IMPLEMENTATION OF QUALITY ASSURANCE GUIDELINES AND THEIR INFLUENCE ON QUALITY EDUCATION IN SELECTED PUBLIC UNIVERSITIES IN KENYA

BY

MUTUMA WILSON MICHUBU
E83/CE/13505/2009

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY (ECONOMICS OF EDUCATION AND EDUCATIONAL PLANNING) IN THE SCHOOL OF EDUCATION KENYATTA UNIVERSITY

JUNE, 2019
DECLARATION

I declare that this thesis is my original work and has not been presented to any other university/institution for consideration of any certification. This thesis has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited using current APA system and in accordance with anti-plagiarism regulations.

Signature……………………………………… Date………………………………

Mutuma Wilson Michubu E83/CE/13505/2009
Department of Educational Management Policy and Curriculum Studies

SUPERVISORS

We confirm that the work reported in this Thesis was carried out by the Candidate under our Supervision

Signature……………………………………… Date………………………………

Dr. Jackline K. A. Nyerere
Department of Educational Management,
Policy and Curriculum Studies
Kenyatta University

Signature……………………………………… Date………………………………

Prof. Dorothy Ndunge Kyalo
School of Open and Distance Learning
University of Nairobi
DEDICATION

To my late father Michubu Mucheke (RIP) and my mother Jeniffer Michubu for being so passionate about education for your children. To my wife Ann and my two lovely sons, Mucheke and Maina, thanks for giving me peace of mind.
ACKNOWLEDGEMENTS

First and foremost, I thank my Creator, the Almighty God, who gave me the financial resources, mental strength and good health to undertake and accomplish this work.

I am indebted to my supervisors Dr. Jackline Nyerere and Dr. Ndunge Kyalo, who walked with me every step of this journey. They worked tirelessly in guiding me. Special thanks go to all the lecturers in the Department of Educational Management, Policy and Curriculum Studies. Special thanks to Dr. Mukirae Njihia and Dr. George Onyango. They gave positive criticism that enabled me shape this study.

Sincere gratitude to all the Academic Deans, Quality Assurance Officers and fourth year students at Kenyatta University and Technical University of Kenya, for responding to the instruments of this study in good time. I would like to thank the Dean School of Engineering and Technology Eng. Martin Nzomo, Kenyatta University for challenging me to publish and disseminate my findings.

I am also indebted to Dr. Reuben Mutegi for his words of encouragement and invaluable discussions during the time of data analysis. We have walked a long journey together my brother! Finally, I am indebted to my family and friends for their prayers. God bless them all abundantly.
TABLE OF CONTENTS

DECLARATION ........................................................................................................ ii
DEDICATION ........................................................................................................ iii
ACKNOWLEDGEMENTS ................................................................................... iv
TABLE OF CONTENTS .................................................................................. v
LIST OF TABLES ............................................................................................... ix
LIST OF FIGURES ............................................................................................. xi
ABBREVIATIONS AND ACRONYMS .......................................................... xii
ABSTRACT ......................................................................................................... xiv

CHAPTER ONE ................................................................................................. 1
INTRODUCTION ................................................................................................. 1

1.1 Background of the Study ........................................................................... 1
1.2 Statement of the Problem .......................................................................... 18
1.3 Purpose of the Study ................................................................................. 20
1.4 Objectives of the Study ............................................................................ 20
1.5 Research Hypotheses ............................................................................... 20
1.6 Research Questions .................................................................................. 21
1.7 Significance of the Study .......................................................................... 21
1.8 Limitations of the Study .......................................................................... 22
1.9 Delimitations of the Study ....................................................................... 22
1.10 Assumptions of the Study ....................................................................... 23
1.11 Theoretical and Conceptual Framework ............................................... 24
1.11.1 Theoretical Framework ..................................................................... 24
1.11.2 Conceptual Framework .................................................................... 27
1.12 Operational Definition of Terms ............................................................ 32
CHAPTER TWO ........................................................................................................33

REVIEW OF RELATED LITERATURE ................................................................33

2.1 Introduction........................................................................................................33

2.2 An Overview of Quality of Education in Universities.................................33

2.2.1 Quality Assurance and Quality of Education.............................................36

2.3 Policies and Procedures for Quality Education .............................................40

2.3.1 Students’ Admission Criteria.................................................................45

2.3.2 Students’ Academic Handbook..............................................................46

2.3.3 Monitoring and Assessment of Students’ Academic Work..............47

2.3.4 Benchmarking Policy and Quality of Education.................................50

2.3.5 Commission for University Education as a Quality Regulator in
Universities ........................................................................................................53

2.4 Human and Physical Resources and Quality of Education in Public
Universities ..........................................................................................................54

2.4.1 Teaching Staff in Universities .................................................................55

2.4.2 Physical Resources in Universities and Quality of Education...........60

2.5 Learner-support Services and Quality of Education in Public
Universities ..........................................................................................................70

2.5.1 Academic Guidance, Advice and Quality of Education .................71

2.5.2 Guidance and Counseling and Quality of Education......................74

2.5.3 Financial Advising and Funding and Quality of Education.............78

2.6 Stakeholders Involvement in Curriculum Development and Quality of
Education in Public Universities .........................................................................83

2.7 Summary of Literature Review ..................................................................91

CHAPTER THREE ..................................................................................................94

RESEARCH DESIGN AND METHODOLOGY ..................................................94

3.1 Introduction......................................................................................................94

3.2 Research Design............................................................................................94
3.3 Study Locale ................................................................. 97
3.4 Target Population................................................................ 98
3.5 Sampling Techniques and Sample Size ............................. 99
   3.5.1 Sampling Techniques............................................... 99
   3.5.2 Sample Size.......................................................... 99
3.6 Research Instruments ....................................................... 100
   3.6.1 Questionnaire for the Deans of Schools .................... 101
   3.6.2 Questionnaire for the Students.................................. 101
   3.6.3 Interview Schedule for the Directors of Quality Assurance .... 102
3.7 Piloting........................................................................ 102
   3.7.1 Validity of Instruments ........................................... 103
   3.7.2 Reliability of Instruments ......................................... 103
3.8 Data Collection Procedure ............................................. 104
3.9 Data Analysis Techniques ............................................... 105
3.10 Logistical and Ethical Considerations ............................... 108

CHAPTER FOUR .................................................................. 109
FINDINGS AND DISCUSSION ............................................. 109
4.1 Introduction .................................................................. 109
4.2 Background Information .............................................. 110
4.3 Level of Implementation of Policies and Procedures Necessary for Quality Education ............................................ 112
   4.3.1 Extent of Implementation of Guidelines on Internal Quality Assurance System ........................................ 112
   4.3.2 Extent of Implementation of Guidelines on External Quality Assurance System ........................................ 122
4.4 Influence of Human and Physical Resources on Quality Education in Public Universities ............................................ 126
   4.4.1 Influence of Human Resources on Quality of Education ....... 126
4.4.2 Influence of Physical Resources on Quality Education ............ 132
4.5 Influence of Learner-Support Services on Quality of Education in Public Universities ................................................. 138
4.6 Stakeholders’ Involvement in Curriculum Development for Quality of Education in Public Universities .......................... 146

CHAPTER FIVE .................................................................................. 157
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .......... 157
5.1 Introduction ........................................................................ 157
5.2 Summary of Findings ......................................................... 157
5.3 Conclusions ........................................................................ 162
5.4 Recommendations ............................................................ 164
5.5 Suggestions for Further Research ....................................... 166

REFERENCES .................................................................................. 167

APPENDICES ................................................................................. 185
Appendix I: Letter of Introduction ............................................. 185
Appendix II: Questionnaire for Deans of Schools ................. 186
Appendix III: Questionnaire for Students .............................. 192
Appendix IV: Interview Schedule for Quality Assurance Officers 197
Appendix V: Research Authorization-NACOSTI .................. 198
Appendix VI: Research Authorization-KU .............................. 199
Appendix VII: Research Authorization-TUK ......................... 200
Appendix VIII: Research Permit ............................................... 201
LIST OF TABLES

Table 1.1: Growth (in numbers) of Universities in Kenya ......................... 6
Table 2.1: Recommended Ratio of Faculty to Students .......................... 55
Table 2.2: Specifications for Lecture Halls ...................................... 62
Table 2.3: Specifications for Laboratories ........................................ 64
Table 3.1: Presentation of Sample Size .......................................... 100
Table 3.2: Reliability Coefficients for the Questionnaires .................. 104
Table 4.1: Distribution of Students by Age .................................... 111
Table 4.2: Deans’ Responses on Implementation of Internal Quality Assurance Guidelines .................................................. 113
Table 4.3: Students Responses on Implementation of IQA ............... 116
Table 4.4: Subscription to External Quality Assurance ....................... 124
Table 4.5: Deans Responses on Aspects Relating to Teaching Staff ...... 127
Table 4.6: Students Responses on Aspects Relating to Teaching Staff .... 131
Table 4.7: Deans’ Responses on Adequacy of Physical Facilities ......... 133
Table 4.8: Students Responses on Adequacy of Physical Facilities ....... 134
Table 4.9: Bivariate Regression Analysis of Independent Variable (Physical and Human Resources) on Quality of Education ........ 138
Table 4.10: Deans Rating on Effectiveness of Learner Support Services ...... 139
Table 4.11: Students Rating on Learner Support Services .................. 141
Table 4.12: Bivariate Regression Analyses of Independent Variable (Learner-Support Services) on Quality of Education ......................... 145
Table 4.13:  Extent of Stakeholders Involvement in Curriculum Development 146

Table 4.14:  Deans Rating of Structures for Engaging Stakeholders in Curriculum Development .......................................................... 148

Table 4.15:  Students Responses on Aspects Related to Stakeholders Involvement ................................................................. 151

Table 4.16:  Students Levels of Satisfaction on Information Received from Stakeholders ................................................................. 153
LIST OF FIGURES

Figure 1.1: Comprehensive Educational Quality Assurance Model .................. 25

Figure 1.2: Conceptual Framework .............................................................. 28

Figure 2.1: Quality Assurance System in an Institution of Higher Learning .... 43

Figure 4.1: Distribution of Students by Gender ........................................... 99

Figure 4.2: Levels of Satisfaction on Implementation of Internal Quality Assurance System ................................................................. 114

Figure 4.3: KU and TUK Deans Rating on Implementation of Student Support Services .................................................................................. 140

Figure 4.4: Extent of Students’ Involvement in Giving Feedback on Curriculum Content ...................................................................................... 150
<table>
<thead>
<tr>
<th>AASHE:</th>
<th>Association for the Advancement of Sustainability in Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE:</td>
<td>American Council on Education</td>
</tr>
<tr>
<td>AUCC:</td>
<td>Association of University and College Counselors</td>
</tr>
<tr>
<td>CAT:</td>
<td>Continuous Assessment Test</td>
</tr>
<tr>
<td>CCMS:</td>
<td>Centre for Career Management Skills</td>
</tr>
<tr>
<td>CCSSE:</td>
<td>Community College Survey of Student Engagement</td>
</tr>
<tr>
<td>CHE:</td>
<td>Commission for Higher Education</td>
</tr>
<tr>
<td>CQI:</td>
<td>Continual Quality Improvement</td>
</tr>
<tr>
<td>CUE:</td>
<td>Commission for University Education</td>
</tr>
<tr>
<td>CVCP:</td>
<td>Committee of Vice Chancellors and Principals</td>
</tr>
<tr>
<td>EFA:</td>
<td>Education For All</td>
</tr>
<tr>
<td>ESIB:</td>
<td>European Student Information Bureau</td>
</tr>
<tr>
<td>FTSE:</td>
<td>Full Time Student Equivalent</td>
</tr>
<tr>
<td>HEI:</td>
<td>Higher Education Institutions</td>
</tr>
<tr>
<td>HELB:</td>
<td>Higher Education Loans Board</td>
</tr>
<tr>
<td>ICT:</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IUCEA:</td>
<td>Inter-University Council of East Africa</td>
</tr>
<tr>
<td>KIPPRA:</td>
<td>Kenya Institute for Public Policy Research and Analysis</td>
</tr>
<tr>
<td>KU:</td>
<td>Kenyatta University</td>
</tr>
<tr>
<td>MoE:</td>
<td>Ministry of Education</td>
</tr>
</tbody>
</table>
NAAC: National Assessment and Accreditation Council
NACOSTI: National Commission for Science Technology and Innovation
OECD: Organization for Economic Co-operation and Development
QAA: Quality Assurance Agency
QAO: Quality Assurance Officer
SAPs: Structural Adjustment Programmes
SDG: Sustainable Development Goals
SPSS: Statistical Package for Social Sciences
TUK: Technical University of Kenya
UDSM: University of Dar es Salaam
UNESCO: United Nations Educational Scientific and Cultural Organization
UNICEF: United Nations International Children Education Fund
ABSTRACT

Despite the Inter University Council of East Africa (IUCEA) and Commission for University Education (CUE) providing guidelines for assuring quality of education in universities, there have been concerns by various stakeholders on the quality of graduates from universities in Kenya getting into the job market. This study sought to determine the extent to which quality assurance guidelines by CUE have been implemented in public universities and their influence on the quality of education in Kenya. The study had four research objectives: (i) to assess the level of implementation of policies and procedures necessary for quality of education (ii) to examine the influence of existing physical and human resources on quality of education (iii) to assess the influence of learner-support services on quality of education and (iv) to assess the level of stakeholders’ involvement in curriculum development and revision in public universities in Kenya. The study was informed by the Comprehensive Educational Quality Assurance Model by Boyle and Bowden (1997) and Systems Theory by Ludwig Von Bertalanffy, later on adapted by Robert Owens (1981) in educational institutions. The study was Exploratory using Mixed Methods Design. The study was carried out in two public universities in Kenya which were purposively sampled. The sample constituted the following: 21 deans of schools, two quality assurance officers and 411 fourth year students. Three types of research instruments were used in data collection: questionnaires for deans of schools and fourth year students, interview guide for the quality assurance officers and document analysis. The data were analyzed both quantitatively and qualitatively. Quantitative data were analyzed using descriptive statistics aided by Statistical Package for Social Sciences. Quantitative data were presented in medians, percentages, correlations and tables while qualitative data were organized into thematic areas according to the objectives of the study. Quantitative data were displayed first and then corroborated by qualitative data. The study established that: universities had put in place policies and procedures on internal and external quality systems. However, these guidelines were not uniformly and adequately implemented across the universities; teaching staff in both universities possessed requisite qualifications and experience for teaching but all universities engaged part-time lecturers in teaching; physical facilities such as accommodation, lecture halls and ICT facilities were inadequate; student support services such as guidance and counseling, academic advisory and financial advisory services were not satisfactorily implemented across the universities. Finally, universities occasionally involved stakeholders in curriculum development and revision. It was established that inadequacy and poor implementation of some of these quality assurance guidelines affect the quality of education. The study recommends that universities adequately implement quality assurance guidelines to enhance quality of education.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The demand for higher education continues to rise worldwide as new set of candidates complete their secondary or equivalent level of education and transit to institutions of higher learning. In addition, University education has become a central pillar of socio-economic and politico-transformation of all nations across the world largely due to its contribution in development of human capital. For a country to make any progress in today’s dynamic world, it must heavily invest in university education for capacity development of her people in terms of instilling in them knowledge, skills and competencies (Materu, 2007).

It is further envisioned that university education is an important element for the achievement of the Sustainable Development Goals (SDG’s). Additionally, university education is perceived as a means to unlock individuals’ potentials and at the same time prepare them for various roles in the society. According to Mange (2013), the expectations societies place on university education are enormous with regard to production of manpower that can be utilized for creation of more wealth. Studies, for instance the UNESCO taskforce on higher education in developing countries, observed that countries in the Sub-Saharan Africa must heavily invest in expansion of higher education if they are to make progress in a world that feeds on knowledge and breeds on competition (UNESCO, 2000).
The taskforce further observed that the quality of knowledge generated within higher education institutions and its availability to the wider economy is becoming increasingly critical to national competitiveness. It is on this backdrop that many nations across the world have strived to expand this level of education with the sole aim of advancing their economies. The universities world over, have thus been confronted with increased enrolment of students as well as the need to create access to the rising demand. Due to this rapid expansion and in the wake of reduced government funding of this sector, universities have been confronted by the challenge of providing quality education.

In China for instance, during the Cultural Revolution and in the period of expansion of higher education cases of compromised quality of university education were reported (Okioga, Onsogo & Nyaboga, 2012). During this period, graduates produced by universities lacked key competencies among them innovativeness, creativity and interpersonal skills. Similarly, the declining academic standards in United States of America in 1980s with graduates lacking key competencies for the industry were reported.

As observed by Materu (2007), stakeholders in the Sub-Saharan Africa have expressed growing concern about the quality of university education outcomes and in particular that of the standard of research and student achievements. Furthermore, the rapid changes in the higher education context driven by political,
economic and socio-cultural forces in the latter part of the 20th century have generated concern for quality of graduates being churned out by universities (Massy, 2013; Amaral, 2014; Martin & Stella, 2014; Brookes & Becket, 2015). Materu further observed that the recent expansion of universities has raised questions on the ability of universities to provide quality education especially when many governments across the world have reduced funding for these institutions.

According to the League of World Universities (1993), universities in Africa were not connected to the needs of the industry, and that the graduates from African universities were not able to compete with their counterparts mainly from the developed countries. This is because the universities were more interested in meeting the demand for increased enrolments without considering the manpower needs of the economy. The league further observed that universities in Africa had not put in place mechanisms to ensure quality learning was taking place. For instance, the Inter University Council of East Africa (2014) found that the admission criteria for universities in East Africa were in dire need for reforms. It was found that the admission process did not take into consideration the assessment of resources and skills that the students bring to the programmes and whether these would have a potential to affect the students in acquiring the requisite competencies of the programme they enrolled in (IUCEA, 2014).
The World Bank Working Report No. 124 (1999/2000) on quality assurance in Sub-Saharan African Universities reported that African universities were producing low quality graduates mainly due to rushed expansion without commensurate resources and effective quality assurance practices.

**Growth of University Education in Kenya**

The growth of university education in Kenya can be traced back to 1947 when the Kenya Government under the British colonial rule drew up a plan for the establishment of a Technical and Commercial Institute in Nairobi. Over the years, the institute was gradually elevated until 1970 when it was transformed into the first national university in Kenya and was renamed the University of Nairobi.

During this time, Kenya had placed substantial importance on the role of education in promoting economic and social development after the achievement of independence in 1963. There was demand for manpower to replace the expatriates who were leaving the country. This resulted in the rapid expansion of the education system to provide qualified persons for the growing economic and administrative institutions and to undertake some reforms to reflect the aspirations of an independent state (Court & Ghai, 1974).

In addition, the Kenya government and the United Kingdom requested the International Bank for Reconstruction and Development to fund expansion of
education at all levels in Kenya. With time, these initiatives and advocacies led to expansion of education at all levels. The primary level enrolment increased from 891,533 in 1963 to over 4.3 million in 1983. University enrolment rose from 452 undergraduates in 1963 to 5,454 undergraduates and 1,383 postgraduates in 1983 (Republic of Kenya, 1983 cited in Sifuna, 1998).

This enrolment further rose to over 60,000 students (Chacha, 2004). The increase in enrolments at this period had serious implications as it came at a time when the country was experiencing harsh economic constraints (Misaro, Jonyo & Kariuki, 2013). The increased enrolment was followed by falling standards in the quality of university education, increased student protests and overcrowding due to reduced government funding. The period between the years 2007-2016 marked the highest expansion in the number of universities in Kenya, from 6 universities initially to a total of 30 fully-fledged public universities. The private universities were also increasing. By the year 2015, public universities had increased to 22 with an additional 10 constituent colleges that were at various phases of being fully accredited. The expansion of the institutions led to increased enrolments of over 400,000 students (Republic of Kenya, 2015). Table 1.1, shows the growth in numbers of universities in Kenya.
Table 1.1: Growth (in numbers) of Universities in Kenya

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public universities</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>22</td>
<td>22</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>Public university constituent colleges</td>
<td>15</td>
<td>23</td>
<td>23</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Public university campuses established</td>
<td>30</td>
<td>30</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Chartered private universities</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Universities with letter of</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Interim authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: CUE, (2017)

Information in Table 1.1 shows that the number of public universities that were fully-fledged increased from 7 in the year 2010 to 30 in the year 2016. This increase translated into increased enrolment rates. This in turn has put great pressure on infrastructure, lecturers and facilities (Misaro, Jonyo & Kariuki, 2013). The lecturers for instance have been left to handle large numbers of students thus devoting less time to research and community outreach programmes. Goolam (2008), observed that the increase in number of students at universities had led to reduced individual attention to students with several stakeholders complaining about the poor quality of graduates being produced by the universities (World Bank, 2015; British Council, 2016).
Quality of University Education

Different scholars and organizations have defined quality of education differently. Bornman (2004) observed that there are many actors (such as the students, lecturers, administration, government, professional bodies, employers and society in general) involved when trying to define quality in education. He stated that all these actors have different and conflict interpretation of quality making it difficult to arrive at a conclusive definition. He however argues that there should rather be reference to notions of quality instead of a definition. These notions are: quality exemplified in an exceptionally high standard; quality as transformation; quality in terms of fitness for purpose; quality as quest for zero defect; quality as value for money and quality as a product evaluated against customer satisfaction. UNESCO (2005) defined quality of education as a set of processes and outcomes that are defined qualitatively.

In this case, qualitative indicators includes the quality of the curriculum, quality of facilities, services and technology and policies and practices that institutions have put in place. Further, UNICEF (2000), in its paper *defining quality in education* identified five dimensions of quality: learners, environments, content, processes and outcomes. This study observed that these elements must be adequate and relevant for quality education to be achieved. The Commission for Higher Education (2008), agreed with Bornman (2004) by observing that quality in higher education means different things to different people, and is relative to
processes or outcomes. At any rate, it is the fitness-for-purpose which is based on the view that quality has no meaning except in relation to the purpose of the product or service that is seen by many quality assurance experts as a meaningful way of defining quality because it includes all other definitions, embraces all types of institutions, and is flexible (CHE, 2008).

The IUCEA (2010) observed that quality of education in universities can be addressed by looking at two dimensions: First, the quality and adequacy of inputs which include; adequate academic staff, facilities and infrastructure, student advisory and support services; second, effective processes to enhance delivery of educational programmes, activities and services. It was observed that if these inputs and processes were adequately and effectively availed and implemented in universities, they could have a positive effect on the quality of graduates being produced (IUCEA, 2010). In this case, graduates with adequate communication skills, problem solving skills, creative and critical thinking skills, innovative skills and ICT skills, which are portrayed as important competencies for the 21st century knowledge-based economy.

It is unfortunate that many studies have found out that many university graduates are lacking these important competencies. For instance, a study by the Massachusetts Institute of Technology in the 1970s found that manual tasks in the United States Economy were declining while the demand for analytical and
interactive skills were rising (Partnerships for 21st Century Skills (2008)). This was attributed to the fact that most work places were being computerized and automated. The companies were thus forced to hire human capital with higher skills in ICT, innovativeness, creativity and communication skills. In Kenya, a study by the British Council (2016) on *Graduates’ Employability in Kenya* found that employers were not keen on mastery of content exhibited by candidates during an interview but were rather interested in other attributes not directly related to subject matter such as interpersonal skills and communication skills among others.

It is on this backdrop that the issue of quality of university education in Africa has become a major issue of concern to the university management particularly with increased enrolments. In Ghana, for example, enrolments grew from 11,857 in 1991/92 to 63,576 in 2003/2004, an increase of over 400 per cent. Further, Nigeria experienced rapid expansion with universities growing from six in 1970 to about 240 with an enrollment of over 1.5 million in 2006 (Okebukola, 2006). The same trend was observed in Kenya with a tremendous growth in the number of universities as well as enrolment rates. For instance, in Kenya, the students’ enrolments increased from 82,095 in the year 2003 to 443,783 in 2015, which was an increase of about 400 per cent (British Council, 2015; Republic of Kenya, 2015).
Due to this rapid expansion without corresponding growth in facilities and resources, there have been cases of deteriorating academic conditions with stakeholders mainly employers raising issues with the quality of graduates being produced (Okioga, Onsogo & Nyaboga, 2012). Educationists have complained and argued that the rise in student enrolment was implemented haphazardly without adequate staff and expansion or upgrades of learning resources at the universities, thus adversely affecting the quality of education in public universities (Mayunga, Stefan & Christopher, 2009; Kiamba, 2004 & Sihanya, 2009).

In 2013, a report by Results for Development Institute (R4D) found that most graduates from universities in Kenya were uncompetitive in the job market due to gaps in their training. Despite getting themselves degrees, most of the graduates had to look for jobs for up to 18 months before getting a decent job (Results for Development, 2013). Ponje (2013), observed that the unemployment rate in Kenya stands at 40% and of this population, 70% are youths aged between 20 and 24, with 30% of these youths unable to get formal employment mainly due to gaps in their training. In addition, World Bank (2015), in its report *Kenya’s Education Achievement and Challenges* observed that university education in Kenya was not producing graduates with knowledge, skills and competencies crucial for securing ‘Vision 2030’. For instance, there was mismatch between the skills needed and those available in the labour market especially at a time when
the country is aiming at becoming a Middle Income Economy through the Vision 2030 (British Council, 2016).

The increased enrolments without commensurate funding have therefore led to conclusion by various stakeholders that, universities have not been operating with adequate resources and thus low quality training. World Bank (2015) further noted that universities in Kenya have increased but there has been less focus on quality education. This has mainly been attributed to the fact that universities are opening several campus branches and constituent colleges across the country with weak coordination and implementation of quality assurance schemes and thus compromising on the quality of graduates. A study by the Workforce Connections shows that many university graduates are facing unemployment due to lack of both soft and technical skills, and even if they possess technical skills, they may be out-of-date or irrelevant in the labour market (USAID, 2014). Another study carried out by IUCEA (2014), attests that 49% of new graduates from universities in Kenya do not possess skills required by the employers. The perceptions surrounding these challenges have mainly been attributed to: increased enrolments; poor linkages between employers and universities; lack of labour market information and shortage of suitably qualified staff with modern pedagogical skills that can transform and impart desired skills among learners (USAID, 2014; British Council, 2016).
Quality Assurance Structures in Universities

The Commission for Higher Education (2008) defined quality assurance as the means by which an institution can guarantee that the standards and quality of its educational provisions are being maintained and/or enhanced. It further noted that these are the means through which an institution confirms that the conditions are in place for students to achieve standards set by the institution. The IUCEA (2010) defined quality assurance as a systematic, structured and continuous attention to quality in terms of maintaining and improving quality of education with internal and external assessment elements. These systems entail an elaborate quality assurance guideline in form of internal and external processes to guarantee quality of the outputs.

Different countries around the world have put in place different models to assure quality of their higher education. For example, according to Mishra (2006), some countries have put in place National Corporate bodies to manage the overall quality of their institutions of higher learning. In the United States of America, quality is upheld through an accreditation process which is usually a rigorous process by an accreditation body that certifies an institution at the institutional and programme levels. In the United Kingdom, there is centralized body (Quality Assurance Agency) which carries out quality assurance in institutions of higher learning. This body according to Mishra (2006) is charged with the role of providing the general public assurance that standards and quality within higher
education are being safeguarded. These are all geared towards ensuring that the level of academic achievement attained by university graduates are maintained and improved (Brennan & Shah, 2010; Trow, 2010; Harvey & Newton, 2014; Dill, 2013).

Quality assurance systems in higher education, were first introduced and implemented in a few developed countries mainly in the United States of America and Western Europe in the 1980s and 1990s, and due to their success in ensuring quality of graduates, they spread rapidly to other developed and developing countries over the past two decades (Van Vught & Westerheijden, 2014; Schwarz & Westerheijden 2014; Dill, 2013). For instance, Hong Kong, wanted to transform its economy from manufacturing industry to service-based structure. To address this, she invested heavily on expansion of its universities. However, the government demanded that universities put in place an elaborate quality assurance system to ensure quality was not compromised. These mechanisms were implemented and by the turn of the millennium Hong Kong was able to transform itself into a knowledge based economy (Hong Kong Education Bureau, 2009). Further, different actors such as the World Bank, UNESCO, OECD, as well as professional associations have played significant roles in the introduction and spread of formal quality assurance in higher education across the globe (Singh, 2010).
In Africa, quality assurance system became more necessary with the rapid expansion of university sector in the 1990s (Materu, 2008). For instance, the Inter University Council East Africa (IUCEA) formulated a roadmap for quality assurance to guide universities in addressing quality education for higher education in East Africa. This roadmap involved establishment of appropriate guidelines, procedures and standards that entail three key areas: the internal quality assurance dealing with monitoring, evaluation and improvement of systems; external quality assurance dealing with benchmarking, audit and assessment and an external body that deals with accreditation (IUCEA, 2010). These areas are further broken down into guidelines that address policy and procedures, assessment of student learning, quality assurance of staff, quality assurance of facilities and quality assurance of student support among other guidelines.

In Kenya, the Kenyan government endorsed higher education proclamation and established Commission for University Education (CUE) to regulate quality of education offered in higher education institutions in Kenya (CUE, 2014). CUE drafted the seven broad *University Standards and Guidelines* that both public and private universities operating in Kenya must follow. These standards and guidelines focus on: Institutional standards, standards of physical resources, standards for an academic programme, standards for Open, Distance and E-learning, standards for university libraries, standards for technical universities
and standards for specialized degree awarding institutions. These standards are 

further broken down into guidelines that all universities in Kenya must adhere to.

In line with the objectives of this study, the CUE Standards and Guidelines 2014 

are broken down into four areas with regard to guidelines on: policies and 

procedures, physical and human resources, learner-support services and 

stakeholders’ involvement in curriculum development for quality education in 

universities.

First, the policies and procedures which are addressed under the *Institutional 

Standards* by CUE entail a clear set of procedures and policies to guide the 

university operations among them an internal and external quality assurance. The 

internal quality assurance policy addresses: students’ admission criteria, students’ 

handbook on academic requirements and mechanisms to monitor and assess 

students’ academic work. In addition, the external quality assurance policy 

addresses issues to do with accreditation and benchmarking.

According to the European Association for Quality Assurance in Higher 

Education (ESG, 2015), universities should have a policy on quality assurance 

that entail internal and external structures to address quality issues of their 

programmes. In support, Eurydice (2015), observed that universities should put in 

place internal quality assurance structures that deal with all aspects of school life,
that would in turn lead to quality programmes. These policies and procedures should form part of institutional quality assurance and be continuously improved to assure stakeholders’ that quality issues are being addressed (IUCEA, 2010).

Second, the guidelines on physical and human resources addressed under the *Standards for an Academic Programme as well as Standards for Physical Resources* respectively require universities to ensure that they have adequate human and physical resources to ensure quality learning takes place. For physical resources, CUE requires all universities to provide appropriate and adequate facilities to cater for the number of programmes on offer and students enrolment. In this regard, all universities shall provide: lecture rooms which are adequate in number and size and well-lit and ventilated; adequate laboratory facilities with resources that are varied to facilitate effective teaching and learning, and ICT facilities with internet connectivity. According to Ehiametalor (2001), infrastructural facilities are the operational inputs of every instructional programme that learning institutions must adequately provide. In support, Varghese (2004) observed that universities must support their learners with suitable and reliable infrastructural facilities to support quality learning.

In addition, CUE outlines the need for universities to have in place adequate and competent human resources specifically teaching staff who meet minimum
criteria for appointment and at the same time staff that possess modern pedagogical skills for effective teaching (CUE, 2014).

Third, under Institutional Standards and partly on Standards for an Academic Programme, universities shall have learner-support services that are commensurate with the student population (CUE, 2014). Most importantly, universities must provide adequate guidance and counseling services; career and academic advisory services financial aid and advisory services. These services are essential in supporting learners in their academic programmes. According to Steyn and Wolhuter (2008), learner support services are important in order to help them optimize their academic work. Further, Cooper (2007), argued that learner support services enhance student academic success in universities and that, these services must be adequate and appropriate in supporting student learning. Malone (2009), specifically pointed out that a service like academic advice helps learners identify challenges that they may be facing in their courses of study. To emphasize the importance of these support services, CUE succinctly requires universities to have a clear memorandum in place incase these services are hired or outsourced (CUE, 2014).

Fourth, Under the Standards for an Academic Programme, all universities operating in Kenya must at regular intervals conduct self-assessment of their programmes. According to CUE (2014), this should be done in order to enhance
the quality and efficiency of academic programmes. Msiska and Chulu (2006), observed that university education must be able to respond to the needs of the society, and thus the society through must be represented through various stakeholders in determining the content of the curriculum being offered in universities. In support, Olibie (2014) argued that concerted efforts must be made to develop and implement curriculum that meets the needs of the society and this can only be achieved through stakeholders’ involvement in curriculum development. It is therefore imperative for universities to set up mechanisms and structures to engage stakeholders such as students, alumni and employers in gathering information to inform curriculum development and revision. This will ensure that programmes being offered are in tandem with the needs and goals of students and the society at large.

It is hoped that adequate provision and implementation of these four components which are part of quality assurance by CUE will have an influence on the quality of education in public universities in Kenya. This will enable students to adequately acquire communication, problem solving, innovativeness, ICT and creative and critical thinking skills.

1.2 Statement of the Problem

The environment in which universities in Kenya operate is rapidly changing. The enrolment of students has increased as well as demands by the industry for
graduates who are adaptable to the 21\textsuperscript{st} century knowledge-based economy. Due to these demands, the universities have put in place both internal and external quality assurance mechanisms to assure the stakeholders that the quality of education has not been compromised.

The CUE formulated seven broad standards and guidelines for quality assurance that must be implemented by universities to enhance quality of education. Despite these efforts and interventions by CUE, various stakeholders are still raising issues about the quality of graduates being produced by the universities in Kenya. Notably, graduates who lack the competencies necessary for the 21\textsuperscript{st} century knowledge-based economy, especially in the areas of communication, creativity and critical thinking, innovativeness, ICT and problem solving skills. These are the important skills that the Framework for 21\textsuperscript{st} Century Skills has advocated for quality education. The question that arises therefore is, could it be that the quality assurance guidelines by CUE have not been adequately implemented by the universities? This study sought to establish the extent of implementation of CUE quality assurance guidelines in relation to policies and procedures, physical and human resources, learner-support services, and stakeholders’ involvement in curriculum development and their influence on quality of education in public universities in Kenya.
1.3 Purpose of the Study

The purpose of this study was to establish implementation of quality assurance guidelines by CUE and their influence on quality education in public universities in Kenya.

1.4 Objectives of the Study

The study was based on the following objectives:

i) To assess the level of implementation of quality assurance policies and procedures on quality of education in public universities in Kenya.

ii) To examine the influence of human and physical resources on quality of education in public universities.

iii) To assess the influence of learner-support services on quality of education in public universities.

iv) To examine the extent of stakeholders’ involvement in curriculum development for quality education in public universities.

1.5 Research Hypotheses

The study was guided by the following hypotheses tested at 5% significance level.

H$_{01}$: There is no significant relationship between human and physical resources and quality of education at public universities in Kenya.

H$_{02}$: There is no significant relationship between learner-support services and quality education at public universities in Kenya.
1.6 Research Questions

The study was guided by the following questions:

i) What is the extent of implementation of internal quality assurance policies and procedures by CUE in public universities in Kenya?

ii) What is the extent of implementation of external quality assurance policies and procedures by CUE in public universities in Kenya?

iii) To what extent are employers involved in curriculum development to ensure quality education in public universities in Kenya?

iv) To what extent are the alumni involved in curriculum development in public universities in Kenya?

v) To what extent are the students involved in giving feedback about their curriculum in public universities in Kenya?

1.7 Significance of the Study

First, the Ministry of Education and the Commission for University Education (CUE) may establish the extent to which various guidelines on quality assurance have been implemented in public universities in Kenya and therefore, identify the gaps in implementation of these guidelines. Second, the findings may be important to the university management and policy makers involved in the management and planning of the higher education sector in Kenya and in particular directors of Quality Assurance who may be informed on the status of implementation of CUE guidelines on quality assurance. Lastly, the study might
draw attention to various stakeholders such as the alumni and Federation of Kenya Employers (FKE) among others on their need to participate and work with universities in developing and revising university curriculum to address the needs of the industry.

1.8 Limitations of the Study

First, the logistical challenges in getting information from the directors of Quality Assurance and academic deans demonstrated a challenge in getting information within a stipulated time. This was mainly due to their busy schedules. Second there was limited empirical research linking the variables of the study.

1.9 Delimitations of the Study

The following were the delimitations of this study; first, the study was carried out only in public universities in Kenya. Private universities were excluded from this study. Second, the study confined itself to directors of quality assurance and deans of schools, since they are directly involved in ensuring quality delivery of programmes in universities. In addition, only fourth year students were involved in the study since they have been in the system for a longer period and thus have an idea on quality of education and services they have been receiving. Third, the study focused on quality education that is contextualized in acquisition of the main competencies of the 21st century which are: communication, innovativeness,
problem solving, creativity and critical thinking and acquisition of ICT skills among the undergraduate students.

1.10 Assumptions of the Study

The basic assumptions of this study were: quality assurance guidelines have an implication on the quality education provision in Kenya; the enrolments in public universities will continue to rise while the government funding for these institutions will continue to plummet necessitating the need for universities to come with alternative ways of raising revenue to support quality education; the public universities have similar benchmarks on quality pertaining to academics; the deans and quality assurance officers have the knowledge on the extent of implementation of quality assurance guidelines as stipulated by CUE and how these may influence quality of education. In addition, it was assumed that all the stakeholders in education; parents, employers, Commission for University Education consider quality university education as an important element in the 21st century knowledge economy.
1.11 Theoretical and Conceptual Framework

The study adopted the following theoretical and conceptual frameworks.

1.11.1 Theoretical Framework

Quality assurance system is a critical determinant of quality education in the education sector. Student learning is at the centre of the mission of higher education institutions, and it is enhanced through comprehensive quality assurance practices. In this regard, quality assurance becomes effective when it focuses on the core educational inputs and processes that affect quality of student learning.

The study was thus informed by the Comprehensive Educational Quality Assurance Model by Boyle and Bowden (1997) and General System Theory (GST) originally developed by Ludwig Von Bertalanffy in 1968, and later on adapted by Robert Owens (1981) in education institutions. Comprehensive Educational Quality Assurance Model states that educational institutions have as one of their primary purposes, the duty to provide education of the highest possible quality (Boyle & Bowden, 1997). However, according to the proponents of this model quality of education requires development of a comprehensive approach to assure quality in education. The model depicts a set of broad principal elements which are integrated to form a quality assurance framework based on inputs and processes within a university that will later lead to quality outputs as shown in Figure 1.1.
The principal elements of the model in determining quality education include; the inputs in form of resources, facilities and services to support the institution in delivering its programmes. Second, the institution must put in place effective processes in form of policies and procedures that address faculty development, assessment of student learning and faculty evaluation systems, student admission criteria, involvement of stakeholders and measures to support learners. These will
finally lead to output elements in form of quality improvements evidenced by students learning and overall organizational accountability. This model is suitable for this study because it addresses comprehensively the inputs in form of resources, facilities and processes in form of systems and procedures that if implemented effectively will positively influence the quality of education in universities.

The General System Theory (1968), perceives an organization as holistic system made up of several elements all working towards achievement of the whole. This theory takes cognizance of organizations as complex social systems that rely on inputs from the society and communities, processes that transform these inputs and outputs that are churned from the systems back to the society. According to the theory, reducing any part of the system from the whole reduces the overall effectiveness and the quality of outputs from the organization. A system can be looked at as having inputs, processes and outputs. In an organization inputs would include; the resources such as raw materials, finances, technologies and human resources. These inputs go through a process where they are transformed into outputs that are meaningful to the organization and its environment. Outputs to society according to Robert Owens (1981) would be individuals who possess knowledge, skills and attitudes that are required by the society because of improved: intellectual and manual skills, creativity and critical thinking, attitudes
and motivation, creativity and innovativeness and communication skills among other attributes.

This theory fits into this research because universities are social systems which have inputs such as facilities, teaching staff and students. Processes include such things as student assessments, monitoring of students’ academic work, career advising, measures to support the students and other administrative processes. Outputs include knowledge, skills or competences acquired by the students that are useful to the society. The Comprehensive Educational Quality Assurance Model by Boyle and Bowden (1997) and General System Theory (GST) by Ludwig Von Bertalanffy therefore support and complement each other in this research.

1.11.2 Conceptual Framework

In this section, the conceptual framework of the study is presented and elaborated. The main theoretical constructs identified from the quality assurance literature and elements of the Comprehensive Educational Quality Assurance Model (Boyle & Bowden, 1997) and General Systems Theory were combined to draw the dimensions of the framework. The framework conceptualized in open system perspective comprises the quality assurance practices that are important in influencing the quality of education. The schematic diagram of the conceptual framework of the study is portrayed in Figure 1.2.
Figure 1.2: Conceptual Framework

Source: Researcher, 2019
In this study, quality assurance has been conceptualized as an elaborate system of policies and procedures, physical and human resources, learner-support services and stakeholders’ involvement as important elements that universities have to put in place to ensure quality of education. From the conceptual framework, these elements are conceptualized in terms of their availability, adequacy and effectiveness in addressing quality education.

**Policies and procedures:** For quality of education have been conceptualized in terms of internal and external quality assurance practices that universities have to put in place to ensure quality of education with indicators of internal practices being; students admission criteria, issuance of students’ academic handbook, monitoring and assessment of students’ academic work while the indicators of external quality assurance system have been conceptualized in terms of accreditation practices and benchmarking. It is believed that adequate implementation of these practices will have a positive influence on the quality of education in universities.

**The physical resources and human resources:** Physical resources have been conceptualized in terms of adequacy of lecture halls, libraries, halls of residence and ICT facilities while human resources have been conceptualized in terms of staff numbers, experiences and their qualifications. Adequate provision and

29
utilization of these resources will have a positive contribution to the quality of education in public universities.

The learner-support services: were conceptualized in terms of availability of career advisory services, guidance and counseling services and financial advisory services. It is believed that adequate provision of these learner-support services will ensure learners have a conducive environment for learning where they feel supported which in the end will contribute to quality learning.

Lastly, the stakeholders’ involvement was conceptualized in terms of the involvement of employers, students, alumni and Commission for University Education in curriculum development and revision exercises. It is envisioned that stakeholders’ involvement in curriculum development and revision will ensure that the curriculum the universities are offering meets the needs of the industry especially in regard to content and applicability.

Organizational environment: From the Comprehensive Educational Quality Assurance Model, universities do not operate in isolation. As Newton (2007) argued, any quality assurance system will always be affected by situational factors and context. The environment, both internal and external, plays a role in determining the quality assurance systems put in place. The internal environment will comprise leadership and governance and how the management has viewed
and entrenched quality as part of the culture of the university. The external environment on the other hand includes the legal environment, regulators and government policies such as liberalization of higher education. However, these were not part of the study.
1.12 Operational Definition of Terms

**Higher Education**: This refers to the post-secondary education, tertiary education or third level education which occurs after secondary education.

**Implementation**: Refers to putting into use the CUE guidelines such as policies and procedures; physical and human resources; learner-support services and stakeholders’ by public universities.

**Influence**: Refers to the level by which implementation of CUE (2014), quality assurance guidelines affect quality of education in public universities.

**Public Universities**: Refers to universities sponsored by the government.

**Quality Assurance**: The totality of the policies, values/attitudes, procedures, structures, resources and actions devoted to ensure continuous improvement of quality of the educational processes.

**Quality Assurance Guidelines**: Refer to the CUE (2014), guidelines that all universities operating in Kenya must adhere to in order to ensure quality education is provided.

**Quality of Education**: It is the extent to which learners in public universities have acquired the key competencies of the 21st century which comprise communication skills, innovativeness, problem solving, creativity and critical thinking and ICT skills.
CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter delves on the review of literature related to the study. The literature review was guided by the objectives of the study. The review focused on what other researchers and scholars have said and found in regard to the quality assurance systems employed by universities to ensure quality education. Literature review was discussed with reference to quality dimensions on university education worldwide, Africa, and specifically Kenya being the main focus of this study. Finally, the chapter gives a summary of the reviewed literature and gaps that have been identified from the literature.

2.2 An Overview of Quality of Education in Universities

University education has become a pillar of social, political and economic transformation of nations across the world in the sense that it plays a paramount role in capacity development (Materu, 2007). Higher education has been identified as a critical element of development in which both developing countries and developed countries must build in earnest, if they are to make progress in today’s dynamic world. It is further a critical element for the achievement of the Sustainable Development Goals (SDGs). Countries across the world are thus striving to expand this level of education. And as Bloom, Canning and Chan, (2006) noted, this level of education must be expanded to promote faster
technological advancement for world economies. The transition to a knowledge economy of the 21st century has led to demand for high level of quality knowledge and skills in most occupations challenging nations across the world to relook at the quality of their higher education in terms of pedagogy and content (Materu, 2007).

There is a gap though between the developed and developing countries in terms of the quality and variety of graduates universities produce. There is a challenge for instance in Sub-Saharan Africa in improving their quality of tertiary education. For instance, there are few people trained in high quality levels in relevant fields (Materu, 2007). Further, education and especially the university education could be used to narrow the gap between the developed and developing countries. In the year 2000, UNESCO through a taskforce on higher education in developing nations noted that for developing countries to prosper and bridge the gap, they must invest more in quality higher education. According to the taskforce, quality higher education will make the developing countries more competitive in the global economy.

Bloom, Canning and Chan (2006) corroborate the findings by the UNESCO taskforce by noting that tertiary education can accelerate economic growth and reduce poverty in Sub-Saharan Africa. As noted by the World Bank (1997), despite the clear importance of investment in higher education for economic
growth and social development, the sector is in crisis throughout the world as universities both in developing and developed countries are being confronted with the new challenge of providing quality education especially with the era of growing enrolments. Quality education in universities is supposed to be characterized by excellence, equity, responsiveness to change and effective and efficient provision of services, good governance and excellent management of both human and physical resources (Chacha, 2002). According to World Bank (1997), however, the crisis is mostly being felt in developing countries where higher education is heavily dependent on government funding.

With increase in demand for university education especially from the 1990s, many universities in Africa have undergone challenges in providing quality education especially with reduced government financing (Ajayi, 1996). According to Chacha (2005), increased enrolment in universities is the largest contributor of declining quality education as it has led to increased pressure on university finances resulting into neglect in providing adequate teaching and learning resources. According to UNESCO (2000), the number of universities in Africa grew from as low as 52 in the 1960s, to over 143 by 1980, and more than doubled to 316 by the year 2000. This remarkable growth has been equally followed by increased student enrolments. Mange, (2014) notes that, whereas this quantitative growth in universities and student numbers is welcome, quality issues have been of great concern. Basically, the resources have failed to match the rate of increase
in enrolment. This is supported by Ahemba (2006), who opined that many African universities cannot provide basic physical infrastructure necessary for quality teaching and learning such as; the internet connectivity, books, laboratory equipment and lecture halls.

### 2.2.1 Quality Assurance and Quality of Education

The demand for quality education has been rising across the world. This has forced the universities to respond by putting in place Quality Assurance (QA) mechanisms to uphold the quality of education. According to the European Student Handbook on Quality Assurance in Higher Education (2011), quality assurance is the means by which an institution of higher learning can guarantee its stakeholders with certainty and confidence that the standards and quality of its educational provision are being maintained and enhanced. Vroeijenstin (1995), defined quality assurance as the systematic, structured and continuous attention to quality in terms of maintaining and improving quality of something. CHE, (2006), observed quality assurance as the means by which an institution can guarantee that the standards and quality of its educational provisions are being sustained and improved. QA has its roots in the business world around 1950s and in the early 1960s in the Western World (ESIB, 2011).

In the education sector, QA has been based on internal audits, professional regulations, government controls and external inspections (European Student
Information Bureau, 2011). However, as Materu (2012) observed, quality in education is an elusive term. Studies have widely agreed on a common criterion of quality in higher education as that of ‘fitness for purpose’. This means, education that is capable of meeting the needs of the learners and the society at large. With growing demands and pressures by the students and the society for quality education, institutions of higher learning have been left with no option other than putting in place mechanisms to assure the quality of education is offered. These demands have been confounded further by the lack of finances and infrastructural resources to support HEIs (ESIB, 2011).

European Association for Quality Assurance in Higher Education (ESG, 2015) and other studies have shown that institutions that are perceived to offer quality education have greater benefits such as stronger staff and students’ loyalty, ability to attract funding and greater autonomy from the state. QA should thus support attributes of ‘fitness for purpose of education’ which is the development of the individual student and the society. HEIs continue to play the role of producing educated citizens for the society. They must be prepared to ensure that they have in place mechanisms that improve student learning, handle increasing number of students and provide adequate support to the learners.

According to ESG (2015), an effective quality assurance must entail three elements; internal quality assurance, external quality assurance and quality
assurance agencies. According to Materu (2007), it is necessary for institutions of higher learning to incorporate quality assurance in the entire system of the university. The QA should among other elements entail: screening of candidates for admission by ensuring they meet the minimum academic requirements set by the state or other professional bodies, staff recruitment and promotion procedures, regular review of the curriculum and teaching, learning facilities, policy development and management mechanisms, quality of research, evaluation of students and staff, and involvement of external examiners for end-of-semester or end-of-year examinations. Though review of these elements is important for any functioning quality assurance, Materu reveals that implementation of these practices has been weak in many institutions of higher learning across Africa because of financial constraints and increased workload due to increasing number of students. For example at the University of Dar es Salaam (UDSM), the frequency of visits by external examiners were reduced from once per year to about once in two or three years (Materu, 2007). This is after a recommendation by a panel of quality assurance at UDSM.

Unfortunately, most of these processes are optional for universities to make adjustments that are likely to suite them in terms of cost effectiveness. One such adjustment is elimination of external moderation as is the case at UDSM. To deter some of these practices, External QA systems have played an important role in ensuring that quality of higher education is upheld.
In the East African Region, the IUCEA formulated a Handbook for Quality Assurance in Higher Education which proposed a model with 18 self-assessment tools to guide universities in addressing issues of quality. These tools ranged from; policies and procedures for internal quality assurance, monitoring of student academic progress, feedback from the labour market, course and curriculum evaluation and quality assurance of the academic staff among others.

In Kenya, Commission for University Education (CUE) formally Commission for Higher Education (CHE) was established by an Act of Parliament (Cap 210B) in 1985 to oversee and enhance the quality of university education in Kenya. The Commission formulated universities standards and guidelines that all universities operating in Kenya must adhere to. The standards and guidelines focused on seven broad areas; institutional standards, standards of physical resources, standards for an academic programme, standards for university libraries, standards for technical universities and standards for specialized degree awarding institutions (CUE, 2014). In this study, the seven broad areas by CUE were broken down into guidelines addressing four areas; policies and procedures, guidelines on physical and human resources, guidelines on learner-support services and guidelines on the need for stakeholders’ involvement in curriculum development all geared towards assuring quality of education in universities. It is expected that all the universities put in place measures to ensure adherence to
these guidelines. The study therefore focused on the extent of implementing some of these guidelines as stipulated by the CUE.

2.3 Policies and Procedures for Quality Education

The key role of institutions of higher learning is development of high caliber of human resources for economic development. This is achieved through creation of knowledge, skills and competencies to a large extent by universities. To create this pool of knowledge, skills and competencies universities world over must develop programmes and processes that will ensure the graduates produced are competent in the market. According to the European Association for Quality Assurance in Higher Education (ESG, 2015), universities should have a policy for quality assurance that is made public and form part of the institutions strategic management. This policy should be developed by the internal stakeholders and then be implemented through structures and processes that are appropriate. At the same time, the institutions should involve external stakeholders to ensure the success of these policies. As this is elaborated further by ESG (2015), policies and procedures should form part of the institutional quality assurance and be continuously improved. In their study on *quality issues in the expansion of university education in Kenya* Okioga, Onsogo and Nyaboga (2012) found that universities still lack adequate policies to address quality issues.
For instance, they observed that promotion and professional development of staff in universities is governed by bureaucratic procedures that in some cases reward long service rather than success in teaching and research. Gudo, Olel and Oanda (2011), in their study on *University expansion in Kenya and Issues of quality education* found that the increase in student number in universities has had negative effect on quality and quantity of research. They observed that 40.48% and 58.8% of staff from private and public universities respectively perceived that the number of students admitted had negatively affected the quality and quantity of research in public universities mainly because the staff was overloaded with teaching and monitoring student academic progress at the expense of carrying out research.

These results were corroborated by Chacha, (2004) and Eshiwani (2009), who observed that due to overloading of staff, the research output in universities had declined. With regard to examination process, Gudo et al., (2011) found that the examination process in universities had been compromised. They attributed this problem to the increased number of students in universities. They noted that 35.714% and 63.6% of respondents in private and public universities respectively, agreed that the number of students had negatively affected the quality of invigilation and supervision of university examinations. They observed that the inadequate invigilation and supervision of examinations in public universities were negatively affecting the quality of education.
In regard to cheating in exams, Gudo et al., found that 21.92% and 31.32% of students from private and public universities respectively reported frequent examination cheating, meaning that this vice was to some extent being practised in both public and private universities. They concluded that this behaviour was mostly attributed to lack of preparation on the part of students and partly lack of clear policies to monitor students’ academic work.

The Commission for University Education is charged with the responsibility of regulating all universities in Kenya. In 2014, the Commission instituted universities standards and guidelines for universities to promote highest standards of teaching and learning through institutionalizing an internal and external quality assurance mechanism (CUE, 2014). Among the guidelines spelt out include; using a variety of delivering modes and methods of teaching that promote creativity and critical thinking and staff to avail themselves for consultations, guidance, monitoring and mentoring students (CUE, 2014). Further, the IUCEA guideline has developed an approach that entails internal quality assurance and external quality assurance as shown in Figure 2.1. The internal quality assurance includes the monitoring instruments, evaluation instruments and activities aimed at improvement while external quality assurance includes benchmarking activities and external audits (IUCEA, 2010). The Internal Quality Assurance developed by university according to IUCEA must address issues such as student assessment,
quality assurance for the staff, quality assurance for facilities and quality assurance for student support.

![Quality Assurance System in an Institution of Higher Learning](source: IUCEA (2014))

From information in Figure 2.1 universities being institutions of higher learning must put in place policies and procedures that address internal and external mechanisms to address quality of education. The internal mechanisms entail, admission criteria, student monitoring and evaluation among other components, while external quality mechanisms entail benchmarking and external regulators.
These policies and procedures need to be implemented in order to address the issues of quality of university education (Okioga et al., 2012).

Quality therefore has to be examined in a structural manner, within a well-defined framework. The public universities just like business enterprises need to put quality assurance mechanisms to check on the quality of their inputs, processes and outputs. Some of these systems that have been formulated by various quality assurance bodies across the world usually address inputs and processes that must be effective and adequate to ensure quality education (Materu, 2007).

The policies and procedures must incorporate both internal and external quality assurance mechanisms initiated and carried out by universities themselves to evaluate the quality of education they provide. They can be performed primarily by members of the university staff, or in collaboration with other university stakeholders, such as students, parents, or members of the local community (Eurydice, 2015). Eurydice further observed that internal quality mechanisms can deal with any aspect of school life, from its pedagogical approach, monitoring and evaluation of student learning to its administrative efficiency. The study sought to determine the extent of implementation of policies and procedures (both internal and external) universities in Kenya have put in place in the effort to address issues of quality of education.
2.3.1 Students’ Admission Criteria

There is need for a clear guideline on students’ admission. The universities must, for instance, put in place clear and elaborate student admission criterion that is based on minimum academic requirements for enrollment. An elaborate student admission criterion is critical component of an internal quality assurance system. The department of education in the Republic of South Africa states that for students to be admitted for the bachelor degree, they must meet a minimum admission requirement that is particularly distinctive (Republic of South Africa, 2005). The department further notes that higher education institutions admit applicants who are likely to succeed in degree studies given good teaching, facilities and academic support are availed to the student.

The Commission for University Education stipulates the minimum academic requirements for all academic programmes, which must be adhered to in line with national, international and professional bodies’ requirements. For admission into undergraduate programmes CUE, outlines the criteria for admission as a C+ for Kenya Certificate of Secondary Education (KCSE) holders or its equivalent as determined by the Kenya National Examinations Council (KNEC) or a KNEC diploma or its equivalent (CUE, 2014). The study sought to find out if universities adhere to this criterion when admitting students for undergraduate programmes.
2.3.2 Students’ Academic Handbook

The *Student Academic Handbook* is a guide prepared by universities to provide clarifications on students’ code of conduct, responsibilities, academic regulations and requirements. It is also meant to provide students guidance on taking exams, changing courses, and their general behavior in their academic life. The handbook assists students to prepare for academia to ensure they are successful in the university environment.

Universities must have standards and regulations that all students must abide. These standards provide students with order and an atmosphere conducive to intellectual and personal development. According to CUE (2014), universities should support their students by providing them with information about their programmes on admission. For instance, universities should provide information on examination expectations and requirements as well as regulations that go with the examination process. Such information may entail: types of examinations; ratio of Continuous Assessment Tests to final end of trimester examinations; grading and disciplinary procedures in case of examination malpractices among others. These are some of the information that must be contained in students’ academic handbook. The study therefore sought to establish whether public universities in Kenya issue students with academic book on admission to act as guidance on various matters regarding their academic life.
2.3.3 Monitoring and Assessment of Students’ Academic Work

Monitoring of students’ academic work entail activities carried out by the lecturer to keep track of the student learning for purposes of making instructional decisions and providing feedback to students on their academic progress. According to IUCEA (2010), a university should have a structured monitoring system to collect information about the quality of its students’ academic work. The monitoring system should include: student evaluations, student progress system, structured feedback from labour market and structured feedback from alumni.

A variety of assessment criteria in the course of students’ academic work is another key quality assurance aspect that universities need to uphold. Universities need to come up with policies on variety of techniques to assess student learning (Burungi, 2006). A variety of formative assessment techniques would enrich students’ academic work rather than solely relying on summative assessments. Burungi further observed that students’ assessment on what they have learnt is an important element of quality assurance for the regulatory agencies such as CUE and for the individual universities. Studies by Struyven et al., (2005), Adjei (2013) and Arend (2006) showed that use of a variety of assessment techniques improves student learning and determines the way in which the student approaches learning. Other literature has shown that there is a strong positive relationship between the assessment techniques and student learning.
For instance, the more a course used discussion, written assignments and papers, the more students used critical thinking strategies.

Conversely, the more a course used finals/mid-term and non-graded assignments, the less students reported spending time thinking strategically. Learning is a complex process with many variables involved. Assessment too is complex involving many aspects and dimensions (Arend, 2006). Course assessment often involves formative and summative assessment. Summative assessment is designed to make evaluative judgment at the end of the course of study while formative assessment is often carried out to give feedback and improve instructional processes and thus learning. Just as summative assessment is important in evaluating a course of study, formative assessment is too very critical as it gives the instructor and the students an opportunity for feedback which is acted upon by the instructor and students. Formative assessment promotes interactions between the instructor and students.

Avend (2006) in her study on Course assessment practices and student learning strategies, found that 94% of instructors reported that they had more than 10 individual interactions with their students during the course by using a variety of assessment techniques. In addition, 96% of the instructors reported that they responded to students formative assignments in less than 48 hours. Further, 86% of course instructors indicated that they always used student feedback from
formative assessment to identify misunderstandings and to advise students to improve their work. The study also found that slightly more than half 55% of the students used instructor’s feedback to make any real changes to their assignments and revisions. These findings show that students’ assessment and use of a variety of assessment techniques are a critical element of quality assurance in universities.

External moderation of examinations is another aspect of enhancing quality of examinations in universities. Gudo, Olel and Oanda (2011), observed that external moderation of examinations in private universities was not appropriately implemented. They observed that at United States International University (USIU) external moderation of exams was not in use but rather the institution relied on its lecturers to moderate examinations and results.

In other cases, private universities were operating on a trimester system, translating to high costs of hiring external examiners and therefore avoiding the aspect of external moderation. In public universities Gudo et al., (2011), observed that the external system was in use but faced a myriad of challenges including; large number of students inhibiting the external examiners to go through as many papers as required. Further, the external examiners were found to be examiners and part-timers in several other universities and thus they did not have time to thoroughly scrutinize the exams and results. This according to Gudo, translates to
low quality exams offered in universities. The study therefore sought to establish whether universities had an effective mechanism to monitor and assess students learning.

2.3.4 Benchmarking Policy and Quality of Education

Benchmarking is a process that transforms organizational processes into strategic goals that help an institution of higher learning to systematically compare itself with the best practices and performances of peer institutions (Mugenda, 2011). It is a continuous analysis of an organization’s processes, services, products and functions with an intention of evaluating an organizations current performance and thereby working on mechanisms for self-improvement or exceeding those practices (Anand & Kodali, 2008).

An organization usually uses other organizations that are seen to have best practices as a yardstick. This is the type of benchmarking that Gichinga and Mukulu (2015) refer to as industry benchmarking. In this case, an organization compares itself against industry leaders who share common market and technological features. Because there is no direct competition involved, the benchmarking partner is usually willing to share information on how best an organization can improve its practices. Benchmarking was first adopted by higher education institutions in North America in early 1990s and recently in the mid-1990s, the practice was adopted by universities in United Kingdom and Australia.
The practice has over time grown to be a significant management tool for improvement of a variety of functions across universities (Gichinga & Mukulu, 2015).

According to Garlick and Pryor (2004), the scope of benchmarking has broadened with time, and universities are now benchmarking in areas such as: mechanisms to increase student numbers; establishment of collaborations and linkages, governance structures, contemporary programmes, provision of quality teaching resources and facilities among others. This practice has been embraced at various levels of the university management including quality assurance sector as a mechanism to enhance quality education in universities. The university staffs have found benchmarking a useful management tool as they seek to ascertain performance within their universities and thus design means for self-improvement.

In the recent past, universities in Kenya and those in the rest of the East African region have been blamed for churning out low quality graduates who lack competencies that are required for the 21st century economy (IUCEA, 2014). These graduates according to Mabururu, (2011) are not satisfactorily prepared for the labour market and do not align with the requirements of the Vision 2030 mainly lacking: innovative skills, creativity, ICT and communication skills among other important competencies.
With this challenge therefore, it is imperative for institutions of higher learning to establish and create links with institutions that are seen to produce quality graduates who are marketable across the world. One best way to do this is to benchmark. In her presentation at a UNESCO Global forum, Mugenda (2011) argued that benchmarking is an inevitable practice that must be emulated by universities if they aim to succeed in offering quality services. She noted that benchmarking enables universities to compare systematically with peer institutions, and thus improve their practices, functions and policies. Despite the positive benefits associated with benchmarking, Barak and Kniker (2002), found that some universities are not keen to benchmark due to issues like understaffing, strategic planning challenges and limited compatibility of data especially with institutions that are already adequately endowed with resources and more so, the ones that have entrenched quality management practices over a long time.

The newly established institutions often express frustrations in trying to keep up with the standards of the old institutions. In their study on benchmarking and competitive advantage in universities in Kenya, Gichinga and Mukulu (2015), found that universities have embraced benchmarking as a strategic planning tool. However, external benchmarking was the most common type of benchmarking practised across universities. This is a type of benchmarking where universities compare themselves with institutions that are seen as direct competitors, meaning that industry benchmarking was not commonly used. The study further found that
the reasons for benchmarking ranged from public concern for better academic standards (83.2%), and need to maintain competitive advantage (82.5%). Majority of the respondents in this study also indicated that benchmarking led to customer satisfaction as well as being a successful quality management tool. This study sought to establish whether public universities in Kenya use benchmarking as a quality assurance tool.

2.3.5 Commission for University Education as a Quality Regulator in Universities
The CUE was established under the Universities Act, No. 42 of 2012, as the successor to the Commission for Higher Education. The commission is a government agency mandated to regulate and streamline university education, training and research. It has stipulated a number of functions in the universities Act. However, the core functions are summarized as follows: Planning for establishment and development of universities; training and mobilization of resources; accreditation and regular inspection of Universities; co-ordination and regulation of admission to Universities; and documentation, information Service and public relations for universities in Kenya (Lenga, 2009).

The Commission has an accreditation unit that assess quality control and assurance of the institution and the programmes they are offering, after which they are recognized as meeting minimum acceptable standards. The process is
designated to determine whether or not an institution has met or exceeded the published standards (set by an external body such as a government, national quality assurance agency, or a professional association) for accreditation and is achieving its mission and stated purpose. The process usually includes a self-evaluation, peer reviews and site visits (CUE, 2014).

In the year 2014, CUE published *Universities and Standards* that all universities operating in Kenya must adhere to. This guideline stipulated eight schedules namely: institutional standards; standards for physical resources; standards for academic programme; standards for open, distance and e-learning; standards for university libraries; standards for technical universities; standards for specialized degree awarding institutions and Commission forms (CUE, 2014). It is the mandate of CUE to carry out regular site visits to inspect whether universities are adhering to these standards. The study therefore sought to establish the effectiveness of CUE in its mandate of regulating quality in universities in Kenya.

### 2.4 Human and Physical Resources and Quality of Education in Public Universities

The following are the human and physical resources necessary for quality of education.
2.4.1 Teaching Staff in Universities

For effective teaching to take place at a university level there is a minimum ratio of lecturing staff against the number of enrolled students (Gudo, Olel & Oanda, 2011). According to CUE (2014), a university must ensure that it has adequate and competent human resources in order to carry out its mandate effectively. The universities must have a human resource policy to guide this standard. Consequently, CUE (2014) categorically puts a guideline on the ratios associated with quality teaching and learning for various disciplines are shown in Table 2.1.

Table 2.1: Recommended Ratio of Faculty to Students

<table>
<thead>
<tr>
<th>Programme</th>
<th>Faculty/ Student ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied sciences</td>
<td>1:10</td>
</tr>
<tr>
<td>Arts and Humanities</td>
<td>1:15</td>
</tr>
<tr>
<td>Medical and Allied Sciences</td>
<td>1:7</td>
</tr>
<tr>
<td>Pure and Natural Sciences</td>
<td>1:10</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>1:18</td>
</tr>
</tbody>
</table>

Source: CUE, (2014)

The CUE standards stipulate that an academic programme must be supported by adequate full-time teaching staff with requisite academic qualifications. The guide further outlines that the academic programme shall be supported by: a full-time senior-lecturer and above who holds a doctoral degree in the relevant field; at least two full-time academic staff with appropriate and relevant academic
qualifications; a ratio of 2:1 for full-time to part-time teaching staff and finally the academic qualifications for any teaching staff must be at least one level above what that academic staff is teaching. For instance, a Masters holder should not teach a Masters class (CUE, 2014).

Despite these stipulations by CUE and other regulatory bodies such as ICUEA, literature has shown that universities have not fully adhered to these guidelines. There have been cases of inadequate and overloaded teaching staff with lecturers teaching classes of up to 200 students and above (KIPPRA, 2015; IUCEA, 2014). CUE (2014) advises that the maximum lecturer workload shall be 40 hours per week including: teaching, administrative duties, examination setting and marking, community service and research among other duties that the staff member might be assigned from time to time (CUE, 2014).

Inadequate numbers of staff in higher education institutions could compromise quality of education (Okioga et al., 2012). This situation has been reported to be worse especially in universities in Africa. Amonoo-Neizer (1998) reported, African universities are being faced with the challenge of attracting and retaining qualified teaching staff. Mange (2014) partly attributes this challenge to the brain drain that has affected universities in Africa whereby the most qualified professionals especially in the education and health sector are migrating to the developed world. This has resulted to most universities being left with young and
inexperienced teaching staff. It is estimated that between 1960 and 1989 approximately 127,000 professionals left the African continent for better prospects in the developed countries (Olusola, 2007). Olusola further notes that since 1960, Africa has been losing an average of 20,000 professionals each year.

In addition Mange, (2013) pointed out that without adequate supply of competent and highly trained personnel, production of knowledge by African universities will be limited and in the end the graduates will not have acquired knowledge and skills required by the labour market.

In their study on *University expansion in Kenya and Issues of Quality Education: Challenges and opportunities*, Gudo, Olel and Oanda (2011), found that universities in Kenya were experiencing shortage of teaching staff in various departments. They found that University of Nairobi had only 44.54% of lecturers required to carry out effective teaching. This meant that about 55.46% of lecturers were part-timers.

A research study carried out by the Kenya Institute of Public Policy Research and Analysis (KIPPRA) in the year 2015 observed that 50% of the academic staff at public universities in Kenya did part-time teaching. The part-time lecturers are often engaged by universities to bridge the gap that the full-time lecturers who are often overloaded cannot cope with. This problem has been attributed to a large extent on increased enrolments in universities creating a lecturer/student
imbalance. This challenge started way back in 1990s when the Kenya’s economy went into recession. During this time, the Bretton-Woods institutions introduced Structural Adjustment Programmes (SAPs) to reduce government expenditure. One of the stringent measures introduced was freeze on public sector employment. Public universities being public institutions were not left out in these adjustments. With time, the numbers of lecturers in universities were declining against rising student numbers leading to average ratios of up to 1:500 (KIPPRA, 2015).

Mange (2013), observed that 70% of deans at Egerton University felt that workload due to less staff was a major challenge to university management and thus affecting quality of education. He further found that 62% of deans of schools at Kenyatta University identified inadequate staff in most departments as a major impediment to achieving quality education. This is despite the CUE and IUCEA providing guidelines on the ratios of lecturers to students in various departments. The biggest question here according to Gudo et al., (2011) is, how will the few faculty be able to teach the students as well as uphold the quality since the available few are often overworked? Ngolovoi (2006) supports this claim by arguing that increased workload and lack of competence by some lecturers could be affecting the delivery of quality education to students in universities in Kenya. In support, Odebero (2010), noted that for the faculty to survive the heavy workload, they have developed the survival mechanisms including allocating
graduate assistants and tutorial fellows full teaching load without much of their
guidance.

In other cases, Odebero observes that many masters’ students are subjected to
only project work. This does not go through the quality assurance process that full
thesis need to pass through leading to compromised research work. Gudo (2011),
supports this by observing that assigning junior faculty members without required
experience to supervise students has been due to the explosion of demand for
graduate studies against few competent supervisors and this may further
undermine the quality of research work from the public universities. A scrutiny of
these coping mechanisms reveals that they are detrimental to the quality of higher
education and have negative influence on the quality of graduates (Gudo, 2011).

Another key area affected in public universities is research and development.
There is decline in terms of output, quality and regularity of publications due to
decline in scholarly research (Olukoji, 2002). Despite research being a core
mandate of universities, Chacha (2004) found that reduction in the number and
quality of research carried out by the teaching staff at universities was due to
overloading of staff with mainly teaching and marking duties. Eshiwani (2009),
observed that diminishing government funding has adversely affected the quality
of teaching and research as well as general working conditions in universities.
The 21st century knowledge based economy will demand universities to devise new pedagogical approaches and new pedagogical opportunities require a new caliber of faculty for higher education well-versed with modern pedagogical skills and experiences (Fabrice, 2012). The universities may be eager and enthusiastic to support their staff in form of professional development, but as Fabrice (2012) notes, the kind of professional development is in many cases disconnected from the educational objectives of the programmes. Fabrice concludes by adding that a well-designed programme for staff development must reflect on quality of teaching and learning to meet the expectations of the faculty for it to be meaningful. The study therefore sought to establish the adequacy of staff, academic qualifications and experience required for teaching as a way of addressing issues of quality education in public universities.

2.4.2 Physical Resources in Universities and Quality of Education

Universities worldwide have the core duty of equipping learners with advanced level of knowledge, skills and experiences for positions of responsibilities in government, business and other professions (Varghese, 2004). For this to happen, universities must rely on quality and appropriate infrastructural facilities.

According to CUE (2014), all universities operating in Kenya must provide suitable and adequate facilities to cater for the number of programmes on offer and students enrolment. In this regard, a university shall provide the following
facilities; Lecture theatres or lecture rooms, departmental areas, staff offices and seminar rooms, central administration offices, library, auditorium, staff common rooms, student common rooms with indoor recreation facilities, outdoor recreation facilities in form of games or sports facilities, drainage system, proper sanitation and water supply among other physical facilities. This guideline should apply even at university campuses where the facilities must be comparable to those at the main university.

Being centres of higher learning, universities are supposed to provide excellent teaching and learning environments that are conducive to enhance production of high caliber human capital for transformation of societies. Besides, these environments must promote appropriate interactions and a sense of community that enable formal and informal learning. According to CUE (2014), university facilities must not be: situated in surroundings that could be injurious to the wellbeing of students such as factories, near quarries or dump sites; located in environments that can distract learning such as near bars and night clubs among others; situated in environments that are noisy and therefore impend learning such as airports, bus parks and market places. CUE continues to note that if the university is offering face-to-face programmes, it must be located on a piece of land of not less than 20 hectares in order to support at least 600 students. The Commission further gives directives on specifications that all facilities in the
universities must meet in order to enhance learning. For example, the specifications for a lecture hall are as shown in Table 2.2.

Table 2.2: Specifications for Lecture Halls

<table>
<thead>
<tr>
<th>Number of students</th>
<th>Space in square meter with desk and chair</th>
<th>Space in square meter with chairs only</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-29</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>30-39</td>
<td>1.9</td>
<td>1.4</td>
</tr>
<tr>
<td>40-59</td>
<td>1.7</td>
<td>1.3</td>
</tr>
<tr>
<td>60-99</td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>100-149</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td>150-299</td>
<td>1.5</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: CUE, (2014)

In their study, Gudo, Olel and Oanda (2011) found that the satisfaction level for physical learning facilities among universities in public universities was 43.482%. They noted that some students missed sitting space during lectures while others listened through the windows outside the lecture room. It was noted that this promotes rote learning as students mostly depended on notes from their lecturers.

Physical facilities are important components of quality education and as Ehiametalor, (2001) as noted in Alan (2011), observe infrastructural facilities are the operational inputs of every instructional programme which include critical components that are essential for teaching and learning. Yizengaw (2008)
observed that higher education institutions in Africa have seen very little in terms of providing and improving infrastructure in universities for the last few decades. He further noted that this is mainly attributed to insufficient budget and overdependence on public financing. Infrastructure, such as internet access, library, textbooks, equipment, laboratories and classroom space are critical bottlenecks resulting in deterioration of quality of education and learning. The poor state of facilities also affects the quality of research and its ability to contribute to societal development and progress.

Physical facilities in universities were identified by Bosah (1997), to include lecture halls, libraries, playgrounds, hostels, security facilities among other essential infrastructure that will deliver quality learning in universities. Indisputably, these are very important in the development of quality university education. This qualitative role is further supported by Alan (2011) by observing that the qualitative role played by the infrastructure ensures the comfort, safety and motivational aspect to faculty and learners. Availability of infrastructure facilitates perfect attention required by a teacher and the learner in enhancing academic performance.

Unfortunately, Okwakol (2008) noted that most African universities do not have adequate physical facilities such as lecture theatres, faculty offices, accommodation facilities and libraries to provide a suitable learning and teaching
environment. For instance, she noted that 55% of laboratory equipment in most departments in universities were not in good state in which they could be used to carry out scientific experiments with only about half the experiments being done.

It is important that a university offering courses with practical areas should have laboratories. And as CUE directs, a university conducting courses of programmes requiring the use of laboratories or specialized facilities as part of instructional facilities shall, in addition to providing lecture rooms and lecture theatres provide adequate laboratory facilities. The Commission further gives the specifications for laboratories for different academic programmes as shown in Table 2.3.

**Table 2.3: Specifications for Laboratories**

<table>
<thead>
<tr>
<th>Type of Laboratory</th>
<th>Specialty assignable space per Full Time Students Equivalent (FTSE) in square meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Science Laboratory</td>
<td>2.80 - 3.70</td>
</tr>
<tr>
<td>Building Science Laboratory</td>
<td>3.70 - 4.60</td>
</tr>
<tr>
<td>Biological Health and Veterinary Laboratory</td>
<td>2.70 - 4.60</td>
</tr>
<tr>
<td>Science Laboratory</td>
<td></td>
</tr>
<tr>
<td>Business Management Laboratory</td>
<td>1.90 - 2.80</td>
</tr>
<tr>
<td>Communication Laboratory</td>
<td>2.40 - 3.70</td>
</tr>
<tr>
<td>Education Laboratory</td>
<td>2.40 - 4.60</td>
</tr>
<tr>
<td>Engineering Laboratory (excluding Mechanical)</td>
<td>3.70 - 6.50</td>
</tr>
<tr>
<td>Engineering Laboratory (Mechanical)</td>
<td>6.50 - 9.30</td>
</tr>
<tr>
<td>Fine Arts, Architecture and Design Studio</td>
<td>2.80 - 4.60</td>
</tr>
<tr>
<td>Nutrition and Dietetics Laboratory</td>
<td>2.80 - 4.60</td>
</tr>
</tbody>
</table>

Source: CUE, (2014)
Table 2.3 shows the space in square metres per full-time student equivalent (which means the number of hours of teaching required by one student to fulfill the requirements of the course in an academic year) that universities must allocate for laboratories.

Accommodation facilities are another big challenge for universities across the world. And as the Centre for Global Education (2002) observed, countries around the World find it a challenge to provide accommodation for tertiary students. According to Nimako and Bondinuba (2013), the challenge of providing accommodation has consumed much of the universities management time globally.

In many developed and developing countries, governments are not able to adequately provide accommodation for students who successfully gain admission to pursue various programmes of study in higher institutions. Some institutions of higher learning are coming up with different models of providing accommodation. For instance, according to the Centre for Global Education (2002), universities have entered into organized private partnerships to provide accommodation to the students. However, this arrangement has been a challenge to the educational managers, marketing management and construction management as it poses the challenges to them in ensuring that students
accommodation facility they provide meets the required standards and conditions that enhance students learning.

In their study on the *empirical evaluation of student accommodation quality in higher education*, Nimako and Bondinuba (2013) found that a greater percentage of tertiary students had to choose non-residential accommodation because of the inadequate residential campus accommodation. In other cases, accommodation facilities have been given on priority basis. For example, a study by Odundo, Origa, Nyandega, and Ngaruiya (2015), found that accommodation facilities at the University of Nairobi were issued to regular undergraduate students while the self-sponsored students were asked to seek off-campus accommodation. It was assumed that the self-sponsored students were financially stable and thus could afford their own accommodation. The study attributed the challenge of accommodation to growing number of students whom the university could not accommodate within the university. The study further noted that the students enrolment was not in congruence with the bed capacity. For example, the enrolments had grown from 5,568 students in 1986/87 to 32,421 students in 2006/07 academic year, bed space increased by 6,591 (118%) from 5,600 in 1986/87 to 12,191 in the 2006/07 academic year indicating a high disparity between students enrolment and bed capacity (Odundo et al., 2015).
The students who lack accommodation are therefore left with no option but to make arrangements for off-campus accommodation. The students have also devised survival mechanisms such as sharing rooms and beds in cheap accommodation facilities that have come up outside the campus. It is, however, unfortunate to note that some of these accommodation facilities lack basic amenities such as water, toilets and ventilation. Besides, these facilities are not under control of the university management and therefore, cases of insecurity, immoral behaviour and drug abuse among other vices have been reported. This is despite the Commission for University Education requiring all universities to provide adequate accommodation facilities that are safe and well-ventilated. Lack of campus accommodation makes students waste more time that they could have invested in academic work.

Quality infrastructure in form of technology is critical for research output by universities. According to Republic of Kenya (2006), the quality and quantity of teaching and learning materials particularly information technologies impact in a very significant way on the quality of research from universities. Computer for instance has become a most important notebook, and an important component in all aspects of learning. Okwakol (2008), observed that universities that fail to utilize the benefits of the digital age-computer assisted and web connectivity cannot offer quality university education. He further notes that library services
and information structures in almost all public universities are inadequate (Okwakol, 2008).

Manyasi (2010), while studying how using information technology could increase access to higher education through distance learning in Kenya found that institutions of higher learning lacked necessary technology. The institutions had only a few computers, which were used by lecturers to access internet services. Lecturers and administrators lacked instructional competencies and information design for distance learning associated with delivery of high quality services. Mange (2013), observed that 56.1% of Heads of Departments at Kenyatta University, 26.5% in Egerton and 46.3% of their counterparts in University of Nairobi had inadequate computers to carry out academic work. The report noted that the computers available in most departments and faculties were not adequate to meet the needs of the lecturers leading to a negative implication on communication, research, teaching and learning in the public universities.

These challenges lead to a negative impact on quality education offered in public universities since ICT infrastructures are crucial facilities for carrying out various technological researches by both members of academic staff and students (Mange, 2013).
The problem of inadequacy of infrastructure has been made worse by the increasing enrolment rates. As Republic of Kenya (2006) observed, the increased enrolments have not been matched with expansion of physical facilities and academic infrastructure and that some of the existing infrastructures are inadequate, dilapidated and in bad state of despair. Further, lecturers in universities in Kenya are forced to work under adverse conditions; poor salaries, lack of resources, such as teaching and learning materials including journals and textbooks (Eshiwani, 2009). Eshiwani further observes that these circumstances have resulted in lowering of academic standards and quality of graduates. For instance, graduates who are deficient in written communication and technical proficiency which make them unfit for the market.

Ndethiu (2007) found that proper reading habits in universities have declined mainly due to lack of adequate reading materials. She further observed that lack of up-to-date and appropriate books, inadequate use of internet and general lack of reading space were constraints to students reading. Further, Oanda et al., (2011) found that, public universities in Kenya did not have up-to-date laboratory and workshop equipment necessary for quality learning. They found that, 79.16% and 34.70% of students in private and public universities respectively were satisfied with the laboratory and workshop equipment. This shows that many students in public universities were not satisfied with these facilities.
The inadequacy of these important infrastructures has been blamed on financial constraints which in the end compromises quality of education in public universities. World Bank (2000) and Cheboi (2001) observed that financial resources directed to University education are often inadequate and cannot fully support the level of infrastructure required for quality university education. This study therefore sought to investigate the adequacy of physical facilities and their influence on quality education in public universities in Kenya.

2.5 Learner-support Services and Quality of Education in Public Universities

Learner-support services are critical to student success especially at public universities that enroll large number of students (Varghese, 2004). Van Schalkwyk, (1995), observed that these services are meant to help individual institutions to make their education more effective. Lazarus (1997) defined these services to include the human aspects that provide support to individual learners as well as to other aspects of education. Support services centre on the development of the individual student as well as creating a supportive learning environment. Steyn and Wolhuter (2008) noted that these services may differ from one institution to another depending on the needs and requirements of specific learning institutions. These services are not only important to the learner but also to faculty staff who may need them to optimize their work. These
services include; subject advisory and professional services, research services, communication services and teachers associations.

These services also entail non-academic services required by the learner to optimally gain from the teaching and learning and these may include; school social work services, tutorial/special education services, medical and accommodation services.

These support services have been found by scholars such as Cooper (2007) to enhance student academic success in universities. CUE advises all universities to ensure that student support services are regularly assessed in terms of adequacy and appropriateness to ensure effective teaching and learning. In this study, the focus was more on support services to learners and their availability and extent of implementation in public universities in Kenya since they are critical qualitative aspects in supporting quality education.

2.5.1 Academic Guidance, Advice and Quality of Education

Academic advice is focused on assisting students realize their full benefits of their education programmes. Malone (2009) observed that academic advice is important to students’ success in their academic work as it address the challenges that may face them in their courses of study. Malone further points out that students, whether in university or high school require support in order to realize and acquire skills and knowledge necessary to succeed both at the college level
and in their future careers. Haraver (2009) observed that if well done, academic advising helps students to make good academic choices as well as choose career paths wisely.

The important areas that students need advice on include; programme requirements, academic content competencies, career requirements, cognitive and critical thinking skills, time management and interpersonal skills, and coping abilities. Academic advice should be distinguished from the mainstream guidance and counseling.

According to Muola and Mwania (2013), academic advice is an independent component of the general counseling in schools based on the fact that students have special needs that cannot be adequately addressed in the normal guidance and counseling programme. Academic advisors therefore may refer students facing academic challenges to the counseling department for any psychological issues that may impact on their academic work. Pascarella and Terenzini (1991); Cooper (2007); Poliner and Lieber (2004) observe that academic guidance and advice are critical components that support teaching and learning. They also found that academic guidance and advice services can play the role of enhancing educational capabilities of under-prepared learners instilling skills in academic writing, choice of courses and study skills. They further noted that that these services can assist learners who are struggling academically.
Noel-Levitz (2006) found that academic advice should be part of a retention plan of students who might portray tendencies of dropping out because of challenges associated with academic work. Sharkin (2004) observed that academic advice is perceived to have a positive impact on the students because it helps students to plan on completion of their academic programme. Several studies have indicated that the quality of academic advice can directly affect a student’s chances of graduating (Pascarella & Terenzini, 2005). Steingass and Sykes (2008) highlighted a positive relationship between effective academic advice and student retention, especially for first-year students. Students who receive quality professional academic advice tend to have better retention and graduation rates (Pascarella & Terenzini, 2005; Steingass & Sykes, 2008). Other studies have shown that if students perceive that the universities are mindful of their academic welfare, they are likely to be more determined and focused to succeed in their studies.

A study done by McArthur (2005) found that, 67% of the students felt that the time they spent with their academic advisors was valuable and that it impacted positively in their academic work. Haraver (2009), found that majority of the students who left their programmes of study before completion may have had reasons that could have been avoided with proper programme advice. She recommended that every faculty member should have a role in academic advice and should be supportive of students. Later, a survey carried out by Muola in
2012, observed that majority of students (77%) who were sampled needed academic advice on how to maintain high academic grades. In Spain, Arcov, Fernadez, Heilborn and Lopez (2005) in their study of the profile of university students, revealed that students rated academic needs such as getting easily distracted, need to improve their study skills, problem of time management and problem of test taking anxiety as the areas desiring significant attention. The study sought to find out whether this essential service is part of student support service in universities in Kenya and the extent it has affected quality education.

2.5.2 Guidance and Counseling and Quality of Education

Apart from academic guidance and counseling, another key support service for students in public universities is the guidance and counseling. This is noted as a different kind of support to students. Cooper, (2007) asserts that the aspect of guidance and counseling focuses on preparing students for unanticipated life events and ongoing personal difficulties and challenges students face in universities. For instance, Summers (2003), found that counseling services enhance the retention rates of students with high chances of dropping out. Gatua (2012), observed that guidance and counseling is professional service aimed at assisting students to understand themselves, others, school environment and attain abilities to adjust accordingly.
It is important to note that the students who join university are mainly from secondary schools where they had been confined to a controlled environment under the close care and supervision of their teachers. Once these students join the university, they find a very different environment where their behaviours are not controlled. Furthermore, they find themselves in an environment of varied cultural backgrounds that they were not familiar to. These students will need to adjust to this totally different environment within a short time span. To some, coping becomes very difficult. Guidance and counseling has therefore become an imperative component of the universities due to the ever increasing complexities in the lives of university students.

Muango and Joel (2012) observed that guidance and counseling services help students to adjust to a different environment and other new people and situations in their lives. For instance, universities are institutions with heterogeneous groups of people with whom students will share different facilities such as hostels with others from differing economic, ideological and social backgrounds and thus they must be guided for such new developments. Students all over the world are faced with personal, academic, social and emotional challenges which if not attended to, could affect their academic work. According to the Kenya Institute of Curriculum Development (KICD), guidance and counseling aims at providing information and skills to impart and help students realize their potentialities through holistic growth and development.
Owino (2005) observed that the social development of young university students has become a major responsibility of the universities, that formal guidance and counseling departments with explicit mandates are necessary. University students are much of the time detached from their parents and caregivers. The universities have therefore been left to offer this support in order to help students adjust socially to the new environments they find themselves in. Indiscipline remains one of the most serious problems facing education systems today (Simatwa, 2007). There is little doubt that Kenya has strong provisions for guidance and counseling in schools.

The Sessional paper No. 1 of 2005 (Republic of Kenya, 2005) gave general guidelines on guidance and counseling services in schools. However, the same report, acknowledged that the rapid expansion of University education has brought in many challenges as well as the mismatch between skills acquired by university graduates and the demands in the work place (Republic of Kenya, 2005a, 2005b). Owino (2005), observed that the holistic development of students in universities needs a more official planning and unequivocal description of responsibilities. These will require a lot of support from the individual institutions and in view of these contentions, universities need to develop possible guidance and counseling programmes that learners are exposed to support their academic life. Based on the many challenges that universities found themselves in trying to guide the students with social problems, the universities formed committees to
come up with guidelines on student mental health policies and procedures for higher education (CVCP, 2000).

Various studies have found that guidance and counseling is an important component of universities especially in this era of increasing enrolments and changing student dynamics. A study by Muango and Ogutu (2012), observed that 72.6% of the students at Masinde Muliro University rated guidance and counseling in their university as being satisfactory, implying that almost two thirds of the sampled students were happy with the counseling services. A survey conducted by the Association of University and College Counselors (AUCC, 2002), noted that public universities in Kenya had constituted a campus-based counseling services. Gudo, Olel and Oanda (2011) found that 78.97% and 44.41% of students in private and public universities respectively were satisfied with guidance and counseling services. However, Amukoa (1984) & Khaemba (1986) cited in Muango and Joel, (2012) observed that there has been little effort and will to institute guidance and counseling departments in Kenyan public universities. This according to Muango and Joel (2012) could be the key factor for the many cases of unrest in public universities in Kenya.

These key structures have not been well-designed and the divisions have led to escalation of indiscipline and agitation among the students in Kenyan public universities (Muango & Joel, 2012).
The study sought to ascertain whether guidance and counseling services in Kenyan universities are adequate and effective in addressing students’ needs as a way of assuring quality education.

2.5.3 Financial Advising and Funding and Quality of Education

Another important student support service is financial aid and advice. As Cooper, (2007) notes finances are central to student life in sustaining themselves in universities. A study that was conducted by the Community College Survey of Student Engagement (CSSE) in 2008, found that 45% of students noted that finances were crucial for their continued stay in universities. Education involves both direct and indirect costs. Direct costs are mainly related to the tuition fees, books and accommodation among others. All these aspects require financing. Currently, many governments across the world are passing part of the burden of higher education financing to students and their parents a policy commonly known as Cost Sharing Policy. This has left many students and parents strained on meeting the costs associated with education.

The Kenya government initiated and supported several commissions and presidential working parties to look into various issues related to education key among them, financing of education in order to address the issues of access, equity, relevance, and quality (Gichui, 2015). The Presidential Working Party on Education and Training for the Next Decade and Beyond (popularly known as the
Kamunge Committee) was set up in 1988 to address issues of quality, relevance, cost, financing, devolvement, and the management of education vices. One of the major recommendations by this commission was cost sharing policy in the financing of the education sector. This policy required that communities, including parents, were to construct schools and finance other projects in primary, secondary and tertiary levels. The government on its part was to employ teachers and education managers.

The policy was implemented immediately and it brought about several dynamics and challenges in the education sector. At the University level for example cases of student strikes and drop outs were reported especially for the poor who could not afford the tuition fees and other running expenses. Gichui (2015) observes that many parents who could barely afford the basics of life were forced to support their children university education. One way to finance education was through subsidized loans by the government.

The National Student Financial Wellness Study (2015), found that majority of students, 64.0% used loans to pay for college and more than one third, 35.5% of students use students loans as their primary source of funding for their tuition. In Kenya, despite the government introducing students loans through the Higher Education Loans Board (HELB), which attracted small interest rates, the rising cost of tuition forced many students to seek alternative forms of financing their
education such as part-time working or selling food in the hostels in order to sustain themselves. This has often resulted to fatigue thereafter making it very difficult for students to concentrate in their studies.

In this predicament, many students find themselves struggling and just studying, not to do well, but to pass the class and move on (Gichui, 2015). Other forms of financing higher education such as bursaries and Constituency Development Funds were introduced by the government. However, these funds have been meagre and often under the patronage of politicians who in many cases do not consider the needy cases when awarding them. The competition for these funds has also been stiff especially with the rising poverty with many cases of deserving students missing out.

A study by Deolalikar, (1999) noted that though access to primary education is equitable, inequity increases from the secondary level and by the time students reach university; the poorest quintile constitutes only 7.54 per cent of higher education attendance while the richest quintiles account for 44.78%. The finding by Deolalikar means that majority of the poor students are not able to transit to universities due to the perceived high costs associated with university education. Otieno (2007), found that inequity at the university level is so rampant with 78.3 per cent of the students coming from high income/high middle income families, while only 21.7 per cent being from low income families. He noted that this has
implication on access and affordability issues, especially when the question of subsidies is not formulated well.

It is, therefore, important that students require financial management skills in order to appropriately utilize the little finances they have. Several studies have shown that lack of proper financial management by university students has resulted to financial stress and often the students confronted by this challenge end up performing poorly in their academic work or even dropping out altogether (Eisenberg, Gollust, Golberstein & Hefner, 2007; Westefeldet al., 2005). Stress associated with students funding and managing their finances to support their education, lowers students’ academic performance and in other instances forces students to reduce their course loads or withdraw from college completely to pursue full-time employment, which in the end increases students time for graduation (Joo, Durband, & Grable, 2008; Letkiewicz et al., 2014-2015). Other studies by Eisenberg, Gollust, Golberstein and Hefner, 2007; Westefeld (2005), found that financial stress among college students has even been linked to poor mental health and suicide attempts. However, students with greater financial self-efficacy are less likely to report financial stress (Heckman, Lim & Montalto, 2014).

To manage such challenges, universities need to come up with structured means of advising students on appropriate means to raise their finances as well as
mechanisms on how to manage the little they have, in form of financial advice services. A study by Community College Survey of Student Engagement in United Kingdom (2008) found that, a great majority of students indicated that financial advice is one of the most critical support service they desired from their universities. In the United States, the federal government requires federally subsidized students to participate in entrance and exit counseling for their debts management. This should be a lesson for Kenya when majority of the students in tertiary institutions partially finance their education through loans from HELB.

Several studies have shown that majority of students are limited in regard to their money management skills. Henry, Weber and Yarbrough (2001) found that most students do not follow a written budget and most of these students attributed this deficiency to lack of skills in managing their finances. This service could emphasize advice students on avenues for financing their education, financial management as well as helping them better understand the role of finances in their lives. There was need to establish if public universities have put in mechanisms to support their students in advising them on management of their finances as well as alternative avenues for financing their education.
2.6 Stakeholders Involvement in Curriculum Development and Quality of Education in Public Universities

The concept ‘stakeholder’ has been treated as a relatively new concept. It was coined by R.E. Freeman, in his management theory that he formulated in 1984 (Fontaine, Harman & Schmid, 2006). Freeman’s definition of stakeholder was later taken as a traditional definition which meant any group or individual who can affect or is affected by the achievement of the organization’s objectives. In the case of learning institutions and in regard to the education and training sector, Amaral, Jones and Karseth (2002) define stakeholders to include the teaching staff, students, parents, employers, the state and the institutions themselves. With reference to universities and other institutions of higher learning, Amaral, Jones and Karseth (2002) distinguish between two types of stakeholders, namely; internal and external. He defines internal stakeholders as all those individuals or groups who participate in the daily life of the institution, including the academic staff, non-academic staff and students.

On the other hand, Amaral defines external stakeholders as representatives of outside interests who also play the management role just like the internal stakeholders. In this case, external stakeholders represent the industry and employers, the regulators and the alumni industry among others. These stakeholders have a critical part to play in informing the management the quality
of products they want from the institution as well as encouraging positive attitudes in the interest of the society of which the institutions are part.

Stakeholders are, therefore, important elements of an institution of higher learning in ensuring quality education in public universities. Across the world, university education is experiencing massive change much of it driven by national desire to create a ‘knowledge economy’ or to obtain greater social rather than individual benefits in a more ‘inclusive society’ (Msiska & Chulu, 2006). They further observe that providers of university education have to be more accountable for standards, quality of services provided and for their public spending. In this regard, stakeholders who include students as customers, professional bodies as contributors to curriculum content and accreditation, as well as employers must partner in curriculum development, delivery and revision.

Stakeholder consultation or compliance is perceived to influence many aspects of university service provision and in some cases, it has been seen as eroding the traditional university autonomy. Curriculum content is now largely determined by these stakeholders rather than academics as the case was for a long time (Msiska & Chulu 2006).

According to the education Acts in Belgium, Netherlands, Finland, Sweden and Norway, there is clear stipulations for collaborating with stakeholders in
universities (Thijs and van den Akker (2009), Eurydice, 2008). In Iceland for example, universities must disseminate the results of scholarly work and technological innovations to society.

The educational curriculum of any nation affects, effects and is affected by the structures and aspirations of the wider society. According to Olibie (2014), curriculum provides the education system with an opportunity to respond to the contextual requirements of the society. Therefore, concerted efforts must be made to develop and implement a curriculum that meets the needs of both the local and international community. In addition, UNESCO (2009) observed that curriculum development process should progressively evolve into a public debate engaging policy-makers, curriculum experts, practitioners, and the society at large. In England, Hoogholf and Bron (2008) observed that, curriculum development largely relies on advisory committee of educators and a review panel made up of teachers, academics and the industry (employers) each with their own input in order to come up with a curriculum that is holistic.

UNESCO (2009), supported involvement of stakeholders in curriculum development and stated that governments should take appropriate steps to make curriculum at any level of education participatory. In addition, UNESCO noted that for curriculum innovations to be successfully implemented, the general public needs to understand their nature and purpose. World Bank (2003) supported
UNESCO, by adding that concerted efforts must be made when developing a curriculum in terms of involving all stakeholders.

In New Zealand, stakeholders’ involvement is very significant. According to several studies in New Zealand, curriculum development at any level of education goes through a series of trials in schools, industry, online discussions and international inquiries. From the onset, research done among teachers in Scotland by UNESCO (2005) indicated that they are engaged fully in shaping the curriculum by giving feedback in development and revision process.

In today’s modern and contemporary society, learners must be facilitated with a curriculum that is challenging and intrinsically motivating to respond to the needs of the society. In Kenya, there is no central body charged with the responsibility of developing the university curriculum (Mwebi, 2015). Each university develops its own curriculum depending on its uniqueness, mission and vision. The content is developed and peer reviewed at the departmental level under the guidance of the experienced staff before it is passed to the senate for adoption. Once adopted, it is presented to the CUE for external review. If accepted by the CUE, the curriculum can be implemented by the university (CUE, 2013). It is at the department and/or school level therefore that universities should engage stakeholders in developing the content of the curriculum.
Several studies have found that stakeholder involvement in curriculum development and revision play a significant role in ensuring that the curriculum implemented is adaptable to the needs of the society. Koskei (2015), found that stakeholders involvement plays a significant role in the implementation of a new curriculum innovation.

However, a study by Olibie (2014) on parental involvement in curriculum development and implementation in schools found that there was low extent of parental support in curriculum matters for their children. This is despite Jing and Zhou’s (2012) observing that parental support significantly contributes to students understanding of their school curriculum. Further, a study by Otunga (2007) indicated that teachers’ participation in the process of curriculum development contributed to ownership towards implementation of that curriculum.

Employers have a lot of potential in enhancing the employability of university students (Centre for Career Management Skills, 2009). By engaging employers in curriculum development and revision, students are exposed to opportunities for placement, research as well as curriculum that is market focused (CMS, 2009). It is important to note that employers are important sources of information about the needs of the labour market as well as the challenges the students are likely to face in the workplace. According to Mwebi (2015), employer involvement in curriculum development is central in enhancing students with skills, knowledge.
and experiences required by the labour market. It ensures that universities offer curriculum that is relevant, valid and in tandem with the needs of the industry. Besides, it ensures students get the opportunity to develop high-quality flexible study opportunities.

A study by Quality Assurance Agency (2015) in the United Kingdom, found that, involving employers in curriculum development cycle, has enhanced the relevance of basic degrees. The study further observed that embedding the skills and experiences from the industry has enhanced student employability and grounded students with locally required skills and attributes. The same study found that, although the employers were mostly involved in programme design, through providing feedback and validating university programmes, there was little documented evidence by the universities on a formal process of engagement. This means the universities involved in the study had not put an elaborate formal engagement with the employers.

The regulators are also part of the stakeholders engaged in curriculum development in the universities. The regulatory bodies are involved in accrediting degree programmes to ensure they cover specific content. In some cases, the regulatory bodies may require students to demonstrate their knowledge and understanding through spending a specified number of hours on a practically related field or work-related assignment in a company (QAA, 2015).
In Kenya, for example, CUE has stipulated the minimum number of credit hours that students must cover in a given programme. It is, therefore, the responsibility of such a regulatory body to ensure that universities adhere to such stipulations.

In the context of university curriculum, it is essential for stakeholders to participate especially in this era of globalized and diversification of higher education. The general public is more than before demanding quality education offered to students in public universities (OECD 2011). In addition, universities as custodians and disseminators of knowledge, have the social responsibility to equip the members of the society with necessary skills, competencies and knowledge so that they can constantly transfer these skills to the changing nature of work and be adaptive and sensitive to cultural identities of other people.

Higher education curricula must among other things reflect on continuously exposing students and staff in the universities to wide views of the globalized world (ASSHE 2010). University curriculum must also encourage students to reshape their approaches and views about learning and teaching and be flexible to accommodate the dynamics of the 21st century knowledge economy. Besides, universities need to produce manpower that has relevant skills to the job market.

A study by the British Council on graduate employability in Kenya found that there have been policy initiatives and statistical data focusing on the youth
generally without focusing on skills required by the labour market. The study notes that the situation is worse at universities, whose introduction of new courses does not seem to have been informed by the market needs, and thus contributing to graduate unemployment. It is unfortunate for such issues to arise when CUE requires all universities to put in place structures to carry out self-assessment of their programmes at regular intervals by incorporating the opinions of stakeholders such as students, alumni, labour market and the society in general (CUE, 2014).

According to Schemburg and Teichler (2006), universities ought to prepare their students to realize the highest possible skills to enable them to fit in the job market. In their report on *Enhancing Graduate Employability*, Tumuti, Wanderi and Thoruwa (2013), found that Kenyan universities are not equipping their students with skills needed in the job market. They noted that the universities are not connected to their local environments and context. They recommended that by universities engaging in off-campus communities, students can gain generic skills that enhance their employability mainly through community engagement programmes which focus on volunteering and specific programmes that address community problems. These community engagements are becoming common practices in higher education discourse across the world (Bender 2008; Jacoby 2009; Mule 2010). At the policy level and in reference to Universities bill 2012, one of the objectives of university education is community service.
Further, the mission statements of many universities have committed to ‘service’. In this regard, universities must be run with the community being part and parcel of the institution, since the products from the university will be consumed by the society.

It is, therefore, necessary for universities to engage with stakeholders in the process of developing their academic programmes as well as revising them to fit the needs of the society. IUCEA, (2010), postulates that institutions of higher learning must have structured methods to obtain feedback from all stakeholders for the measurement of their satisfaction. In this regard, the internal quality assurance system must have a way of collecting information from the stakeholders in a structured way, especially the labour market (employers) and the alumni (IUCEA, 2010). The study sought to determine the extent to which stakeholders are involved in curriculum development and revision to address the needs of the industry as stipulated by IUCEA and CUE guidelines.

2.7 Summary of Literature Review

Overall, literature review outlines quality assurance systems, processes, resources and support services that universities worldwide, specifically in Africa and in Kenya must put in place to enhance quality of education in universities. Quality education has been identified by previous studies as critical across all levels of education. Student enrolments have surpassed the capacity of traditional
infrastructures that have not expanded in comparison with the enrolment rates. The student demographics and profiles have changed with entry of mature students and different modes of learning being introduced. The civil society and general public is more than ever before concerned about the quality of graduates being churned out by the universities.

The resulting attempts to solve some of the issues in Kenya have included among others the establishment of policies and procedures to address quality as well as ensuring human and physical resources and student support services are adequate and effective in addressing issues of quality. However, under the current expansion of public universities in terms of increased enrolments and wide scope of courses offered, issues of quality of education have been raised. Various bodies such as CUE and IUCEA have established guidelines that universities must emphasize to ensure quality of education is maintained. Based on these observations, the study identified the following gaps: First, much of the empirical research has focused on quality assurance systems without looking at the extent of implementation according to the CUE guidelines in Kenya. Second, there is limited empirical research that has linked the four components of the theoretical framework in determining the quality of education in public universities in Kenya.
Third, most of the previous studies have focused on the need for putting in place quality assurance systems to assure quality ignoring the influence of these systems on quality of education. Lastly, there is very little empirical research in Kenya on quality assurance and its influence on quality of education. These are the research gaps that this study aimed to fill.
CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter focused on the methodology and procedures which were adopted in carrying out the study. The chapter is divided into the following sections: research design, study locale, target population, sampling techniques and sample size, research instruments, piloting, validity and reliability of instruments, data collection procedures, methods of data analysis, logical and ethical considerations.

3.2 Research Design

The study was exploratory in nature based on Mixed Methods design. Burns and Groove (2001) define exploratory research as research conducted to gain new insights, discover new ideas, and for increasing phenomenal knowledge. An exploratory design is appropriate in cases where there are few or no earlier documented cases of a research problem. According to Polonsky and Waller (2005); Cooper and Schindler (2006), exploratory research design is most useful in situations where there is inadequate information regarding a particular phenomenon and therefore, the researcher wishes to explore that area in order to form basis for future research. Davis (2000); Zikmund (2003); Cooper and Schindler (2006), elaborate this more by noting that the primary goal of exploratory research is to gain better understanding of an issue or situation.
Mixed Methods Exploratory design was appropriate for this study because the researcher was interested in exploring implementation of quality assurance guidelines in public universities and its influence on quality of education, where very little empirical studies existed. Triangulation was employed to develop a better understanding of complex phenomena by corroborating or complementing the responses from the different instruments. According to Mertens (2005), Teddlie and Tashakkori (2003), Green, Benjamin, and Goodyear, (2001), corroboration of one set of results with another enhances the validity of inferences. Mixing of methods according to the proponents of this design such as Creswell, (2009) and Johnson, (2008) argue that it is inevitable while undertaking research, whether done consciously or not, because most research paradigms are not single, pure types but mixtures of beliefs and practices that are evolving through continuous re-evaluation.

The quantitative descriptive approach was used to generate data from a wide number of sources about the respondents’ knowledge and practices regarding the nature of the existing quality assurance systems and practices across the targeted universities and their levels of implementation. The quantitative data alone may not enable deeper explanations for why a phenomenon occurs. This dimension necessitates the use of qualitative data. Hence, the qualitative approach was employed to get data that captures the different dimensions of respondents’ experiences, personal perspectives and meanings, values, norms, and beliefs.
regarding quality assurance systems and practices (Johnson & Onwuegbuzie, 2004). Quality assurance in universities is the independent variable for the empirical analysis of this study. In this case, quality assurance was conceptualized inform of CUE guidelines that universities must adhere to, in order to ensure quality of education in public universities.

These were conceptualized inform of policies and procedures for quality education, the human and physical resources, student support services and level of stakeholders involvement in curriculum development and revision to ensure quality education in universities. The policies and procedures include the internal and external quality practices that universities have put in place. The internal system was taken to include: student admission criteria, monitoring and assessment of student learning while external quality assurance was conceptualized in terms of universities benchmarking with best practices and accreditation. The physical resources included: lecture halls, libraries, halls of residence and ICT facilities. The human resources were conceptualized in terms of staff numbers, academic qualifications and experience. The learner-support services were conceptualized in terms of adequacy and availability of student career advisory services; guidance and counseling and financial aid advisory services. Lastly, stakeholders’ involvement was conceptualized in terms of the extent to which employers, alumni and CUE are involved in curriculum development and revision in the universities. All these elements were
conceptualized in terms of adequacy and availability in influencing the quality of education.

The dependent variable was the quality of education in public universities. In this study, quality of education was envisaged according to students who possess innovative, creative and critical, communication skills, problem solving and ICT skills. The acquisition of these skills has been supported by the framework for 21\textsuperscript{st} century skills which highlight the important elements that an education system must strive to achieve if it is aiming at quality education (Howland, Johassen & Marra, 2012).

3.3 Study Locale

The study was carried out in two public universities that were purposively selected; Kenyatta University (KU) and Technical University of Kenya (TUK). Purposive sampling involved deliberate selection of settings, persons, institutions or events that the researcher felt had important information to answer the research questions.

Kenyatta University (KU) is located 16 kilometres from Nairobi City along the Nairobi-Thika super highway while Technical University of Kenya is located along Haille Selassie Avenue in Nairobi Central Business District. Kenyatta University was selected because it is one of the oldest universities in Kenya.
having been established in 1985. In this regard, the study sought to investigate the extent to which the university has entrenched a quality assurance culture for quality education. In addition, Kenyatta University had the highest enrolment with a population of 76,879 students (Republic of Kenya, 2015). TUK was selected because of its orientation to the area of Technical Education which is a key element for the achievement of Vision 2030. In addition, TUK had the highest enrolment in the technical category with a student population of 7,201 (Republic of Kenya, 2015).

3.4 Target Population

The target population comprised: the fourth year students, deans of schools and directors of quality assurance at KU and TUK. Fourth year students were targeted since they have been in the system for a longer period of time and therefore they have more information and experience on the quality education they have been receiving in their respective universities. The deans of schools were targeted because they are in charge of implementing quality assurance system at the school. The directors of quality assurance were targeted since they are involved in developing, monitoring and reporting quality standards across the university. The target population thus comprised 21,072 fourth year students, 21 deans of schools and 2 directors of quality assurance at KU and TUK (Republic of Kenya, 2015; CUE, 2015).
3.5 Sampling Techniques and Sample Size

The study adopted the following sampling techniques in arriving at sample size:

3.5.1 Sampling Techniques

Two public universities were purposively sampled for this study. For the students, the researcher used proportionate sampling and simple random sampling. While for the deans of schools and quality assurance officers, the researcher used a census. Therefore, the sampling techniques for the research study were: purposive, proportionate and simple random sampling.

3.5.2 Sample Size

Kenyatta University and Technical University of Kenya were purposively selected. In these universities, there were 21,072 fourth year students, 21 deans of schools and 2 directors of quality assurance (Republic of Kenya, 2015; CUE 2015). A census was used for the case of deans of schools and quality assurance directors, with 21 deans of schools and two directors of quality assurance being involved in the study. To determine the study sample size of students, the researcher used Slovin’s formula (1960).

\[ n = \frac{N}{1 + Ne^2} \]

Where: \( n \) = sample size
N= size of population

e=margin of error (0.05)

The study sample size is shown in Table 3.1.

Table 3.1: Presentation of Sample Size

<table>
<thead>
<tr>
<th>Category</th>
<th>Target population in 2 selected universities</th>
<th>Study sample size</th>
<th>University</th>
<th>Population in the respective universities</th>
<th>Study sample size (proportionate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students (fourth years)</td>
<td>21,072</td>
<td>411</td>
<td>KU</td>
<td>19,219</td>
<td>374</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TUK</td>
<td>1,853</td>
<td>37</td>
</tr>
<tr>
<td>Deans of schools</td>
<td>21</td>
<td>21</td>
<td>KU</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TUK</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Directors’ Quality Assurance</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>21,095</td>
<td>434</td>
</tr>
</tbody>
</table>

3.6 Research Instruments

This study used questionnaires and interview guide as the research tools. The questionnaires were used to gather information on the four broad objective areas of the study from the students and deans of schools. The interview guide was used to gather information on quality assurance system and quality of education from the directors of quality assurance. The questionnaires had both structured
questions (close-ended questions) and unstructured (open-ended questions). The respondents were required to select answers from the choices given in the structured questions. The unstructured questions gave the respondents the freedom to respond according to the information required, in one’s own words. The researcher also gathered information from documentary sources.

3.6.1 Questionnaire for the Deans of Schools

The questionnaire for the deans of schools was divided into sections A to E. Section A focused on the general information which included the school and academic qualifications. Section B comprised items focusing on the policies and procedures put in place to ensure quality education. Section C comprised items focusing on available physical and human resources and their adequacy in influencing quality of education. Section D focused on learner-support services in terms of availability and their influence on quality education and finally section E focused on level of stakeholders’ involvement and their influence on quality education.

3.6.2 Questionnaire for the Students

The questionnaire for the students was divided into sections A to F. Section A focused on items relating to background information; age, gender and school. Section B comprised items focusing on the policies and procedures necessary for quality education and their level of influence on students learning. Section C
comprised items mainly focusing on the availability of infrastructural facilities including lecture halls, libraries and ICT resources and how they affect students in their learning. Section D comprised items on the availability of learner-support services and their effect on students learning. Section E comprised items on the stakeholders’ involvement in programme development and revision as well as areas linking students to the job market while section F comprised items that entail quality education.

### 3.6.3 Interview Schedule for the Directors of Quality Assurance

The interview schedule for directors of quality assurance sought to elicit responses on quality assurance mechanisms that these departments have put in place to ensure quality education in public universities. It comprised nine open-ended (unstructured) items addressing the four broad areas of research objectives; including responses on policies and procedures, physical and human resources, learner-support services and extent of stakeholders’ involvement and their influence on quality of education.

### 3.7 Piloting

Piloting was carried out to ensure that the instruments were clear to the respondents. This enabled the researcher to modify, restructure and exclude any unclear items. One dean of school and ten students from one of the selected universities participated in the pilot study.
3.7.1 Validity of Instruments

Content validity was used to determine the comprehensives of the research instruments in addressing research questions. The content and face validity of the research instruments were arrived at through consultation with supervisors and experts in the field of quality assurance. Their opinion was important in order to ensure the content and face validity of the instruments measured what they were intended to measure.

3.7.2 Reliability of Instruments

To determine reliability of the instrument, Split-half technique was employed to determine the consistency of the items in the questionnaires. The Spearman-Brown Prophecy formula was applied to determine the reliability.

\[
\text{reliability} = \frac{n \times r}{1 + (n-1)r}
\]

Where:  \( r \) is the mean inter-item correlation
\( n \) is the number of items in the scale

If the test is reliable, scores on the two halves have a high positive association, meaning a high correlation coefficient (Orodho, 2005). Orodho (2009) further notes that a correlation coefficient (\( r \)) of about 0.7 should be considered high enough to judge the reliability of the instrument. Table 3.2 shows the reliability coefficients for the questionnaires whose reliabilities were tested.
Table 3.2: Reliability Coefficients for the Questionnaires

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Reliability coefficient, (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean of school (1)</td>
<td>0.790</td>
</tr>
<tr>
<td>Students (10)</td>
<td>0.786</td>
</tr>
</tbody>
</table>

Source: Deans and students questionnaire

In this study, the items were considered reliable since they yielded a reliability coefficient of above 0.70. According to Fraenkel and Wallen, (2000) and Orodho, (2009), this figure is usually considered desirable for consistency.

3.8 Data Collection Procedure

After being cleared by the supervisors, an introductory letter was obtained from the Graduate School, Kenyatta University before obtaining a research permit from the National Commission for Science Technology and Innovation (NACOSTI). A copy of the permit and an introductory letter was presented to the universities to request for an introductory letter to the respondents.

Finally, the researcher visited the selected public universities to make appointments with the participants in order to make arrangements for the actual data collection dates according to their convenience. At the stage of administering the questionnaires, the respondents were assured of privacy and confidentiality of their responses indicated in the questionnaires. The researcher
trained two research assistants who assisted in questionnaire distribution and collection among the students. However, the researcher distributed and collected questionnaires from the deans himself as well as the face-to-face interview schedules with the QAOs.

3.9 Data Analysis Techniques

In this study, the intention was to investigate implementation of quality assurance practices in public universities and its influence on quality of education. Thus, the unit of analysis was institutional level quality assurance systems and practices. Of the seven stages of the mixed methods data analysis processes suggested by Onwuegbuzie and Teddlie (2003), four stages, namely; data reduction, data display, data consolidation and data integration were employed in this study. According to the authors, data reduction refers to condensing the dimensionality of quantitative and qualitative data through descriptive statistics and thematic analysis; data consolidation deals with combining both quantitative and qualitative data to create new or combined variables; and data display refers to describing virtually the qualitative data in graphs, and charts; in the data integration stage, both qualitative and quantitative data are integrated into either a whole or separate sets.

The data were subjected to descriptive analysis encompassing a range of both qualitative and quantitative treatments. The data collected through questionnaires
were analyzed by aid of the Statistical Package for Social Sciences (SPSS 22.0) computer software. Tabulation enabled the researcher to categorize the subjects in this research. Tabulation enables data to be put in tables for easier interpretation (Kothari, 2005). The frequencies enhanced analysis of the continuous variables. Data were presented by use of appropriate tables and charts. Inferences were made from these presentations about the whole population. The following is an explanation of how each of the objectives was analyzed:

**Objective one: To assess the level of implementation of CUE quality assurance policies and procedures necessary on quality of education in public universities in Kenya**

This was analyzed quantitatively and qualitatively. In relation to objective one, these are some of the issues on which data were collected and analyzed; i) the internal quality assurance systems universities have put in place ii) the external quality assurance systems iii) the level of implementation of the quality assurance systems and iv) the influence of quality assurance systems on quality of education in public universities. Data were collected and analyzed using descriptive statistics (frequencies, percentages, medians and standard deviations).
Objective two: To examine the influence of human and physical resources on quality of education in public universities

This was analyzed quantitatively and qualitatively. Objective two aimed at data focusing on i) staffing level and its adequacy ii) existing physical infrastructure and its adequacy and iii) the influence of physical and human resources on quality of education. Data was analyzed using descriptive statistics such as percentages, medians and correlations.

Objective three: To examine the influence of learner-support services on quality of education in public universities

This was analyzed using both quantitative and qualitative methods. Data were collected on i) learner-support services available ii) adequacy and effectiveness of learner-support services iii) level of implementation of the learner-support services and iv) the effect of learner-support services on quality education. These were analyzed using descriptive statistics such as percentages, medians and correlations.

Objective four: To assess the level of stakeholders’ involvement in curriculum development and revision in ensuring quality of education in public universities

This was analyzed using both quantititative and qualitative methods. In relation to objective four, these are some of the issues on which data were collected and
analyzed; i) level of stakeholders involvement ii) stakeholders involved iii) activities stakeholders are involved in. The data were analyzed using descriptive statistics and correlations. The themes for the data analyses were derived from the conceptual framework of the study that was grounded in the basic research questions. Analysis of quantitative data were displayed first and then corroborated by qualitative data.

3.10 Logistical and Ethical Considerations

The researcher visited the universities to inform the subjects of the purpose of the intended study, their role and then sought their informed consent to participate. The researcher assured the respondents that the information they gave would be treated with utmost confidence. Permission was sought from the vice-chancellors through the deputy vice-chancellors before collecting the data. The researcher administered the instruments with the help of two research assistants who had been trained beforehand. Confidentiality and anonymity played a significant role in terms of obtaining access to respondents. It is also crucial to underscore that respondents were not required to indicate their names anywhere. Further, the researcher avoided all forms of plagiarism by citing all sources accordingly.
CHAPTER FOUR
FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents data, findings, interpretations and discussions. It is divided into six sections: background information; level of implementation of policies and procedures necessary for quality of education; influence of existing physical and human resources on quality of education; learner-support services and quality of education and level of stakeholders’ involvement in curriculum development. The presentation of findings was done using tables and graphs. According to Kothari (2004), academic writing mainly requires the use of tables, figures and graphs to present data. He further asserts that tables, figures and graphs should be integrated and used appropriately to make comparisons and show trends in presenting detailed information of a statistical nature. The study was guided by the following objectives:

i. To assess the level of implementation of quality assurance policies and procedures on quality of education in public universities in Kenya.

ii. To examine the influence of human and physical resources on quality of education in public universities.

iii. To assess the influence of learner-support services on quality of education in public universities.

iv. To examine the extent of stakeholders’ involvement in curriculum development for quality education in public universities.
In addition, the study was guided by the following hypotheses tested at 5% significance level:

\( H_{01} \): There is no significant relationship between human and physical resources and quality education at public universities in Kenya.

\( H_{02} \): There is no significant relationship between learner-support services and quality education at public universities in Kenya.

The data was first transformed after which the results were analyzed and presented in terms of frequencies, percentages and median. The median weightage was interpreted as follows: 0-1.4: Negative response, 1.5-2.4: Neutral response and 2.5-3: Positive response.

### 4.2 Background Information

A total of eighteen (18) out of 21 deans filled and returned the questionnaires. This gave a response rate of 86.0%. The study also found that all the deans who participated in the study were PhD holders which is an indication that for one to be appointed as a dean of a school, she/he must be at the level of a lecturer and above as per the CUE guidelines on staff promotion criteria.

With regard to the gender of the students who responded to the items of the questionnaire, majority from KU were males while females were the majority at TUK. This information is shown in Figure 4.1.
Information from Figure 4.1 shows that, slightly above half 188(55.5%) students from KU were males with 151(44.5%) of them being females. In TUK, majority of students 17(51.5%) were females whereas 16(48.5%) were males.

Finally, with regard to the age distribution of the students in KU and TUK, majority were below 25 years. This information is shown in Table 4.1.

Table 4.1: Distribution of Students by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>KU</th>
<th>TUK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Below 25 years</td>
<td>287</td>
<td>85.7</td>
</tr>
<tr>
<td>26-30 years</td>
<td>43</td>
<td>12.8</td>
</tr>
<tr>
<td>31-35 years</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>51 and above</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>Total</td>
<td>335</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Students questionnaire
Whereas majority 287(85.7%) of the students from KU who responded to the items on the questionnaire were below 25 years, all students 32(100.0%) from TUK were also below 25 years. Forty-three (12.8%) of students from KU were aged between 26-30 years with only 5(1.5%) of them being over 30 years old. It can be observed that majority of the students joined university immediately after completing their secondary school level of education.

4.3 Level of Implementation of Policies and Procedures Necessary for Quality Education
This section addresses objective one which focused on the level of implementation of policies and procedures necessary for quality education in public universities. The respondents were required to indicate their levels of satisfaction on the extent to which internal and external quality assurance guidelines have been implemented as per the CUE guidelines.

4.3.1 Extent of Implementation of Guidelines on Internal Quality Assurance System
The research sought the responses of deans from KU and TUK in relation to implementation of internal quality assurance guidelines. Deans responded to statements in relation to implementation of internal quality assurance guidelines in their Universities as shown in Table 4.2.
Table 4.2: Deans’ Responses on Implementation of Internal Quality Assurance Guidelines

<table>
<thead>
<tr>
<th></th>
<th>KU Deans</th>
<th></th>
<th>TUK Deans</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Disagree</td>
<td>Undecided</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
</tr>
<tr>
<td>My university has put in place an elaborate internal quality assurance system</td>
<td>3 1 6.7% 0 0.0% 14 93.3%</td>
<td>3 1 33.3% 0 0.0% 2 66.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are policies and procedures to guide teaching and learning</td>
<td>3 1 6.7% 0 0.0% 14 93.3%</td>
<td>3 1 33.3% 0 0.0% 2 66.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My university has put in place an elaborate student admission criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students are effectively monitored and evaluated in the course of their study</td>
<td>3 1 6.7% 1 6.7% 13 86.7%</td>
<td>3 1 33.3% 0 0.0% 2 66.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The analysis result gave a median of 3 to all the statements indicating that deans from KU and TUK were positive towards all the statements mentioned. It can be concluded that Kenyatta University and Technical University deans positively felt that their Universities had established and implemented internal quality assurance systems especially in the following areas: putting in place an internal quality assurance system, adequate policies and procedures to guide teaching and
learning, students’ admission criteria, and students’ effective monitoring and evaluation in the course of their study.

**Deans Levels of Satisfaction with Implementation of Internal Quality Assurance Guidelines**

Figure 4.2 shows the extent to which deans from KU and TUK felt about the implementation of internal quality assurance practices in their universities.

![Bar chart showing levels of satisfaction](image)

**Figure 4.2: Levels of Satisfaction on Implementation of Internal Quality Assurance Guidelines**

Majority of the deans 13(86.6 %) from KU and 2(66.7%) from TUK said that they were satisfied with the implementation of internal quality assurance system in their universities, 2(13.3%) of deans from Kenyatta University said that they were very satisfied with 1(6.7%) of them saying that they were neutral on the same. It can be concluded that majority of deans were satisfied with the implementation of
internal quality assurance system in their universities. This finding can be corroborated with the response by the quality assurance officer who affirmatively responded “that the universities had put in place clear internal quality assurance practices to promote quality education”. (QAO).

Students’ Responses on the Implementation of the Internal Quality Assurance Guidelines
Besides deans of schools and quality assurance officers, the study focused on students in relation to the extent they felt some aspects of internal quality assurance were implemented in their universities. Table 4.3 shows students’ responses on the implementation of aspects of Internal Quality Assurance guidelines especially in the following areas: academic requirements for admission, issuance with academic handbook, monitoring of students’ academic work and availability of variety assessment techniques for evaluation of academic work.
Table 4.3: Students Responses on Implementation of IQA

<table>
<thead>
<tr>
<th>Question</th>
<th>KU</th>
<th>TUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does one have to meet minimum academic requirements before being admitted to the university?</td>
<td>Yes: 292 (87.4%) 42 (12.6%)</td>
<td>Yes: 29 (87.9%) 4 (12.1%)</td>
</tr>
<tr>
<td>Are students issued with student handbook on admission?</td>
<td>Yes: 258 (77.2%) 76 (22.8%)</td>
<td>Yes: 6 (18.2%) 27 (81.8%)</td>
</tr>
<tr>
<td>Is student's academic work continuously monitored?</td>
<td>Yes: 190 (57.9%) 138 (42.1%)</td>
<td>Yes: 12 (36.4%) 21 (63.6%)</td>
</tr>
<tr>
<td>Are there a variety of assessment techniques used to evaluate students work?</td>
<td>Yes: 205 (61.9%) 126 (38.1%)</td>
<td>Yes: 21 (63.6%) 12 (36.4%)</td>
</tr>
</tbody>
</table>

*Source: Students Questionnaire*

It was observed that majority of students from KU, 292(87.4%) and 29(87.9%) from TUK reported that there were minimum academic requirements needed to be met before they were admitted to the university. This is important so as to ensure that universities only admit qualified students for different academic programmes.
thus ensuring that the quality of university education is not compromised as per the CUE guidelines.

Further, majority 258(77.2%) of students from KU reported that they were issued with an academic handbook on admission unlike their counterparts from TUK where a majority 27(81.8%) said that they were not issued with an academic handbook. Therefore, it can be observed that this aspect has not been adequately implemented at TUK and yet it is a requirement by CUE that on admission, students should be issued with an academic handbook which spells out the expectations in various programmes of study. This to some extent could compromise the quality of education at TUK since students do not know what is required of them in their courses of study.

In addition, 190(57.9%) and 12(36.4%) of students from KU and TUK respectively reported that their academic work was continuously monitored. There was a good number 138(42.1%) of students from Kenyatta University who said that their academic work was not continuously monitored, with a vast majority from TUK, 21 (63.6%) reporting that their academic work was not continuously monitored. It can be reported that monitoring of academic work was not satisfactorily being implemented which to an extent compromises the quality of education. This again does not adhere to CUE (2014) guideline that: *a university shall ensure there is in place a student monitoring and assessment*
As observed by Arend (2006), continuous monitoring of students’ academic work helps in identifying their strengths and weaknesses while at the same time enhancing their communication and analytical skills based on the feedback they get from their lecturers.

Finally, it was observed that majority of students 205(61.9%) from KU and 21(63.6%) from TUK reported that there were varieties of assessment techniques used to evaluate their academic work. Studies have shown that regular assessment of students’ academic work result to more interactions between the students and their lecturers. For instance, Arend (2006) found that 94% of the instructors reported that they had more than 10 interactions with their students in a semester if they applied a variety of techniques to assess their academic work. The regular interactions between lecturers and students through a variety of assessment techniques could be one way of identifying the weak areas that can be remedied before it is too late. This in the long run enhances quality of education in universities. It can be argued that with adequate implementation of these aspects of Internal Quality Assurance (IQA), quality of education will be enhanced in universities in terms of students acquiring the key competencies of the 21st century such as communication skills, problem solving skills and ICT skills among others (British Council, 2016; Partnerships for 21st Century, 2008).
To implement their responsibilities, institutions of higher learning must have a functioning internal quality assurance system. CUE (2014) clearly states that: *the universities are responsible for the internal quality assurance of their academic programmes*. According to Stumbrys (2014), internal quality assurance assists institutions to enhance high quality services; provides students, employers and other stakeholders with reliable and comprehensive information about the quality of studies and research output. He further states that internal quality assurance system enables an institution to identify areas of performance of which quality is insufficient so that measures can be undertaken to improve quality and guarantee accountability of the financial resources allocated to these institutions. Kenyatta University for example has established and implemented a Quality Assurance Policy that defines how quality is considered and who is in charge of what processes and as reported by the quality assurance officer: “*This practice is meant to cascade down from the top management levels to school levels. The university regularly carries out evaluation reports and surveys, such as lecturer evaluations, customer satisfaction surveys and alumni surveys among other stakeholders*”. *(QAO, KU).*

According to CUE (2014), the admission criterion must be clearly spelt out and adhered to. Under the Standards for an Academic Programme CUE has clearly spelt out that: “*Universities shall set up the academic admission requirements for programmes on offer in line with national and international trends, minimum*
standards set for each programme and professional bodies (where applicable)” (CUE, Standards and Guidelines, 2014, p 57).

The Commission outlines that for any student to be admitted for an undergraduate programme, they must have a minimum of grade C+ in their Kenya Certificate of Secondary Education (KCSE) or its equivalent as determined by the Kenya National Examination Council (KNEC) or alternatively a KNEC diploma or its equivalent.

Second, universities shall issue students with an academic handbook on admission. According to CUE (2014) under the Institution Standards, a University shall develop a student handbook containing inter alia, admission requirements and fees guidelines. The handbook spells out the policies, procedures and regulations that a students need to grasp in the course of their study. The policies and regulations spelt out in student handbook are an important part of daily student life.

It also entails behaviour expectations as expressed in the student code of conduct, which enable students to succeed in school and the community which in the end translates to quality education. This policy was found to be inadequately implemented at TUK.
Third, universities shall ensure that students’ academic work is regularly monitored and evaluated. Under the Standards for an Academic Programme, CUE (2014) states that: *a university shall ensure there is in place a student monitoring and assessment policy/criteria.* In addition, the standard states that the monitoring and evaluation of students' academic work must meet the objectives and learning outcomes of the curriculum and objectives of the students and the World of work (CUE, 2014). To achieve this, universities must keep a database of students’ profiles on their competencies, establish a continuous mechanism to evaluate the progress of the students by identifying areas of strengths and weaknesses and finally undertake summative evaluation at the end of the course to establish if the course objectives have been achieved. This in essence requires a form of continuous monitoring of student academic work.

According to CUE, (2014), universities can use a variety of examinations to assess learning. These include: Continuous Assessment Tests and End of semester examinations. The continuous assessment tests should further be of different types to include: group assignments, quizzes, take away assignments and project work among others. In addition, CUE requires universities to show the ratio of Continuous Assessment Tests (CATs) to the final end of semester examinations. The use of a variety of these techniques to assess students helps to enrich their academic life by bringing out competencies such as communication skills, innovativeness, teamwork and ICT skills, among others. The study revealed that
monitoring of students’ academic work was not adequately implemented at KU and TUK. This despite studies by Arend (2006) and Stumbrys (2014), showing that regular monitoring and assessment of students’ work helps in identification of strengths and weaknesses among learners which in the end promotes quality learning. It can be argued that if these mechanisms which form part of internal quality assurance are effectively implemented by the universities, then the quality of education would be enhanced.

4.3.2 Extent of Implementation of Guidelines on External Quality Assurance System

This section assesses the external quality assurance systems that universities have adapted to ensure quality of education. External quality assurance enables an institution of higher learning to affirm the reliability and efficiency of the procedures of an internal quality assurance system without duplication and misrepresentation (Stumbrys, 2014).

The responses were mainly addressed to the deans of schools and quality assurance officers. These practices ranged from: extent to which universities have subscribed to an external quality assurance system, benchmarking with universities that offer the best practices and the extent to which the Commission for University Education (CUE) has been involved in promoting quality education
at the university level since CUE is the external quality assurance agency of the universities in Kenya.

According to Institutional Standards by CUE (2014), *Universities shall ensure they benchmark with universities that are known to have best practices in quality management*. In addition to benchmarking, the Commission for University Education carries out regular quality audits of universities as an external quality regulator. The deans were required to indicate their levels of satisfaction on the extent to which their universities: had subscribed to an external quality assurance policy, benchmarked and the extent to which CUE was involved in regulating quality. Table 4.4, shows the extent to which deans at KU and TUK rated these aspects of external quality assurance.
Table 4.4: Subscription to External Quality Assurance

<table>
<thead>
<tr>
<th></th>
<th>Kenyatta University</th>
<th></th>
<th>Technical University of Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Disagree</td>
<td>Undecided</td>
</tr>
<tr>
<td>My university has subscribed to an external quality assurance system</td>
<td>3</td>
<td>1</td>
<td>0.0%</td>
</tr>
<tr>
<td>My university benchmarks with the best practices in delivering quality education</td>
<td>3</td>
<td>1</td>
<td>6.7%</td>
</tr>
<tr>
<td>The commission for University education is involved in promoting quality education</td>
<td>3</td>
<td>1</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

*Source: Deans’ Questionnaire*

The study revealed that while majority of deans from Kenyatta University 13(86.7%) agreed with the fact that their university had subscribed to an external quality assurance system only 1(33.3%) dean from Technical University of Kenya agreed with this statement. Similarly, it was observed that most deans from Kenyatta University and Technical University of Kenya (Median=3) positively felt that their universities benchmarked with the best practices in delivering quality education. This finding was corroborated by one of the QAOs who stated that: “*Benchmarking is inevitable......we benchmark with other universities*”
especially those that are seen to have quality management practices especially in the areas of financial management and teaching and learning”. (QAO)

Finally, on whether the Commission for University Education was involved in promoting quality education, it was clear that deans from Kenyatta University and Technical University of Kenya strongly and positively felt that CUE was involved (median=3). This could mean that the universities partners with CUE in various aspects focusing on enhancing quality of education such as accreditation and curriculum review among others. The positive responses towards most of these aspects shows that KU and TUK had adhered to CUE guideline on the need to have external quality assurance mechanisms that supplement their internal quality assurance mechanisms. This to some extent enhances quality of education.

Specifically, the finding that both KU and TUK practiced some level of benchmarking, agreed with a study by Gichinga and Mukulu (2015) who found that universities in Kenya practice some form of benchmarking the common being external benchmarking.

For instance, according to the evaluation report by Europe-Africa Quality Connect (2012), Kenyatta University had established a student exchange programme through the Centre for International Programmes and Collaborations that connects students and staff to international collaboration opportunities to
internationalize the university and curriculum. Such an initiative could to a great extent enhance the quality of education in the universities since students are able to get opportunities to interact with their counterparts in top universities in the world where they can benefit from modern pedagogical practices that reflect the needs of the 21st century labour market.

4.4 Influence of Human and Physical Resources on Quality Education in Public Universities

This section sought to investigate the adequacy and influence of human and physical resources necessary for quality education as per the CUE guidelines in the sampled universities. The views for this section were sought from the deans, quality assurance officers and the students.

4.4.1 Influence of Human Resources on Quality of Education

First, the study sought to look at the existing human resources and later the influence they had on quality of education. Table 4.5 shows the deans responses on aspects relating to adequacy, experience and academic qualifications of the teaching staff in the sampled universities.
### Table 4.5: Deans Responses on Aspects Relating to Teaching Staff

<table>
<thead>
<tr>
<th></th>
<th><strong>Kenyatta University</strong></th>
<th></th>
<th><strong>Technical University of Kenya</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>My school has adequate full time staff necessary for quality teaching and learning</td>
<td>Median: 3 3 20.0% 0 0.0% 12 80.0%</td>
<td>My school engages part-time teaching staff to cater for the shortfalls</td>
<td>Median: 3 0 0.0% 0 0.0% 3 100.0%</td>
<td></td>
</tr>
<tr>
<td>Teaching staff in my school possess necessary experience for quality teaching and learning</td>
<td>Median: 3 2 13.3% 0 0.0% 13 86.7%</td>
<td>Teaching staff meet the minimum academic qualifications necessary for quality teaching and learning</td>
<td>Median: 3 0 0.0% 1 33.3% 2 66.7%</td>
<td></td>
</tr>
</tbody>
</table>

**Source: Deans Questionnaire**

The study revealed that majority of deans from KU and TUK had a positive response towards the following statements in relation to human resources: With median=3 for all statements from both universities, it can be concluded that most deans strongly and positively felt that their schools had adequate full-time staff necessary for quality teaching and learning. However, it is worth to note that despite the deans agreeing with the fact that their schools had adequate full-time teaching staff, majority of them 13(86.7%) and 3(100%) at KU and TUK.
respectively, reported that their schools engaged part-time teaching staff. This could be interpreted to mean that perhaps some of the full-time teaching staff were engaged in other responsibilities such as administrative work that prevented them from being engaged in full-time teaching. It could also be interpreted that the workload in areas such as post graduate student supervision was taking much of their teaching time. The schools were therefore forced to hire part-time staff to bridge the gap.

Quality teaching in the universities requires adequate and qualified teaching staff. This is line with CUE (2014) guideline on teaching staff which states that: *An academic programme shall be supported by adequate full-time staff holding requisite academic qualifications*. More so, the academic staff is the single most important learning resource for quality teaching in universities. Besides, having adequate teaching staff, universities must strive to ensure they have qualified teaching staff that possess necessary skills, knowledge and experience to communicate their knowledge effectively to the students. CUE (2014) under the Institutional Standards succinctly states that: *A university shall have adequate and competent human resources to carry out its mandate in accordance to its human resource policy*. (CUE, Standards and Guidelines, 2014:6).

Teaching staff must also keep abreast of modern trends in their areas of specialization and utilize latest forms of technology in teaching and learning
Further, the teaching staff must be available for consultation, mentoring and guiding their students in the course of their studies. This will require universities to have adequate full-time teaching who can fully dedicate their services to support quality teaching and learning.

The finding that both universities engage part-time teaching staff agrees with Gudo, Olel and Oanda (2011) who found that majority of the universities in Kenya were engaging part-time faculty to cater for the shortfall. For instance, they had found that 55.46% of the lecturers at the University of Nairobi were part-timers while 62% of the deans at Kenyatta University engaged part-time teaching staff. The finding also supports an earlier study carried out by KIPPRA which found that nearly 50% of the lecturers in public universities are part-timers teaching in more than one University (KIPPRA, 2015). This according to KIPPRA led to negative consequences on the quality of education. Engaging part-time teaching staff could compromise the quality of education in that in most cases, the part-time staff may not have adequate time and dedication that a full-time lecturer may have. This is partly because most of the part-timers are teaching in more than one university which in the end compromises the quality of education. According to CUE (2014), the ratio for full-time to part-time academic staff members for the support of any given programme shall be 2:1. In this case the two universities may not be adhering to this guideline which in the end compromises the quality of education.
With regard to experience possessed by the teaching staff, 13 (86.7%) and 2 (66.7%) deans from KU and TUK respectively, positively felt that the teaching staff in their schools possessed necessary experience for quality teaching and learning and that teaching staff met the minimum academic qualifications. This finding is very important as it shows that KU and TUK had adhered to the CUE guideline on the need for universities to have qualified teaching staff which in the end enhances quality of education.

**Students’ Responses Towards Various Aspects of the Teaching Staff**

Besides deans, the students’ views on various aspects of the teaching staff were sought since they are the direct consumers of the teaching learning process. Their views were mainly sought in areas to do with; delivery of content, use of variety of teaching methods and the extent to which lecturers encouraged them to be creative and innovative. Their views are presented in Table 4.6.
<table>
<thead>
<tr>
<th></th>
<th>Kenyatta university</th>
<th></th>
<th>Technical university of Kenya</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Disagree</td>
<td>Undecided</td>
<td>Agree</td>
</tr>
<tr>
<td>My university has adequate staff for effective teaching and learning</td>
<td>3</td>
<td>104</td>
<td>30.8%</td>
<td>23</td>
</tr>
<tr>
<td>Lectures are qualified and knowledgeable in delivering content</td>
<td>3</td>
<td>48</td>
<td>14.2%</td>
<td>38</td>
</tr>
<tr>
<td>Lecturers use variety of teaching methods</td>
<td>3</td>
<td>116</td>
<td>34.6%</td>
<td>38</td>
</tr>
<tr>
<td>Lecturers encourage us to be creative and innovative</td>
<td>3</td>
<td>84</td>
<td>25.2%</td>
<td>46</td>
</tr>
<tr>
<td>Lecturers are interactive</td>
<td>3</td>
<td>108</td>
<td>32.2%</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Students Questionnaire

As shown in Table 4.6, it was observed that 211(62.4%) and 18(54.5%) students at KU and TUK felt that there were adequate staff for effective teaching in their university. Further, most students positively felt that lecturers were qualified and knowledgeable in delivering content as reported by 251(74.5%) and 23(69.7%) students at KU and TUK respectively. It is however important to note that, slightly over half of the students at KU 181(54.0%) and 17 (51.5%) of the students at TUK, reported that their lecturers used variety of teaching methods. This finding could be interpreted to mean that a good number of lecturers use teacher centered approaches such as lecture method that may promote rote learning and thus compromising the quality of education. This is despite the CUE (2014) outlining that: any academic programme on offer by universities shall
provide the learner with a comprehensive range of cognitive and analytical skills that demonstrate problem solving, creativity and critical thinking skills. This can be enhanced by using modern teaching approaches such as Case Studies that provoke critical analysis and thinking. Studies for instance by Arend (2006) found out that teaching staff must be competent in modern pedagogical skills that instill creativity and critical thinking among the learners.

It is unfortunate that studies such as World Bank (2015) and British Council (2016) found that the graduates from universities in Kenya are lacking key competencies necessary for the 21st century labour market. More so, employers have complained that the graduates mainly possess the knowledge but lack in practical skills forcing them to retrain the fresh graduates in order to be adaptable to the job environment. To some extent this could be attributed to traditional pedagogical approaches that are still being used in the universities.

4.4.2 Influence of Physical Resources on Quality Education

In addition to the human resources, students rely on a variety of physical resources to support their learning. These facilities range from libraries, lecture halls, halls of residence, ICT facilities among others. These facilities should be adequate and designed with the needs and requirements of students in mind. The CUE (2014) Standard for Physical Resources states that: “Every university shall provide appropriate and adequate facilities to cater for the number of
programmes on offer and students’ enrollment”. (CUE, Standards and Guidelines, 2014, p 20).

The adequacy of physical resources in the two sampled universities is as reported by the deans in Table 4.7.

Table 4.7: Deans’ Responses on Adequacy of Physical Facilities

<table>
<thead>
<tr>
<th></th>
<th>Kenyatta University</th>
<th>TUK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inadequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>Libraries</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Libraries</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Lecture halls</td>
<td>5</td>
<td>33.3%</td>
</tr>
<tr>
<td>Hall of residence</td>
<td>10</td>
<td>71.4%</td>
</tr>
<tr>
<td>ICT facilities</td>
<td>2</td>
<td>13.3%</td>
</tr>
<tr>
<td>Laboratories</td>
<td>7</td>
<td>50.0%</td>
</tr>
<tr>
<td>Library resources</td>
<td>2</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

Source: Deans’ questionnaire

On adequacy of the physical resources majority of deans 13(92.9%) from Kenyatta University and 2(66.7%) from TUK positively felt that there were adequate libraries in their universities, 10(66.7%) of them from KU reported that the lecture halls were adequate while 2(66.6%) of the deans from TUK felt otherwise.

Further, majority 13(86.6%) of deans from Kenyatta University positively felt that there were enough ICT facilities whereas 2(66.6%) of deans from TUK reported that ICT facilities in their University were inadequate. It was also observed that
according to 13(86.7%) of deans from KU and 2(66.7%) from TUK there were adequate library resources in their Universities. However, 10(71.4%) of the deans from KU and all deans from TUK reported that there were inadequate halls of residence in their universities. On adequacy of laboratories, half of the deans from Kenyatta University and 2 (66.7%) deans from TUK felt that they were adequate.

Besides deans, the responses of students on adequacy of physical facilities were sought. This information is presented in Table 4.8.

Table 4.8: Students Responses on Adequacy of Physical Facilities

<table>
<thead>
<tr>
<th></th>
<th>Kenyatta University</th>
<th>Technical University of Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Disagree</td>
</tr>
<tr>
<td>Lecture halls are adequate and spacious</td>
<td>3</td>
<td>139</td>
</tr>
<tr>
<td>Reference materials in the library are adequate</td>
<td>3</td>
<td>106</td>
</tr>
<tr>
<td>ICT facilities and Internet connectivity are adequate</td>
<td>2</td>
<td>151</td>
</tr>
<tr>
<td>University has adequate accommodation facilities</td>
<td>1</td>
<td>192</td>
</tr>
<tr>
<td>There are adequate facilities to promote innovativeness</td>
<td>2</td>
<td>118</td>
</tr>
</tbody>
</table>

Source: Students Questionnaire

The study revealed that with median=2 at KU, it was clear that students neither agreed nor disagreed with the fact that ICT facilities and internet connectivity
were adequate and that there were adequate facilities to promote innovativeness. On adequacy of reference materials, majority of students from Kenyatta University positively felt that reference materials in the library were adequate (median=3) although a good number (31.8%) also felt that they were not. Majority of them felt that lecture halls were adequate and spacious (median=3). It was further established that most students from Kenyatta University (median=1) reported that their university did not have adequate accommodation facilities. In General, it can be concluded that students from Kenyatta University felt that a number of physical resources were not adequate to support quality learning. This is in contrast to deans at KU who felt that these facilities other than accommodation facilities were adequate. This could be interpreted to mean that whereas the deans felt that the physical facilities were adequate, students as the consumers of these services were not satisfied. This to an extent could compromise the quality of education. With median=1 for TUK in all the statements mentioned in relation to adequacy of physical facilities, it can be concluded that physical facilities were inadequate at TUK as compared to KU.

It can be observed that some essential physical facilities necessary for quality education were inadequate, with TUK being the most affected. This is a matter of concern for TUK being a Technical University that is aiming to produce technical innovations that could help Kenya realize Vision 2030. Inadequacy of physical facilities compromises the quality of university education.
For instance, lack of accommodation facilities which was observed as inadequate at both KU and TUK means that students have to look for alternative forms of accommodation outside the university which in most cases are not secure while others lack essential facilities like water and toilets. Lack of accommodation facilities in the two universities was further noted as a matter of concern by the quality assurance officer who stated that: “... it has been a challenging matter for the universities especially with increased enrolments. It compromises the quality of education especially because the students are not able to study in secure and accommodative environments”. (QAO).

This is despite the CUE (2014) stating that: Students accommodation in a university shall be provided in facilities that are adequate, safe, well-lit and ventilated. The finding on inadequacy of physical facilities is supported by the following studies: First, Ndethiu (2007) found that a good number of libraries in Kenyan universities lacked up-to-date books and reading materials; Second, Gudo et al., (2011) found that some universities in Kenya did not have adequate lecture halls and thus many students were forced to take their lectures outside the lecture hall due to lack of sitting space which often promoted rote learning; Third, Nimako and Bondinuba (2013); Eshiwani, (2009); Ndethiu (2007) and Odundo, (2015), found that accommodation facilities is a big challenge to the universities especially in this era when enrolments have outstripped the bed capacity; fourth, Ndethiu (2007) found that the ICT facilities and internet connectivity in many
universities across Kenya were inadequate especially when Kenya is aiming at being a middle income country by the year 2030, through the Vision 2030; fifth, Oanda et al., (2011) found that public universities in Kenya did not have up-to-date laboratory equipment necessary for quality teaching and learning. They found that only 34.70% of students in public universities were satisfied with the laboratory and workshop equipment available to conduct their experiments, meaning that majority of the students (65.3%) were not satisfied with the laboratory facilities in their universities.

To establish the influence of existing resources on quality of education at Kenyatta University and Technical University of Kenya, a null hypothesis; \( H_0: \) There is no significant relationship between physical and human resources and quality education, was tested at 5% significance level.

To test this hypothesis a bivariate regression analysis was carried out to establish the influence of existing physical and human resources on quality education at Kenyatta University and Technical University of Kenya. The results are represented on Table 4.9.
Table 4.9: Bivariate Regression Analysis of Independent Variable (Physical and Human Resources) and Quality of Education

<table>
<thead>
<tr>
<th></th>
<th>β*</th>
<th>R²</th>
<th>p-value</th>
<th>t-value</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical &amp; human</td>
<td>KU</td>
<td>0.518</td>
<td>0.210</td>
<td>0.000</td>
<td>9.408</td>
</tr>
<tr>
<td>resources</td>
<td>TUK</td>
<td>0.561</td>
<td>0.265</td>
<td>0.002</td>
<td>3.342</td>
</tr>
</tbody>
</table>

The outcomes of the bivariate regressions presented in Table 4.9 show that physical and human resources explain 21.0% and 26.5% of the variance in the quality of education at KU and TUK respectively. Therefore, we can say that human and physical resources statistically and significantly influence quality of education with p-value =0.000, R² =0.210 and p-value=0.002, R² =0.265 at KU and TUK respectively. This implies that physical and human resources influence a good proportion of quality of education at KU and TUK. Therefore, the null hypothesis (h₀) is rejected.

4.5 Influence of Learner-Support Services on Quality of Education in Public Universities

Objective three sought to investigate the adequacy and availability of learner-support services and their influence on quality education in the sampled universities. The study specifically focused on availability and adequacy of three student support services: academic guidance and advice, guidance and counseling and financial advice and funding. The study also focused on how these three
support services influence the quality of education. Table 4.10 shows the deans rating on the three learner support services in their universities.

**Table 4.10: Deans’ Rating of Effectiveness of Learner Support Services**

<table>
<thead>
<tr>
<th>Learner-support services</th>
<th>Kenyatta University</th>
<th></th>
<th>Technical University of Kenya</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median n</td>
<td>%</td>
<td>Unatisfactory n</td>
<td>%</td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td></td>
<td></td>
<td>3</td>
<td>13.3%</td>
</tr>
<tr>
<td>Academic guidance &amp; advisory services</td>
<td></td>
<td></td>
<td>2</td>
<td>13.3%</td>
</tr>
<tr>
<td>Financial advisory services</td>
<td>2</td>
<td>4</td>
<td>26.7%</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Deans’ questionnaire

As shown in Table 4.10, slightly over half of the deans at KU (53.3%) and 2(66.7%) of their counterparts from Technical University of Kenya reported that they were satisfied with effectiveness of guidance and counseling departments in their universities. This means that a good number of deans at KU were not satisfied with effectiveness of guidance and counselling services in their university. With regard to academic guidance 7(46.7%) deans from KU and all deans from TUK said that they were neither satisfied nor unsatisfied with academic guidance and advisory services given to students (median=2). This implies that academic guidance and advisory service at Kenyatta University and Technical University of Kenya were not satisfactorily effective in supporting learners in course of their studies. Finally, it was observed that majority of deans from both universities were neither satisfied nor unsatisfied with financial aid and
advisory services (median=2) at both KU and TUK. It can be observed from the deans’ perspective at both KU and TUK, that the three learner support services have not been effective in addressing students’ needs in both institutions. This is further supported by findings in Figure 4.3 which shows the deans responses on the extent of implementation of learner support services in their universities.

![Figure 4.3: Deans’ Rating on Extent of Implementation of Learner Support Services](image)

*Source: Deans’ questionnaire*

As shown in Figure 4.3, majority of deans from both Kenyatta University (53.3%) and 66.7% from Technical University of Kenya felt that implementation of learner-support services in addressing students’ needs was average. However, 40.0% of deans from Kenyatta University said that it was above average with only 6.7% of them from Kenyatta University and 33.3% from Technical University of
Kenya observing that implementation of learner-support services was below average.

**KU Students’ Responses on Learner-Support Services**

Table 4.11 shows students’ responses in relation to the support they get from their universities.

**Table 4.11: Students’ Rating on Learner Support Services**

<table>
<thead>
<tr>
<th>Support Service</th>
<th>Kenyatta University</th>
<th>Technical University of Kenya</th>
<th>KU</th>
<th>TUK</th>
<th>Median</th>
<th>Disagree</th>
<th>Undecided</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>University offers guidance and counseling services</td>
<td>2</td>
<td>133</td>
<td>59</td>
<td>17.5%</td>
<td>145</td>
<td>39.5%</td>
<td>59</td>
<td>17.5%</td>
</tr>
<tr>
<td>University provides financial advisory services to enhance management of my finances</td>
<td>1</td>
<td>167</td>
<td>52</td>
<td>15.7%</td>
<td>112</td>
<td>50.5%</td>
<td>52</td>
<td>15.7%</td>
</tr>
<tr>
<td>There are academic advisory services provided by my university</td>
<td>3</td>
<td>115</td>
<td>46</td>
<td>13.9%</td>
<td>171</td>
<td>34.6%</td>
<td>46</td>
<td>13.9%</td>
</tr>
<tr>
<td>There are opportunities for attachment in the course of my study</td>
<td>3</td>
<td>105</td>
<td>40</td>
<td>12.0%</td>
<td>189</td>
<td>31.4%</td>
<td>40</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

**Source: Students Questionnaire**

As shown in Table 4.11, the study revealed that majority of students from Kenyatta University were neutral towards the fact that their university offered
adequate guidance and counseling (median=2) compared to majority of their counterpart from Technical University of Kenya who felt that their university did not offer adequate guidance and counseling (median=1). Further, while majority of students from Kenyatta University positively felt that their universities provided relevant academic guidance and advisory services (median=3), majority of students from Technical University of Kenya had a neutral perception towards the same (median=2). The study revealed that students from both universities felt that their universities did not provide them with financial advisory services to enhance management of their finances (median=1). Finally, it was observed that students from both Kenyatta and Technical university of Kenya positively felt that there were opportunities for attachment in the course of their study (median=3).

Generally, it can be observed that learner support services with regard to academic advisory, guidance and counseling and financial advisory services are inadequate in both universities as attested by both the deans and the students. This was further corroborated by directors of quality assurance. One said: “the universities needed to create more awareness on existence of some of the service departments like guidance and counseling offered so that students could appreciate them”. (QAO)
One of the directors of quality assurance however said that: “Many students do not prefer to go for guidance and counseling within the university despite them having many challenges that negatively impact on their academic work”. (QAO)

It was interesting to find out from one of the quality assurance officer that: “Financial advisory services for students have not been really alienated from the finance department to offer specific services on financial advisory services to students on ways to manage their finances”. (QAO)

These findings are further supported by the following studies: Muola and Mwania (2013), Haraver (2009), and MacArthur (2005), who found that that many universities, had not put in place adequate student academic advisory services; Gudo, Olel and Oanda (2011) who found that only 44.41% students in public universities in Kenya were satisfied with guidance and counseling services, meaning majority were dissatisfied and Gichui, (2015), who found that financial advisory services were inadequate in universities in Kenya.

Inadequacy of these essential services could compromise the quality of university education. For instance, lack of financial advisory services could mean that students are not adequately being supported in matters related to identifying alternative forms of financing their education as well as managing their finances.
This could negatively affect the quality of learning as students especially those from poor households spend much of their time looking for ways of supplementing their financial needs. Inadequate guidance and counseling services could also affect the quality of education in that students could be suffering from various problems such as drug abuse and early pregnancies among others that directly affect their academic life. Lack of academic advisory services could also affect the quality of education in that some students could be finding difficulties coping with some requirements of their courses of study which may lead to poor performance and eventually dropping out. Learner-support services are meant to help and support students in their academic work. Mashau et al., (2008), noted that support services create a supportive environment to enhance student learning.

Under the Institutional Standards, CUE succinctly states that: *A university shall provide student support services that are commensurate with the student population.* (CUE, Standards and Guidelines, 2014: 10).

In addition, CUE requires all universities operating in Kenya to ensure that student support services are constantly assessed for effectiveness in teaching and learning. The assessment of these services must address issues of: availability, adequacy, utilization and accessibility.

To establish the influence of learner support services at KU and TUK, a null hypothesis; *there is no significant relationship between learner-support services*
and quality of education was tested at 5% significance level. To test this hypothesis, a bivariate regression analysis was carried out to establish the influence of learner-support services offered on quality of education at Kenyatta University and Technical University of Kenya. The results are represented in the Table 4.12.

Table 4.12: Bivariate Regression Analyses of Independent Variable (Learner-Support Services) on Quality of Education

<table>
<thead>
<tr>
<th>Learner-support services</th>
<th>( \beta^* )</th>
<th>( R^2 )</th>
<th>p-value</th>
<th>t-value</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>KU</td>
<td>0.494</td>
<td>0.222</td>
<td>0.000</td>
<td>13.114</td>
<td>94.609</td>
</tr>
<tr>
<td>TUK</td>
<td>0.359</td>
<td>0.210</td>
<td>0.007</td>
<td>2.875</td>
<td>8.264</td>
</tr>
</tbody>
</table>

The outcomes of the bivariate regressions presented in Table 4.12 shows that learner-support services explain 22.2\% and 21.0\% of the variance in the quality of education at KU and TUK. Thus we can say that it statistically and significantly influences the quality of education (p-value =0.000, \( R^2\)=0.222 and p-0.07, \( R^2\)=0.210 at KU and TUK respectively). This implies that learner-support services influence quality of education of students at KU and TUK. Therefore, the null hypothesis (h\(_0\)) is rejected.
4.6 Stakeholders’ Involvement in Curriculum Development for Quality of Education in Public Universities

Objective four sought to investigate the level of involvement of employers, alumni and CUE in curriculum development and revision as a way of enhancing quality education. Table 4.13 shows the extent to which stakeholders are involved in curriculum development in the two sampled universities.

Table 4.13: Extent of Stakeholders Involvement in Curriculum Development

<table>
<thead>
<tr>
<th></th>
<th>Kenyatta University</th>
<th>Technical University of Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never involved</td>
<td>Occasionally involved</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Employers</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Commission for</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>University Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alumni stakeholders</td>
<td>3</td>
<td>21.4%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Source: Deans’ questionnaire

The study revealed that majority 9(64.3%) of deans from Kenyatta University and 2(66.7%) from TUK reported that employers were occasionally involved in programme development and revision to meet the needs of quality education whereas 8(57.1%) of them from KU and all deans from TUK interviewed said that Commission for University Education were involved all the time. Further, while 9(64.3%) deans from KU said that alumni were occasionally involved in curriculum development and revision to meet the needs of quality education, majority of the deans 2(66.7%) said that they were never involved.
Deans from KU and TUK said that employers in their university were occasionally involved in programme development to meet the needs of quality education. This is an indication that the two universities do not involve employers all the time when they are developing or revising the curriculum. This finding is corroborated by one of directors of quality assurance who said that: “most universities in developing countries did not have a clear mechanism of involving employers in curriculum development and review unlike their counterparts in the developed world” \((QAO)\)

This finding is worrying especially when many studies have shown the need to engage employers in curriculum development. For example, Mwebi (2015) found that employers are important sources of information about the needs of the labour market that must be incorporated in the curriculum while QAA (2015), found that involving employers enhances the relevance of degrees offered at the universities. In addition, employers could be an important source of information on the type of content they need to be incorporated in the curriculum. Lack of employer involvement therefore could to some extent be the reason why many employers in Kenya are complaining that the graduates are lacking key competencies required in the labour market, meaning that the quality of the university education is compromised (World Bank, 2015; British Council, 2016).
In addition, the study investigated whether universities have put in place structures to engage the stakeholders’. This information is shown in Table 4.14.

Table 4.14: Deans’ Rating of Structures for Engaging Stakeholders in Curriculum Development

<table>
<thead>
<tr>
<th></th>
<th>Kenyatta University</th>
<th>Technical University of Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Disagree</td>
</tr>
<tr>
<td>Stakeholders’ involved in universities is important to ensure quality is maintained</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>There is clear mechanism for getting feedback from the stakeholders in the university</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Complaints from employers are effectively addressed</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>University has a comprehensive database of the skills required by the labour market</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Deans’ Questionnaire

It was observed that majority of deans from KU and TUK had positive response toward the statements mentioned in Table 4.14 in relation to stakeholders. For instance, it was observed that all the deans from KU and TUK interviewed strongly and positively felt that stakeholders involved in universities were important to ensure quality was maintained (median=3). Further, while majority of deans from KU positively felt that there were clear mechanism for getting feedback from the stakeholders in the university (median=3), majority of their counterparts from TUK had a divided opinion on the same (median=2).
The study further revealed that majority of deans from KU and TUK positively felt that complaints from employers were effectively addressed and that their universities had comprehensive database of the skills required by the labor market (median=3).

It is interesting to note that despite both universities reporting that they had a comprehensive database as reported by majority of the deans, there are still cases of rising unemployment in the country. Studies by World Bank (2015) and more recently by British Council (2016) have shown that there are growing unemployment rates especially in art-related professions. It is, however, unfortunate that the universities are continuously producing graduates in the art related courses despite the rising demand for technical skills. This could to some extent explain the reason for rising unemployment rates especially in developing countries where the Social Demand Approach is still the dominant methodology in educational planning.

The study also required the students to give feedback on the extent they were involved in giving feedback on the content of the curriculum they were taking. Figure 4.4, shows this information.
Majority of students 58.1% from Kenyatta University and 56.3% from TUK reported that they were not involved in giving feedback on the content of curriculum in the course of their study. This is despite studies showing that students engagement in giving feedback on the curriculum they are undertaking led to desirable learning outcomes such as critical thinking. It further enables students to understand the process, structure and content of their courses of study. In addition, failure to engage students in curriculum review makes them feel disconnected to the curriculum or objectives of the course which to some extent compromises quality learning (Carini, Kuh & Klein, 2006; Rudduck & Flutter, 2000).
Further, the study investigated whether universities had put in place mechanisms to ensure the stakeholders interacted with the learners in the course of their studies. This information is shown in Table 4.15.

<table>
<thead>
<tr>
<th></th>
<th>KU</th>
<th>TUK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your university invite employers to give talks on the</td>
<td>215 64.4%</td>
<td>15 45.5%</td>
</tr>
<tr>
<td>requirements of the job industry</td>
<td>119 35.6%</td>
<td>18 54.5%</td>
</tr>
<tr>
<td>Is there a placement office that links students to prospective</td>
<td>126 37.8%</td>
<td>5 15.2%</td>
</tr>
<tr>
<td>opportunities for employment</td>
<td>207 62.2%</td>
<td>28 84.8%</td>
</tr>
<tr>
<td>Does your university invite the alumni to give talks</td>
<td>152 45.8%</td>
<td>5 15.2%</td>
</tr>
<tr>
<td></td>
<td>180 54.2%</td>
<td>28 84.8%</td>
</tr>
</tbody>
</table>

Source: Students questionnaire

The study revealed that majority 215 (64.4%) of students from KU reported that their university invited employers to give talks on the requirements of the job industry compared to only 15 (45.5%) of their counterparts at TUK. This indicates that at TUK employers were not commonly invited to give talks to students on job market which is one way of motivating students to work hard on their education as this gives them assurance of job requirements and availability. However, it was observed that both KU and TUK did not have placement office to link students to the prospective employers or if the office was there, majority of students were not
aware of their existence as reported by 207(62.2%) and 28(84.8%) of students from KU and TUK respectively. A placement office is important in that it gives students the avenues and opportunities they can pursue to get employment. The office could also be important in connecting the students to possible employers. Support from the placement office could motivate students to work hard as they are assured of job opportunities which in the end translate to quality learning. Similarly, it was observed that both KU and TUK did not invite alumni to give talks to students as reported by 180(54.2%) and 28(84.8%) from KU and TUK respectively.

Lastly, the study investigated the extent to which students felt satisfied with information they received from stakeholders. This information is presented in Table 4.16.
Table 4.16: Students’ Levels of Satisfaction on Information Received from Stakeholders

<table>
<thead>
<tr>
<th></th>
<th>Kenyatta university</th>
<th>Technical University of Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median</td>
<td>Dissatisfied</td>
</tr>
<tr>
<td>The information given by</td>
<td>n</td>
<td>n%</td>
</tr>
<tr>
<td>employers invited by my</td>
<td></td>
<td></td>
</tr>
<tr>
<td>university is helpful</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>The information given by the</td>
<td>2</td>
<td>145</td>
</tr>
<tr>
<td>placement office is helpful in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>linking us to employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The information given by the</td>
<td>2</td>
<td>173</td>
</tr>
<tr>
<td>alumni invited by the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>university is helpful</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on information on Table 4.16, the study revealed that majority of the students from Kenyatta University were satisfied with the information given by the employers who were invited to give them talks on the requirements of the job market (median=3) unlike their counterparts from TUK who had a neutral perception towards the same (median=2). It was further established that while majority of students from KU reported that they were neither satisfied nor dissatisfied with the information they received from the placement office that linked them to prospective opportunities for employment (median=2) students from TUK said that they were dissatisfied with the same (median=1). This may be interpreted to mean that the office is not there or the service they are receiving
from it is not satisfactory. The information they get from such an office may play the role of placing students for attachments which is an important element of acquisition of hands on skills before they graduate. Similarly, it was clear that students from KU had a neutral perception towards the fact that information given by the alumni invited by the university is helpful (median=2) while those from TUK reported that they were dissatisfied with the same (median=1).

This is an indication that at TUK, most of the services in relation to stakeholders’ engagement were not satisfactory as reported by majority of the students. It could be interpreted to mean that these services are not there or they have not been adequately implemented which in the long run compromises the quality of education.

Under the Standards for an Academic Programme, CUE (2014) requires that any programme of study shall have a rationale that is convincing and evidence-based. The guidelines further require universities to ensure that there are clear governance and administrative structures to involve stakeholders through needs assessments, market surveys and situational analysis to ensure the programme being offered meets the needs of the industry.

According to UNESCO (2009), stakeholders’ involvement in curriculum development is one way of ensuring the programmes being offered meet quality
standards which should progressively evolve into public debate involving policy makers. For example, employers are essential stakeholders for universities in curriculum development and revision, partnerships in community service, providers of placement and work opportunities to students and creation of linkages between universities and the industry. They not only help in shaping students’ experiences, but in today’s era of increased demands for collaborations, they are becoming part of the universities governance and planning. Employers are the main consumers of the products generated by the universities in form of graduates who have acquired knowledge and skills that are demanded by the industry and thus may assist universities to integrate innovative culture among their learners (Koskei, 2015). This can only be achieved if employers are involved in curriculum development.

The curriculum universities are offering must therefore be in tandem with the needs of the labour market. It is imperative therefore, that universities involve the employers when developing or revising the curricula. In addition, universities need to churn out manpower that is required by the labour market to avoid oversupply and undersupply of certain types of manpower (British Council, 2016). This can be achieved through universities having a comprehensive database of the skills required by the labour market that can be attained through Employer-Data-Based surveys among other methods.
The Commission for University is a major external stakeholder for universities in Kenya as it is the body in charge of regulation of university education. The CUE therefore must be part and parcel of the universities. In addition, CUE carries out regular audit checks on various resources that universities have put in place to offer quality programmes.

Further, it is a requirement that CUE is involved as part of the external reviewer of the curriculum before it is implemented. The Commission requires this in order to evaluate the proposed programme using a criteria laid down such as; conformity to set guidelines of curriculum presentation, evaluation of curriculum by peers to determine the depth, breadth, appropriateness and relevance of the programme and verification of appropriateness and adequacy of resources to support the programme among other requirements (CUE, 2014; Mwebi, 2015).

Besides employers and CUE, universities could take advantage of their alumni to get feedback on the academic programmes they are offering. The university alumni could give a lot of input in curriculum development and revision since they are already placed in various forms of employment and having gone through a particular programme, they could have an idea of the gaps that the curriculum ought to fill. They understand whether the knowledge, skills and attitudes they gained from the university is applicable in the job market.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents the summary of the study, summary of findings, conclusions and recommendations. The chapter also presents the suggestions for further research. The purpose of this study as indicated in Chapter one was to establish the extent to which quality assurance guidelines as stipulated by CUE (2014) have been implemented in public universities in Kenya.

5.2 Summary of Findings
The study was guided by four objectives which focused on: assessing the level of implementation of policies and procedures necessary for quality education; examining the influence of existing physical and human resources on quality education; assessing the influence of available learner-support services on quality education and examining the level of stakeholders involvement in curriculum development and revision in ensuring quality of education. The study design was exploratory based on Mixed Methods design. The respondents for the study were 21 deans of schools, 411 fourth year students and 2 directors of quality assurance. The questionnaires, interview schedule and document analysis were the main tools for data collection which was subsequently analyzed using descriptive and inferential statistics.
Objective one aimed at assessing the level of implementation of policies and procedures necessary for quality education in public universities in Kenya. It mainly focused on investigating the internal and external quality assurance mechanisms that universities have put in place. The internal quality assurance systems which were investigated include: students admission criterion, issuance of students handbook on admission, continuous monitoring of students’ academic work and the use of a variety of assessment techniques. Through data analysis, the study established that universities followed a strict admission criterion when admitting students for various courses of study; issuance of students’ academic handbook was adequately implemented at KU as reported by 258(77.2%) of the students. However, this guideline was not adequately implemented at TUK as reported by 27(81.8%) of the students. Continuous monitoring of students’ academic work was not very satisfactory as reported by 21(63.6%) and 138(42.1%) of the students at TUK and KU respectively. Finally, majority of students at both KU and TUK were satisfied with their lecturers using a variety of assessment techniques to assess their courses of study as reported by 205(61.9%) and 21(63.6%) of the students at KU and TUK respectively.

On external quality assurance practices, the study focused on determining whether external quality assurance mechanisms were in place and also the extent to which benchmarking practices are embraced by the universities. Majority of the deans at KU were satisfied with implementation of external quality practices with regard
to having in place an external QA policy (median=3). However, a good number of deans at TUK were undecided on the practice of having an external QA policy (median=2). With regard to benchmarking and involvement of CUE in regulating quality education, majority of the deans at KU and TUK felt that these practices were adequately implemented in their universities (median=3).

Objective two sought to investigate the influence of available human and physical resources on quality education in universities in Kenya. In line with this objective, majority of deans at KU and TUK reported that they had adequate full-time teaching staff (median=3); the teaching staff had the experience required for teaching (median=3) and that the staff met minimum academic qualifications for teaching (median=3). Interestingly, majority of the deans at KU and TUK (median=3) reported that they engaged part-time teaching staff despite having agreed that they had adequate full-time teaching staff.

This section addressed facilities with regard to adequacy of lecture halls and reference material in the libraries majority of students at KU (median=3) felt that these facilities were adequate compared to their counterparts at TUK (median=1). With regard to ICT facilities, majority of students at KU (median=2) and TUK (median=1) felt that this facility was inadequate. At both universities, adequacy of accommodation facilities was rated worst (median=1). Interestingly, majority of the deans at both KU and TUK felt that these facilities with an exception of
accommodation facilities were adequate. The inadequacy of accommodation facilities was further corroborated by the directors of quality assurance at both universities who agreed that, both universities had a big challenge in accommodating all the students within the university halls of residence.

To test the influence of human and physical facilities on the quality of education, a bivariate regression analysis of independent variable (physical and human resources) for KU and TUK was carried out. The results showed that physical and human resources explained 21.0% of the variance with p value=0.000, $R^2=0.210$ and 26.5% with p value=0.002, $R^2=0.265$ at KU and TUK respectively. This implies that physical and human resources influence a good proportion of quality of education at both KU and TUK leading to rejection of the null hypothesis.

Objective three sought to investigate the availability and adequacy of learner-support services and their effect on the quality of education. Specifically, the study sought to investigate adequacy and availability of student academic advisory services, guidance and counseling services and financial advisory services. It was found that with exception of guidance and counselling services (median=3), all other services were lacking or not adequately implemented in the sampled universities as reported by the deans (median=2). Interestingly, majority of the students at both KU and TUK, observed that guidance and counselling services (KU median=2; TUK median=1) and financial advisory services (KU
and TUK median=1) were inadequate. To test the influence of learner-support services on the quality of education, a bivariate regression analysis of independent variable (learner-support services) for KU and TUK was carried out. The results showed that learner-support services explained 22.2% of the variance with p value=0.000, $R^2=0.222$ and 21.0% with p value=0.007, $R^2=0.210$ at KU and TUK respectively. This implies that learner-support services influence a good proportion of quality education at both KU and TUK leading to rejection of the null hypothesis.

Objective four sought to investigate the level of stakeholders’ involvement in curriculum development and revision. The study found that all the universities involved a variety of stakeholders on various activities at the university such as: needs assessment, gathering feedback on quality of programmes offered and curriculum review. However, majority of deans at KU and TUK reported that they occasionally invited employers and alumni during curriculum development and review.

This finding was corroborated by one of the quality assurance officers who said that they did not involve these stakeholders all the time they were developing the curriculum. Further, majority of the students (58.1% at KU and 56.3%, at TUK), reported that their universities did not involve them in giving feedback on the content of the curriculum they were pursuing. This was unfortunate since CUE
requires stakeholder engagement in curriculum development. Additionally, majority 215(64.4%) of students at KU reported that their university invited employers to give them talks on the needs of the labour market, unlike their counterparts at TUK with only 15(45.5%) reporting that their university invited employers.

5.3 Conclusions

Findings show that all the universities had put in place policies and procedures addressing internal and external quality assurance. These practices were, however, not uniformly and adequately implemented across the universities. The study, therefore, concluded that inadequate implementation of policies and procedures addressing internal and external quality assurance practices could affect the quality education in public universities.

Universities had teaching staff with requisite academic qualifications and experiences necessary for quality teaching and learning. However, the study established that the universities engaged part-time teaching staff. This may compromise the quality of education. Besides human resources, quality education requires adequate and appropriate physical facilities. The findings revealed that physical facilities such as laboratories and accommodation facilities were inadequate at both KU and TUK, meaning that experiments and practical subjects were affected. The findings further showed that ICT and internet connectivity at
TUK was a major concern as compared to KU. This is despite the importance of ICT in the knowledge-based economy and also being one of the skills advocated by the framework for 21st century skills. The study therefore, concludes that inadequacy of physical facilities affects the quality of education in universities. Lastly, the study established that physical and human resources have a significant influence on quality of university education.

Learner-support services have not been adequately provided and implemented in the universities. Specifically: academic guidance and advice and financial advice and funding were found to be inadequate in the two study universities. The study concluded that lack of these services could adversely affect quality of education since the students did not feel adequately supported by their universities and therefore, they had to grapple with various issues affecting them instead of concentrating fully in their academics. The study further established that learner-support services have a significant influence on quality university education.

Findings showed that universities engage the stakeholders in variety of activities taking place at the university. However, it was revealed that engagement of stakeholders such as employers, students and CUE in curriculum development and revision was done occasionally. The study concludes that lack of stakeholders’ engagement in curriculum development and review affects quality of university education. In addition, it was revealed that universities have a
comprehensive database of skills and competencies required by the industry. The question that arises therefore is, why are there cases of educated unemployment? The study concludes that universities in Kenya are still being guided by the Social Demand Approach.

5.4 Recommendations

The following were the recommendations based on the findings and conclusions of the study:

i. The study recommends that universities adequately implement policies and procedures related to internal and external quality assurance practices as stipulated by the CUE guidelines.

ii. The study recommends that universities should invest more in having adequate full-time teaching staff.

iii. The universities should ensure that the teaching staff undergo in-service training on modern pedagogical practices in order to inculcate the knowledge, skills and competencies demanded by the 21st century economy.

iv. The study recommends that universities integrate ICT in teaching and learning to enhance attainment of innovative and ICT skills among other competencies.

v. Universities should come up with alternative models of providing student accommodation such as embracing public-private partnership programmes but with proper vetting of private providers.
vi. The study recommends that, public universities should facilitate learner-support services especially issues to do with academic guidance and advice, financial advising and funding and guidance and counseling services.

vii. Universities should embrace appropriate and alternative forms of financing university education such as work-study programmes for the students with challenges in financing their education.

viii. The study recommends that universities should engage stakeholders especially the employers, by getting their views on the areas that the curriculum should address.

ix. The curriculum should be modelled to address the needs of the knowledge-based economy with content and processes that are current and up-to-date.
5.5 Suggestions for Further Research

i. A comparative study could be carried out comparing the extent to which old and newly established universities have implemented quality assurance guidelines as stipulated by the CUE.

ii. A study could be carried out to establish the reasons why universities engage part-time teaching staff and the extent this initiative has affected quality of education in Kenya.

iii. A study could be carried out to establish why the phenomenon of educated unemployed is rising despite universities reporting that they had databases of skills required by the industry.
REFERENCES


Community College Survey of Student Engagement, (2008). *High expectations and high support: The University of Texas at Austin: Community College Leadership Program*.


Claudia Rodriguez Wright, (2013). *Hispanic student access to a higher education institution along the Texas-México Border*. Texas.


ESIB, (2011).*European student handbook on quality assurance in higher education*. ESIB.


Hong Kong Education Bureau (2009). Good practices in quality assurance; A handbook for the sub-degree sector. Hong Kong.

Inter-University Council for East Africa (2014). *Report from a study establishing the status of higher education qualifications systems and the contributions to human resources development in East Africa*. IUCEA.


Kayongo P. M. (2010). *E-learning services vs. physical education institutions; which way to go in financial terms?* NCHE: Kampala.


Ravinder Rena (2010). Emerging trends of higher education in developing countries. Namibia University of Science and Technology.


USAID (2014). *Report to the people*. USAID


APPENDICES

Appendix I: Letter of Introduction

INTRODUCTION LETTER

Wilson Mutuma Michubu
Department of Educational Management,
Policy and Curriculum Studies,
Kenyatta University.

Mobile: 0721 384 288
Email: mutumaw@gmail.com

Dear Respondent,

I am a postgraduate student at Kenyatta University, undertaking research as a fulfillment for the award of a PhD degree. My research is focused on the Implementation of Quality Assurance Guidelines and their Influence on Quality of Education in Selected Public Universities in Kenya.

I am kindly requesting your assistance in collection of data for the purpose of this study.

I will ensure that all data and information provided therein is treated with utmost confidentiality and used for academic purposes only.

Any assistance accorded to me will be highly appreciated.

Yours faithfully

Wilson Mutuma
Appendix II: Questionnaire for Deans of Schools

Instructions
This questionnaire is designed to collect relevant information about your views on the quality assurance guidelines for quality education in your school and at the university in general. Your response to the items of this questionnaire will remain confidential and the results will be used to examine the extent of implementation of quality assurance guidelines and their influence on quality of education in public universities in Kenya. You can use a Tick [✓] to indicate your responses for items with alternative responses. Please briefly state your responses for the open-ended items.

Section A: Background Information
1. School/College__________________________________________________________

2. Educational qualification
   Masters [ ]    PhD [ ]   others (specify) __________________________

Section B: Policies and procedures for quality education (Please Tick [✓] where appropriate)

Internal quality assurance system
3. What is your opinion regarding the following statements? (Tick as appropriate):

   Key:
   SD - Strongly Disagree          A - Agree
   D - Disagree                  SA – Strongly Agree
   U-Undecided

186
My university has put in place an internal quality assurance system

There are adequate policies and procedures to guide teaching and learning

The university has a policy on student admission criteria

Students are effectively monitored and evaluated in the course of their study

4. To what extent are you satisfied with the implementation of internal quality assurance system in your university? (Tick in the appropriate box)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Level of satisfaction</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Very Dissatisfied</td>
<td>(    )</td>
</tr>
<tr>
<td>2.</td>
<td>Dissatisfied</td>
<td>(    )</td>
</tr>
<tr>
<td>3.</td>
<td>Neither</td>
<td>(    )</td>
</tr>
<tr>
<td>4.</td>
<td>Satisfied</td>
<td>(    )</td>
</tr>
<tr>
<td>5.</td>
<td>Very satisfied</td>
<td>(    )</td>
</tr>
</tbody>
</table>

External quality assurance mechanism

5. What is your opinion regarding the following statements? (Tick as appropriate):

Key

SD - Strongly Disagree   A - Agree
D - Disagree             SA – Strongly Agree
U - Undecided
My university has subscribed to an external quality assurance system

My university benchmarks with best practices in delivering quality education

The Commission for University Education is involved in promoting quality education

6. In your opinion, to what extent are you satisfied with the Commission for University Education as an external body in ensuring quality of education is maintained? (Tick in the appropriate box)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Level of satisfaction</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Very Dissatisfied</td>
<td>(    )</td>
</tr>
<tr>
<td>2.</td>
<td>Dissatisfied</td>
<td>(    )</td>
</tr>
<tr>
<td>3.</td>
<td>Neither</td>
<td>(    )</td>
</tr>
<tr>
<td>4.</td>
<td>Satisfied</td>
<td>(    )</td>
</tr>
<tr>
<td>5.</td>
<td>Very satisfied</td>
<td>(    )</td>
</tr>
</tbody>
</table>

C. Physical and human resources

7. What is your opinion regarding the following statements? (Tick as appropriate):

Key

SA - Strongly Agree       A - Agree
U - Undecided             D - Disagree
SD - Strongly Disagree
My school has adequate full time staff necessary for quality teaching and learning

My school engages part-time teaching staff

The teaching staff in my school possess necessary experience for quality teaching and learning

The teaching staff meet the minimum academic qualifications necessary for quality teaching and learning

---

8.

<table>
<thead>
<tr>
<th>How do you rate the adequacy of the following physical facilities in your university? (tick □)</th>
<th>Very inadequate</th>
<th>Inadequate</th>
<th>Adequate</th>
<th>Very adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libraries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture halls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halls of residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratories</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library resources (books and journals)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D. Learner-support services

9. How would you rate the effectiveness of the following learner-support services in your University in addressing students’ needs? (tick in the appropriate box)

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidance and Counseling services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic guidance and advisory services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial aid and advisory services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KEY: (1) Unsatisfactory (2) Neutral (3) Satisfactory
10. What is the extent of implementation of learner-support services in addressing student needs in your university? (Tick 🎁).

<table>
<thead>
<tr>
<th>Level</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above average</td>
<td>(    )</td>
</tr>
<tr>
<td>Average</td>
<td>(    )</td>
</tr>
<tr>
<td>Below average</td>
<td>(    )</td>
</tr>
</tbody>
</table>

E. Stakeholders involvement in curriculum development and revision

11. Does your University involve stakeholders in any of the activities taking place at the University?

Yes [ ] No [ ]

12. If yes, briefly state some of the activities that stakeholders are involved in at your university... 

13. To what extent are the following stakeholders involved in curriculum development to meet the needs of the industry? (Circle appropriately).

**Key:** (1) Never involved  (2) Occasionally involved  (3) Involved all the time

- a) Employers  
  (1)  (2)  (3)

- b) Commission for University Education  
  (1)  (2)  (3)

- c) Alumni  
  (1)  (2)  (3)
14. Indicate your feeling towards the following items:

Key:

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>Undecided</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statement | SD | D | U | A | SA |
-----------|----|---|---|---|----|
Stakeholders’ involvement in universities is important to ensure quality is maintained |
There is a clear mechanism for getting feedback from the stakeholders in the university. |
Employers are involved in curriculum development |
Complaints from the employers are effectively addressed |
My University has a comprehensive database of the skills required by the labour market |

In your opinion what mechanisms can universities put in place to ensure quality of education is maintained? .................................................................

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

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

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

Thank you for your co-operation
Appendix III: Questionnaire for Students

Introduction

This questionnaire is designed to collect relevant information about your views on the systems and practices of assuring quality of education in your school and at the university in general. Your response to the items of this questionnaire will remain confidential and the results will be used to examine the implementation of quality assurance guidelines and their influence on quality of education in public universities in Kenya. You can use a Tick [✓] to indicate your responses for items with alternative responses. Please briefly state your responses for the open-ended items.

SECTION A: Background Information

Indicate the correct option by inserting a tick (✓) in appropriate box provided

1. **Gender:** Male [ ] Female [ ]

2. **Age:** Below 25yrs [ ] 26 – 30 yrs [ ] 31 – 35 yrs [ ] 36 – 40 yrs [ ] 41 – 45 yrs [ ] 46 – 50 yrs [ ] 51 and above [ ]

3. In which school are you registered?

4. Provide brief details about your background (e.g., previous education, work experience, etc.):
Section B: Policies and procedures to enhance quality education

4. Were there minimum academic requirements to be met before you were admitted for the degree programme?
   
   Yes ( )   No ( )

5. Did your University issue you with a student academic handbook on admission?
   
   Yes ( )   No ( )

   If yes, to what extent were you satisfied with the content in the academic handbook? (Tick in the appropriate box).

   Key:

   1. Very Dissatisfied ( )
   2. Dissatisfied ( )
   3. Neither ( )
   4. Satisfied ( )
   5. Very Satisfied ( )

6. My academic work is continuously monitored and evaluated.
   
   Yes ( )   No ( )

7. Lecturers use a variety of assessment techniques to evaluate our academic work.
   
   Yes ( )   No ( )

   If yes, to what extent are you satisfied with the assessment techniques used to evaluate your academic work? (Tick in the appropriate box).

   Key:

   1. Very Dissatisfied ( )
   2. Dissatisfied ( )
   3. Neither ( )
   4. Satisfied ( )
   5. Very Satisfied ( )
Section C: Physical and human resources for quality of education

8. Indicate your feeling towards availability of the following physical facilities for quality learning (Tick (✓)):

Key:  SD - Strongly Disagree   U-Undecided   SA – Strongly Agree

D – Disagree   A-Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lecture halls are adequate and spacious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The reference materials in the library are adequate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ICT facilities and internet connectivity is adequate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university has adequate accommodation facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are adequate facilities to promote innovativeness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Indicate your feeling towards the following statements in regard to the teaching staff (Tick)

Key:  SD - Strongly Disagree   SA – Strongly Agree

D – Disagree
U-Undecided
A-Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The lecturers are knowledgeable in delivering content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturers use a variety of teaching methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturers encourage us to be creative and innovative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lectures are interactive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section D: Learner-support services and quality of education
10. In your opinion, do you feel you have been adequately supported by your university in the course of your study?

Yes [ ]     No [ ]

11. Indicate your feeling towards availability of the following learner-support services (Tick (✓)):

**Key:**  SD - Strongly Disagree       U- Undecided       SA – Strongly Agree  

D – Disagree                        A- Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>My university offers adequate guidance and counseling services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My university provides financial advisory services to enhance management of my finances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are academic advisory services provided by my university</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are opportunities for attachment in the course of my study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section E: Stakeholder involvement in program development and revision in Universities**

12. As a stakeholder in your university have you been involved in giving feedback on the content of curriculum of your course of study?

Yes [ ]     No [ ]
13. Indicate your level of satisfaction on the extent to which the following issues have been implemented in your university (Tick as appropriate):

**Key:**
1. Very Dissatisfied
2. Dissatisfied
3. Neither
4. Satisfied
5. Very Satisfied

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>My university invites employers to give talks on the requirements of the job industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a placement office that links us to prospective opportunities for employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My university invites the alumni to give us talks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section F: Quality of Education**

14. Indicate your feeling towards the level of satisfaction in achievement of the following skills in the course of your study. (Tick appropriately):

**Key:**
1. Strongly Disagree
2. Neither
3. Strongly Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>My university education has enhanced my communication skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have adequately acquired problem solving skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have adequately acquired creative and critical thinking skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have acquired adequate innovative skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have acquired adequate ICT skills in the course of my study</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. In your opinion, what are some of the mechanisms universities can put in place to ensure quality of education is maintained?

Thank you for your co-operation
Appendix IV: Interview Schedule for Quality Assurance Officers

1. What quality assurance systems have you put in place to ensure quality of education is maintained?

2. To what extent do you feel that these quality assurance systems have been implemented?

3. In your opinion, are the CUE guidelines on quality assurance working in ensuring quality of education?

4. Which challenges do you face when implementing CUE guidelines on quality assurance?

5. Do the available physical and human resources meet the requirements of CUE in enhancing quality of education?

6. Has the university put in place learner-support services to enhance quality learning? What are some of the learner-support services have you put in place?

7. In your opinion, are these learner-support services adequate to meet the needs of the learners?

8. Do you involve stakeholders in any of the quality assurance areas? If yes, what are some of the activities do you engage stakeholders in?
Appendix V: Research Authorization-NACOSTI

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Ref. No: NACOSTI/P/16/82737/11277

20\(^{th}\) May, 2016

Wilson Mutuma Michubu
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Implementation of quality assurance system and its influence on quality of education in selected public Universities in Kenya,” I am pleased to inform you that you have been authorized to undertake research in Kiambu and Nairobi Counties for the period ending 19\(^{th}\) May, 2017.

You are advised to report to the Vice Chancellors of the selected Public Universities, the County Commissioners and the County Directors of Education, Kiambu and Nairobi Counties before embarking on the research project.

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

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The Vice Chancellors
Selected Public Universities.

The County Commissioner
Kiambu County.
Appendix VI: Research Authorization-KU

KENYATTA UNIVERSITY

OFFICE OF DEPUTY VICE-CHANCELLOR, RESEARCH,
INNOVATION AND OUTREACH

Ref: KU/DVCR/RCR/VOL.2/16

Mr. W.M. Michubu,
Department of Educational Management
Policy & Curriculum Studies
KENYATTA UNIVERSITY

P. O. Box 43844 - 00100
Nairobi, Kenya
Tel. 254-20-810901 Ext. 026
E-mail: dvc-rio@ku.ac.ke

15th June, 2016

Dear Mr. Michubu,

RE: REQUEST TO COLLECT RESEARCH DATA AT KENYATTA UNIVERSITY

This is in reference to your letter dated 9th June, 2016 requesting for authorization to collect research data at Kenyatta University on the topic: *Implementation of Quality Assurance System and its Influence on Quality of Education in Selected Public Universities in Kenya.*

I am happy to inform you that considering the purely academic nature of your research your request has been approved by University Management. It has been noted that you will collect data from the offices of the Deans of Schools, Director, QMS & PC and administer questionnaires to 4th year students.

Yours Sincerely,

Prof. F. Q. Gravenir
Deputy Vice-Chancellor
Research, Innovation & Outreach
Appendix VII: Research Authorization-TUK

The Technical University of Kenya

Office of the Deputy Vice-Chancellor
Administration, Planning and Infrastructure

Ref: TUK/ADM/DHRS/2016/EXT.Vol.07

21st June, 2015

Wilson Mutuma Michubu
Kenyatta University
P. O. Box 43844
NAIROBI
Email: Mutumaw@gmail.com

Dear Mr. Michubu,

RE: PERMISSION TO COLLECT DATA

Reference is made to your letter of 10th June, 2016 requesting for permission to collect data for your PhD studies. We note that your research topic is “Implementation of Quality Assurance System and its Influence on Quality of Education in selected Public Universities in Kenya.”

I am pleased to inform you that permission has been granted to you to collect data. This permission is subject to the information collected being treated with confidentiality and used for academic purposes only.

I also take the opportunity to wish you success in your studies.

Prop. Joseph Kiilang’at, PhD
Deputy Vice-Chancellor, API

Copy to: Vice-Chancellor
Executive Dean, FEST
Executive Dean, FAST
Executive Dean, FSST
Appendix VIII: Research Permit

THIS IS TO CERTIFY THAT:
Mr. Wilson Mutuma Michuku
of KENYATTA UNIVERSITY, 28856-200
Nairobi, has been permitted to conduct research in Kiambu, Nairobi County,
on the topic: IMPLEMENTATION OF QUALITY ASSURANCE SYSTEM AND ITS INFLUENCE ON QUALITY OF EDUCATION IN SELECTED PUBLIC UNIVERSITIES IN KENYA, for the period ending: 19th May, 2017

Applicant’s Signature

Date Of Issue: 20th May, 2016
Fee Received: Ksh 2,000

Permit No: NACOSTI/P/16/82737/11277

Director General
National Commission for Science, Technology and Innovation