MANAGEMENT CHALLENGES FACING KENYA’S PUBLIC UNIVERSITIES AND IMPLICATIONS FOR THE QUALITY OF EDUCATION

BY

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MAY, 2013
DECLARATION

This thesis is my original work and has not been presented for a degree or any award in any other university. All sources of information have been acknowledged and referenced.

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To my darling wife Gladys, my son Bradley, and my two daughters, Sonia and Sash for their love, support and encouragement they gave me during the study.
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I sincerely thank my Creator, the Almighty God, who gave me the physical, mental strength and good health to undertake and accomplish this work within the prescribed time.

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Finally, I am indebted to many who have contributed to the various stages of this thesis. God bless them all abundantly.
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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAU:</td>
<td>African Association of Universities</td>
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<tr>
<td>AIDS:</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<td>AU:</td>
<td>African Union</td>
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<td>CHE:</td>
<td>Commission for Higher Education in Kenya</td>
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<td>DAAD:</td>
<td>German Academic Exchange Services (Deutsche akademische Auschau)</td>
</tr>
<tr>
<td>DSE:</td>
<td>German Foundation for International Development</td>
</tr>
<tr>
<td>DVC:</td>
<td>Deputy Vice-Chancellor</td>
</tr>
<tr>
<td>EFA:</td>
<td>Education for All</td>
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<tr>
<td>FFP:</td>
<td>Fitness-for-purpose</td>
</tr>
<tr>
<td>FTE:</td>
<td>Full-Time Equivalent</td>
</tr>
<tr>
<td>HIV:</td>
<td>Human Immune Virus</td>
</tr>
<tr>
<td>ICT:</td>
<td>Information Communication and Technology</td>
</tr>
<tr>
<td>IUCEA:</td>
<td>Inter University Council for East Africa</td>
</tr>
<tr>
<td>JKUAT:</td>
<td>Jomo Kenyatta University of Agriculture and Technology</td>
</tr>
<tr>
<td>KU:</td>
<td>Kenyatta University</td>
</tr>
<tr>
<td>KUSA:</td>
<td>Kenya University Students Association</td>
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<tr>
<td>MDG:</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MoEST:</td>
<td>Ministry of Education, Science and Technology</td>
</tr>
<tr>
<td>NCHE:</td>
<td>National Council for Higher Education in Uganda</td>
</tr>
<tr>
<td>NEPAD:</td>
<td>New Partnership for Africa's Development</td>
</tr>
<tr>
<td>NGO:</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NUSA:</td>
<td>Nairobi University Students Association</td>
</tr>
<tr>
<td>OAU:</td>
<td>Organisation of African Unity</td>
</tr>
<tr>
<td>OECD:</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PAYE:</td>
<td>Pay As You Earn</td>
</tr>
<tr>
<td>PSSP:</td>
<td>Privately Sponsored Students Programmes</td>
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<tr>
<td>QAA:</td>
<td>Quality Assurance Agency</td>
</tr>
<tr>
<td>SAP:</td>
<td>Structural Adjustment Programme</td>
</tr>
<tr>
<td>UASU:</td>
<td>Universities Academic Staff Union</td>
</tr>
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<td>UK:</td>
<td>United Kingdom</td>
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</table>
UNESCO: United Nations Educational, Scientific and Cultural Organization
UPE: Universal Primary Education
USAID: United States Agency for International Development
VC: Vice – Chancellor
ABSTRACT

The quality of university education has become such a high profile issue, in the 21st century due to the changes and challenges that face the entire education system in the world. The rise in student population through adoption and application of different modes of learning, have raised concerns about quality of public university education. The study sought to investigate the nature and magnitude of management challenges that face Kenya’s public universities and their implications for quality education. The study had four research objectives to; determine the nature and magnitude of management challenges facing Kenya’s public universities in relation to their missions, determine the implications of management challenges on the quality of university education, identify the strategies public universities have put in place to cope with challenges to ensure quality of education and propose strategies the universities can adopt to mitigate the management challenges. This study was both qualitative and quantitative in nature; hence employed descriptive design. The study was carried out in three Kenya’s public universities which were purposively sampled. The sample constituted the following: 3 vice-chancellors, 8 deputy vice-chancellors, 53 deans of schools, 158 chairpersons of departments, 12 leaders of academic and non-academic staff unions each, 12 leaders of students associations in the three public universities and 3 heads of boarding and accommodation sections. Four types of research instruments were used in data collection: questionnaires for deans of schools, chairpersons of departments and leaders of academic and non-academic staff unions, interview guides for VCs, DVCs and heads of boarding and accommodation sections, observation schedule, and document analysis. The data were analysed both quantitatively and qualitatively. Quantitative data were analysed using descriptive statistics aided by statistical package for social sciences (SPSS). Quantitative data were presented in frequencies, percentages and tables while qualitative data were organized into thematic categories according to the objectives of the study. The study established that public universities that took part in the study did not have enough teaching and learning resources, especially lecture halls, computers, textbooks and library space. The study found out that insufficient fund was the biggest management challenge as it affected all the other areas of research, teaching and learning. It was also revealed that the curriculum was not adequately implemented due to inadequate teaching and learning resources and teaching staff. All these management challenges were found to have an implication on the quality of education offered in the universities. The study recommends that, the universities and the government should establish appropriate, reliable, diversified and sustainable mechanisms for financing university operations; the Commission for University Education (CUE) should institute strict quality monitoring mechanisms to universities and revises its accreditation requirements; graduates tracer studies be conducted among the workforce periodically, universities to put in place clear curriculum regulatory processes and recruit more lecturers and improve lecturers’ incentive system.
CHAPTER ONE

INTRODUCTION

1.1 Background to the Problem

The demand for university education worldwide continues to increase and competition for access rises each year a new set of candidates complete their secondary or equivalent level of education. Furthermore, demand for new skills at workplace necessitates further education and training and this adds more pressure to the limited chances available for university education. Development of the university education sector has thus become a priority in the most advanced as well as in emergent economies.

University education institutions are expanding fast, especially in the majority of developing countries. At the same time as new universities have been created, the higher education sector has been diversified: different establishments such as community colleges, teacher training colleges, polytechnics, open universities and distance education centres have mushroomed outside traditional universities. Due to these changes which have been widely conditioned by ever increasing student numbers on the one hand and decreasing or stagnating resources on the other, the university institutions are confronted by a combination of old and new challenges. At the same time, stakeholders have expressed growing concern about the quality of university education outcomes, in particular that of the standard of research and student achievements.
University education is a critical pillar of human development world over. Besides, it is perceived as a process by which individuals are prepared to assume their respective responsibilities within a social setting and it is a powerful tool for achieving social mobility (Otunga, 1998). This is quite true in regard to expectation of university education all over the world. As the highest level of institutions dedicated to the professional and intellectual development of mankind and society in general, universities are expected to concentrate on research, teaching and public service.

Chacha (2002) argues that universities all over the world are supposed to be characterized by quality and excellence, equity, responsiveness and effective and efficient provision of services, good governance and excellent management of resources. From the 1990s, many universities in Africa have undergone a difficult phase of increasing enrolments in an environment of declining educational quality (Ajayi, 1996). This rapid increase in enrolments is perhaps the most important contributor to the deterioration in quality because it has increased pressure on university finances resulting into neglect of key inputs in instruction and research (Chacha, 2005). Ahemba (2006) describes many African universities as in a state of crisis without the basic physical infrastructure such as the internet connectivity, books, laboratory equipment and classroom.

Higher education has been identified as a critical element of development in which developing countries must build in earnest, if they are to make progress in a world that feeds on knowledge and breeds on competition. It has been
noted that African countries and other least developed countries could use knowledge to narrow their income gap with developed world economies. A UNESCO task force on higher education in developing countries (UNESCO, 2000) corroborates this, noting that higher education is essential to developing countries, if they are to prosper in a world economy where knowledge has become a vital area of advantage. The task force further indicates that the quality of knowledge generated within higher education institutions and its availability to the wider economy is becoming increasingly critical to national competitiveness. In addition, Bloom, Canning and Chan (2005) provide evidence to show the positive impact that tertiary education can have on economic growth and poverty reduction 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. According to Rottenburg (1987), universities, whether in developing or industrialized countries, are confronted with questions concerning their contribution to the economic growth and social development in their respective societies. Consequently, the universities’ “output” in research and in manpower is subject to critical assessment. According to World Bank (1997: 13):

In all countries, especially in developing ones, higher education is heavily dependent on government funding. In an era of widespread fiscal constraints, industrial as well as developing countries are struggling with the challenge of preserving or improving the quality of higher education as education budget and particularly expenditures per student are compressed.
The crisis is most acute in the developing world, both because fiscal adjustments have been harsher and because it has been more difficult for developing countries to contain pressures for enrolment expansion, given relatively low enrolment ratios. Besides, Ngara (1995:4) acknowledges that African Universities’ managers do face problems:

The vice-chancellors, presidents and rectors of African institutions of higher education have on the whole tried to grapple with the predicament their institutions find themselves in, and credit must be given to them and the secretariat of the Association of Africa Universities for the tenacity they have shown in articulating the role of higher education in the search for solutions to African’s problems.

Saint (1992) confirms that though relatively young, universities in Africa continue to achieve significant accomplishments, including the ability of most universities to maintain or increase their staff complements. In contrast, Blair and Jordan (1994) demonstrate that remuneration packages are generally poor and non-competitive and their lack of purchasing power is the major source of academic staff dissatisfaction. Attracting and retaining competent staff is the biggest and current problem in African universities (Amonoo-Neizer, 1998). The brain drain syndrome has affected African universities in terms of migration of well and highly trained professionals from the continent. As a result, many African universities have been left with young, inexperienced and insufficiently trained staff. This phenomenon refers to the alarming exodus of human capital from one location to another. Olusola (2007), quoting data from the Economic Commission for Africa, estimates that between 1960 and 1989, some 127,000 highly qualified African professionals left the continent.
According to Olusola (2007) from the International Organization for Migration, Africa has been losing 20,000 professionals each year since 1990. This continuous outflow of skilled labour contributes to a widening gap in science and technology between Africa and other continents. The effect of brain-drain in Africa is most pronounced in the health and educational sectors. There are more African scientists and engineers in the USA than in the entire Africa continent. The effect of this trend is that Africa is becoming increasingly dependent on foreign expertise for many developmental projects and has its first class brains serving outside her shores.

As Braimoh (1999) clearly pointed out, without an adequate supply of competent and qualified personnel, the knowledge production process by African universities will be faulty and the end products (that is, graduates) will be unsuitable or unprofitable for the stakeholders and labour market requirements. This is particularly the case as a university’s goal to provide quality education is achievable only through the competence of its teaching staff. On the other hand, effective teaching cannot be accomplished without active research.

The close of the 20th century witnessed remarkable changes within the universities in Africa. This period saw an increase in enrolment figures; for instance, from an estimated enrolment of 181,000 in 1975, universities in Africa enrolled 1,750,000 in 1995. According to the Global Education Digest (UNESCO, 2000), African higher education had an enrolment of 2,051,751 in 2004. A striking characteristic of the history of higher
education in Africa has been the rapid increase in the number and variety of institutions since the 1960s. From a low of 52 in the 1960s, the number of universities almost trebled to 143 by 1980, and more than doubled to 316 by 2000 (UNESCO, 2000).

Overall student enrolment has increased at an equally striking rate as it is indicated above. Whereas these quantitative leaps are welcome, the implications they have had on quality has been of great concern. Without exception, resources failed to match the rate of increase in enrolment. African universities were, therefore, called upon to do more with less in terms of infrastructure, teaching and research facilities, and staff. It is becoming increasingly evident that the 21st century is set to become a crucial and challenging period for universities in Africa.

Globalization phenomena and knowledge revolution are also influencing universities management in Africa Joseph (2003:6):

If globalization is about forging relationships then it is ‘relationships’ between people, cultural groups, communities and organization that ought to be the target of our educational efforts.

It is now widely acknowledged that in the context of changing global relations and the rise of the new information technologies, producing relevant knowledge is central to the role of higher education in contemporary society. Presently, due to advancement of Information Communication and Technology (ICT), new models of learning have emerged and have been adopted in the universities such as open learning and e-Learning. As a result of
the intensification of globalized socio-economic and cultural relations and of the information technologies which underpin globalization, the world is increasingly entering a new knowledge or “network” society (Carnoy, 1998; Castells, 1993, 1996). In this, the social organization of knowledge and learning is changing dramatically with major implications and challenges for higher education institutions worldwide.

Much government concern about the quality of education derives from the widespread belief that poor quality will frustrate efforts to use education as an effective level of economic growth and development at a time in world history that is experiencing an acceleration of globalization. The understanding of what constitutes the quality of education is, therefore, evolving. Conventional definitions have included literacy, numeracy and life skills, and these have been directly linked to such critical components as teachers, content, methodologies, curriculum, examination systems, policy, management and administration (Ross & Genevois, 2006).

1.1.1 The Development of University Education in Kenya

The development of university education in Kenya can be traced back to 1922 when Makerere College was established as a technical college which grew into an inter-territorial institution admitting students from Kenya, Uganda, Tanganyika and Zanzibar. In 1949 Makerere College entered into a special relationship with the University of London in order to enable its students to study for the degrees of the latter university. Until 1954 Makerere College, as the University College of East Africa, remained the only institution of higher
education in east Africa. It admitted students with Cambridge School certificate for a two year “A” level preliminary study, prior to higher studies leading to the awards of diplomas and degrees. On March 25 1970, the East African authority decided to split the then University of East Africa into three independent universities for Kenya, Uganda and Tanzania. This development saw the creation of Makerere University (Uganda,) University of Dar es Salaam (Tanzania), and the University of Nairobi (Kenya).

The most salient feature of university education in Kenya has been the rapid growth in the number of institutions and enrolments. The number of public universities increased from one in 1970 to seven in 2010, with thirteen constituent colleges. Like its public counterpart, the private university sector has also grown tremendously. From one private university in 1970, the number has increased to over 17 by 2010. An increasing population base of learners in the primary and secondary sub-sectors has driven the rapid expansion of university education in Kenya. Kenya has made tremendous progress in university education compared to other East African countries. The total student enrolment in Kenyan universities in 2004/05 was 91,541 (Ministry of Planning and National Development, 2005), of these above 90% were enrolled in the public universities while the rest are in private universities as compared to 600 at independence in 1963.

The scenario about public universities in Kenya seems to be one mass production of graduates following the introduction of parallel degree programmes and the upsurge in the demand for university education (Republic
of Kenya sector review and development, 2003). At the University of Nairobi, for example, there are 19,285 part-time students as compared to 17,054 full-time students. At Kenyatta University, there are 9,524 part time students compared to 9,333 full-time students. At Jomo Kenyatta University of Agriculture and Technology, the figures are 4,590 part-time students and 3,372 full-time students, Government of Kenya 2008.

The rapid increase in enrolments exacerbated by the introduction of parallel degree programmes in public universities enrolment has grown from 72,551 in 2003 to 97,107 in 2008, Government of Kenya. The number has risen to 100,107 in 2007/2008 (Riechi, 2010). This has strained available resources at the universities, including increased workload for the lecturers. Besides, with calls to public universities to innovate strategies that would enable more Kenyans to acquire university education, the challenge to university managers in Kenya in the 21st century is how to provide quality higher education in the face of spiralling demand and declining government funding. This massification of university education is raising concerns among stakeholders about the quality education provided in the university institutions. Kinyanjui (2007) observes that there is a widespread perception of a decline in the quality of higher education and training in Kenya due to over enrolment, inadequate and out-dated teaching and learning facilities and low staff morale.

A report of the government [Republic of Kenya 2003: 75] outlines the objectives of university education as to:
i. develop in students and scholars the ability to think independently, critically and creatively;

ii. adapt, develop, advance, preserve and disseminate knowledge and desirable values, and to stimulate intellectual life (including the spirit of services to others);

iii. educate and train the high level human capital needed for accelerating development through industrialization of the economy;

iv. nurture the internalization of universal knowledge, including key technological advances with a view to harnessing it for national development;

v. provide through basic and applied research, knowledge, skills and services that help solve the problems facing society;

vi. help create a society in which both merit, based on diverse talents and equity in development are recognized and nurtured;

vii. inculcate entrepreneurial skills in the graduates to enable them to build employment opportunities for themselves and others.

The above stated objectives of university education imply that graduates from universities ought to undergo a fundamental transformation that empowers them to think clearly and independently, solve problems creatively, make sense and use of information, and embody moral and intellectual values that characterize dignified citizenship. Such graduates would be innovative, enterprising, morally sensitive, and self-directing. While the professed and implied goals of university education in Kenya are desirable, the process and
outcomes of learning achievement do not match them (Regional Eastern Africa Unistaff Alumni Network, 2006:58). This is evident from various documented observations; for example, Wambari (1999: 42) notes: “It is becoming increasingly evident that we, Kenyans, are somehow uneasy about the quality of education we are making available to our children. Somehow we feel that current education falls short of what effective education ought to achieve”. Similarly, Ngara, 1995:4) observes: “… there is not much cause for joy, for it is clear that many universities north of the Limpopo are struggling against all odds to fulfil their mission in society”.

It is documented in the blue print for Kenya Vision 2030 (Republic of Kenya, 2007) that the problem of mismatch between the level of skills imparted by the education system as a whole, and the requirements of the labour markets, must be corrected in order to meet the demands of the new economy. Similarly, the report of the Commission on Education System in Kenya (Republic of Kenya, 1999: 88) states: “The commission was informed that the current curriculum has not fully achieved the objectives of education and has failed to provide sufficient knowledge and skills for the learners to be self-reliant and employable at all levels. The curriculum has also failed to inculcate values and ethics, capacity for critical thinking and innovation “. Chacha (2005:30-31), in a review of research, notes:

Studies show that research and publishing by faculty has dropped over the last few years. Due to heavy teaching responsibilities-brought about by the rising student numbers, plus the need to moonlight so as to make some extra money to supplement the meagre pay-faculties are not keen on undertaking meaningful research and publishing work. The
long adage “publish or perish” no longer seems to hold much water within the university fraternity. All the above observations indicate that the quality and relevance of higher education in Kenya are not satisfactory. Due to both the past and the contemporary challenges, the universities are experiencing, for instance, the expansion, diversification and commercialization of university education in Kenya under both regular and parallel degree programmes, coupled with implementation of 2002 reformations in public universities, have come up with old and new challenges to these institutions. These challenges have made the stakeholders to raise concerns of quality education being offered to the students.

The relevance of university education in Kenya can be assessed through the demand for graduates by employers. Graduates need not be retooled when being employed in both private and public sectors. It can also be judged by the quality of research conducted and its utilization. However, the rapid expansion of university education has been associated with a decline in the relevance and quality of education offered. The key variables that impact on quality of education according to Commission for Higher Education (CHE) and Republic of Kenya, sector review and development (2003: 83) are:-

i) Curriculum;

ii) Instructional materials and equipment;

iii) Physical facilities;

iv) Teachers/instructors/lecturers;

v) Assessment and examinations;
vi) Institutional management and
vii) Institutional environment.

This research used these parameters to evaluate quality of public university education in Kenya as the universities endeavour to accomplish the three-core missions of university education which are; teaching and learning, research and community service.

1.2 Statement of the Problem

As the 21st century unfolds, Kenyan universities and indeed universities everywhere, are undergoing unprecedented changes and confront multiple challenges, both old and new. For instance, rapid technological, economic, political, and socio-cultural transformations emanating from the wider world and academic itself are eroding the old systems and structures in university education. The accelerated pace of globalization that has been experienced in recent years, unrelenting economic crises and orthodox structural adjustment, major shifts in the composition and orientation of the student body, changes in the content and system of instruction have posed great challenges to public university managers which may affect quality of university education. The expansion, diversification, privatization of public university education and challenges facing these institutions in the 21st century, have brought with them an increased concern among the stakeholders for the quality of university education offered to students.

Overcrowded facilities due to increased students’ enrolment, poorly maintained lecture and library buildings susceptible to weather hazards, and
inadequate teaching and learning resources are likely to impact negatively on student achievement and academic staff motivation. Graduates at the university level are expected to emerge with relevant skills necessary for initiating and advancing economic development and, the vision, attitudes and values that form an essential part of translation of material outputs of development into the overall wellbeing of the population. There is an issue of concern between the level of skills imparted by the university education and the requirements of the labour markets in both private and public sectors. Consequently, one critical issue of concern for the public is that of provision of quality education. If quality university education is affected by unmitigated challenges facing public university management, the mission of Kenya Vision 2030 and Millennium Development Goals, the roles, the expectations, the objectives and the missions of the public universities in Kenya may not be realized. Under the circumstances, there are some gaps in both research and documentation about the nature and magnitude of management challenges facing public universities in Kenya and their implications for quality education.

1.3 Purpose of the Study

The expansion, diversification and privatization of public university education provision have brought new challenges to university management in Kenya. The aim of Kenya Vision 2030 from this challenging backdrop is to; create a globally competitive and prosperous country with a high quality of life by 2030. It aims to transform Kenya into; a newly industrializing, middle-income
country, providing a high quality of life to all its citizens in a clean and secure environment, which is only possible if our universities are able to provide quality education. The purpose of this study therefore, was to investigate and to determine the nature and magnitude of management challenges facing public universities and their implications for the quality education.

1.4 Objectives of the Study

The specific objectives of this study were to:

i) Determine the nature and magnitude of management challenges facing Kenya’s public universities in relation to their missions.

ii) Determine the implications of management challenges on the quality of university education.

iii) Identify the strategies public universities have put in place to cope with challenges to ensure quality of education.

iv) Propose strategies the universities can adopt to mitigate the challenges with a view to improving the quality of education and remain competitive in the globalized academic environment.

1.5 Research Questions

The following research questions guided this study:

(i) What is the magnitude of management challenges that public universities face in relation to: teaching and learning, research and community service?

(ii) What are the implications of management challenges on the quality of public university education?
(iii) What are the strategies put in place in public universities to cope with management challenges to ensure quality maintenance?

(iv) To what level have the public universities implemented the recommendations of the government task forces to counter management challenges?

(v) What strategies can the public universities employ to mitigate on the implications of the management challenges to ensure quality education in a globalized academic environment?

1.6 Significance of the Study

The results of this study are significant in several respects:

First, the findings add to the body of literature in the area under study. Providing empirical data would help interventions, if necessary, to improve the quality of the learning and teaching, and learning environment. This research has revealed magnitude of management challenges public universities are experiencing and their implications on quality education. Second, the findings of the study may help public universities to re-focus their strategies and policies of university education so as to cope with the management challenges facing them to ensure maintenance of quality education. Third, the findings may be useful to the government and Commission for Higher Education in Kenya in terms of provision of resources and revision of university education policies. Fourth, the findings may benefit the public, the employer, the students and other stakeholders in terms of assurance about quality in public university education.
1.7 Assumptions of the Study

The following assumptions were made for the study:

a) The universities operate within the framework of the individual acts which have more or less similar management practices and structures, that they are governed by the same mandate and mission.

b) Management challenges facing public universities mainly emanate from the management task areas [finance, physical and material resources, staff personnel, student personnel, curriculum and instruction, and institution and community relations] in an effort to accomplish the three major roles of the Universities: teaching and learning, research and community service.

c) The respondents were honest when filling the questionnaires and when being interviewed.

d) Public universities have similar benchmarks on quality, pertaining to academics.

1.8 Limitations of the Study

The study was limited by unavailability of sufficient funds for conducting research in public universities for both the researcher and his three research assistants. Time also limited this study.

1.9 Delimitations of Study

The study delimited itself to three public universities in Kenya and therefore, this research was delimited to finding out the nature and magnitude of
management challenges in three public universities only; University of Nairobi, Kenyatta University and Egerton University.

1.10 Theoretical Framework

The study was guided by General System Theory (GST) originally developed by Ludwig Von Bertalanffy, later on adapted by Robert Owens (1981) in education institutions. He sees General System Theory as holistic system in regard to organizational management. In this theory, a system is a collection of parts unified to accomplish an overall goal. If one part of the system is removed, the nature of the system is changed as well. For example, a pile of sand is not a system. If one removes a sand particle, you have still got a pile of sand. However, a functioning car is a system. Remove the carburettor and you have no longer got a working car.

A system can be looked at as having inputs, processes and outputs. Systems share feedback among each of these three aspects of the systems. In an organization input would include resources such as raw materials, finances, technologies and human resources. These inputs go through a process where they are planned, organized, motivated and controlled, ultimately to meet the organizational goals. Outputs to society according to Robert Owens (1981) would be individuals who are more able to serve themselves and society because of improved: intellectual and manual skills, power of reason analysis, values, attitudes and motivation, creativity and inventiveness, communication skills, cultural appreciation, understanding of the world and sense of social
responsibility. Feedback would be information from the consumers of systems output.

Feedback also comes from the larger environment of the organization which includes influences from government, society, economics and technologies (see figure 1.1). This overall system framework applies to any system including sub-systems (departments and programmes) in the overall organization. General System theory may seem quite basic and with tremendous changes facing organizations and how they operate today, educators and managers have come to face new ways of looking at organizations.

Figure 1.1 captures the key tenets of a social system model as it happens in an educational institution.

**Figure 1.1: Theoretical model of inputs-processes-outputs**

**Source:** Robert Owens (1981:64)
This theory fits into this research because public universities are systems and they are social organizations which have inputs such as finance, staff and student personnel, physical and material resources. Processes include such things as curriculum and instruction and administration processes. Outputs include knowledge, skills or competences acquired by the students, quality research findings and consultancy and other services rendered to the community. Universities receive feedback from the government, society, economics and technologies.
1.11 Conceptual Framework

The conceptual framework is about inputs, the three major roles of public universities Vis a Vis outputs.

**Figure 1.2: Quality of University Education Conceptual Model**

*Source: Researcher (2013)*

It was assumed that, public universities have three core-missions, these are; teaching and learning, research and consultancy and community service. In order to achieve the missions, universities as whole or holistic systems are supposed to tackle challenges emanating from management task areas and which are: physical and material resources, staff personnel (both teaching and
non-teaching staff), finance, student personnel, curriculum and instruction and university community relations (Campbell, 1974) These management task areas are comprehensively connected to; implementation of good policies, managerial and administrative systems, supportive legislative framework, means to measure learning outcomes, resources, content, processes, learning environment, what the learner brings and seeks out learners. These independent variables have an implication on quality education and determine the output i.e. the dependent variable which is the quality of university education as indicated in the conceptual framework in figure 1.12. These must interact harmoniously, in order to achieve the above three key missions of the university (Olembo, 1992). See figure 2.1 on page 37-42.

1.12 Operational Definition of Key Terms

Access: Measures of enrolment rates in gender and marginalised groups. It includes opportunities to acquire university education by both gender and marginalised groups.

Challenges: Impediments towards achievement of pre-determined university education missions, objectives and goals.

Economics: Feedback of graduate performance working in trade and industry.

Equity: Provision of equal opportunities of access to universities education.
**Globalization**: Borderless world, where ideas flow freely among the institutions and the people.

**Higher Education**: Post-secondary education offered by universities and tertiary institutions.

**Management task areas**: Curriculum and instruction, finance, staff personnel, student personnel, physical and material resources and university community relations.

**Output**: University graduates and knowledge and skills they acquire.

**Policies**: These are deliberate plans of action to guide decisions on educational institutions in order to achieve pre-determined objectives.

**Privatization**: Commercialization of public university education so as to seek additional funds to meet high operational costs.

**Public university**: University that is developed and provided with staff and facilities using public funds.

**System**: A system is a set of interrelated parts that work together to achieve an objective. (Examples: a company, a university, the human body).

**Technologies**: Feedback of graduate scientific knowledge and skill acquisition.
**University management**: The process of setting and achieving university missions, objectives and goals through the execution of the five functions of management, namely; planning, organizing, coordinating, commanding and controlling that utilize human, financial and materials resources.


CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The purpose of this research was to investigate and determine the nature and magnitude of management challenges facing public universities in Kenya and their implications for quality education. This chapter, therefore, reviews literature on the following crucial areas; role of university education in development; the concept of quality university education; stakeholders’ views on quality university education; the concept of ‘quality education’ in relation to the modern world; development of universities in Africa; issues and challenges of universities education in Africa; education policies in Kenya, historical background of public universities in Kenya and process of quality assurance and accreditation.

2.2 Role of University Education in Development

High quality university education transforms individuals and societies in ways that reduce poverty and increase the global competitiveness of nations. It is true that many developing countries including Kenya, have given priority to primary and secondary education at the expense of tertiary education. However, recent studies confirm that university education produces both public and private benefits (Bloom, 1975):

1. Private benefits include better employment prospects, higher salaries, ability to understand complex social and political issues, and a higher social status. These benefits often result in better quality of life.
Kenyans value university education and sacrifice their resources to provide education opportunities at this tier. Evidence from Organization for Economic Cooperation and Development (OECD) studies show that countries that invest heavily in education and skills benefit economically and socially.

2. India with a per capita of only $3,100 (measured in terms of purchasing-power parity), a literacy rate of only 65% and with a 65% rural population is a leading source of computer software in the world. India’s knowledge-based exports are expected to surpass $50 billion by 2010 (Nilekani, 2006).

3. India’s ability to harness and utilize knowledge to solve common societal problems (e.g., increase in agricultural production) is attributed to its government’s huge investments in world-class higher education institutions and universities that are relevant, competitive and meritocratic.

4. Examples of such institutions include the Indian Institutes of Technology, Indian Institute of management, Indian institutes of Science, and the Regional Engineering Colleges.

University education plays a crucial role in national development (Republic of Kenya, Session paper No 1 of 2005). It is a critical pillar of human development worldwide. In today’s lifelong-learning framework, tertiary education provides not only the high-level skills necessary for every labour
market but also the training essential for teachers, doctors, nurses, civil servants, engineers, humanists, entrepreneurs, scientists, social scientists and myriad personnel.

It is these trained individuals who develop the capacity and analytical skills that drive local economies, support civil society, teach children, lead effective governments, and make important decisions which affect entire societies. Universities are clearly a key part of all tertiary systems. As per the Session Paper No I of 2005, the Kenyan Government’s Goal is to have universities that are: demand driven, globally marketable, democratically managed, research supported, technologically informed, gender sensitive and of high quality.

2.3 The Concept of Quality in university education

Everybody who thinks about quality and quality assurance is faced with the question:

“What is quality?” Many discussions on quality start with a quote from Pirsig (1991).

Quality….you know what it is, yet you don’t know what it is; but this is self, contradictory. But some things are better than others, that is, they have more quality. But when you try to say what the quality is, apart from the things that have it, it all goes poof! There is nothing to talk about. But if you can’t say what quality is, how do we know what it is, or how do you know that it even exists? If no one knows what it is, then for all practical purposes, it doesn’t exist at all. But for practical purposes, it really does exist. What else are the grades based on? Why else would people pay fortunes for some things and throw others in the trash pile? Obviously some things are better than others… but what’s the ‘bitterness’ so round and round you go, spinning mental wheels and nowhere finding any place to get traction. What the hell is quality? What is it?
Green (1994) states that many book articles have been written to try to discover the nature of quality. But quality is like love. Everybody talks about it and everybody knows what he/she is talking about. Everybody knows and feels when there is love. Everybody recognizes it. But when one tries to give a definition of it he/she is left standing empty-handed. It is clear from above that there is no general consensus on the concept for quality. An objective definition of quality does not exist, because quality is, just like beauty, it is in the eyes of the beholder. Whoever asks whether something has quality has a certain concept in mind and certain expectations. When one talks about the quality of a product or the quality of service, the definition often used is the satisfaction of the client.

While quality in general is already a difficult concept in itself, quality in higher education is much more confusing, because it is not always clear what the “product” and who the “client” is. Is the “graduate” the “product” that universities offer society and the labour market? Or is the graduate-to-be, the student, our “client” and the programme that is offered the “product”? A university has multiple product system and a multi-client system.

Research findings abound that signify a link between student achievement and the quality of learning facilities provided to support educational programmes. While quality of learning facilities is an important concern to educators, there is no consensus what a quality facility is or how to effectively measure it. However, several writers have suggested a number of criteria that may be used to measure quality of facilities. Adequacy assessments for example, are
important indicators. Such questions as whether the facility adequately supports the desired educational programme or enables the development of learning environments that support students and teachers in achieving their goals, are critical measures of quality learning facility (Schneider, 2004 and Abend, Ornstein, Baltas, de la Garza, Watson, Lange, Von Ahlefeld, 2006).

Yurko (2005) argues that space quality is a function of an education facility. Examples of space qualities are; a learning facility having adequately sized classrooms, availability of natural lighting and a welcoming atmosphere. Other aspects such as level of comfort, cleanliness and maintenance are also important measures of quality facility (Cash, 1993). Nightgale and O’Neil (1997) provide an all encompassing definition of a quality facility as one that is fit for purpose. When referring to an education building, it needs to have learning spaces that support the learning process; is secure, comfortable and provides an inspirational setting for learning (Abend et al., 2006). Inadequate provision of such facilities as textbooks, online library services are quality issues and such resources are “not fit for the purpose” because they are unable to meet the needs of students’ learning (Abend et al., 2006).

Uline and Tschannen-Moran (2008) hypothesise on the likely outcomes of the interplay of quality of facilities and learning environment, by observing that dilapidated, crowded and uncomfortable school facilities were likely to be responsive for low student and teachers’ morale as well as teacher retention/attrition in such academic institutions. Other reviewers such as Earthman (2004) and Higgins, Hall, Wall, Woolner, McCaughey, (2005) support earlier
findings linking quality of library facilities, support services and the study environment. Quality of library facilities, support services and the study environment in libraries and lecture halls in Kenya’s public universities were some of the facilities investigated in this research.

2.3.1 The Stakeholders’ Views on Quality University Education

Quality assurance in higher education is so much more complicated than quality assurance in industry, because there are so many players in the field. Higher Education has many stakeholders and each category of stakeholders has its own ideas. The following are stakeholders in higher education:

   a) The government or the state
   b) The employees
   c) The academic world
   d) The students
   e) Parents
   f) Society at large

In an article published in assessment and evaluation in education, Harvey et al., (1993), after a thorough analysis of the various concepts, conclude: “first, quality means different things to different people. Second, quality is relative to processes or outcomes”. This conclusion fits the idea that quality is in the eyes of the beholder for instance:

   i. When the government considers quality, it looks first at the pass/fail ratio, the dropouts and enrolment time. Quality in the eyes of governments can be described thus: “As many students as possible
finishing the programme within the scheduled time with an international level degree at reduced costs.”

ii. Employers training about quality will refer to the knowledge, skills and attitudes obtained during studies: the “product” that is tested is the graduate.

iii. Quality of education has totally different meaning in the eyes of the students and their parents. For them, quality is connected with the contribution to their individual development and preparation for a position in society. Education must link up with the personal interests of the student. But the educational process also has to be organized in such a way that students can finish their studies in the given time.

iv. An academician will define quality as “A good academic training based on good knowledge transfer and a good learning environment and a good relationship between teaching and research.”

Quality is a very complex concept as it has been seen in the foregoing. It is not a simple one-dimensional notion. Quality is multi-dimensional so there is quality of input, process quality and quality of output. Ross and Mahlck (1990) in an expanded explanation of Beeby’s (1968, 1979) notion of qualitative change in the classroom defined quality of education as a process, concerned with educational planning, that is, likely to result in an improvement in the environment in which the student works, which aids the learning provided for that purpose by the school system and that the improved environment, could reasonably be expected to express itself as detectable gains in the knowledge, skills and values acquired by students. Though this
definition does not pinpoint the specific variables required to create the above environment, it provides a basis of looking at the issue of quality in three respects thus:

a) An improved learning environment.

b) Provision of teaching and learning aids.

c) Gains in the knowledge, skills and values acquired by students.

Levin (1993) while acknowledging the complexity of giving an absolute definition of quality divided, the status indicators of the quality of education into three:

a) Educational inputs; which comprise financing aspects, such as per pupil expenditure, physical measures such as the condition of learning facilities and manpower measures which is the number of personnel expressed as a ratio in relation to the number of pupils.

b) Educational outputs; which include all the levels of knowledge, skills and values acquired by pupils when leaving school and later career accomplishments.

c) Educational process; referring to the interaction between students and personnel the curriculum, and organization of the school environment.

According to UNESCO (1998), quality in higher education is a multi-dimensional concept, which should embrace all its functions and activities: teaching and academic programmes, research on scholarship, staffing, students, infrastructure and the academic environment. These are some of the parameters that will be used to measure quality in university education. If challenges facing public universities affect any of the above parameters, then
it means quality university education provision to the citizens will be affected. According to Commission for Higher Education (2008), quality is a difficult concept, and quality in higher education is much more confusing.

Quality in higher education is perceived as consisting of a synthesis of conformity, adaptability and continuous improvement; it is a synthesis of a range of expectations of many stakeholders Commission for Higher Education (2008). Students may focus on facilities provided and perceived usefulness of education on future employment. Parents may consider the achievement of their children. Employers may consider the competence of the graduates Commission for Higher Education (2008). Quality can, therefore, be viewed from many approaches. In this study, workable parameters of quality were given in relation to what fits most of the ideas and that covers most of the expectations of the stakeholders in relation to what has been reviewed and to the modern world.

2.3.2 The Concept of ‘Quality of Education’ In Relation to the Modern World

The primary concern of quality education under this sub-topic is learning. Therefore, the relationship between the learner and the teacher is critical. However, the inputs, processes, environment and outputs that surround a learner foster/ hamper learning are important as well. According to Ross et al., (2007), these can be seen as affecting the quality of education at two levels.

a) At the level of the learner in his or her learning environment and
b) At the level of the education system that creates and supports the learning experience.

Each of these two levels can be divided to form ten dimensions related to the quality of education – as illustrated in Figure 2.1.
Learning is at the centre, and is surrounded by the inner learner level and the outer system level: Both of these levels operate within a specific context, which can vary considerably from location to location. Elements within the learner level:

**Source:** Ross 2006: 45

**Figure 2.1: framework for the quality of education**
1) **Seeks out learners**

Education must be available without discrimination. This underscores the UNESCO commitment to reach out to those who have been traditionally neglected—including the poor, girls, working children, children in emergencies, those with disabilities, and those with nomadic lifestyles. A high-quality education, therefore, implies an environment that actively seeks out learners and assists them to learn.

A high-quality education also welcomes the learner adapting to meet learning needs. It is inclusive and it strives to ensure that all learners regardless of sex, age, language, religion and ethnicity are reached.

2) **What the learner brings**

What the learner brings to his or her own learning, and to that of a group, is extremely important. It can vary from work skills, to traumatic experiences, to excellent early childhood development opportunities, to illness, or to hunger.

3) **Content**

The content of education needs to be re-examined in light of the changes that have occurred in the world. Much of what is now taught worldwide may be less relevant to future generations of learners in many countries, there is a need for modern and relevant curricular materials. Learners have a right to a quality education that will serve as the basis for lifelong learning.
4) Processes

The process of education is frequently an overlooked aspect of quality of education. However, learners are enabled to frame and solve problems, how different learners in the same group are treated, how teachers and administrators are treated and behave, and how families and communities are engaged in education are all processes that affect the quality of education. High-quality educational processes require well-trained teachers who are able to use learner centred-teaching and learning methods and life-skills approaches. How knowledge, skills, and values are transmitted is an important part of the curriculum as what is learned because, the process is part of “what” is learned.

5) Environment

Evidence is mounting that a suitable learning environment can also be considered as contributing towards the quality of education. There must be adequate hygiene and sanitation facilities accessible to all and, if possible, health and nutrition services in the vicinity. Elements within the education system level:

1) Managerial and administrative system

The structure and organization of an education system usually serves as the philosophical underpinning for what occurs throughout the system—whether in the university, the school, or the curriculum development unit of a ministry and education. An education system must be structured and organized so that
it is learner-centred. The system must be fair and transparent to all those in it. Rules and regulations need to be clear, with responsibilities and related procedures well-articulated and implemented. It is clear that the structure, organization and management of education play an important role in providing the checks and balances that are necessary in any system.

2) Implementation of good policies

Typically, ministries of education set policies that may not be widely known and understood by all, particularly at the classroom level. Therefore, a helpful starting point is to raise awareness among administrators, teachers and students about these policies. The next step is to ensure that there are mechanisms to implement and enforce the policies, since it is pointless to have rules and procedures if they are not observed. Education is neither independent of the rest of the society nor of policies that are developed and implemented elsewhere in the country. For example, a high quality of education would require coherent and supportive policies in areas such as a ‘responsible’ media, health education, youth, early childhood development programmes, and life-long learning opportunities.

3) Supportive legislative framework

Legislation is essential for ensuring that agreed principle contained within the concept of the right to education can be put into action on a daily basis in a sustained way. As with policies, both education legislation and other related legislation must be in place, understood by the general public as well as by experts, and implemented.
There must be an enabling legislative framework that does more than paying lip service to the right education, defined broadly. Clearly a high quality education must be accessible to all children. This is about access and equity being legally initiated, e.g. affirmative action. This will ensure high quality education is provided to all.

4) Resources

A high quality education requires resources, recognizing the full range of human and material resources that can be brought to bear in support of education.

5) Means to measure learning outcomes

The quest for better understanding of what is wanted from high quality education has expanded desired learning outcomes significantly. The following simple classification of the main types of learning outcomes to be pursued may be helpful:

a) Knowledge – the essential cognitive achievement levels that all learners should reach (including literacy, numeracy and core subject knowledge).

b) Values – solidarity, gender equality, tolerance, mutual understanding, respect for human rights, non-violence, and respect for human life and dignity.

c) Skills or competencies – a secure command of how to solve problems, to experiment, to work in teams, to live together and interact with those who are different, and to learn how to learn; and
d) Behaviours – the capacity to practise what has been learned.

The evolving understanding of the various directions of quality suggests that some of the commonly used indicators might need to be reconsidered as well. It also suggests that while cross-national comparisons are important, they are not the only ones in which countries need to focus. In fact, in some instances, both within-county and cross-country comparisons may be required for policy purposes. What is important is that nations should understand what they expect from education and articulate those expectations in ways that can be measured.

According to the sector review and development (2003) of Republic of Kenya, among the variables that impact on relevance and quality are the curriculum, teaching/learning materials, equipment, physical facilities, finance, teaching force, school and institutional management, assessment of examinations, the students/pupils themselves and also the teaching and learning process. The parameters stated by Ross (2006), for the quality education in the modern world as indicated in figure 2.1 forms the indicators for quality education in this study. This is because they are modern and in line with the ones for Republic of Kenya sector review and development (2003).

### 2.4 Development of Universities in Africa

The operation and development of universities in Africa is inextricably connected to the prevailing paradigm, conditioning, and the direction of the existence of the societies on the continent. The first generation universities in post-independent Africa were largely conditioned by the dictates of
modernization thinking. The possibility of catching up with the Western metropolitan levels of development, which modernization theorists postulated resulted in an increased investment in higher education by most African governments.

The guiding principle was investment in human capital as a necessary condition for development and moving ahead with the rest of the world (Harbison 1973; McClelland 1961; Schultz 1961; Inkeles & Smith 1974). The re-constructionist view of society held by African nationalist leaders in the sixties created a partnership between government and universities. Universities were regarded as partners in the enormous and daunting challenging task of national self-determination, nationalization, sovereignty, and a better life for all. The university was considered a public good on which expenditure of scarce public resources was a justified national necessity.

African political leaders had the will and commitment to establish conditions for effective development of universities. Lungwangwa (2002) notes that, public service was rendered to the government and other agencies by university experts without expecting any payment. Consultancy was a rare term in the vocabulary of academics. The first generation universities in post-independent Africa are many and they include among others, the University of Zambia, University of Nairobi, University of Dar es Salaam and University of Malawi (Lungwangwa, 2002).
The second generation universities, like Copper Belt University in Zambia, National University of Science and Technology in Zimbabwe, Moi and Kenyatta universities in Kenya, Morogoro University in Tanzania to mention but a few, were established within the framework of the modernization and deconstructionist paradigm which gave rise to the first generation universities in post-independent Africa. The neo-liberal political and socio-economic paradigm of the eighties and nineties ushered in a new thinking about higher education (Lungwangwa, 2002).

The public good view of higher education was substituted by the private good conception. Higher education was viewed as an investment in personal wellbeing. A university certificate was seen as giving rise to higher private returns in form of income, better living conditions and life chances for one’s offspring. State financing policies of higher education opportunities gave way to cost-sharing as an acceptable way of meeting the cost of higher education (Psacharopoulus, 1971, 1994). Besides, much of Sub-Saharan Africa has suffered deep stagnation over the last two decades, and is staggering under the weight of domestic and international conflict, disease (especially the plague of HIV and AIDS, poverty, corruption and natural disasters.

According to Mwiria, Ng’ethe, Ngome, Odero, Wawire and Wesonga (2007), universities once shining lights of intellectual excitement and promise suffered from an enormous decline in government resources for education. The market forces conception of life created a detachment of the
state from universities and other higher education institutions. This level of education came to be viewed as an integral part of the market. Universities and other institutions are advised to engage in income-generation activities and venture into businesses.

According to Lungwangwa (2002), managers of university institutions are expected to:

- Adopt a market view of the services their institutions provide. This means slapping monetary value on service which experts render to other institutions;
- Determine tuition fees in economic terms;
- Engage in consultancy relationships and
- Adopt business-like relationships in all dealings with clients including students.

Business ethos of efficiency, cost effectiveness, value for money in service provision are influencing ways in which universities in Africa are managed (Mwiria, 2000, Association of African Universities and the World Bank, 1997). In the neo-liberal paradigm, higher education is viewed as a market. It has opportunities for generating profit to any potential investor. At present, universities are considered competitive enterprises.

Students and their families are the clients whose resources have to be tapped. This is a challenge; the public university management has to cope with so as to make public universities relevant to society. On the other hand, governments are expected to stimulate this market by providing
student loans, vouchers, scholarships and bursaries to those who cannot afford the fees but have the abilities to enter higher education institutions (Lungwangwa, 2002).

Third generation universities in Africa are emerging in various countries, following this neo-liberal conception of higher education. These institutions are coming in form of private universities operated along business lines for purposes of generating profit from the provision of an educational service. Extreme right neo-liberal policies stress the decreasing of funding to public higher education and emphasize on private sector institutions (Tiyambe, 2004). However, open market in higher education, it should be noted, will make it difficult to organize this level of education according to some criteria of excellence. All these kinds of changes occurring in public universities in Africa are coming up with new challenges, which need to be addressed so as to maintain high quality university education.

Africa’s commitment to the implementation of Structural Adjustment Programmes (SAPs) dates back to 1980s (Chacha, 2002). The gap between the universities and governments in most African countries has been exacerbated by SAPs, which many countries on the continent have been following. One of the requirements of SAPs is centred on cost-saving measures through cost-sharing schemes in the social sectors. In practical terms, this means elimination of subsidies where they exist (Lungwangwa, 2002). The technical rationalization based on rate of return analysis in educational investment of the eighties justified reduced government
resource support to universities in many African countries. The technical justification of policy change combined with rising poverty levels in many African countries left many universities in desperate conditions (Association of African universities and the World Bank (1997) and ESAURP (1998)).

2.5 Issues and Challenges of University Education in Africa

According to Ngara (1995) the African university has four primary functions teaching- promoting human resource development by producing high level human power in all fields of study; research and disseminating knowledge; fostering moral values and raising social consciousness and consultancy and service. Some of the issues and challenges that have to be addressed by universities in Africa so as to meet the above expectations include the following:

- Inadequate funding and the slow pace of release of the little funds to which the universities are entitled.
- Continued dilapidation and deterioration of the physical infrastructures making it very difficult to have conducive teaching and learning enrolment.
- Low morale of staff as a result of the deterioration in their working environment.
- Brain drain as staff leave the institutions for greener pastures within the country or elsewhere.
- Lack of physical expansion in facilities to accommodate the ever increasing demand for university education in the societies.
Lack of funding for research activities making it difficult for the universities to be at the frontier of knowledge and effectively play their essential role as centres of creativity, innovation and invention.

Continued loss of public confidence in the universities as a result of the declining academic standards and

Lack of a clear direction for the universities in the changing society, for instance, there have been heated debates on matters relating to the standards of courses/degrees, their scope, and their relevance to the current needs and the work environment, especially in industry (Ngara, 1995; Chacha, 2002; Lungwangwa, 2002; Tiyambe, 2004 and Mwiria et al., 2007).

There are a number of changes that can readily be observed in the higher education systems of Africa and elsewhere. The first change has to do with the growth and expansion of higher education systems in the last decade or two in Africa. Tiyambe (2004) sees the need for increased access and expansion of the systems in Africa as being driven by a mixture of the goal of social equity, the performance of the universal access programmes to education, demographic growth, and the necessity of providing growing economies with large numbers of highly trained workers.

The second major change is the way institutions are funded as governments reduce their levels of funding for education mainly for higher education. This situation is worsened by the fact that budget cuts are occurring at a time when higher education systems are expected to grow and provide access to a larger
portion of the population. As noted by the World Bank (1997), higher education institutions are facing increased competitions for scarce financial resources with other public services. The third change according to Tiyambe (2004) concerns the goal of making higher education systems more relevant to their societies so that staff and students can contribute to the developmental agenda. Curricula and programmes are now seen in need of reconceptualisation to this end.

As a result of the aforementioned changes in the African universities, the said institutions were forced to undergo some reforms. Thus, two major higher education reform periods can be identified in Africa. The first is the period following independence in 1960s and 1970s (Tiyambe, 2004). In most of Anglophone Africa commissions were set up to make policy recommendations aimed at systematically reforming the education systems. The pattern in Francophone Africa tended to comprise the organization of general conferences that adopted resolutions on changes needed in the systems. Higher education in post-colonial Africa set out to expand and increase participation rates (Tiyambe, 2004).

Reformed higher education systems were expected to play a role in bringing about economic and social development. Unfortunately, as the World Bank (1997) observes, the reformed post-colonial universities continue to serve the same purpose as the colonial universities by producing the elite for the bureaucracy and the private sector. Higher education budgets were cut as development agencies prioritized the primary and secondary sectors of
education. Resources were channelled to meet the goal of universal primary education since international agencies believed that investment returns were higher if governments invested in primary and secondary education (World Bank, 1997; Tiyambe, 2004). This old development orthodoxy has since been reviewed and abandoned by agencies such as the World Bank.

The second wave of reforms followed political changes and a return to democracy in many parts for Africa in the 1990s. This second wave reflects the shifts underway at the level of continental and regional politics: the dissolution of the Organization of African Unity (OAU) and the formation of a new umbrella body, the African Union (AU). The new body is aiming to forge a far more coherent and integrated strategy for African development than its predecessor was able to manage. The AU’s economic recovery strategy is driven through the New Partnership for African Development (NEPAD) adopted in October, 2001.

Regarding issues of education at the continental level, there is the Association of African Universities (AAU) and at the regional level in East Africa, there is the Inter-University Council for East Africa (IUCEA). In June 2006, IUCEA together with DAAD organized a workshop on supporting a Regional Quality Assurance initiative in East Africa. In the workshop it was felt that, it is important to have a shared understanding of quality and quality assurance among the universities in East Africa because understanding seems to vary from one university to another, the target being harmonization of standards. This is one of the challenges, among others, facing universities across Africa.
not only in East Africa. This issue was raised by (IUCEA, 2007), noting that higher education in East Africa is facing several challenges, which the institutions of higher learning should address in order to achieve their mission in the region.

According to the Ugandan National Council for Higher Education (NCHE, 2004), Uganda’s higher education institutions present a picture of daunting, if not insurmountable challenges. The national council further reiterates that from every conceivable angle, the present state of higher education institutions is not conducive to the delivery of sustainable quality and relevant higher education for the benefit of individuals and the global village of the twenty-first century. This situation in Uganda applies also to Kenyan higher education institutions and developing countries in general. It is lucid from this kind of information that, there are changes unfolding in higher education institutions, not only in East Africa but also throughout the world. These changes have brought about a lot of challenges and different pressures to higher education institutions as it is evidenced by Ross and Genevois (2006:41) below:

These different pressures have resulted in the concept of the ‘quality of education’ coming to the fore as learners, parents and communities, educators, leaders, and nations acknowledge that what is learned (and how learning occurs) is as important as access to education.

This is enough evidence that the stakeholders world over are at present concerned with quality of education provision than before. It is especially true now at the beginning of the 21st century when education is increasingly being understood to be ‘more than the three Rs’ (reading, writing and arithmetic),
and extends to an expanded vision of education as articulated by the Jomtien Conference on Education for all in 1990 (UNESCO, 1990) and later reaffirmed by the Dakar World Education Forum in 2000 (UNESCO, 2000).

Among the reasons for the current interest in quality, perhaps none is more important than a widely-shared belief that the quality of America’s colleges and universities is declining (Haworth & Conrad, 1997). The general public in Africa, just like Americans, believes that the quality of higher education is declining (Ngara, 1995). In fact, all over the world, ministries other than the ministry of education have begun to take an interest in education. The same is true of NGOs, businesses and the general public, which have all placed different pressures on higher education systems. Furthermore, the quality of education has become such a high profile issue in this 21st century due to the changes and challenges that face the entire education systems in the world (Martin, Lemaitre, Wilkinson, Hajry, Tayag, Naidoo, Singh, 2007). Besides, viewpoints about the importance of the quality of education cannot be divorced from the heightened salience of education policy and education reform within the whole range of public policy, mainly because of widely acknowledged linkages between education and national economic performance.

It is unequivocally clear that the social organization of knowledge and learning are dramatically changing and from this context, it is revealed that, many universities in Africa entered the 21st century characterized by multiple challenges.
2.6 Education Policies in Kenya

Since independence, the government has sought to address the challenges facing the education sector. It has accomplished this by establishing various commissions, committees and taskforces with specific terms of reference. The Ominde Commission of 1964 (Republic of Kenya, 1964) was the first of such an effort, which emerged with key recommendations. It proposed an education system which would foster national development and lead to the development of the critical human resource necessary for national development. This was followed by the Gachathi Committee of 1976 (Republic of Kenya, 1976) which focused on the structure of the education system. It also resulted in government support to community (Harambee) secondary schools, and led to the establishment of the National Centre for Early Childhood Education and the Commission for Higher Education.

The presidential working party on the second university commonly known as the Mackey Report of 1981 (Republic of Kenya, 1981) led to the removal of the advanced level of secondary education and the expansion of other post-secondary training. In addition to the establishment of Moi University, it led to the establishment of the 8:4:4 system of education. The “Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond” commonly known as The Kamunge Report of 1984 (Republic of Kenya, 1984) focused on education financing. This resulted in the introduction of cost-sharing between the government, parents and communities. It also focused on issues of quality and relevance in education.
Recent policy initiatives have focused on the attainment of Universal Primary Education (UPE) and the key concerns of access, participation, equity, quality and relevance.

Increased policy attention to UPE came in the wake of the Jomtien World Conference on Education for All To 1990 whose resolutions Kenya is a signatory. The recent implementation of Free Primary Education (2003) and subsidised Secondary Education (2008) is an effort to attain UPE as a strategy towards the attainment of EFA goal and also the education sector to achieve the MDGs by the year 2015. The introduction of the 8:4:4 education systems elicited a lot of public debate in regard to its load, relevance and cost implications. Government responded by appointing the Koech Commission of 2000 (Republic of Kenya, 2000) whose findings have not been all accepted. Despite the challenges facing the sector, it has expanded substantially in terms of educational institutions. The number of public primary schools has increased from 6,058 in 1963 to 18,063 in 2008, while secondary schools have increased from 151 in 1963 to 4,245 in 2008. The public universities have increased in number from one at independence to seven in 2008 Government of Kenya (2008). Currently in the year 2013, public universities in Kenya are twenty two, since fifteen constituent colleges have been elevated to university status by the president of Republic of Kenya.

The expansion of facilities and institutions was accompanied by a phenomenal expansion in student enrolment. At the primary level, student enrolment rose from a total of 892,000 in 1963 to 7.2 million in 2003. The enrolment for
secondary levels rose from 30,000 in 1963 to 848,000 by 2003, while that of public universities grew from 517 in 1963 to 97,107 by 2008 Government of Kenya (2008). The economy of Kenya has over the last decade performed poorly. And in the past decade, the formal sector has failed to meet the challenges of employment creation.

Free Secondary Education which commenced in 2008 will mean an increase in university enrolment. Generally, the education sector in Kenya is faced with a myriad of challenges in this 21st century. University education in Kenya targets the development of both students and society. University education is expected to contribute to the building of the country’s human resource by producing a cadre of highly skilled manpower Kenya Vision 2030 (Republic of Kenya 2007). The rapid expansion of university education in Kenya has led to the decline in the quality of education (Republic of Kenya, 2003). This means producing a cadre of high skilled manpower by the universities will be compromised by unaddressed challenges. The relevance of university education has also come under increased scrutiny. Development of curriculum at university level excludes the participation of practitioners from relevant professions and industries; in addition emphasis at public universities seems to be on mass production graduates at the expense of quality (Republic of Kenya, 2003).

The development of quality standards and quality assurance in Kenya is carried out by the inspectorate department of the Ministry of Education for schools while Commission for University Education (CUE) is responsible for
universities. There is limited legal enabling power to make the inspectorate to enforce the decisions on non-adherence to guidelines in educational management.

2.7 Historical Background of Public Universities in Kenya

The historical background of higher education in Kenya can be traced back to Makerere University in Uganda, founded in 1922 during British colonial rule as a technical college for African students from the East African countries of Uganda, Kenya and Tanganyika. The college offered post-school certificate courses in various fields including teacher training, carpentry, building technology, motor mechanics, medical care, agriculture and veterinary services. After the publication of the Asquith Report in 1949, Makerere University Act was passed. This gave, the institution the legal status of a university of East Africa that was to offer degrees of the University of London. It admitted its first undergraduate students in 1950.

The first Kenyan higher education institution was the Royal Technical College of East Africa, established in Nairobi in 1956 to provide instruction in courses leading to the higher national certificate offered in Britain and to prepare matriculated student through full-time study for university degrees in engineering and commercial courses not offered by Makerere. Royal Technical College of East Africa, was renamed the Royal College of Nairobi in 1961 and turned into a university college, offering Bachelor of Arts and Bachelor of Science degrees in engineering of the University of London.
In 1963, when Kenya attained its independence, Royal College of Nairobi became the University College of Nairobi and joined Makerere and Dar es Salaam Colleges to form the federal University of East Africa. The University of East Africa was dissolved in 1970, with each of the three countries (Kenya, Uganda and Tanzania) establishing their own national universities under their respective acts of parliament. The University College of Nairobi was, therefore, renamed the University of Nairobi (Chacha, 2002 and Mwiria et al., 2007).

The University of Nairobi has since grown to be the largest University in Eastern and Central Africa with over 30,000 students by year 2009. The highest concentration of scholars and academic programmes housed in 14 faculties, 7 institutes, over 100 departments and one school, managed through six campus colleges headed by principals (Mwiria et al., 2007). The government has established seven other public universities. Moi University was the second public university to be established following a recommendation by a Presidential Working Committee (Republic of Kenya, 1981) to develop degree programmes in vital scientific and technical fields and provide academic programmes with practical orientation. Moi University is best known in the country for its forestry and wildlife conservation studies, although it also runs academic programmes in engineering, agriculture, physical sciences, medicine, law, education and social sciences.

Kenyatta University was inaugurated in 1985 as the third public university in Kenya. The university offers degree courses in education, physical sciences,
social sciences, business studies, environmental sciences and recently introduced: law, engineering, medicine and agriculture. It is renowned for its programmes in education for which it is considered the leading education institution in Eastern and Central Africa.

Egerton University is the fourth public university to be established. It started from a small school in the early 1940s; it grew into a college in 1950 and soon started offering certificate and diploma courses in agriculture and education. In 1979, the Government of Kenya and USAID funded the expansion of the college and it was soon gazetted as a constituent college of the University of Nairobi eventually rising to full university status in 1987. Apart from the main campus, Egerton has over four other campuses and a student population of over 10,000. It offers various degree courses, but its best known programmes are in agriculture (Mwiria et al., 2007).

Jomo Kenyatta University of Agriculture and Technology (JKUAT) is the fifth public university to be established. It became a fully-fledged university in 1994, its origin dates back to 1981 when it started as a middle-level technical college by means of assistance from the Japanese government over two decades (1981-2000). Jomo Kenyatta University of Agriculture and Technology (JKUAT), offers a variety of degrees in engineering, computer science, food science and agriculture. The university has also established several campuses to meet the rising demand of higher education in Kenya (Mwiria et al., 2007).
Maseno University in Western Kenya is the sixth public university to be established. Its history goes back to the first decade of the twentieth century, when a church missionary society established mission centre expanded to cater for learning and agricultural activities. Later, it became a Teacher Training College (Siriba Teachers Training College) and government training institute. These two institutions were handed over to Moi University in 1990. Maseno remained a constituent college of Moi University until 2000 when it was mandated to the status of a fully-fledged university, with three faculties, two institutes and a student population of 4,300 (Mwiria et al., 2007). The seventh public university in Kenya to be established is Masinde Muliro University of Science and Technology in the year 2007. The university offers courses in the faculties of science, engineering, education and social sciences.

2.8 Process of Quality Assurance and Accreditation

As it has been established in this chapter, quality means different things to different people, and is relative to processes or outcomes. Quality is a difficult concept, and quality in higher education is much more confusing. Quality in higher education is perceived as consisting of a synthesis of conformity, adaptability and continuous improvements. It is a synthesis of a range of expectations of many stakeholders. Students may focus on facilities provided and perceived usefulness of education on future employment. Academic staff may pay attention to the teaching learning process. Management may give importance to the institution’s achievements. Parents may consider the
competence of graduates. Quality can therefore be viewed from many approaches.

*Quality as excellence/exceptionality:* This is the traditional concept of quality where the emphasis is placed on attaining high level standards, being excellent. In higher education institutions, an institution that demonstrates exceptionally high standards is seen as quality institution. However, it is not possible for Quality Assurance Agency (QAA) to condemn institutions that do not attain exceptional standards, because this would not serve the purpose of accountability or self-improvement. This definition may be used in evaluating doctoral programmes or cutting-edge research.

*Quality as conformance to standard/threshold:* This concept has its origins from the manufacturing industry. The word ‘standard’ is used to indicate pre-determined specifications or expectations. As long as an institution meets the pre-determined standard, it can be considered a quality institution fit for a particular status. This concept is often the basis for accreditation decisions. It is the approach followed by most regulatory bodies for ensuring that institutions or programmes meet certain threshold levels. This could be, for example, the number of full-time professors, the percentage of them with final degrees, or the number of articles published per full-time equivalent (FTE) academic staff. Conforming to standards may result in approval to start a programme or recognition for a particular status or funding depending on the context. This concept of quality makes assessment fairly easy; however, it may also make it irrelevant. It is usually possible to comply with formal
requirements without paying attention to the substantive issues they are meant to safeguard. It may hinder innovation.

**Quality as fitness for-purpose (FFP):** This concept is based on the view that quality has no meaning except in relation to the purpose of the product or service. This quality concept is improvement oriented, but who determines the purpose, what are appropriate purposes? The purposes may be determined by the institution itself. Goals may be set by the government or by a group of stakeholders.

**Quality as added value:** This concept focuses on the students. Quality means the value added to the student during education and training. It is the way from formulating learning outcomes to realising the outcomes in the graduates. The basic question is ‘what has the student learned?’ An institution that enables a student to enhance his/her knowledge, competence and employability is seen as successful in its effort and therefore in generating quality education and training. One has to pay attention to what is expected otherwise the definition can be rendered meaningless.

**Quality as value for money:** The concept has its focus on efficiency and effectiveness. It measures outputs against inputs. Something has quality when it meets the expectations of the consumers in relation to the amount they pay for it. Quality therefore corresponds to the satisfaction of the customers. It is often supported by the government since it is connected with accountability.

**Quality as satisfaction of the customer/client:** This is a variation of fitness-for-purpose. The concept is based on the customer’s needs and satisfaction
therefore; quality corresponds to the satisfaction of the customers. In higher education there are many customers and they must all be considered. They include students (who are direct consumers and invest their time in learning), parents (who pay for the educational services for their children) and government (that sets national policies and invests public money for educational purposes).

2.9 Summary of Literature Review

Literature was reviewed on the role of university education in development; the concept of quality university education; stakeholders’ views on quality university education; the concept of quality education in relation to the modern world; development of universities in Africa; issues and challenges of university education in Africa; education policies in Kenya and historical background of public universities in Kenya. This study revealed some gaps in research and documentation about the nature and magnitude of the management challenges facing public universities in Kenya and their implications for quality education. Furthermore, the increase in students enrolment in public universities and change in study modes (i.e. expansion, diversification and privatization coupled with changes, the mismatch between the skills imparted at the universities and the labour market requirements, have brought concerns about quality education provision and these are the issues this study sought to establish and document.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This study sought to identify magnitude of the management challenges facing the public universities in Kenya and their implications for quality education provision. This chapter is focused on the methodology and procedures which were adopted in carrying out the study. The chapter is divided into the following sections: research location, research design, target population, sampling design, sample population, instrumentation, reliability of research instruments, validity of research instruments, piloting, data collection procedures and methods of data analysis.

3.2 Research Location
The study was conducted in three public universities in Kenya: University of Nairobi, Kenyatta University and Egerton University, which were selected through purposive sampling technique due to their uniqueness: University of Nairobi being the oldest, largest in terms of faculties and departments and in the capital city of Kenya, Kenyatta University located in the outskirts of Nairobi City and has been the centre of excellence in education programmes for decades and Egerton University being the centre of agricultural programmes for decades and located in the rural setting.

Besides, when the inquiry is confined to a small universe and the sample also to be kept small, then purposive sampling can serve the purpose well. Purposive sampling can also be adopted when a known characteristic of the
universe is to be studied intensively (Kothari, 2007). The three public universities in Kenya were selected because they aspire to meet the needs of a wide clientele as opposed to their counterpart private universities. The universities need to meet the social demand for education and training as reflected in the rising enrolments and these university objectives need to be met through quality assurance.

3.3 Research Design

The study adopted descriptive design. Descriptive design is a method of collecting information by interviewing or administering questionnaire to the sample of individuals (Orodho, 2003). The researcher employed both tools in data collection exercise. According to Yin (1994:19), a research design is a “blue print” of the research. It is the “action plan for getting from here to there” where “here” is the question to be answered and “there” is the conclusion “answers about these questions”. He says that action plan should guide the researcher in the process of collecting, analyzing and interpreting data. A research design, he explains, is the logic that links the data to be collected and the conclusion to be made to the initial questions of study.

The design was applied because the study was to find out the nature and magnitude of management challenges facing public universities in Kenya and implications for quality education. Besides, what the researcher wanted to know and the types of research questions to be answered in the study were the deciding factors of a research design (Yin, 1994; Merriam, 1998).
Orodho and Kombo (2002) support this kind of a design when seeking out opinions of people about something.

The key variables of this study were management challenges facing the public universities and their implications on quality university education and this design was appropriate because of the purpose and objective of the study. Travers (1969) states that descriptive design is applied to establish the nature of existing conditions. On the purpose of descriptive design research, Good (1963.244) notes that they include:

a) To secure evidence concerning all existing situations or current conditions.

b) To identify standards or norms with which to compare present conditions in order to plan the next step.

c) To determine how to take the next step having determined where we are and where we wish to go. Descriptive design studies have the following advantages according to Robinson (1993: 128-129):

   i. They provide a relatively simple and straightforward approach to the study of values, attitudes, beliefs and motives.

   ii. They may be adopted to collect generalizable information from any human population.

According to Mugenda and Mugenda (1999), descriptive research design is probably the best method to social scientists and other educators who are interested in collecting original data for the purpose of describing a
population. Descriptive research design was suitable to this study since it sought to investigate the nature and management challenges facing public universities in Kenya and their implications on quality higher education provision. Descriptive research design deals with both quantitative and qualitative data which the instruments in this study were intended to gather.

3.4 Target Population

3.4.1 Institutions

The institutions targeted were 7 public universities in Kenya (Nairobi, Kenyatta, Egerton, Moi, Jomo Kenyatta, Maseno and Masinde Muliro).

3.4.2 Respondents

The seven institutions were managed by 7 vice-chancellors, 21 deputy vice-chancellors, 79 deans of schools, 295 chairpersons of departments, 28 leaders of academic staff unions, 28 leaders of students associations, 28 leaders of non-academic staff unions and 7 managers of boarding and accommodation departments.

Table 3.1 Respondents

<table>
<thead>
<tr>
<th>Respondents category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice –chancellors</td>
<td>7</td>
</tr>
<tr>
<td>Deputy vice – chancellors</td>
<td>20</td>
</tr>
<tr>
<td>Deans of schools</td>
<td>79</td>
</tr>
<tr>
<td>Chairpersons of departments</td>
<td>295</td>
</tr>
<tr>
<td>Leaders of academic staff unions</td>
<td>28</td>
</tr>
<tr>
<td>Leaders of non-academic staff unions</td>
<td>28</td>
</tr>
<tr>
<td>Leaders of students associations</td>
<td>28</td>
</tr>
<tr>
<td>Managers of boarding and accommodation departments</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total number of respondents</strong></td>
<td><strong>492</strong></td>
</tr>
</tbody>
</table>
3.5 Sampling Design

3.5.1 Institutions

Three public universities were sampled purposively for the study as presented in Table 3.1. University of Nairobi was sampled purposively because it was the oldest and largest public university in Kenya at the time of data collection. Kenyatta University was chosen because of being the centre of excellence in education programmes for several years and Egerton University was picked for being the centre of excellence in agriculture-related programmes for decades. One university which was not included in the actual study was selected for piloting. This was Jomo Kenyatta University of Agriculture and Technology (JKUAT), chosen because of logistics.

3.5.2 Sample

See the sample matrix Table 3.2 showing the sample studied in all the three public universities. The study settled for a sample size shown in Table 3.2 because for descriptive studies 10% of the accessible population is enough (Gay, 1992; Mugenda and Mugenda 1999 and Kasomo, 2006). The three universities sampled purposely represent 42.8% of the respondents and this percentage was suitable for the study since it is bigger than the 10% recommended by many research experts. The sample of this study also comprised of the management cadres of only three universities, since it was possible to collect data from all the respondents (Ogula, 2005).
Table 3.2 Summary of Sample Matrix

<table>
<thead>
<tr>
<th>Respondents category</th>
<th>Nairobi University</th>
<th>Egerton University</th>
<th>Kenyatta University</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice – chancellors</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Deputy vice –chancellors</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Deans of schools</td>
<td>30</td>
<td>10</td>
<td>13</td>
<td>53</td>
</tr>
<tr>
<td>Chairpersons of departments</td>
<td>67</td>
<td>34</td>
<td>57</td>
<td>158</td>
</tr>
<tr>
<td>Leaders of academic staff unions</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Leaders of non-academic staff unions</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Leaders of students’ associations</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Managers of boarding and accommodation departments</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total number of respondents</strong></td>
<td><strong>113</strong></td>
<td><strong>61</strong></td>
<td><strong>87</strong></td>
<td><strong>261</strong></td>
</tr>
</tbody>
</table>

3.6 Instrumentation

In this research a set of instruments were employed to collect data. The following instruments were used:

a) Questionnaires; University Management Questionnaires for: 1] Department chairpersons, 2] Deans of schools/faculties, 3] Academic staff union leaders, 4] Non-academic union leaders and 5] Leaders of students’ associations. The questionnaires were preferred by the researcher to collect data because of the large group of respondents who were targeted from three universities within a short time, with little costs to incur. These tools were also used to gather data because of the research design employed in the study and to ease data analysis.

b) Interview Schedules; University Management Interview Schedule for: 1] Vice-chancellors, 2] Deputy vice-chancellors and 3] Managers of
boarding and accommodation departments. The interview schedules were used to collect data in this study because they targeted top universities managers who were key informants and who could not have time for the questionnaires. Besides, interview schedules were considered quite flexible and adaptable by the researcher.

c) Observation schedule-This particular tool was used to gather data because it avoids bias, overcomes language barriers, covers events in real time and is contextual.

d) Document analysis guide-This instrument was utilized to collect data because documents are stable, unobtrusive, can be exact, broad coverage-in time events and settings. Documents were cheap too, to access and analyse. The four instruments were employed to gather data in this study because of triangulation purposes. The tools were also suitable for collecting both quantitative and qualitative data as per the research design of the study.

3.6.1 University Management Questionnaire

The investigator used the questionnaire to obtain factual data and opinions in a structural framework from the respondents (Nisbet, 1970). Five sets of questionnaires were used to collect the required data. The questionnaire consisted of open and multiple-choice questions. Questionnaires were designed for the university’s chairpersons of departments, deans of schools/faculties, leaders of academic unions, leaders of non-academic unions and leaders of students associations. The questionnaires were used in
these particular respondents because of their suitability to collect data from large numbers of individuals and they can handle a wide range of issues such as adequacy of teaching staff, funds, teaching and learning resources and ICT facilities which are imbedded in this study. Respondents filled in the questionnaires which were distributed and collected by research assistants. Each university had one research assistant.

3.6.2 University Management Interview Schedule

Interviews were conducted to help examine magnitude of management challenges and how they imply on quality university education. Views were sought from the respondents. The interview method yields rich sources of data on people’s experiences, opinions, aspirations and feelings (May, 1993). This method was also interactive and enables a researcher to cover the phenomenon under investigation in great depth (Mwanje, 2001). Interviews were conducted with the vice-chancellors, deputy vice-chancellors and managers in boarding and accommodation departments from the respective universities. The researcher conducted the interviews for all the respondents above.

3.6.3 Observation Schedule

The researcher moved in the lecture halls, libraries, hostels, dining halls and in the computer laboratories to observe and record the condition of physical facilities, material resources and the learning environment to establish the nature\conditions and adequacy of university learning resources.
3.6.4 Document Analysis Guide

Official written material resources analysed included; 1] University Strategic Plans to, give information on the Strengths, Weaknesses, Opportunities, and Threats [SWOT] for the particular institution and strategies to mitigate the challenges and other relevant information concerning the objectives of the study.

2] Quality assurance documents were examined to give information on the quality assurance in the institutions and how institutions ensure that there were quality assurance standards. 3] Government taskforces documents and policies on public universities were perused and analysed for instance; Interim Report of the Public Universities Inspection Board (PUIB); Kenya Education Sector Support Programme Document, 2005; Economic Survey 2008; Sessional Paper No.1 of 2005 on ‘A policy Framework for Education, Training and Research’; Commission for Higher Education University Industry Linkage Report, 2002; UNESCO Global Education Digest, 2006.

4] The graduation booklets were perused to note the trends of graduates over the last five years. The researcher also examined the 5] University calendar to ascertain lecturers numbers, their academic qualifications and the mission of the university. Alongside these documents, other valid university documents were analysed as well according to the objectives of the study.

3.7 Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results (Mugenda & Mugenda, 1999). A test must be valid in order
for it to be reliable. The split-half method was used to establish the coefficient of internal consistency of the questionnaires. According to Gay (1992) and Louis, Manion and Morrison (2008), this method involves splitting the statements (items) of a test into two halves (odd and even numbered items). Then, the odd numbered and even numbered items are placed in two subtests and the scores of the two sub-tests are computed for each individual and correlated using the Pearson’s Product Moment Correlation Coefficient formula. The obtained value however represents reliability of only half of the test. To obtain reliability of the whole test, the Spearman Brown Prophecy formula was applied.

If the test is reliable, the scores on the two halves have a high positive association, that is, a high correlation coefficient (Orodho, 2005). This procedure was used because of its ability to measure the internal consistency of the instruments being tested. Split-half technique was preferred in this study over other methods like the test re-test method because it takes care of the changes in time and circumstances. Table 3.3 shows the reliability coefficients obtained for five questionnaires whose reliabilities were tested. The instruments were therefore considered reliable since the general rule of thumb in research, is that reliability should be at least 0.70 (Orodho, 2005).
Table 3.3: Reliability coefficients for the questionnaires

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Reliability coefficient, r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department chairpersons,</td>
<td>0.78</td>
</tr>
<tr>
<td>Dean of schools,</td>
<td>0.79</td>
</tr>
<tr>
<td>Academic staff union leaders,</td>
<td>0.73</td>
</tr>
<tr>
<td>Non-academic union leaders,</td>
<td>0.77</td>
</tr>
<tr>
<td>Leaders of students’ associations.</td>
<td>0.76</td>
</tr>
</tbody>
</table>

3.8 Validity of Research Instruments

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda & Mugenda, 1999).

To determine the validity of the items in the research instruments, a pilot study was conducted to the respondents from each category of the subjects. The researcher utilised content validity and also considered face and construct validity. According to Huck (2000) content validity is done by expert judgement. The instruments were therefore scrutinised by expert judgement of the scholars in area of management and in higher education. They were focussing on teaching and learning, research and community service to determine whether the items in the instruments adequately addressed the objectives of the study.

3.9 Piloting

It bears repeating that the wording of questionnaires was of paramount importance and that pre-testing was crucial to their success (see http://
www.routledge.com/textbooks/9780415368780-chapter15,file 15.12.ppt) as it was pointed out by Louis, et al., (2008). After piloting, the researcher ensured that the questions were comprehensive, instructions were clear or non-ambiguous, determined how long respondents took to complete questionnaires, noted the respondents’ objection about answering some questions. Piloting also assisted the researcher on how to analyze data collected.

The researcher conducted piloting in one university. The university selected for piloting was Jomo Kenyatta University of Agriculture and Technology. During piloting, the five questionnaires were distributed to the respective respondents and then collected after being filled. They were analysed and their results used to revise the items in all the questionnaires. The researcher also sought the advice of the experts from the department of educational management, policy and curriculum studies, over all the instruments meant for data collection. The aim was to establish if the instruments were workable and develop ways of improving them. The university selected for piloting was not included in the actual study.

3.10 Data Collection Procedure

Data were collected in four phases:

Phase One: The researcher sought a permit for data collection from the National Council, Science and Technology after which authorization to collect data in the three institutions was granted. The researcher then paid a visit to the three public universities for familiarization purposes.
Phase Two: Questionnaire administration: The researcher used three research assistants who were recruited competitively after recommendation by the residential lecturers of each university. These research assistants were all briefed on how to administer questionnaires among the respondents targeted. Each research assistant was assigned one public university. The research assistants distributed the questionnaires to the respondents and collected the filled-in questionnaires after an agreed period of time. All filled-in questionnaires were handed over to the researcher for further processing.

Phase Three: Observations were carried out by the researcher who went round the compound and buildings of each university according to the contents of the spot check observation form.

Phase Four: The researcher arranged for an interview with vice-chancellors and deputy vice-chancellors each day for one respondent for one institution. Finally, the researcher interviewed the managers in boarding and accommodation departments in all the three universities under study. The researcher took ten months to complete the whole data collection exercise. The following documents were analysed according to research objectives and questions; strategic plan for each university, quality assurance documents for each university, and government taskforces reports for public universities, research works for researchers, graduation booklets for each university, universities calendars and teaching timetables for each university sampled. Multiple sources of information were sought
and used because no single source of information could be trusted to provide a comprehensive perspective (Patton, 1990).

3.11 Method of Data Analysis

After the data have been collected, the researcher turned to the task of analysing them. The analysis of data required a number of closely related operations such as establishment of categories, the application of these categories to raw data through coding, tabulation and then drawing statistical inferences (Kothari, 2005). The researcher ensured that the instruments were double-checked for completeness. The information was summarized and statistics derived. The data were subjected to descriptive analysis encompassing a range of both qualitative and quantitative treatments. SPSS was applied in data analysis. Qualitative data were analyzed by establishing the categories and themes, relationships/patterns and conclusions in line with the study objectives (Van Dalen, 1962). Descriptive analysis was used because it enables the researcher to inspect the variables in their areas of study. Tabulation enabled the researcher to categorize the subjects in this research. Tabulation was a part of the technical procedure wherein the classified data were put in the form of tables (Kothari, 2005). The frequencies enhanced analysis of the continuous variables. Data were presented by use of tables, frequencies, pie-charts and bar graphs where appropriate and finally making inference about the whole population. Table 3.4 shows how data were analyzed for each research objective.
Table 3.4 Data Analysis Framework

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Data analysis procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine the nature and magnitude of management challenges facing Kenya’s public universities in relation to their missions.</td>
<td>Frequency counts, Percentages, data collected were both qualitative and quantitative.</td>
</tr>
<tr>
<td>Determine the extent to which the challenges have impacted on the quality of university education.</td>
<td>Frequency counts, Percentages, data collected were both qualitative and quantitative.</td>
</tr>
<tr>
<td>Identify the strategies public universities have put in place to cope with challenges to ensure quality maintenance.</td>
<td>Frequency counts, Percentages, data collected were mainly qualitative.</td>
</tr>
<tr>
<td>Propose strategies the universities can adopt to mitigate the challenges with a view to improving the quality of education and remain competitive in the globalized academic environment.</td>
<td>Frequency counts, Percentages, data collected were mainly qualitative.</td>
</tr>
</tbody>
</table>
CHAPTER FOUR
FINDINGS AND DISCUSSION

4.1 Introduction

The purpose of this study was to investigate and to establish the nature and magnitude of management challenges facing Kenya’s public universities and their implications for quality education. The study had four research objectives to;

i) Determine the nature and magnitude of management challenges facing Kenya’s public universities in relation to their missions (teaching and learning, research and community service).

ii) Determine the implications of management challenges on the quality of university education.

iii) Identify the strategies public universities have put in place to cope with challenges to ensure quality of education.

iv) Propose strategies the universities can adopt to mitigate the challenges with a view to improving the quality of education and remain competitive in the globalized academic environment.

The study was also guided by the following five research questions:

i) What is the magnitude of management challenges that public universities face in relation to their missions that is: teaching and learning, research and community service.
ii) What are the implications of management challenges on the quality of public university education in relation to: teaching and learning, research and community service?

iii) What are the strategies that are put in place in public universities to cope with management challenges to ensure quality maintenance?

iv) To what level have the public universities implemented the recommendations of the government task forces to counter management challenges?

v) What strategies the public universities can employ to mitigate on the implications of the management challenges to ensure quality education in a globalized academic environment?

The study participants comprised of 3 vice-chancellors, 8 deputy vice-chancellors, 53 deans of schools, 158 chairpersons of departments, 12 leaders of academic and non-academic staff unions each, 12 leaders of students’ associations, 3 top managers in boarding and accommodation departments.

Data were collected through administration of one hundred and fifty eight (158) questionnaires to chairpersons of departments from the three universities sampled. The same questionnaires used to gather data from the chairpersons, were used to gather data from fifty-three (53) deans of schools from the universities studied. Further, questionnaires were used to collect data from twelve (12) leaders of academic union, twelve (12) leaders of non-academic union and twelve (12) leaders of students associations from the three universities sampled. Data were also collected through interviews with three (3) vice-chancellors, eight (8) DVCs from University of Nairobi, Kenyatta
University and Egerton University and three (3) boarding and accommodation managers from the three universities studied. Data were further collected through spot check observation and analysis of relevant documents. The quantitative data were fed into appropriate computer worksheets using the statistical package for social sciences (SPSS) and the qualitative data were analysed by establishing the categories and themes, relationships/patterns. Then the conclusions were drawn based on research objectives and research questions which are enumerated in chapter one.

4.2 Challenges Faced in Relation to Management of Teaching and Learning

Teaching, learning and carrying out research are the core missions of universities. The three core missions of the universities enable the universities to offer various certificate, diploma, postgraduate diploma, degree (Bachelor, Masters and Ph.D) programmes. Over the years, the modes of study at the universities have expanded to include full-time residential programmes, Open/distance learning (ODeL), e-leaning, institutional-based and part-time. These different modes of study and different kinds of clienteles have come up with numerous sorts of management challenges at the universities.

In this section, data were collected on challenges related to adequacy and designation of teaching staff, adequacy of; finances for conducting researches, instructional materials and equipment such as textbooks and ICT infrastructure. Essentially, the role of managers is to guide the
organizations toward goal accomplishment. All organizations exist for
certain purposes or goals, and managers are responsible for combining and
using organizational resources to ensure that their organizations achieve
their purposes. Universities are social organizations and they too aspire
toward goal accomplishment.

Effective and sound university management requires the use of five
functions of management; planning, organising, commanding, coordinating
and controlling in order to achieve pre-determined and desired objectives
and goals. For an effective teaching and learning, institutional
management, requires to properly employ the above five functions of
management, over the following management task areas; staff personnel,
physical and material resources- which includes the lecture halls, chairs,
laboratories, hostels, libraries, computers; student personnel, curriculum
and instruction, finance, institution and community relations (Campbell,
1974). The study, therefore, sought to find out adequacy and designation of
teaching staff, the nature and adequacy of physical and material resources,
adequacy of finances for carrying out research and instructional materials.
It also sought to find out frequency of curriculum review as per the needs
of the learners and society in general. This culminates into the achievement
of three-core missions of universities which are; teaching and learning,
research and community service. The following variables that have an
implication on quality education were used as benchmarks during
discussion and interpretation of research findings;
(i) Curriculum

(ii) Instructional Materials and Equipment

(iii) Physical Facilities

(iv) Instructors

(v) Assessment and Examinations

(vi) Institutional Management and

(vii) Institutional Environment

The university curriculum as a measure of quality examines the review of the curriculum for a period of five years, examines products of the curriculum in terms of skills acquisition and the quality of assessment and examinations. Adequacy of instructional materials and equipment, physical facilities and infrastructure for, teaching and learning and adequacy of lecturers were other measures of quality considered in this study. The levels of qualification of the lecturers were also not left out. Institutional management and institutional environment were other measures of quality which were also considered as benchmarks for quality education. Volumes of research carried out in the universities and dissemination of research works to the community were some of the other measures borne in the mind of the researcher.
4.2.1 Teaching staff

Table 4.1 shows deans of schools’ views on the challenges faced by their schools in the management of staff.

**Table 4.1: Challenges faced in management of academic staff as perceived by Deans of schools**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor remuneration, which de-motivates the staff</td>
<td>7 54.0</td>
<td>6 60.0</td>
<td>25 83.3</td>
</tr>
<tr>
<td>Lecturers spend less time at work due to poor service attitude</td>
<td>4 31.0</td>
<td>4 40.0</td>
<td>21 70.0</td>
</tr>
<tr>
<td>Increased workload due to less staff</td>
<td>5 38.5</td>
<td>7 70.0</td>
<td>9 30.0</td>
</tr>
<tr>
<td>Missing grades</td>
<td>1 8.0</td>
<td>2 20.0</td>
<td>14 46.7</td>
</tr>
<tr>
<td>Lecturers do not set and mark exams on time</td>
<td>3 23.0</td>
<td>3 30.0</td>
<td>24 80.0</td>
</tr>
<tr>
<td>Inadequate staff in most departments</td>
<td>8 62.0</td>
<td>6 60.0</td>
<td>13 43.3</td>
</tr>
<tr>
<td>Standards set for hiring new staff is too high</td>
<td>6 46.2</td>
<td>4 40.0</td>
<td>21 70.0</td>
</tr>
<tr>
<td>Perceived aged staff who do not perform their duties</td>
<td>9 69.2</td>
<td>2 20.0</td>
<td>28 93.3</td>
</tr>
<tr>
<td>Lecturers do not complete syllabus on time</td>
<td>3 23.0</td>
<td>3 30.0</td>
<td>17 56.7</td>
</tr>
<tr>
<td>Limited funds for research</td>
<td>4 31.0</td>
<td>7 70.0</td>
<td>12 40.0</td>
</tr>
<tr>
<td>Lack of office space</td>
<td>2 15.3</td>
<td>3 30.0</td>
<td>6 20.0</td>
</tr>
</tbody>
</table>

Table 4.1 shows that; deans of schools in all the universities studied perceived that one of the challenges they faced in relation to management of teaching staff was poor remuneration, which de-motivates lecturers. All the universities sampled felt that poor remuneration of the staff was an issue. Respectful statistical percentages, as expressed by deans of schools across the universities sampled were; University of Nairobi 25(83.3%), Egerton University 6(60%) and Kenyatta University 7(54%). The deans’ perception as evidenced by
statistical percentages from each university studied; show that poor remuneration of the staff was the greatest challenge to the universities management. With increased workload due to less staff, 7(70%) of deans of schools sampled in Egerton University felt that, it was a great challenge to university management, while it was less challenging in Kenyatta University and University of Nairobi.

Table 4.1 also shows that, 24(80%) of deans of schools sampled in University of Nairobi perceived lecturers not setting and marking exams on time as a great challenge, while it was less of a challenge in Kenyatta University and Egerton University. Table 4.1, also indicates that 8(62%) of deans of schools sampled in Kenyatta University and 6(60% ) of Deans of Schools sampled in Egerton University perceived inadequate staff in most departments being a challenge, but it was less of a challenge in University of Nairobi. While 4(40%) of deans of schools in Egerton in University, 6(46.2% ) of Deans of Schools in Kenyatta University and 21(70% ) of their counter parts from University of Nairobi sampled, perceived that the standards set for acquiring new staff was too high, was a challenge. Perception of sampled deans on aged staff as a challenge, Table 4.1 indicates that; 9(69.2%) of deans of schools in Kenyatta University and 28(93.3%) in University of Nairobi reported that the perceived aged staff, who did not perform their duties well, was a challenge to universities management and that it was less of a challenge in Egerton University. While 7(70%) of deans of schools in Egerton University reported that limited funds for research was a great challenge to the university’s
management and that it was less of a challenge in Kenyatta University and University of Nairobi.

It means that, inadequate funds available for conducting research among the academic members of staff is a challenge not only to the staff, but also to the universities management. A report of the taskforce for the development of the national strategy for university education as reported by Public Universities Inspection Board (PUIB, 2006) confirms that public universities are allocated inadequate funds for development. For example, only Ksh 602 million was allocated for development to all the six public universities in the fiscal year 2004-2005 (PUIB, 2006). The public universities have, therefore, been under pressure to generate additional income and to reduce their dependence on the government expenditure (Sessional Paper 1 of 2005). As a consequence, the volumes of researches carried out at the universities would be compromised due to limited funds allocation by the government. There is evidence, according to (PUIB, 2006) that the quality of university graduates is declining in some programmes. These include professional degree programmes of science, engineering, medicine, and business (including accounting) that are essential for development. Professional bodies in (accounting, engineering, and law), local industry and other employers in government and service sectors have raised concerns about the quality of graduates from local universities (PUIB report on legal and engineering programmes). World-over, carrying out research is a core function of universities. Teaching and learning related challenges have implications for teaching and learning as indicated in Table 4.2.
Table 4.2 shows deans of schools’ views on the implications of the challenges faced by university management in the management of staff in teaching and learning.

**Table 4.2: Implications of challenges faced in management of staff in teaching and learning as perceived by Deans of schools**

<table>
<thead>
<tr>
<th>Implications of the challenges on teaching and learning</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13 %</td>
<td>n=10 %</td>
<td>n=30 %</td>
</tr>
<tr>
<td>Continuity problems due to lack of new younger staff</td>
<td>7 54.0</td>
<td>4 40.0</td>
<td>26 86.7</td>
</tr>
<tr>
<td>Quality of education will go down</td>
<td>9 69.2</td>
<td>7 70.0</td>
<td>29 96.7</td>
</tr>
<tr>
<td>Lack of proper research, leading to underperformance by lecturers</td>
<td>5 38.5</td>
<td>3 30.0</td>
<td>16 53.3</td>
</tr>
</tbody>
</table>

Table 4.2 shows percentages of deans of schools in all the universities sampled, perceived that there were problems with work continuity due to lack of younger staff. The perceived implications in percentage form for each university sampled were: At Nairobi University 26(86.7%) of deans of schools, perceived continuity problems due to lack of new younger staff having some implications to management of staff in teaching and learning, followed by Kenyatta University 7(54%) and Egerton University 4(40%).

Across the universities sampled, concerning quality of education, 9(69.2%) of deans of schools in Kenyatta University, 7(70%) of deans of schools in Egerton University and 29(96.7%) of deans of schools in Nairobi University perceived that the quality of education would go down due to the challenges they faced in relation to management of teaching staff. Lack of proper
research, leading to underperformance by lecturers was found to have little implication on teaching and learning as shown in Table 4.2. A brief view of document analysis of designation of lecturers in the public universities sampled indicate that universities have few professors: University of Nairobi; professors 110, Ph.Ds 743, non-Ph.Ds 436, Kenyatta University; professors 30, Ph.Ds 554, non-Ph.Ds 312 and Egerton University; professors 09, Ph.Ds 196, non-Ph.Ds 161.

The teaching staff at the universities were not adequate, especially the professors. The study of staff establishment in the universities in Kenya by Commission for Higher Education (CHE) 2009 corroborates that there was an acute shortage of professors at a time when the higher education sub-sector was experiencing exponential growth. Documentary analysis and (CHE) reports 2009 show that there were less than 400 professors in Kenya’s universities serving a student population of more than 100,000.

The University of Nairobi has the highest number of professors at 110, Kenyatta University has 30 and Egerton University has 09. According to CHE, every department of a university should have two or three professors who have special knowledge of the specific subjects offered in the department. Professors are the academic leaders in the universities who guide junior academic staff and lead in research and advancing knowledge frontiers. The Commission for Higher Education’s report (2009) and Ross and Genevois (2006), about the implications of lack of adequate numbers of professors in the universities on academic standards in the universities in the country reveals
that, academic standards would decline because university education is supposed to be more research-oriented and to help solve social problems.

Furthermore, the quality of university education in Kenya is in question after a survey by the CHE revealed the institutions are largely relying on part-time and under-qualified academic staff (Sunday Nation November 14, 2010). The same Sunday Nation of 14th November reported that after the Commission sent questionnaires to all public and private universities asking for data on academic staff, it emerged that on average, 70 per cent of the staff had a Master’s degree.

According to the statutes of universities, especially public ones, a Master’s degree holder usually holds the post of a tutorial fellow and is supposed to help tutor small groups of undergraduate students as advised by experienced academic members of staff. Spot check observation shows that Masters’ degree holders teach large numbers of undergraduate students, over 300 hundred, especially those taking common university units (UCU) such as; communication skills, development studies, library skills, environmental science, science and technology, introduction to basic mathematics, introduction to economics, computer skills, creative and critical thinking, entrepreneurship and HIV and AIDS and drugs abuse etc. According to post graduate students and their lecturers, it emerged that, “a number of Master’s students are being supervised by lecturers who have not attained one degree higher than them”, putting into question the quality of higher education in the
country. This contravenes international standards that require academic staff to hold one level qualification above those they teach.

Documentary analysis of students-staff ratio of the universities studied shows that numbers of academic staff are insufficient in some faculties such as Business, ICT, Medicine, Education, and Engineering. Also, in some departments that handle common units taken by every student in the universities. Supervision of post graduate students is also an issue here because of large numbers of students enrolled.

Students-staff ratio across the universities sampled (as per October 2010) was as follows; students-staff ratio of Nairobi University was 36:1, Kenyatta University was 35:1 and that of Egerton was 28:1. However, in some faculties and departments, especially those that handle common university units, these statistics are not reflecting a true picture on the ground. It was found that, lecturers from some of those departments were simply overwhelmed by student numbers and spend most of their time teaching and marking examinations papers without getting any opportunity to carry out research.

Lack of sufficient time to conduct any academic research; implies sacrifice to quality of education disseminated to the students, since new knowledge that is supposed to be generated from research is not incorporated in the teaching processes. Research, also helps researchers in writing books on knowledge generated. The question of staff numbers vis a vis student numbers, plays a great role in the quality of the teaching and learning process. Table 4.3 below, shows the lecture-student ratio across selected faculties in UK universities.
Table 4.3: Staff and Student Ratio

<table>
<thead>
<tr>
<th>School/Faculty</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>17.1</td>
</tr>
<tr>
<td>Science</td>
<td>13.2</td>
</tr>
<tr>
<td>Clinical</td>
<td>5.6</td>
</tr>
<tr>
<td>All subjects</td>
<td>13.9</td>
</tr>
</tbody>
</table>


These UK figures compare closely with those of Australia and New Zealand (student-to-staff ratio has soared to one of the highest among industrialized countries, with almost 22 students for every tutor in the two countries) where universities link their evaluation of quality of education to the ratios attained.

From documentary analysis, Kenya’s situation shows that the number of students has almost doubled over the last few years while the number of staff has not changed significantly. This increase in student-to-staff ratio in public universities has not been matched by additional modes of delivery to compensate for this increase.

Besides, tutorials have almost become a thing of the past because the numbers of students are too many, more than the available number of staff and the existing teaching space (PUIB, 2006). Information from students, lecturers, and document analysis indicates that, sometimes, lengths of semesters are shortened by at least one week in all the universities sampled. Indeed, there is a big difference in the duration of semesters across the universities.
A semester, according to sampled universities statutes and calendars is supposed to be a period of study consisting of not less than fourteen weeks and not more than sixteen weeks. This loss in students’ study time is often compounded by the long time it takes for students and lecturers to settle down to serious learning and coaching at the beginning of each semester due to timetabling problems (PUIB, 2006).

4.2.2 Curriculum and Instruction

The study sought to find out how often was curriculum reviewed and whether it addressed the needs of the learners and the community.

Table 4.4 shows deans’ views on the challenges faced in relation to management of curriculum and instruction.

**Table 4.4: Challenges faced in management of curriculum and instruction as reported by Deans of schools**

<table>
<thead>
<tr>
<th>Challenges faced by Deans</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13</td>
<td>%</td>
<td>n=10</td>
</tr>
<tr>
<td>Lack of information on current job market demands</td>
<td>6</td>
<td>46.2</td>
<td>5</td>
</tr>
<tr>
<td>Lecturers who are partly inefficient</td>
<td>2</td>
<td>15.3</td>
<td>3</td>
</tr>
<tr>
<td>Low level of embracement of ICT in curriculum delivery</td>
<td>1</td>
<td>8.0</td>
<td>1</td>
</tr>
<tr>
<td>Continuous curriculum review which is tiresome</td>
<td>5</td>
<td>38.5</td>
<td>7</td>
</tr>
<tr>
<td>Job market is too dynamic for curriculum to catch up</td>
<td>8</td>
<td>62.0</td>
<td>6</td>
</tr>
<tr>
<td>Lack of implementation equipment</td>
<td>3</td>
<td>23.0</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 4.4 shows that 26(86.7%) of deans of schools in University of Nairobi, 5(50%) deans of schools in Egerton University and 6(46.2%) deans of schools in Kenyatta University perceived lack of information on current job demands as a challenge [i.e. right skills, knowledge and competences required on job]. Perceptions of the deans across the universities on lecturers who were partly inefficient were; 2(15.3%) of deans of schools in Kenyatta University, 3(30.0%) of deans of schools in Egerton University and 4(13.3%) of deans of schools in University of Nairobi reported that lecturers who were partly inefficient was a challenge. In Kenyatta University deans of schools perceived that lecturers who were partly inefficient was not much of a challenge, so lecturers were perceived to be partly efficient by the deans of schools who took part in the study.

Perceptions of the deans of schools across the three universities on the challenge of low level of embracement of ICT in curriculum delivery, percentage responses were as follows; Kenyatta University 1(8.0%), Egerton University 1(10%) and Nairobi University 2(6.7%). These statistics show that there was high level of ICT embracement among the three universities and therefore it was a minor challenge to universities management. However, strategic plans of the three universities contradict these findings. They indicate that, all universities are struggling to embrace high level of ICT due to inadequate funds allocated to them.

With curriculum review as a challenge 5(38.5%) of deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and 20 (66.7%) of their counterparts in University of Nairobi perceived that the
universities had constant curriculum reviews, which were tiresome. This means that, constant curriculum reviews were an issue in Kenyatta University, whereas it was not a big challenge in University of Nairobi and Egerton University. While 8(62%) of deans of schools in Kenyatta University, 6(60%) of deans of schools in Egerton University and 13(43.3%) of deans of schools in University of Nairobi perceived that job market was too dynamic for curriculum to catch up, on the other challenge 3(23%) of deans of schools in Kenyatta University, 4(40%) of deans of schools in Egerton University and 5(16.7%) of their counterparts in University of Nairobi perceived that there was lack of implementation equipment. These statistics imply that, job market was too dynamic for curriculum reviews by the universities, especially in Kenyatta and Egerton universities. Curriculum needs to be reviewed from time to time according to the needs of the societies and demands of the job market (Varghese, 2009).

Rosenberg (1997) asserts that many lectures in public universities use old material (lecture notes and references). Coupled with brain drain of the best lecturers from the public universities, the situation has adversely affected the quality of university education (Mwiria et al., 2007). Table 4.5 and the discussion that follow have highlighted the implications of challenges in management of curriculum and instruction in relation to quality education provision.
Table 4.5 shows deans’ views on the implications of the challenges faced in the management of curriculum and instruction.

**Table 4.5: Implications of challenges faced in management of curriculum and instruction on education as perceived by deans of schools**

<table>
<thead>
<tr>
<th>Implications of challenges on education</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13</td>
<td>n=10</td>
<td>n=30</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Less interaction between lecturers and students</td>
<td>4 (31.0)</td>
<td>3 (30.0)</td>
<td>12 (40.0)</td>
</tr>
<tr>
<td>Reduced quality of teaching</td>
<td>5 (38.5)</td>
<td>4 (40.0)</td>
<td>9 (30.0)</td>
</tr>
<tr>
<td>Learning standards are compromised</td>
<td>6 (46.2)</td>
<td>6 (60.0)</td>
<td>21 (70.0)</td>
</tr>
<tr>
<td>Graduates may not match job market requirements</td>
<td>8 (62.0)</td>
<td>7 (70.0)</td>
<td>27 (90.0)</td>
</tr>
</tbody>
</table>

As shown in Table 4.5, challenges faced by the deans of schools have some implications on quality education as perceived by deans across the three universities. These were: 4(31%) of deans of schools in Kenyatta University, 3(30%) deans of schools in Egerton University and 12(40%) deans of schools in University of Nairobi perceived that there was less interaction between lecturers and students while 5(38.5%) of deans of schools sampled in Kenyatta University and 4(40%) deans of schools in Egerton University and 9(30%) of their counterparts in University of Nairobi indicated that the challenges they faced affected the quality of teaching.
The data in Table 4.5 further show that 6(60%) of deans of schools in Egerton University and 21(70%) of deans of schools in Nairobi University indicated that learning standards were compromised and that 8(62%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and as high as 27(90%) deans of schools in University of Nairobi perceived that graduates may not match job requirements. These statistics mean that the challenges faced in constant curriculum reviews by the universities have a negative implication on quality education offered to students, in that graduates may not match job requirements and due to compromised learning standards.

From this data analysis, document analysis, lecturers’ interview and students interview report, there was an indication that curricula in most universities were not updated in most programmes, and those universities lacked clear regulatory processes that would enable them to update curricula. If updating was at all done, then consultation and interaction with stakeholders and professionals in the industry were not sought.

Curriculum involves content, structure, processing, and examination of what is taught and learnt. The critical challenge is to ensure that for every programme, a curriculum that meets the needs of the students, the university and the wider community, is developed and implemented (Varghese, 2009). It is imperative that the content and process of the curriculum be current and up-to-date in nature. The university should plan its curriculum development to be competitive at the national and global levels in line with development in other universities around the world (Varghese, 2009).
Universities should, therefore, have clear regulatory processes that would enable them to update curricula. Such processes would include, for example, interaction with stakeholders and careful surveys of alumni. Since the updating of curricula has become a profession and is now done in consultation with professionals in the industry, it is necessary to have a systematic way of reviewing and updating curriculum in Kenyan universities.
Table 4.6 and the discussion under it highlight deans’ views on the challenges they face in their schools in examination management.

### 4.2.3 Management of Examinations

Table 4.6 shows deans’ views on the challenges faced by their schools in examination management.

**Table 4.6: Challenges in the management of examinations as reported by deans of schools**

<table>
<thead>
<tr>
<th>Examination activity</th>
<th>Challenges faced</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
</table>
| Setting of examinations: | - Late submission of exams by staff  
- Less staff leading to overwork  
- Some lecturers do not know how to set exams | 8       | 62.0  | 7      | 70.0  | 27      | 90.0  |
| Marking of examinations: | - Lateness in marking and submission of results  
- Too many scripts and few marking staff | 6       | 46.2  | 5      | 50.0  | 15      | 50.0  |
| External examiners-quality control: | - Lack knowledge of student needs  
- Are sometimes unavailable | 3       | 23.0  | 2      | 20.0  | 8       | 26.6  |
| Exam data storage: | - Loss of data due to computer crashes  
- Exam leaks to students from secretaries and lecturers | 5       | 38.5  | 6      | 60.0  | 22      | 73.3  |
| Cheating in examinations and other invigilation issues: | - Students cheat but destroy evidence if caught  
- High rates of cheating due to too many students and few invigilators | 7       | 54.0  | 7      | 70.0  | 29      | 96.7  |

Table 4.6 shows that 8(62%) of deans of schools in Kenyatta University, 7(70%) of deans of schools in Egerton University and 27(90%) deans of schools in Nairobi University indicated that there was late submission of exams by staff, less staff leading to overwork and some lecturers do not know
how to set exams, while 6(46.2%) of the deans of schools in Kenyatta University, 5(50%) deans of schools in Egerton University and 15(50%) deans of schools in Nairobi University indicated that, there was also lateness in marking and submission of results and that there were too many scripts and few marking staff.

While on examination data storage, 5(38.5%) of deans of schools in Kenyatta University, 6(60%) of deans of schools in Egerton University and 22(73.3%) deans of schools in Nairobi University indicated that, there was loss of data due to computer crashes and examination leakages to students from secretaries and lecturers and on cheating in examinations, 7(54%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and 29(96.7%) deans of schools in Nairobi University indicated that there were high rates of cheating due to high student numbers and low numbers of invigilators.

There are many complaints, which question the integrity of how examinations are carried out in all three universities. Cheating in university examinations has assumed such monumental proportions that it has become a way of life; a cancerous culture! (Standard may 11, 2013). All three universities have rules and procedures but some appear to have poor implementations and light penalties for offenders (PUIB, 2006). A spot check analysis, established that, this problem is compounded by challenges of marking exams and continuous assessment tests (CATS) for very large numbers of students (as many as 300 hundred scripts are assigned one lecturer). Lecturers are at times under considerable pressure when giving and marking examinations due to large
numbers of students and short deadlines like two weeks for marking. Previously, Kenya universities have used external examiners from beyond the borders, to validate the examination processes, but now with little resources, these external examiners have been reduced and thereby compromised the views of wider external examiners (PUIB, 2006).

Table 4.7 shows deans’ views on the implications of the challenges faced in examination management to the quality of education

**Table 4.7: Implications of examination management to quality of education as viewed by the Deans**

<table>
<thead>
<tr>
<th>Implications</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13  %</td>
<td>n=10  %</td>
<td>n=30  %</td>
</tr>
<tr>
<td>Loss of quality university education</td>
<td>5  38.5</td>
<td>4  40.0</td>
<td>24  80.0</td>
</tr>
<tr>
<td>Students’ integrity would not be measured accurately</td>
<td>7  54.0</td>
<td>6  60.0</td>
<td>16  53.3</td>
</tr>
<tr>
<td>Low quality grades</td>
<td>6  46.2</td>
<td>5  50.0</td>
<td>15  50.0</td>
</tr>
</tbody>
</table>

As shown in Table 4.7, 5(38.5%) deans of schools in Kenyatta University, 4(40%) deans of schools in Egerton University and 24(80%) of their counterparts in University of Nairobi indicated that there would be loss of quality university education, while 7(54%) deans of schools in Kenyatta University, 6(60%) deans of schools in Egerton University and 16(53.3%) deans of schools in Nairobi University indicated that students’ integrity would not be measured accurately and 6(46.2%) deans of schools who took part in the study in Kenyatta University, 5(50%) of their counterparts in Egerton University and 15(50%) deans of schools in University of Nairobi indicated
that there would be low quality grades. Stakeholders are therefore concerned that examination cheats and their collaborators could possibly erode the credibility of university degrees.

4.2.4 ICT Infrastructure

Table 4.8 shows heads of departments’ views on the adequacy/inadequacy of computers to meet teaching and learning goals of students, faculty and staff.

Table 4.8: Adequacy of computers for staff as reported by heads of departments

<table>
<thead>
<tr>
<th>Views</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=57 %</td>
<td>n=34 %</td>
<td>n %</td>
</tr>
<tr>
<td>Very adequate</td>
<td>3 5.3</td>
<td>2 5.9</td>
<td>2 3.0</td>
</tr>
<tr>
<td>Adequate</td>
<td>2 3.5</td>
<td>7 20.6</td>
<td>21 31.3</td>
</tr>
<tr>
<td>Inadequate</td>
<td>32 56.1</td>
<td>9 26.5</td>
<td>31 46.3</td>
</tr>
<tr>
<td>Very inadequate</td>
<td>20 35.1</td>
<td>16 47.1</td>
<td>13 19.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57 100.0</strong></td>
<td><strong>34 100.0</strong></td>
<td><strong>67 100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.8 shows that 32(56.1%), heads of departments in Kenyatta University, 9(26.5%) heads of departments in Egerton and 31(46.3%) of their counterparts in Nairobi University had inadequate computers. Table 4.8 indicates inadequacy or adequacy of computers provided to staff members. Kenyatta
University reported the highest level of inadequacy followed by Nairobi University then Egerton University.

The situation was, however, worse in Egerton University where 47.1 per cent reported that computers in the university were very inadequate. The views by heads of departments in the schools in Table 4.8 imply that the computers available in most departments and faculties were not adequate to meet the needs of the lecturers. This has a negative implication on communication, research, teaching and learning in the public universities. According to their respective strategic plans and interviews with vice-chancellors and deputy vice-chancellors, universities in Kenya find it very expensive to establish and maintain ICT infrastructure. This means, the universities often do not benefit much from the modern management information systems.

According to Bennett (1977:249) “judicious use of IT can lead to a first-rate administrative system, effective decision-making, efficient use of resources, and high productivity levels with the firm”. Furthermore, analysis of strategic plans of 2013 of Nairobi and Kenyatta universities, it was revealed that ICT infrastructure was inadequate. For instance, at Kenyatta University, the student-computer ratio was approximately 10:1. Given the population of teaching and non-teaching staff, this number of computers falls short of demand.

To attain an ideal ratio of 1:1, as per the international standards, the university requires a total of 5000 computers. Internet connectivity at Kenyatta University stood at a mere 40% and with a student population of 30,081 in the
year 2011; Kenyatta University required a bandwidth of 120mb/s, according to its strategic plan of 2023. However, at that time, there was a bandwidth of only 60mb/s. The absence of an appropriate broad bandwidth has continued to be a constraint to the university’s networking endeavours.

At Nairobi University, the student-computer ratio was 12:1 whereas for academic staff it was 4:1. The computer network infrastructure was about 70% covering all campuses that spread within a radius of about 22 kilometres. From this analysis, the universities sampled had an inadequate information and communication technology infrastructure to effectively support a free flow of ideas, research, teaching, learning and management. This challenge has a negative impact on quality of education offered in the universities, since ICT infrastructure are crucial facilities for carrying out various technological researches, by both members of academic staff and students.
Table 4.9 shows deans of schools’ opinions over adequacy or inadequacy of computers in their schools.

**Table 4.9: Deans of Schools’ views on adequacy/inadequacy of computers among the lecturers and students**

<table>
<thead>
<tr>
<th>Views</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13 %</td>
<td>n=10 %</td>
<td>n=30 %</td>
</tr>
<tr>
<td>Ratio of students to computers is high.</td>
<td>8 62.0</td>
<td>6 60.0</td>
<td>3 10.0</td>
</tr>
<tr>
<td>There should be at least two students per computer.</td>
<td>6 46.2</td>
<td>2 20.0</td>
<td>22 73.3</td>
</tr>
<tr>
<td>Lecturers have little access to Computers except those in IT</td>
<td>7 54.0</td>
<td>4 40.0</td>
<td>6 20.0</td>
</tr>
<tr>
<td>Not all areas where computer use is necessary have been addressed</td>
<td>2 15.3</td>
<td>4 40.0</td>
<td>2 6.6</td>
</tr>
<tr>
<td>Measures are being taken to ensure levels of Computerizations are high</td>
<td>4 31.0</td>
<td>1 10.0</td>
<td>28 93.3</td>
</tr>
</tbody>
</table>

Table 4.9 shows that 8(62%) deans of schools sampled in Kenyatta University, 6(60%) deans of Schools sampled in Egerton University and only 3(10%) deans of schools sampled in Nairobi University indicated that the ratio of student per computer was high, this means that, there were divergent views in relation to adequacy of computers in the universities sampled. In Kenyatta and Egerton universities 62 and 60 per cent of deans reported that the ratio of students to computers was high and in Nairobi University this was not a big issue as it is indicated in Table 4.9.
While 6(46%) of deans of schools in Kenyatta, 2(20%) deans of schools in Egerton University and 22(73.3%) deans of schools in Nairobi University indicated that there should be at least two students per computer. Deans’ view on computer accessibility in percentages, shows that, 7(54%) deans of schools sampled in Kenyatta University and 4(40%) deans of schools sampled in Egerton University and 6(20%) of their counterparts in Nairobi University indicated that teachers have little access to computers except those in IT department.

Table 4.9 shows that, 2(15.3%) deans of schools sampled in Kenyatta University, 4(40%) deans of schools sampled in Egerton University and a paltry 2(6.6%) of their counterparts in Nairobi University indicated that not all areas where computer use is necessary have been addressed. Finally, only University of Nairobi deans of schools 28(93.3%) of those sampled had indicated that measures were being taken to ensure levels of computerizations were high. The other two universities sampled indicated as shown in the Table 4.9. In this study, infrastructures would include such things as libraries, bookstores and laboratories (Chachage, 2008).
4.2.5 Textbooks and library space

Table 4.10 shows heads of departments’ views on adequacy or inadequacy of textbooks for both staff and students.

Table 4.10: Adequacy of textbooks for staff and students as viewed by heads of departments

<table>
<thead>
<tr>
<th>Adequacy of Textbooks</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very adequate</td>
<td>0 (0.0%)</td>
<td>4 (11.8%)</td>
<td>5 (7.5%)</td>
</tr>
<tr>
<td>Adequate</td>
<td>23 (40.4%)</td>
<td>6 (17.6%)</td>
<td>14 (20.9%)</td>
</tr>
<tr>
<td>Inadequate</td>
<td>34 (59.6%)</td>
<td>20 (58.8%)</td>
<td>36 (53.7%)</td>
</tr>
<tr>
<td>Very inadequate</td>
<td>0 (0.0%)</td>
<td>4 (11.8%)</td>
<td>12 (17.9%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57 (100.0%)</strong></td>
<td><strong>34 (100.0%)</strong></td>
<td><strong>67 (100.0%)</strong></td>
</tr>
</tbody>
</table>

Table 4.10 clearly indicates that all the three universities had inadequate textbooks as reported by heads of departments. Thirty-four (59.6%) heads of departments in Kenyatta University, 20(58.8%) heads of departments in Egerton University and 36(53.7%) heads of departments in University of Nairobi reported that, they had inadequate textbooks in their schools libraries, while 23(40.4%) heads of departments in Kenyatta University, 6(17.6%) heads of departments in Egerton University and 14(20.9%) of their counterparts from University of Nairobi indicated that they had adequate textbooks in their libraries.
Based on the results as shown in Table 4.10, the views of the heads of departments in the three universities indicate that there were inadequate textbooks found in the libraries. Textbooks were most adequate in Kenyatta University and University of Nairobi and least adequate at Egerton University. Libraries had most inadequate facilities in terms of space and books in public universities, both self-sponsored and regular students complain that the universities have not invested much in the acquisition of textbooks to cope with the increased student intakes (Mwiria et al., 2007). A spot check observation and documentary analysis corroborates what is shown in Table 4.10, about the inadequacy of textbooks and library space in all the universities sampled. For instance, in 2007; Jomo Kenyatta Memorial Library of the University of Nairobi has a book capacity of more than 2.5 million volumes. The library catered for approximately 17000 students. The student population has since risen to over 36,000. This has made it inadequate in terms of space. At Kenyatta University in 2007, the capacity of the university library was about 2,500 students. The student population has currently risen to approximately 30,000 at the main campus. This clearly shows that it cannot serve that kind of student population adequately. However, a new more spacious library is under construction in the university. Egerton University has a library that was designed for only 1,600 by 2007. In Egerton University, the student population has currently increased to approximately 10,000 and therefore, the library space is inadequate. Many students in public universities
therefore, conduct their studies in their rooms where they do not make any references due to lack of enough textbooks and sitting space in the libraries. The quality of higher education offered by Kenyan universities hinges on among other things, the adequacy of library resources. These have implications on the universities’ effectiveness in transmitting knowledge and skills, by making them possible to avail content, influence the scope and depth of coverage of that content to students and the faculty (Republic of Kenya, 2003 and ALA, 2004). Ahemba (2006) observes that most libraries in African universities are depleted. Available literature indicates a shortage of funding and investment in many Sub-Saharan African universities, resulting into deficiencies in key learning resources such as books and other physical infrastructure (Ahemba, 2006; Bloom et al., 2005). This is as a result of low funding resulting from economic situations in a number of developing countries, such that some libraries have not had any new acquisitions for the last five or ten years (UNESCO, 1995). This has impacted negatively on the universities’ ability to perform consistently at high standards.

A well-resourced library also increases the potential for academic staff to use a variety of teaching/learning approaches, ranging from resource-based to individualized learning. The taskforce on Higher Education and Society (World Bank, 2000) observed that most of the teaching practices in African universities major on rote memorization of factual information and called for learning methods that emphasized greater intellectual engagement, participation and discovery during the learning process, rather than rote learning. Rote learning is most likely to proliferate in resource deficient
environments. A Kenyan taskforce for the development of the national strategy for higher education argues that Kenyan university students rely on lecturers’ notes because library books are insufficient (Republic of Kenya, 2008). In knowledge economies such as we have today, libraries and computers are critical indicators of quality.

Table 4.11 shows deans of schools’ views on the implications of lack of enough textbooks on teaching and learning.

**Table 4.11: Implications of lack of enough textbooks for teaching and learning as reported by Deans of schools**

<table>
<thead>
<tr>
<th>Implications for students</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very few students can access textbooks thus their learning is affected negatively</td>
<td>2 15.3%</td>
<td>5 50.0%</td>
<td>6 20.0%</td>
</tr>
<tr>
<td>The few available textbooks are hidden by students which impedes the others’ learning</td>
<td>1 8.0%</td>
<td>2 20.0%</td>
<td>1 3.3%</td>
</tr>
<tr>
<td>Available books have outdated information, thus learning is not up to date</td>
<td>4 31.0%</td>
<td>5 50.0%</td>
<td>8 26.7%</td>
</tr>
<tr>
<td>Inadequacy of textbooks makes learning a challenge and wastes time</td>
<td>1 8.0%</td>
<td>6 60.0%</td>
<td>2 6.7%</td>
</tr>
<tr>
<td>Students do not do well in class due to lack of proper information</td>
<td>2 15.3%</td>
<td>3 30.0%</td>
<td>7 23.3%</td>
</tr>
</tbody>
</table>

Table 4.11 shows that 2(15.3%) of deans of schools in Kenyatta University, 5(50%) deans of schools in Egerton University and 6(20%) deans of schools in University of Nairobi indicated that learning is affected negatively due to lack of adequate textbooks, a paltry 1(8%) deans of schools in Kenyatta University, a mere 1(3.3%) dean of school in University of Nairobi and
2(20%) of their counterparts in Egerton University reported that few available textbooks are hidden by students which impedes the others’ learning. Deans’ perceptions on likely implication for learning on outdated textbooks in percentages, clearly show that, 4(31%) the deans of schools in Kenyatta University, 5(50%) deans of schools in Egerton University and 8(26.7%) deans of schools in University of Nairobi reported that learning is not up-to-date because textbooks have outdated information.

While on inadequacy of textbooks, only 1(8%) deans of schools in Kenyatta University and 2(6.7%) deans of schools in University of Nairobi and as high as 6(60%) of their counterparts in Egerton University indicated that inadequacy of textbooks makes learning a challenge and wastes time. The likely implication on students not doing well, only 2(15.3%) deans of schools in Kenyatta University, 3(30%) deans of schools in Egerton University and as high as 7(23.3%) deans of schools studied in University of Nairobi reported that students do not do well in class due to lack of proper information. Apart from inadequate space from spot check observation, most libraries had no holding lists of their journals. This situation was made worse by the fact that many lecturers in public universities use old notes as reported by students, which means that the courses they taught were also not updated (Rosenberg, 1997).

Documentary analysis shows that increased students’ enrolment which is not marched with increased infrastructure and staff, coupled with brain drain of the best lecturers from the public universities in search of greener pastures, have adversely affected the quality of university education (Mwiria et al.,
2007). As it has been seen in the foregoing, there are many challenges faced by public universities in relation to teaching and learning, and universities are crucial institutions in the education sector, since they prepare individuals to be productive in society. These universities need to be fully equipped to handle this noble task.

As it has been reported, the biggest challenge faced by universities was lack of enough teaching and learning resources like textbooks, computers and in general, teaching and learning infrastructure (Chachage, 2008). A research carried out on challenges for teaching and learning in Kenya’s public universities by Mwangi and Maurice (2011), confirms that the quality of the library, online resources and lecture facilities provided by Kenya public universities did not meet quality measures of adequacy. They were unable to support the desired educational programmes effectively and facilitate the development of learning environments that support students and teachers in achieving their goals. The facilities were the antithesis of healthy and secure facilities that can provide a stimulating/inspirational setting for the users, critical measures of quality facilities. Therefore, insufficient resources can have a negative impact on the quality of education.

It is unequivocally clear that the social organization of knowledge and learning are dramatically changing and from this context it is revealed that, many universities not only in Kenya, but in the whole of Africa entered the 21st century characterized by myriad of challenges (Tiyambe, 2004).
Table 4.12 shows deans of schools’ views on the other challenges faced in relation to lack of enough textbooks for both staff and students.

**Table 4.12: Other challenges faced in relation to lack of enough textbooks for staff and students as viewed by the Deans of schools**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of research by both students and staff is compromised due to lack of textbooks</td>
<td>3 (23%)</td>
<td>7 (70%)</td>
<td>3 (10%)</td>
</tr>
<tr>
<td>Ordered books do not come in good time to be of help to students and staff</td>
<td>4 (31%)</td>
<td>1 (10%)</td>
<td>5 (16.7%)</td>
</tr>
<tr>
<td>Most of the textbooks are old and in need of repair or replacement</td>
<td>7 (54%)</td>
<td>4 (40%)</td>
<td>19 (63.3%)</td>
</tr>
<tr>
<td>Lack of funds to purchase textbooks</td>
<td>5 (38.5%)</td>
<td>6 (60%)</td>
<td>8 (26.7%)</td>
</tr>
<tr>
<td>Slow process of accessing updated texts</td>
<td>6 (46.2%)</td>
<td>2 (20%)</td>
<td>21 (70%)</td>
</tr>
<tr>
<td>Missing textbooks due to theft</td>
<td>2 (15.3%)</td>
<td>4 (40%)</td>
<td>4 (13.3%)</td>
</tr>
</tbody>
</table>

Table 4.12 shows that 3(23%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and 3(10%) deans of schools in University of Nairobi reported that the quality of research by both students and staff was compromised due to lack of textbooks, while 4(31%) deans of schools in Kenyatta University, 1(10%) dean of school in Egerton University and 5(16.7%) deans of schools from Nairobi University indicated that ordered books do not come in good time to be of help to students and staff.
Deans’ perception on the challenge of old textbooks Table 4.12 clearly shows that, 7(54%) deans of schools sampled in Kenyatta University, 4(40%) deans of schools sampled in Egerton University and 19(63.3%) deans of schools sampled in Nairobi University reported that most of the textbooks were old and in need of repair or replacement, while 5(38.5%) deans of schools sampled in Kenyatta University, 6(60%) deans of schools sampled in Egerton University and 8(26.7%) deans of schools sampled in Nairobi University reported that there was lack of funds to purchase textbooks, 6(46.2%) deans of schools sampled in Kenyatta University and 21(70%) deans sampled in Nairobi University indicated that the process of accessing updated texts was slow and 2(15.3%) deans of schools studied in Kenyatta University, 4(40%) deans of schools studied in Egerton University and 4(13.3%) deans of schools studied in Nairobi University indicated that some textbooks were missing due to theft.

Spot check observation shows that books in the three libraries from the universities sampled were not adequate. In addition, most of them were old and had been gathering dust over the years. It means that libraries were poorly stocked with few books relevant in academic circles. A visit by the researcher to each of the library of the universities sampled and an interview with chief librarians confirmed that, the libraries in the sampled institutions lacked enough and up-to-date textbooks. Lack of enough textbooks and updated ones has an implication on teaching and learning, on research and quality of education. However, an interview report from the vice-chancellors and deputy vice-chancellors indicate that with sufficient funds to install and maintain
modern ICT to ensure access and proper utilization by every student can mitigate insufficiency of textbooks in the libraries.

4.2.6 Lecture Halls

Table 4.13 shows heads of departments and deans of schools’ views on the adequacy or inadequacy of lecture halls.

**Table 4.13: Adequacy of lecture halls as viewed by Heads of Departments and Deans of Schools.**

<table>
<thead>
<tr>
<th>Adequacy rates</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=70</td>
<td>n=44</td>
<td>n=97</td>
</tr>
<tr>
<td>Very adequate</td>
<td>0</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Adequate</td>
<td>47</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>Inadequate</td>
<td>7</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Very inadequate</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>44</strong></td>
<td><strong>97</strong></td>
</tr>
</tbody>
</table>

Table 4.13 clearly shows that, 82.5% of the heads of departments and deans of schools in Kenyatta University, 47.1% heads of departments and deans of schools in Egerton University and 34.3% heads of departments and deans of schools in University of Nairobi rated their lecture halls as adequate. Others, 12.3% of the heads of departments and deans of schools in Kenyatta University, 35.3% of the heads of departments and deans of schools in Egerton University and 40.3% of the heads of departments and deans of schools in University of Nairobi rated their lecture halls as inadequate. The result shows that the views of heads of departments and deans of schools in the three
universities on the adequacy of lecture halls were average. However, spot observation and documentary analysis show that lecture halls were not adequate for the students admitted in the universities.

Lecture halls were adequate in Kenyatta University followed by Egerton University and then University of Nairobi as shown in Table 4.13. Only very few heads of departments and deans of schools from all the Universities stated that their lecture halls were very adequate and very inadequate. An interview report with the DVCs Administrations also confirmed that lecture halls, staff offices and the students’ common rooms were inadequate in the universities sampled due to increased students’ enrolment lately.
Table 4.14 shows deans’ views on the effects of lack of enough lecture halls on the teaching and learning process.

Table 4.14: Effects of lack of enough lecture halls on teaching and learning process as perceived by the Deans of schools

<table>
<thead>
<tr>
<th>Effects of adequacy/inadequacy of lecture halls</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no personal interaction between students and lecturers</td>
<td>8 (n=13) 62.0%</td>
<td>7 (n=10) 70.0%</td>
<td>26 (n=30) 86.7%</td>
</tr>
<tr>
<td>Adequacy promotes effective learning</td>
<td>5 (n=13) 38.5%</td>
<td>2 (n=10) 20.0%</td>
<td>14 (n=30) 46.7%</td>
</tr>
<tr>
<td>Inadequacy causes congestion in lecture halls</td>
<td>3 (n=13) 23.0%</td>
<td>7 (n=10) 70.0%</td>
<td>10 (n=30) 33.3%</td>
</tr>
<tr>
<td>Difficulties in timetabling, hence tutorial time is taken up by lectures</td>
<td>2 (n=13) 15.3%</td>
<td>4 (n=10) 4.0%</td>
<td>17 (n=30) 56.7%</td>
</tr>
<tr>
<td>Delay of classes</td>
<td>6 (n=13) 46.2%</td>
<td>3 (n=10) 30.0%</td>
<td>22 (n=30) 73.3%</td>
</tr>
<tr>
<td>Scheduling classes very early or very late especially for postgraduate students and this inconveniences both lecturers and students</td>
<td>4 (n=13) 31.0%</td>
<td>4 (n=10) 40.0%</td>
<td>25 (n=30) 83.3%</td>
</tr>
</tbody>
</table>

Table 4.14 clearly shows that, 8(62%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and 26(86.7%) of their colleagues in University of Nairobi reported that lack of enough lecture halls affects the teaching and learning process in that there was no personal interaction between students and lecturers. Five, 5(38.5%) deans of schools in Kenyatta University, 2(20%) deans of schools in Egerton University and 14(46.7%) deans of schools in Nairobi University indicated that adequacy of lecture halls promoted effective learning, while 3 (23%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and 10(33.3%) of their colleagues in University of Nairobi indicated that inadequacies caused congestion in the lecture halls, two (15.3%) deans of
schools in Kenyatta University, 4(40%) deans of schools in Egerton University and 17(56.7%) deans of schools in University of Nairobi indicated difficulties in timetabling, hence tutorial time is taken up by lectures.

Table 4.14 clearly shows that, 6(46.2%) deans of schools in Kenyatta University, 3(30%) deans of schools in Egerton University and 22(73.3%) deans of schools in University of Nairobi indicated that inadequacies caused delays of classes and four (31%) deans of schools in Kenyatta University, 4(40%) deans of schools in Egerton University and as high as 25(83.3%) deans of schools in University of Nairobi reported that postgraduate classes were scheduled either very early or very late in the day causing inconveniences to both lecturers and students due to inadequate lecture halls.

From above analysis, interview reports from managers of boarding and accommodation and spot check observation, the teaching facilities and the physical infrastructure of the public universities were not adequate. Yet increasing student enrolment has over stretched the capacity of libraries, lecture theatres, laboratories, residential accommodation and dining halls. Earlier studies indicated that, in some cases, some students listened to their lectures through the windows (Hughes & Mwiria, 1999:228). Voice of student who was overheard by the investigator reveals that some common units have many students “we are so many in UCU100-communication skills such that some of us listen to the lecturer from outside the lecture hall.” Coupled with these, other concerns have been raised elsewhere about the quality of workshops, laboratories, tools and journal subscriptions in Kenya universities (Republic of Kenya, 2000: 187-188). The state of equipment in
Kenya public universities was not desirable. Some of the key ingredients in quality in a university are the availability of sufficient teaching facilities, equipment, and materials. The nature of physical facilities is important in determining the quality of university education (Republic of Kenya, 2003, pp.xiv, 61, 81).

4.2.7 Finances

Table 4.15 shows heads of departments’ views on adequacy or inadequacy of finances on the teaching and learning process.

Table 4.15: Adequacy of finances as viewed by Heads of departments

<table>
<thead>
<tr>
<th>Adequacy or Inadequacy</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=57</td>
<td>%</td>
<td>n=34</td>
</tr>
<tr>
<td>Very adequate</td>
<td>0</td>
<td>0.0</td>
<td>4</td>
</tr>
<tr>
<td>Adequate</td>
<td>9</td>
<td>15.8</td>
<td>3</td>
</tr>
<tr>
<td>Inadequate</td>
<td>41</td>
<td>71.9</td>
<td>16</td>
</tr>
<tr>
<td>Very inadequate</td>
<td>7</td>
<td>12.3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>57</td>
<td>100.0</td>
<td>34</td>
</tr>
</tbody>
</table>

Table 4.15 clearly shows that, 71.9% heads of departments in Kenyatta University, 47.1% heads of departments in Egerton University and 46.3% of the heads of department in University of Nairobi felt that funds were inadequate. Table 4.15 results indicate that the views of heads of departments in the three universities on adequacy of funds allocated to individual departments were inadequate. The results reveal that heads of departments in
Kenyatta University felt that finances were the most inadequate, followed by Egerton University then University of Nairobi.

Majority of heads of departments indicated that the funds allocated to their departments were either inadequate or very inadequate as shown in Table 4.15. From the interview report with the vice-chancellors and deputy vice-chancellors of finances and documentary analysis – Financial constraints were major challenges facing public universities. In fact, the major financial challenge for Kenya higher education is often ‘how to do more with less’ since available resources have been on the decline (Brown, 2001). The funds allocated to public universities by the exchequer are grossly inadequate and swiftly declining with time.

Table 4.16 shows deans’ views on the implications of inadequate funds on teaching and learning in their schools.

**Table 4.16: Implications of inadequate funds to the teaching and learning process as perceived by Deans of schools**

<table>
<thead>
<tr>
<th>Implications</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some training programmes, especially field attachments have to be cut down</td>
<td>7 54.0</td>
<td>6 60.0</td>
<td>25 83.3</td>
</tr>
<tr>
<td>Many goals and objectives are not realized</td>
<td>6 46.2</td>
<td>7 70.0</td>
<td>21 70.0</td>
</tr>
<tr>
<td>Research and publishing work is not done</td>
<td>3 23.0</td>
<td>2 20.0</td>
<td>13 43.3</td>
</tr>
<tr>
<td>Staff is not able to get necessary teaching equipment</td>
<td>5 38.5</td>
<td>4 40.0</td>
<td>8 26.6</td>
</tr>
</tbody>
</table>

Table 4.16 shows that 7(54%) deans of schools in Kenyatta University, 6(60%) deans of schools in Egerton University and as high as 25(83.3%) of their counterparts in University of Nairobi had to cut down some training
programmes due to inadequate funds. Six (46.2%) deans of schools in Kenyatta University, 7 (70%) deans of schools in Egerton University and as high as 21 (70%) of their colleagues in University of Nairobi reported that many goals and objectives were not realized. Three, (23%) deans of schools in Kenyatta University, 2 (20%) deans of schools in Egerton University and 13 (43.3%) deans of schools in University of Nairobi indicated that research and publishing work were not done. Five, (38.5%) deans of schools in Kenyatta University, 4 (40%) deans of schools in Egerton University and 8 (26.6%) deans of schools in University of Nairobi reported that their staffs were not able to get necessary teaching equipment. The motivation to keep research, writing and publishing wide was greatly inhibited when financial aspect was considered.

4.3 Challenges Faced by the Universities in Relation to Research

Research is a big part of the teaching and learning process and it is important to ensure that it is always carried out to enhance teaching and learning. Researchers face a lot of challenges like the inadequacy of research funds and of research materials. Despite the fact that some researchers are successful in doing their research, most of the research findings are never implemented, thus rendering the work archival.
4.3.1 Research

Table 4.17 shows deans’ views on the challenges faced by their schools in relation to research.

**Table 4.17: Deans’ views on the challenges faced by their schools/faculties in relation to research**

<table>
<thead>
<tr>
<th>Challenges faced by deans of schools</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13</td>
<td>n=10</td>
<td>n=30</td>
</tr>
<tr>
<td>Availability of finances for research grants:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Inadequate</td>
<td>8</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>- Grants are offered only in limited fields</td>
<td>62.0</td>
<td>70.0</td>
<td>76.6</td>
</tr>
<tr>
<td>Capacity of the university to conduct research:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Inadequate equipment but adequate workforce</td>
<td>5</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>- Demotivated staff due to high workload and limited funds</td>
<td>38.5</td>
<td>50.0</td>
<td>53.3</td>
</tr>
<tr>
<td>Faculty motivation to conduct research:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Most research work is not published</td>
<td>8</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>- Findings are hardly implemented.</td>
<td>62.0</td>
<td>60.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Publishing and disseminations of funds:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Utilization of research findings for teaching, policy development and practice:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Findings are hardly implemented.</td>
<td>7</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>54.0</td>
<td>40.0</td>
<td>83.3</td>
</tr>
</tbody>
</table>

As shown in Table 4.17, regarding availability of finances for research grants, 8(62%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton university and 23(76.6%) deans of schools in University of Nairobi reported that funds for research were inadequate and grants were only offered in limited fields. Five 5(38.5%) deans of schools in Kenyatta University, 5(50%) deans of schools in Egerton University and 16(53.3%) of their
colleagues from University of Nairobi indicated that their Universities lacked the equipment to do research. Deans’ view on motivation to do research, 8(62%) deans of schools in Kenyatta University, 6(60%) of Deans of schools in Egerton University and 20(66.7%) deans of schools in University of Nairobi indicated that their staff was not motivated to conduct research due to high workload and limited funds, while on publishing, 7(54%) deans of schools in Kenyatta University, 4(40%) deans of schools in Egerton University and as high as 25(83.3%) deans of schools in University of Nairobi indicated that most of the research work was not published and on the utilization of research findings as a challenge, 4(31%) deans of schools in Kenyatta University, 3(30%) deans of schools in Egerton University and 9(30%) of their colleagues in University of Nairobi reported that research findings were hardly implemented in teaching and policy development.
Table 4.18 shows deans’ views on the implications of the challenges faced in relation to research on the quality of education.

**Table 4.18: Implications of challenges faced in relation to research as reported by Deans of schools**

<table>
<thead>
<tr>
<th>Implications</th>
<th>Kenyatta University</th>
<th></th>
<th>Egerton University</th>
<th></th>
<th>Nairobi University</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=13</td>
<td>%</td>
<td>n=10</td>
<td>%</td>
<td>n=30</td>
<td>%</td>
</tr>
<tr>
<td>Researches are not utilized</td>
<td>9</td>
<td>69.2%</td>
<td>7</td>
<td>70.0%</td>
<td>27</td>
<td>90.0%</td>
</tr>
<tr>
<td>to benefit the community</td>
<td>2</td>
<td>15.3%</td>
<td>3</td>
<td>30.0%</td>
<td>7</td>
<td>23.3%</td>
</tr>
<tr>
<td>Little research is conducted by staff</td>
<td>5</td>
<td>38.5%</td>
<td>6</td>
<td>60.0%</td>
<td>18</td>
<td>60.0%</td>
</tr>
<tr>
<td>Quality of research has been compromised</td>
<td>6</td>
<td>46.2%</td>
<td>5</td>
<td>50.0%</td>
<td>20</td>
<td>66.7%</td>
</tr>
<tr>
<td>Quality of education is reduced</td>
<td>8</td>
<td>62.0%</td>
<td>7</td>
<td>70.0%</td>
<td>25</td>
<td>83.3%</td>
</tr>
<tr>
<td>Education is overtaken by the dynamic world</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.18 clearly shows implications of challenges as perceived by deans of schools across the universities; 9(69.2%) deans of schools in Kenyatta University, 7(70%) deans of schools in Egerton University and as high as 27(90%) their counter parts in Nairobi University reported that researches were not utilized to benefit the community; while 5(38.5%) deans of schools in Kenyatta University, 6(60%) deans of schools in Egerton University and 18(60%) of their colleagues in Nairobi University indicated that the quality of research was compromised. Implication on reduction of quality education; 6(46.2%) deans of schools in Kenyatta University, 5(50%) deans schools in
Egerton University and 20 (66.7%) deans of schools in University of Nairobi indicated that the quality of education was reduced and 8 (62%) deans of schools in Kenyatta University, 7 (70%) deans of schools in Egerton University and as high as 25 (83.3%) of their colleagues in Nairobi University reported that education was overtaken by the dynamic world. The VCs and DVCS in the interview report admitted that there were numerous challenges hampering universities research activities. These challenges include insufficient funding, inadequate infrastructure for research and dissemination of research findings. These inadequacies have been found to have implications on the quality of education. Figure 4.1 shows opinion of students’ association leaders.

![Figure 4.1 showing opinions of students’ association leaders, concerning the way teaching is done in the universities and how it adequately equips students for research](image-url)
Figure 4.1 shows that most of the leaders of the students associations from all the universities agreed that teaching methods adequately equip students for research; only a few disagreed.

Table 4.19 shows heads of departments’ views on the challenges faced in conducting a research.

**Table 4.19: Challenges faced in conducting Research as reported by Heads of Departments (n = 158)**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>n=158</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No research grant office available</td>
<td>85</td>
<td>53.6</td>
</tr>
<tr>
<td>Lack of funds</td>
<td>149</td>
<td>94.0</td>
</tr>
<tr>
<td>Lack of adequate research materials</td>
<td>140</td>
<td>88.5</td>
</tr>
<tr>
<td>Lack of time due to heavy workloads</td>
<td>125</td>
<td>78.9</td>
</tr>
<tr>
<td>Lack of support from the university</td>
<td>122</td>
<td>77.1</td>
</tr>
<tr>
<td>Lack of motivation</td>
<td>147</td>
<td>92.8</td>
</tr>
<tr>
<td>Strict publishing conditions</td>
<td>91</td>
<td>57.8</td>
</tr>
<tr>
<td>Research recommendations are not implemented</td>
<td>124</td>
<td>78.3</td>
</tr>
</tbody>
</table>

Table 4.19 shows that 94.0% of the heads of departments indicated that the biggest challenge they faced was lack of funds to conduct research, 92.8% of the heads of department reported that they lacked motivation and 88.5% of the heads of departments indicated that there was lack of adequate research material while the rest responded as shown in Table 4.19.
Table 4.20 shows the implications of the challenges faced by the heads of departments in conducting research.

**Table 4.20: Implications of challenges of conducting research on quality education as perceived by heads of departments (n = 158)**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>n=158</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower standards of education offered</td>
<td>135</td>
<td>90.3</td>
</tr>
<tr>
<td>Reduced career initiatives</td>
<td>128</td>
<td>80.7</td>
</tr>
<tr>
<td>Negative performance and standards of education would go down.</td>
<td>116</td>
<td>73.4</td>
</tr>
<tr>
<td>The society does not get to know what the university can do for them</td>
<td>93</td>
<td>59.0</td>
</tr>
</tbody>
</table>

As shown in Table 4.20, 90.3% of the heads of departments indicated that standards of education would go low as a result of the challenges faced in research, 80.7% of the heads of departments indicated that career initiatives were reduced, 73.4% of the heads of departments indicated that there was negative performance and standards of education would go down and 59.0% of the heads of departments reported that the society did not know what the university could do for them. The teaching staffs from all the three universities were asked whether the universities gave them enough funds to conduct research and they responded that they were not, and that the lack of research funds led to academic decline. The quality and standards of any university academic programmes cannot be determined independently of its research output (Table 4.20).
Table 4.21 shows leaders of academic staff’s views on areas associated with university education decline.

Table 4.21: Areas associated with university education decline as viewed by leaders of the university academic staff union

<table>
<thead>
<tr>
<th>Areas</th>
<th>Kenyatta University</th>
<th>Nairobi University</th>
<th>Egerton University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=4 %</td>
<td>n=4 %</td>
<td>n=4 %</td>
</tr>
<tr>
<td>Lack of up to date learning/teaching materials</td>
<td>3 75.0</td>
<td>2 50.0</td>
<td>2 50.0</td>
</tr>
<tr>
<td>Increasing student numbers</td>
<td>3 75.0</td>
<td>3 75.0</td>
<td>3 75.0</td>
</tr>
<tr>
<td>Inadequate research funds</td>
<td>2 50.0</td>
<td>1 25.0</td>
<td>1 25.0</td>
</tr>
<tr>
<td>Lack of motivation in lecturers</td>
<td>3 75.0</td>
<td>3 75.0</td>
<td>3 75.0</td>
</tr>
<tr>
<td>Too much workload</td>
<td>2 50.0</td>
<td>2 50.0</td>
<td>2 50.0</td>
</tr>
<tr>
<td>Inadequate teaching staff</td>
<td>2 50.0</td>
<td>1 25.0</td>
<td>1 25.0</td>
</tr>
</tbody>
</table>

Table 4.21 shows that 75% of the leaders of the academic staff union from Kenyatta University indicated that lack of up-to-date learning and teaching materials led to university education decline. This view was also held by 50% of the leaders of academic staff union from Nairobi University and the same number from Egerton University. The 75% of the leaders of the academic staff union from all the three universities were of the opinion that lack of motivation in lecturers led to university education decline. The rest responded as shown in Table 4.21.
Figure 4.2 shows leaders of students associations’ views on the quality education in public universities

Figure 4.2 shows that 50% of the students’ association leaders indicated that the quality of education in public universities was low, 41.7% indicated it was high and only 8.3% indicated it was very high.

Table 4.22 shows challenges that non-academic staffs unions face in the three sampled universities

<table>
<thead>
<tr>
<th>Challenges</th>
<th>n=12</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor relationship with university management</td>
<td>11</td>
<td>91.7</td>
</tr>
<tr>
<td>Poor remuneration</td>
<td>10</td>
<td>83.3</td>
</tr>
<tr>
<td>Heavy workloads due to lack enough staff</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Lack of information on current job market demands</td>
<td>8</td>
<td>66.7</td>
</tr>
<tr>
<td>Lack of work motivation</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>Low level of embracement of ICT in the institutions</td>
<td>6</td>
<td>50.0</td>
</tr>
<tr>
<td>Lack of support from the university</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td>Inadequate facilities</td>
<td>3</td>
<td>25.0</td>
</tr>
</tbody>
</table>
As shown in Table 4.22, over 70.0% of the respondents indicated that the major challenges they faced were; poor relationship with university management group (91.7%); poor remuneration (83.3%) and heavy workloads due to lack enough staff (75.0%). Other challenges mentioned included; inadequate facilities, lack of support from university and low level of embracement of ICT in the institutions.

Table 4.23 Recommendations of the challenges stated in Table 4.22.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>n=12</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase remuneration of non teaching staff</td>
<td>12</td>
<td>100.0</td>
</tr>
<tr>
<td>Provide information on current job demands</td>
<td>11</td>
<td>91.7</td>
</tr>
<tr>
<td>Ensure that non teaching staff are well motivated in their work</td>
<td>9</td>
<td>75.0</td>
</tr>
<tr>
<td>Employ more staff to reduce work load</td>
<td>7</td>
<td>58.3</td>
</tr>
</tbody>
</table>

Table 4.23 shows that all (100.0%) respondents recommended that the university management should increase remuneration of non teaching staff, 91.7% suggested that they should be provided with the information on current job demands whereas 75.0% suggested they should be well motivated in their work. Non-teaching staffs are supposed to be sufficient, well remunerated and motivated because to attain quality education in higher institutions is a collective responsibility of both teaching and non teaching staff.

4.4 Challenges Faced by Universities in Relation to Community Service

The community is part of the university and good relations must exist between the two for their benefit. It is the duty of the university to cultivate and maintain the good relations with the community around it. This can be done by providing some services to the community, like mobilizing the students to
clean the environment, involving the community in university activities like sports days, graduation and others. However, many challenges are expected to arise while the university is providing services to the community. Table 4.24 shows deans of schools and heads of departments’ views on the community service programmes that their schools/departments engage in.
4.4.1 Community Service

Table 4.24: Community service activities schools and departments supposedly engage in

<table>
<thead>
<tr>
<th>Activities that universities participate in:</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=70</td>
<td>%</td>
<td>n=44</td>
</tr>
<tr>
<td>Environmental awareness</td>
<td>57</td>
<td>81.2</td>
<td>34</td>
</tr>
<tr>
<td>Tree planting</td>
<td>67</td>
<td>96.4</td>
<td>43</td>
</tr>
<tr>
<td>Cleaning of rivers and national parks</td>
<td>52</td>
<td>74.1</td>
<td>33</td>
</tr>
<tr>
<td>Analysis of water and soil</td>
<td>44</td>
<td>62.5</td>
<td>31</td>
</tr>
<tr>
<td>A proposal has been forwarded for funding to deal with e-agriculture</td>
<td>35</td>
<td>50.0</td>
<td>23</td>
</tr>
<tr>
<td>Guidance and counseling</td>
<td>69</td>
<td>98.2</td>
<td>43</td>
</tr>
<tr>
<td>Community diagnosis, treatment and advising</td>
<td>61</td>
<td>86.6</td>
<td>34</td>
</tr>
<tr>
<td>Staff and students visit schools to give motivational talks</td>
<td>51</td>
<td>73.2</td>
<td>28</td>
</tr>
<tr>
<td>Staff offers advice on community projects implementation</td>
<td>47</td>
<td>66.9</td>
<td>22</td>
</tr>
<tr>
<td>Conduct AIDs campaign programmes</td>
<td>69</td>
<td>98.2</td>
<td>43</td>
</tr>
<tr>
<td>Hold outreach programmes</td>
<td>42</td>
<td>59.8</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 4.24 shows that, 67(96.4%) of Deans of Schools and Heads of Departments from Kenyatta University, as high as 43(97.5%) deans of schools and heads of departments from Egerton University and 88(90.7%) deans of schools and heads of departments from Nairobi University reported that tree planting was done in the community by the universities. Sixty-nine, (98.2%) deans of schools and heads of departments from Kenyatta University,
43(98.3%) deans of schools and heads of departments from Egerton University and 93(96.3%) deans of schools and heads of departments from University of Nairobi indicated that they performed guidance and counseling for community members and 69(98.2%) deans of schools and heads of departments from Kenyatta University. Fort-three, (98.3%) deans of schools and heads of department from Egerton University and 92(94.4%) deans of schools and heads of departments sampled from Nairobi University indicated that they conducted AIDs campaign programmes. The rest of the community service activities that universities participate in, were performed as shown in Table 4.24.

Table 4.25 shows deans of schools and heads of departments’ views on how their schools and departments facilitate information exchange between faculty members and the community to enhance utilization of research findings and expert knowledge in solving societal problems.
### Table 4.25: Dissemination of research findings and expert knowledge in the community as viewed by Deans of Schools and Heads of Departments

<table>
<thead>
<tr>
<th>Ways of disseminating information</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching staff are involved in advising community projects</td>
<td>44 (62.9%)</td>
<td>31 (70.5%)</td>
<td>75 (77.3%)</td>
</tr>
<tr>
<td>Showcasing research initiatives in the communities</td>
<td>41 (58.6%)</td>
<td>26 (59.1%)</td>
<td>59 (60.8%)</td>
</tr>
<tr>
<td>Use of brochures and electronic media available to the public</td>
<td>34 (48.6%)</td>
<td>22 (50.0%)</td>
<td>47 (48.5%)</td>
</tr>
<tr>
<td>Holding consultation sessions</td>
<td>62 (88.6%)</td>
<td>33 (75.0%)</td>
<td>84 (86.6%)</td>
</tr>
<tr>
<td>Establishing links with other institutions</td>
<td>68 (97.1%)</td>
<td>42 (95.5%)</td>
<td>88 (90.7%)</td>
</tr>
<tr>
<td>Organizing seminars/workshops in the communities</td>
<td>64 (91.4%)</td>
<td>43 (97.7%)</td>
<td>93 (95.9%)</td>
</tr>
<tr>
<td>Involvement of the community as partners in research and implementation</td>
<td>47 (67.1%)</td>
<td>33 (75.0%)</td>
<td>74 (76.3%)</td>
</tr>
</tbody>
</table>

As shown in Table 4.25, the most common community service programme dissemination method, was organizing seminars and workshops in the communities, followed by establishing links with other universities, as per the views of 64(91.4%) deans of schools and heads of departments from Kenyatta University, 43(97.7%) deans and heads of departments from Egerton University and 93(95.9%) deans of schools and heads of departments from University of Nairobi. About establishing links with other institutions,
68(97.1%) deans of schools and heads of departments from Kenyatta University, 42(95.5%) deans of schools and heads of departments from Egerton University and 88(90.7%) of their counterparts from University of Nairobi reported that universities do establish links with other institutions. The other ways of dissemination performance per university sampled is as indicated in Table 4.25.

Table 4.26 shows the Deans’ views on the challenges experienced by the schools in relation to their community service mandate.

Table 4.26: Challenges faced by Deans of Schools in fulfillment of community service mandate

<table>
<thead>
<tr>
<th>Challenges faced</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilizing all staff to take part in the exercises</td>
<td>7 54.0%</td>
<td>6 60.0%</td>
<td>22 73.3%</td>
</tr>
<tr>
<td>Lack of enough funds</td>
<td>9 69.2%</td>
<td>7 70.0%</td>
<td>28 93.3%</td>
</tr>
<tr>
<td>Lack of strong linkages with the surrounding community</td>
<td>5 38.5%</td>
<td>4 40.0%</td>
<td>16 53.3%</td>
</tr>
<tr>
<td>Transport means are inadequate</td>
<td>6 46.2%</td>
<td>5 50.0%</td>
<td>14 46.6%</td>
</tr>
<tr>
<td>Lack of time to implement exercises</td>
<td>5 38.5%</td>
<td>3 30.0%</td>
<td>4 13.3%</td>
</tr>
</tbody>
</table>

As shown in Table 4.26, 7(54%) deans of schools from Kenyatta University, 6(60%) deans of schools from Egerton University and 22(73%) of their colleagues from University of Nairobi indicated that mobilizing staff to take part in the exercises was a challenge. On funds, 9(69.2%) deans of schools from Kenyatta University, 7(70%) deans of Schools from Egerton University
and 28(93.3%) deans of schools from University of Nairobi lacked funds to fulfill their community service mandate. Five (38.5%) deans of schools from Kenyatta University, 4(40%) deans of schools from Egerton University and 16(53.3%) deans of schools from University of Nairobi indicated that they lacked strong linkages with the surrounding community. Six (46.2%) deans of schools from Kenyatta University, 5(50%) deans of schools from Egerton University and 14(46.6%) deans of schools from University of Nairobi did not have adequate transportation.

Table 4.27 shows deans of schools and heads of departments’ views on the challenges faced by the schools in the fulfillment of their community service mandate.

**Table 4.27: Challenges in the fulfillment of community service as reported by Deans of Schools and Heads of Departments**

<table>
<thead>
<tr>
<th>Challenges faced</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=70</td>
<td>n=44</td>
<td>n=97</td>
</tr>
<tr>
<td>Mobilizing all staff to take part in the exercises</td>
<td>61 87.1</td>
<td>39 88.6</td>
<td>75 77.3</td>
</tr>
<tr>
<td>Lack of enough funds</td>
<td>69 98.6</td>
<td>43 97.7</td>
<td>92 94.8</td>
</tr>
<tr>
<td>Lack of strong linkages with the surrounding community</td>
<td>53 75.7</td>
<td>40 90.9</td>
<td>88 90.7</td>
</tr>
<tr>
<td>Transport means are inadequate</td>
<td>47 67.1</td>
<td>35 79.5</td>
<td>72 74.2</td>
</tr>
<tr>
<td>Lack of time to implement exercises</td>
<td>66 94.3</td>
<td>38 86.4</td>
<td>86 88.7</td>
</tr>
</tbody>
</table>

Table 4.27 shows that the biggest challenge faced by the deans of schools and heads of departments sampled was lack of enough funds; Kenyatta University
indicated 69(98.6%), Egerton University 43(97.7%), and University of Nairobi had 92(94.8%) deans of sand heads of departments who lacked enough funds. Fifty-three 53(75.7%) deans of schools and heads of departments from Kenyatta University, 40(90.9%) deans of schools and heads of departments from Egerton University and 88(90.7%) deans of schools and heads of departments from University of Nairobi indicated that lack of strong linkages with the community was also a big challenge and 66(94.3%) deans of schools and heads of departments from Kenyatta University, 38(86.4%) deans of schools and heads of departments from Egerton University and 86(88.7%) deans of schools and heads of departments from University of Nairobi indicated that lack of time to implement activities was quite a challenge.

4.5 Quality Assurance Mechanisms put in Place to Ensure Quality in University Education

Challenges are bound to arise in any institution, and counter-measures are found to deal with the challenges accordingly. Table 4.26 shows deans of schools and heads of departments’ views on the strategies to be put in place to promote research.
Table 4.28: Strategies to promote research as perceived by Deans of Schools and Heads of Departments

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=70</td>
<td>n=44</td>
<td>n=97</td>
</tr>
<tr>
<td>Providing funds to staff for research</td>
<td>69</td>
<td>41</td>
<td>93</td>
</tr>
<tr>
<td>Helping to publish researches and pasting them on the net</td>
<td>61</td>
<td>36</td>
<td>88</td>
</tr>
<tr>
<td>Providing more computers for easy accessibility</td>
<td>59</td>
<td>37</td>
<td>77</td>
</tr>
<tr>
<td>Start a research-based journal</td>
<td>47</td>
<td>31</td>
<td>66</td>
</tr>
<tr>
<td>Linking with industries as funding sources</td>
<td>62</td>
<td>38</td>
<td>72</td>
</tr>
<tr>
<td>Collaborating with other universities to do research</td>
<td>67</td>
<td>41</td>
<td>92</td>
</tr>
</tbody>
</table>

As shown in Table 4.28, 69(98.6%) deans of schools and heads of departments from Kenyatta University, 41(93.2%) deans of schools and heads of departments from Egerton University and 93(95.9%) of their counterparts from University of Nairobi indicated that providing funds to staff for research was the best recommended strategy. Sixty seven 67(95.7%) deans of schools and heads of departments from Kenyatta University, 41(93.2%) deans of schools and heads of departments from Egerton University, and 92(94.8%) of their colleagues from University of Nairobi indicated that there should be collaboration with other universities to do research. Another popular strategy...
was to help in publishing researches and posting them on the net as per the views of 61(87.1%) deans of schools and heads of departments from Kenyatta University, 36(81.8%) deans of schools and heads of departments from Egerton University and 88(90.7%) deans of schools and heads of departments from University of Nairobi.

Table 4.29 shows the leaders of teaching staff unions’ views on possible solutions to mitigate the impact of the challenges on quality of education.

**Table 4.29: Solutions to mitigate research challenges as suggested by leaders of teaching staff unions**

<table>
<thead>
<tr>
<th>Solutions</th>
<th>Kenyatta University</th>
<th>Nairobi University</th>
<th>Egerton University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governments should put more emphasis on research innovations</td>
<td>3 75.0</td>
<td>2 50.0</td>
<td>3 75.0</td>
</tr>
<tr>
<td>Employ more lecturers</td>
<td>2 50.0</td>
<td>3 75.0</td>
<td>2 50.0</td>
</tr>
<tr>
<td>Provide enough learning and teaching materials</td>
<td>3 75.0</td>
<td>2 50.0</td>
<td>2 75.0</td>
</tr>
<tr>
<td>Provide research funds to universities</td>
<td>2 50.0</td>
<td>1 25.0</td>
<td>2 50.0</td>
</tr>
</tbody>
</table>

Table 4.29 shows that 75% of leaders of academic staff union from Kenyatta and Egerton Universities indicated that governments should put more emphasis on research innovations while the same number of leaders of academic staff union from University of Nairobi recommended that more lecturers should be employed. Also, the same number of leaders of academic staff union from Kenyatta and Egerton universities indicated that enough
teaching and learning materials should be provided and 50% from the same universities indicated that research funds should be provided.

Table 4.30 shows deans of schools and heads of departments’ views on the strategies employed to improve performance of the university in community service.

**Table 4.30: Strategies employed to improve performance of the university in community service as reported by deans of schools and heads of departments**

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Kenyatta University</th>
<th>Egerton University</th>
<th>Nairobi University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase of government funding</td>
<td>69</td>
<td>43</td>
<td>96</td>
</tr>
<tr>
<td>Continuous awareness-raising campaigns among staff</td>
<td>61</td>
<td>34</td>
<td>65</td>
</tr>
<tr>
<td>Identifying areas for community service provision</td>
<td>51</td>
<td>29</td>
<td>43</td>
</tr>
<tr>
<td>Partnerships with stakeholder industries and other well-wishers</td>
<td>47</td>
<td>22</td>
<td>50</td>
</tr>
</tbody>
</table>

As shown in Table 4.30, 69(98.6%) deans of schools and heads of departments from Kenyatta University, 43(97.7%) deans of schools and heads of departments from Egerton University and 96(99.0%) of their counterparts from University of Nairobi indicated that they would like the government to increase funds to universities and 47(67.1%) deans of schools and heads of
departments from Kenyatta University, 22(50%) from Egerton University and 50(51.5%) from University of Nairobi recommended strategy of having partnerships with stakeholder industries and other well-wishers. Lastly, on awareness campaigns, 61(87.1%) deans of schools and heads of departments from Kenyatta University, 34(77.3%) from Egerton University and 65(67.0%) from University of Nairobi, advocated for continuous awareness-raising campaigns among staff.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study; conclusions and recommendations arrived at, as per the research findings. It also gives suggestions for further studies.

5.2 Summary

The purpose of this study was to investigate and to establish the nature and the magnitude of management challenges faced by Kenya’s public universities and their implications for quality education.

The subjects of the study were 3 vice-chancellors, 8 deputy vice-chancellors, 53 deans of schools, 158 chairpersons of departments, 12 leaders of academic and non-academic staff unions each, 12 leaders of students associations and 3 top managers in boarding and accommodation departments. Given below is a summary of the main study findings:

5.2.1 Teaching Staff

More than 50% of deans of schools who took part in the study from all the universities, indicated that one of the management challenges they face in relation to management of teaching staff is poor remuneration, which demotivates lecturers. To be specific and in percentages forms, in Kenyatta University 54% deans of schools, 60% deans of schools in Egerton University and 83.3% deans of schools in University of Nairobi perceived that poor remuneration, which demotivates staff, was a great challenge to universities
management. Seventy per cent of respondents from Egerton University perceived that increased workload due to less staff was a challenge and 80% of respondents from University of Nairobi indicated that lecturers did not set and mark exams on time. Concerning inadequacy of staff, more than 50% of respondents from Kenyatta and Egerton universities indicated that they had less staff in most departments. At least 50% of respondents from all the universities sampled, complained that standards set for acquiring new staff were too high. About perceived aged staff, at least 60% of respondents from Kenyatta and Nairobi universities indicated that they had staff that was perceived aged by the respondents, who did not perform their duties well and 70% of respondents from Egerton University perceived that they had limited funds for research.

The study found that at least 40% of respondents from all the three universities indicated that there were problems with work continuity due to lack of younger staff and more than 65% of respondents from all the three universities indicated that the quality of education would go down due to the challenges they faced in relation to management of teaching staff. Poor remuneration of staff, workload and inadequacy of staff were some of the challenges facing public universities management. Implication of these challenges on education as perceived by respondents, 69.2% of the respondents from Kenyatta University, 70% of the respondents from Egerton University and 96.7% of their counterparts from University of Nairobi felt that the quality of education would go down due to those unmitigated challenges.
5.2.2 Curriculum and Instruction

Over 45% of deans of schools who took part in the study in the three universities reported that lack of information on current job demands was a challenge. On the other challenge, 15.3% of deans of schools from Kenyatta University and 30% of their counterparts from Egerton University indicated that lecturers who were products of past curricula were partly inefficient and over 35% of deans of schools who took part in the study in the three universities indicated that they had constant curriculum reviews, which were tiresome. About curriculum implementation equipment, 23% of deans of schools in Kenyatta University and 40% of deans of schools in Egerton University reported lack of implementation equipment as a challenge. More than 35% of deans of schools in Kenyatta and Egerton Universities indicated that the challenges they faced reduced the quality of teaching and learning and over 45% of deans of schools in the three universities, indicated that learning standards were compromised and more than 60% of deans of schools in all the three universities indicated that graduates may not match job requirements.

The study from document analysis further reveals that, public universities do not have clear regulatory processes of the curriculum and that there is a mismatch between the skills acquired by the students and the job market requirements. Some implications of these challenges on education; 46.2% of the respondents from Kenyatta University, 60% of the respondents from Egerton University and 70% of the respondents from University of Nairobi perceived that learning standards would be compromised in the presence of those challenges. Sixty-two per cent of Kenyatta University respondents, 70%
of respondents from Egerton University and 90% of their counterparts from University of Nairobi felt that graduates may not match job market requirements.

5.2.3 Management of Examinations

In management of examinations, over 60% of respondents from all three universities indicated that there was late submission of examinations by staff, while more than 45% of the respondents from all universities indicated that there was also lateness in marking and submission of results. Concerning loss of data and examination leakages, over 35% of respondents from all the universities indicated that there was loss of data due to computer crashes and examination leakages from secretaries and lecturers. Over 60% of respondents from all the universities indicated there were high rates of cheating due to high student numbers and low numbers of invigilators. At least 45% of respondents from all the universities indicated that there would be loss of quality university education, while over 50% indicated that students’ integrity would not be measured accurately and at least 45% indicated that there would be low quality grades. The study established that there was examination supervision problem due to large numbers of students sitting for examinations against few supervisors.

5.2.4 ICT Infrastructure

The study found that 34(48.1%) of the deans of schools and heads of departments from Kenyatta University, 14(31.2%) of the deans of schools and heads of departments from Egerton University and 34(34.8%) from University
of Nairobi had inadequate computers. The trend implies that the computers available in most schools were not adequate to meet the needs of the students and lecturers alike. More than 35% of deans of schools from Kenyatta and Egerton universities indicated that the ratio of students per computer was high. Six (46.0%) of deans of schools from Kenyatta University and 22 (73.3%) deans of schools from Nairobi University indicated that there should be at least two students per computer, 7 (54%) of deans of schools from Kenyatta University and 4 (40%) of deans of schools from Egerton University indicated that teachers have little access to computers except those in IT department. Only Nairobi University deans of schools 28 (93.3%) have indicated that measures are being taken to ensure levels of computerizations are high. Document analyses have sworn that there was inadequate ICT infrastructure across the three universities.

5.2.5 Textbooks and Library Space

It was established that more than 50% deans of schools and heads of departments from Kenyatta and Nairobi Universities have inadequate textbooks in their schools libraries while 34(48.1%) deans of schools and heads of departments from Kenyatta, 6(14.5%) deans of schools and heads of departments from Egerton and 32 (33.1%) deans of schools and heads of departments from Nairobi universities indicated that they had enough textbooks in their libraries. Five (50%) deans of schools from Egerton University indicated that learning is affected negatively due to lack of enough textbooks. Four (31%) deans of schools from Kenyatta University, 5 (50%)
deans of Schools from Egerton University and 8 (26.7%) deans of schools from Nairobi University indicated that learning is not up to date because textbooks have outdated information.

There are some implications of textbooks challenges on education; 7 (70%) of the deans of schools from Egerton University indicated that the quality of research by both students and staff is compromised due to lack of textbooks, more than 50% of deans of schools from all the universities used in the study indicated that most of the textbooks are old and in need of repair or replacement. Six (46.0%) of the deans of schools from Kenyatta University, 21 (70%) from Nairobi University indicated that the process of accessing updated texts was slow and (40%) of the deans of schools from Egerton University indicated that some textbooks were missing due to theft. The study has revealed that textbooks and library space were not enough in the sampled universities due to increased student population.

5.2.6 Lecture Halls
Concerning adequacy of lecture halls, 74.1% of respondents from Kenyatta University, 43.8% of respondents from Egerton University and 40.2% of respondents from Nairobi University rated their lecture halls as adequate, while 18.5% of respondents from Kenyatta University, 39.5% of respondents from Egerton University and 38.4% of respondents from University of Nairobi rated their lecture halls as inadequate. Only very few respondents from all
universities responded that their lecture halls were very adequate and very inadequate.

The results of the study showed that more than 60% of respondents from all universities indicated that lack of enough lecture halls affects the teaching/learning process in that there was no personal interaction between students and lecturers, 38.5% of respondents from Kenyatta University indicated that adequacy promoted effective learning. Seventy per cent of respondents from Egerton University indicated that inadequacies caused congestion in the lecture halls, 46.2% of respondents from Kenyatta University and 73.3% of respondents from University of Nairobi indicated that inadequacies caused delays of classes and 83.3% of respondents from University of Nairobi indicated that postgraduate classes were scheduled either very early or very late causing inconveniences to both lecturers and students due to inadequate lecture halls. Student population has soared over the years in public Universities; hence lecture halls have become inadequate.

An interview report from Managers and accommodation departments reveal that boarding facilities are inadequate and sometimes throughout the academic year students are congested in the hostels due to increased students’ enrolment.

5.2.7 Finances, Implications of Inadequate Funds and Research

Statistically, percentages concerning research funds indicate that, only 8.8% of the heads of departments in Egerton University, 15.8% of the heads of departments in Kenyatta University and 17.9% of their counterparts in
University of Nairobi had adequate funds. The majority of respondents indicated that the funds allocated to their departments were either inadequate or very inadequate, 71.9% of respondents from Kenyatta University rated the funds as inadequate while 50% of respondents from Egerton University and 41.1% of respondents from Nairobi University indicated that the funds were inadequate.

Concerning the implication of inadequate finance as a management challenge, 54% of the respondents from Kenyatta University, 60% of the respondents from Egerton University and 83.3% of the respondents from University of Nairobi reported that the universities had to cut down some training programmes due to inadequate funds. Furthermore, 42.2% of the respondents from Kenyatta University, 70% of the respondents from Egerton University and 70% of the respondents from University of Nairobi indicated that many goals and objectives were not realized, and 35% of respondents from Kenyatta and Egerton universities indicated that their staffs were not able to get necessary teaching equipment.

Seventy-five per cent of the teaching staff from Kenyatta University indicated that lack of up-to-date learning/teaching materials led to university education decline. This view was also held by 50% of respondents from University of Nairobi and the same number from Egerton University. Other 75% of respondents from all the three universities were of the opinion that lack of motivation in lecturers led to university education decline. Elsewhere, 50% of the students’ association leaders indicated that the quality of education in public universities was low, 41.7% indicated it was high and only 8.3%
indicated it was very high. Concerning research funds, over 60% of respondents from all the universities indicated that funds for research were inadequate and grants were only offered to limited fields, while at least 35% of all the respondents indicated that their universities lacked the equipment to do research. About motivation of staff, over 60% of all the respondents indicated that their staffs were not motivated to conduct research due to high workload and limited funds and over 35% of them indicated that most of the research work was not published.

The study established that over 65% of all respondents indicated that researches were not ploughed back into the community; at least 35% of all the respondents indicated that the quality of research was compromised and over 45% indicated that the quality of education was reduced. Over 60% of all the respondents indicated that education was overtaken by the dynamic world. Most of the respondents from all the universities agreed that teaching methods adequately equip students for research, only a few disagreed. Seeking heads of departments, opinion, on research; 94.0% of the heads of departments indicated that the biggest challenge they faced was lack of funds to conduct research, 92.8% indicated that they lacked motivation, 88.5% indicated that there was lack of adequate research material, 90.3% of the heads of departments indicated that standards of education would go lower as a result of the challenges faced in research, 80.7% indicated that career initiatives were reduced, 73.4% indicated that there was negative performance and standards of education, while 59.0% indicated that the society did not know what the university could do for them. The teaching staffs from all the
universities were asked whether the universities gave them enough funds to conduct research and they responded that they were not, and that the lack of research funds led to academic decline. Lack of sufficient funds to run the universities and to enable the lecturers to carry out researches, were a big challenge to the management of the universities.

5.2.8 Community Service

At least 90% of respondents from all the universities indicated that tree planting was done in the community by the universities. More than 95% of the respondents from all the universities indicated that they performed guidance and counseling for community members and over 90% also indicated that they conducted AIDs campaign programmes.

The most common community service programme dissemination method was organizing seminars and workshops in the communities, followed by establishing links with other universities, as per the views of at least 90% of the respondents from all the universities.

Over 65% of respondents from all the universities lacked funds to fulfill their community service mandate, more than 50% of respondents from all the universities could not mobilize their staff to take part in all the exercises while 45% of respondents from Kenyatta and Egerton universities did not have adequate transportation. The biggest challenge faced by the respondents was lack of funds. At least 85% of the respondents from all the universities indicated that lack of strong linkages with the community was also a big challenge. Majority, 93.7% of respondents from Kenyatta University indicated that lack of time to implement exercises was quite a challenge.
The most recommended strategy was to provide funds to staff for research. At least 94% of respondents from all the universities indicated that there should be collaboration with other universities to do research. Another popular strategy was to help in publishing researches and pasting them on the net as per the views of 87.5% of respondents from Kenyatta University, 82.5% from Egerton and 90.7% from Nairobi University, 75% of respondents from Kenyatta and Egerton universities indicated that governments should put more emphasis on research innovations while the same number of respondents from University of Nairobi recommended that more lecturers should be employed. Also, the same number of respondents from Kenyatta and Egerton universities indicated that enough teaching and learning materials should be provided and 50% from the same universities indicated that research funds should be provided. Further, over 95% of respondents from all the universities would like the government to increase community service funds to universities and over 50% planned to have partnerships with stakeholder industries and other well-wishers. Over 60%, advocated for continuous awareness-raising campaigns among staff.

5.3 Conclusions

Based on the findings of the study, it can be concluded that all the universities that took part in the study did have a number of management challenges; limited research funds and finances for running the universities, inadequate teaching staff which means that there were high learner-lecture ratios, poor remuneration of lecturers and non-teaching staff, which demotivates lecturers and non-teaching staff, inadequate teaching and learning resources, for
instance lecture halls, computers, textbooks and library space due to increased student population admitted in the universities. Other challenges drawn from documentary analysis include:

(i) **Heavy teaching load:** There exists an imbalance in the ratio of staff to students. This is most critical in ‘popular’ courses. The old system of mentoring tutors and graduate assistants to help out in marking assignments, counselling and some routine tasks associated with lectureship are no longer evident. Lecturers, particularly those undertaking classes with first year module 1 and 2 programmes sometimes have to contend with unreasonably large groups taught at once.

(ii) **Lack of office space:** Many lecturers in the universities lack offices. This is most critical for new appointees. They therefore, opt to work from their houses or other bases, and are only seen on campuses when they have lectures or crucial meetings. This *modus operandi* eventually ends up limiting contact and consultation hours between the students and their lecturers. It also breeds an absence of ownership and sense of belonging on the part of the lecturers’ vis-à-vis the university.

(iii) **Access to support teaching material:** It is generally not easy for academic staff to gain access to relevant equipment such as computers, LCD projectors, language laboratory facilities, photocopiers, printers and other relevant tools of trade. This is generally exacerbated by poor governance and a bureaucratic centralized command system which pays more attention to procedure than results and outputs. Where these facilities exist, they are usually under lock and key. The technicians have no idea of how to install and
operate them or prefer not to have them used. In universities that run evening and/or Saturday classes, academic staff simply has to be self-sufficient with regard to teaching material and equipment.

(iv) **Inadequate library and research facilities:** The library is the heart of any university; research is the essential activity within it. Public universities may lack expansive reading spaces, but do strive to ensure their clientele is adequately-served such as through updated and relevant journal subscriptions. Online research facilities are gradually being availed in cyber-cafes for adjunct staff or in offices for the full-time staff. However, the purchase of new published books is slow. New departments are known to have been set up way ahead of the procurement of relevant reference and course texts.

(v) **Relatively low remuneration:** This aspect is best exemplified by the continued and steady exodus of highly trained and qualified staff to neighbouring and far flung countries that offer better pay packages and generous benefits to university lecturers from Kenya.

(vi) **Dishonoured terms of service:** Full-time staff are occasionally not allowed to proceed on Sabbatical leave when due. Signed contracts and terms of service are arbitrarily changed by the administration without the consultation or consent of staff. Part-time and adjunct staffs in most universities are also affected particularly when remuneration for work done is unduly delayed in contravention to the terms laid out in their contracts. Conditions for staff engagement in university based consultancies are unattractive and procurement process has bottlenecks. The pay package for the consultant is also not attractive. It is the responsibility of each university
Council to ensure that terms of service signed are honoured. The universities should revert to the original teaching entry qualification requirement of Ph.D. Similarly, university-based consultancies should be made more attractive and financial disbursement and procurement procedures for research and consultancy materials expedited.

(vii) Deteriorating university working culture and ethical norms:

Every university has an ethos to which it subscribes. Encoded within it is the commitment to uphold and improve on academic standards within the respective university. Despite this, this study has established a number of management challenges which had some implications on quality education.

These management challenges were found to have some implications on education provided in the sampled universities. Universities in which the research was carried out, did not have enough teaching and learning resources, especially lecture halls, computers, textbooks and library space. The three public universities did not meet quality measures of adequacy. The study established that lack of funds was the biggest challenge as it affected all the other areas of teaching, learning and carrying out research by the lecturers. It was also established that the curriculum was not adequately implemented due to lack of enough teaching and learning resources and also due to lack of enough teaching staff. There were no clear regulatory processes of the curriculum in the universities sampled. Probably, this explains the mismatch that was found to exist between skills acquired by the graduates and the job market requirements. All these factors were found to have an implication on
quality of education provided in the public universities, as per the responses from the respondents.

Documentary analysis shows that all the three public universities have established a directorate of quality assurance. This is an internal quality control unit for each public university. An Internal Quality Assurance (IQA system) is a system aiming at setting up, maintaining and improving the quality and standards of teaching, scholarship (student learning experience), research, and service to community. The overall objective is to continuously promote and improve the quality of the programmes, their mode of delivery, and their support facilities, etc. However, Kenya’s public universities also need an external agency to accredit their programmes and fast track quality education provided. The universities that took part in the study according to interview report from the VCs and DVCs have also established Quality Management Systems and performance contracts and they have also been ISO certified so as to deliver quality services to their customers. This information has been corroborated by the document analysis. The institutions are also engaged in income generating activities to supplement the capitation from the Government.

Quite a number of taskforce recommendations have not been fully embraced by the universities sampled. For instance, one of the recommendations by a report of the taskforce for the development of the national strategy for university education 2006 was to significantly improve wellbeing, retention and productivity of staff and students in universities. This recommendation has not been fully implemented. However, public universities sampled were
implementing some of the recommendations from different taskforces in piece meal.

5.4 Recommendations

1. In line with the findings of the study, the study recommends that universities and the Government establish appropriate, reliable, diversified and sustainable mechanisms for financing university operations. In keeping with their core mandate therefore, universities should enhance the focus on increased quantity and quality of research output. Kenya’s development critically depends on a high research outputs, which targets critical areas of national development and builds human and physical capacity for specialized research. Kenya must make provision for incentives and rewards, improve funding and grants, as well as strengthen collaboration and partnership among research entities and with consumer agencies, and safeguard intellectual property rights.

2. The Commission for Higher Education (CHE), currently known as the Commission for University Education (CUE) should institute strict quality monitoring and evaluation mechanisms to universities and revises its accreditation requirements. An accreditation system could be linked to an international accreditation system. An internationally accepted criterion is needed not only for setting standards but measuring quality. Besides, universities need to have well established benchmarks and indicators of quality which can serve as positive indicators of self criticism by both universities and stakeholders.
3. Graduates tracer studies among the workforce should be conducted periodically, at least after every five years in order to inform the universities about the needs and skills required in the industries so as to review the curriculum accordingly.

4. Public universities should put in place clear curriculum regulatory processes as per the needs of the communities and industries’ requirements. The curriculum involves the content, structure, processing, and examination of what is taught and learnt. The critical challenge is to ensure that for every programme, a rich and sound curriculum that meets the needs of the students, the university and the wider community, is developed and implemented. It is imperative that the content and process of the curriculum be current and up-to-date.

5. More lecturers and non-teaching staff should be recruited to match the increase in student enrolment and improve lecturers’ incentive system. Each university in Kenya should have a substantive number of highly qualified academic staff at the centre of its teaching, research and supervision levels. This should be demonstrated in the numbers of qualified academic staff with a Doctor of Philosophy (Ph.D) degree or its equivalent who are recruited, developed, and retained. One of the key factors in motivating and retaining academic staff is that of having in place a comprehensive and competitive incentive system for existing academic staff, for new ones, as well as for aspiring ones.
Above all, Kenya’s universities can achieve a turn-around in this situation through incentives that motivate lecturers to do more research. It is also necessary to:

(i) Review the system of Postgraduate funding that include: research proposal writing; writing papers from completed research; awarding incentives to researchers who publish or patent their results; communicating science and technology findings.

(ii) Review facilities and infrastructure available for research and publication with a view to facilitate high research and publication outputs.

(iii) Promote best practices in research; grant management, peer review process and postgraduate training.

(iv) Enhance ways of promoting conference organization, attendance and presentation of papers.

(v) Enhance mechanisms for local, regional and international linkages in research (doctoral consortium).

(vi) Enhance mechanism for the dissemination of research findings to consumers other than the public.

(vii) Develop funding mechanisms for promotion of research and publication.

(viii) Develop the capacity of dissemination of research findings through training of science journalists.

(ix) Establish a national forum for researchers where they could exchange experiences to enrich their work.
(x) Develop a way of funding such a forum. Develop guidelines on who will attend such forums.

(xi) Provide training for selected journalists in scientific journalism to build the media capacity to summarize and publish research results since there ‘currently’ are problems in disseminating research findings.

5.5 Areas for Further Research

1. A similar study should be carried out in private universities in Kenya.

2. Studies to be done on quality of programmes offered in both private and public universities in Kenya.

3. Studies to be done on quality of various modes of studies that have been embraced by both private and public universities in Kenya.
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APPENDIX 1
INTRODUCTION LETTER

Daniel Mange Mbirithi
Department of Educational Management, Policy & Curriculum Studies Kenyatta University
P.O. Box 43844, Nairobi

Dear Respondent,

I am a postgraduate student from Kenyatta University. I would like to collaborate with you in determining magnitude of management challenges facing public universities in Kenya and their implications for the provision of quality education. I sincerely request for your support through filling the questionnaire provided to you. The information you will give will assist highly in the above goal, which would be very vital in improving the situation on quality public university education provision in Kenya. The information provided will be treated with a lot of confidentiality.

Your contribution and sincerity will be highly esteemed

Yours truly,

Daniel Mange Mbirithi
APPENDIX 2

University Management Questionnaire for the Heads of Departments

INTRODUCTION

Purpose
The purpose of this study is to determine magnitude of the management challenges facing Public Universities in the country and their implications for quality education.

Instructions
This questionnaire seeks to capture your views on several issues regarding university education. They are in various sections A, B, C, and D.

Please answer all questions by expressing your view in the spaces provided.
Your responses will be treated with utmost confidentiality.

SECTION A: BACKGROUND INFORMATION

TEACHING STAFF

1. Total number of teaching staff in the department.
   Male ..............................
   Female ............................

2. Number of staff member who are Professors ..............................

3. Number of staff members with PHD ..........................................

4. Number of staff members with Masters Degree ............................
Section B: Challenges Related to Teaching and Learning

1. RESOURCES:

Computers:

a) How many computers are available in your department for use by students?

b) How many computers are available in your department for use by members of staff?

c) What is your view on the adequacy of the computers to meet the teaching and learning goals of the department?

   [ ] Very Adequate    [ ] Adequate    [ ] Inadequate    [ ] Very Inadequate

Explain your answer briefly

Textbooks:

In order to meet your department’s teaching and learning goals

a) Is there a library dedicated to your department?

   Yes [ ]    No [ ]

b) How would you rate the adequacy of textbooks in the university library?

   Very Adequate [ ]    Adequate [ ]

   Inadequate [ ]    Very Inadequate [ ]
c) What is the implication of the above to teaching and learning in your department?

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d) What other challenges do you face in teaching and learning in relation to textbooks?

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E) How does the department cope with the challenges above?

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Teaching Staff:

a) List the Five Most Serious challenges experienced in your department in relation to management of teaching staff. (Challenges could include hiring, remuneration, sharing of workload, adequacy e.t.c.) Please give a brief explanation of each challenge listed.

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b) What is the implication of the above challenges to teaching and learning in your department?

c) What strategies have been put in place to cope with the challenges above?
d) What more do you suggest should be done to overcome the challenges faced in relation to management of teaching staff in the University?

Lecture Halls:

a) How do you rate the adequacy/inadequacy of lecture halls available in the university?

- Very adequate [   ]
- Adequate [   ]
- Inadequate [   ]
- Very Inadequate [   ]

b) How does the adequacy/inadequacy of lecture halls affect the teaching/learning process in the department?

c) What strategies have been put in place to cope with challenges related to lecture halls?
Finance:

a) Rate the adequacy of the money allocated to your department annually in relation to the needs of the department.

Very Adequate [ ] Adequate [ ]
Inadequate [ ] Very Inadequate [ ]

b) What is the implication of adequacy/inadequacy of finances to the teaching/learning process?

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b) What is the implication of adequacy/inadequacy of finances to the teaching/learning process?

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2. CURRICULUM AND INSTRUCTION

Curriculum Review:

a) When was the last time that you reviewed the units offered in the department?

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b) What are your views on the relevance of the current curriculum structure to job market demands?

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c) Do you feel that the learning offered by the university is adequate to enable graduates to fit on the job without any retraining?

Yes [ ]
No [ ]

Explain your answer

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Curriculum Instruction

a) Describe how the following approaches are used for curriculum instruction quality control in the department.

   i. Students feedback -----------------------------------------------
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   ii. Staff Appraisal -----------------------------------------------
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   iii. Moderation of exams -----------------------------------------------
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iv. Peer Review

v. Others

b) What challenges do you face in relation to curriculum and instruction management?

c) What are the implications of the above challenges to quality of education in the university?

d) What strategies have been put in place to counter challenges related to curriculum and instruction management?
Examination Management

a) What challenges are faced by the department in examination management in relation to the following:

i. Setting of Examinations -------------------------------

ii. Marking of examinations -------------------------------

iii. External examiners - quality control ---------------

iv. Exam data storage -------------------------------

v. Cheating in examinations and other invigilation issues ------
vi. Others

b) What is the implication of these challenges to the quality of education in the university?

c) Describe the measures that have been put in place to counter the various challenges in examination management.

d) What else do you propose should be done to improve examination management in the university?

Expansion and Diversification of University Education

How has massification (introduction of open learning, school-based, e-learning programs etc) impacted on quality of education in relation to:

a) Resources available
b) Human Resources available ---------------------------------------------------------
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c) Education quality -------------------------------------------------------------
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SECTION C: RESEARCH

1. List challenges experienced in your department in relation to research
   for each of the following:
   a. Availability of finances for research grants --------------------------
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   b. Capacity of the university to conduct research -----------------------
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   c. Faculty motivation to conduct research -------------------------------
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d. Publishing and disseminations of findings

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e. Utilization of research findings for teaching, policy development and practice

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2. What are the implications of the above challenges to the quality of education in the university?

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3. What strategies has the department put in place to promote quality and suitability of research among faculty members?

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4. What do you propose could be done to improve on the suitability and quality of research in the university?

SECTION D: COMMUNITY SERVICE

1. What community service programmes does the department engage in?

2. How does the department facilitate information exchange between faculty members and the community to enhance utilization of research findings and expert knowledge in solving societal problems?

3. What challenges are experienced by the department in relation to fulfilment of its community service mandate?
4. Propose strategies that can be employed to improve performance of the university in community service.
APPENDIX 3

University Management Questionnaire for the Dean of Schools/Faculties

INTRODUCTION

Purpose: The purpose of this study is to determine magnitude of the management challenges facing Public Universities in the country and their implications for quality education.

Instructions: This questionnaire seeks to capture your views on several issues regarding university education. They are in various sections A, B, C, and D. Please answer all questions by expressing your view in the spaces provided. Your responses will be treated with utmost confidentiality.

Section A: Challenges Related to Teaching and Learning

1. RESOURCES:

Computers:

a) How many computers are available in your school/faculty for use by students?

b) How many computers are available in your department for use by members of staff?

c) What is your view on the adequacy of the computers to meet the teaching and learning goals of the school/faculty?

[ ] Very Adequate [ ] Adequate [ ] Inadequate [ ] Very Inadequate
Textbooks:

In order to meet your school/faculty’s teaching and learning goals

a) Is there a library dedicated to your department?
   
   Yes [ ]      No [ ]

b) How would you rate the adequacy of textbooks in the university library?
   
   Very Adequate [ ]         Adequate [ ]
   Inadequate [ ]             Very Inadequate [ ]

c) What is the implication of the above to teaching and learning in your department?
   
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d) What other challenges do you face in teaching and learning in relation to textbooks?
   
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Explain your answer briefly

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e) How does the department cope with the challenges above?

Teaching staff:

a) List five most serious challenges experienced in your school/faculty in relation to management of teaching staff. (Challenges could include hiring, remuneration, sharing of workload, adequacy e.t.c) Please give a brief explanation of each challenge listed.

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5. 
a) What is the implication of the above challenges to teaching and learning in your school/faculty?

b) What strategies have been put in place to cope with the challenges above?

c) What more do you suggest should be done to overcome the challenges faced in relation to management of teaching staff in the University?

Lecture Halls:

a) How do you rate the adequacy/inadequacy of lecture halls available in the university?

   Very adequate [ ]  Adequate [ ]
   Inadequate [ ]  Very Inadequate [ ]

b) How does the adequacy/inadequacy of lecture halls affect the teaching/learning process in the school/faculty?
c) What strategies have been put in place to cope with challenges related to lecture halls?

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Finance:

a) Rate the adequacy of the money allocated to your school/faculty annually in relation to the needs of the department.

Very adequate [ ]  Adequate [ ]
Inadequate [ ]  Very Inadequate [ ]

b) What is the implication of adequacy/inadequacy of finances to the teaching/learning process?

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Finance:

c) What strategies do you employ to cope with challenges related to inadequacy of finances (if any)?

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2. CURRICULUM AND INSTRUCTION

Curriculum Review:

a) When was the last time that you reviewed the units offered in the school/faculty?
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b) What are your views on the relevance of the current curriculum structure to job market demands?
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c) Do you feel that the learning offered by the university is adequate to enable graduates to fit on the job without any retraining?

Yes [ ]

No [ ]

Explain your answer
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Curriculum Instruction

a) Describe how the following approaches are used for curriculum instruction quality control in the school/faculty.

ii. Students feedback
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iii. Staff Appraisal

iv. Moderation of exams

v. Peer Review

vi. Others

b) What challenges do you face in relation to curriculum and instruction management?

c) What are the implications of the above challenges to quality of education in the university?
d) What strategies have been put in place to counter challenges related to curriculum and instruction management?

Examination Management

a) What challenges are faced by the school/faculty in examination management in relation to the following:

vii. Setting of Examinations

viii. Marking of examinations

ix. External examiners - quality control

tax. Exam data storage
xi. Cheating in examinations and other invigilation issues

xii. Others

b) What is the implication of these challenges to the quality of education in the university?

c) Describe the measures that have been put in place to counter the various challenges in examination management.

d) What else do you propose should be done to improve examination management in the university?
3. How has massification (introduction of open learning, school-based, e-learning programs etc) impacted on quality of education in relation to:

a) Resources available

b) Human Resources available

c) Education quality

SECTION C: RESEARCH

1. List challenges experienced in your school/faculty in relation to research for each of the following:

a. Availability of finances for research grants

b. Capacity of the university to conduct research
c. Faculty motivation to conduct research

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d. Publishing and disseminations of findings

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e. Utilization of research findings for teaching, policy development and practice

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2. What are the implications of the above challenges to the quality of education in the university?

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3. What strategies has the school/faculty put in place to promote quality and suitability of research among faculty members?

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4. What do you propose could be done to improve on the suitability and quality of research in the university?

SECTION D: COMMUNITY SERVICE

1. What community service programmes does the school/faculty engage in?

2. How does the school/faculty facilitate information exchange between faculty members and the community to enhance utilization of research findings and expert knowledge in solving societal problems?

3. What challenges are experienced by the school/faculty in relation to fulfillment of its community service mandate?
4. Propose strategies that can be employed to improve performance of the university in community service.
APPENDIX 4

University Management Questionnaire for the Teaching Staff Union Leaders

INTRODUCTION

Purpose: The purpose of this questionnaire is to capture data on magnitude of management challenges facing public universities and their implications for the quality of university education.

Instructions: Please fill this questionnaire as accurately as possible. Your responses will be treated with utmost confidence and used only for academic purpose. Do not write your name anywhere in this questionnaire.

1. Gender [ ] Male [ ] Female

2. Your academic qualification

[ ] Tutorial fellow [ ] Lecturer
[ ] Senior lecturer [ ] Associate professor
[ ] Professor

3. (a) What are the challenges that lecturers face in this 21st century in teaching and learning in the following learning platforms:

(i) Regular

(ii) Part-time
(iii) Open learning

(b) What challenges do lecturers experience in: research and community service?

(c) Do those challenges in question number 3 (a) and (b) affect quality university education?

[  ] Yes  [  ] No  [  ] I do not know

(d) What are the possible solutions to mitigate the impact of the above challenges on quality of education provided?

4. Do you receive enough funds from university for conducting research?

[  ] Yes  [  ] No

5. Lack of sufficient funds for research has resulted in declining academic standards.

[  ] True  [  ] False

6. Have you ever contributed articles in a peer refereed journal?

[  ] Yes  [  ] No

If yes, how many articles have you contributed? .........................
7. How do you rate the number of students in the lecture hall while lecturing?
   [ ] Too many to be manageable    [ ] Too many but manageable
   [ ] Average                [ ] Too few

8. In which ways does the class size of students affect quality education?
   ........................................................................................................
   ........................................................................................................
   ........................................................................................................
   ........................................................................................................

9. Are there any address systems in the lecturer halls?
   [ ] Yes     [ ] No

10. Generally how is the teaching-learning environment in the campus?
    [ ] Excellent     [ ] Very good     [ ] Good
     [ ] Fair        [ ] Poor

11. (a) Do you have tutorials with your students?     [ ] Yes
     [ ] No
     (b) If no, what reason do you give?
         ........................................................................................................
         ........................................................................................................
         ........................................................................................................
         ........................................................................................................

12. Do you have an access to computer while working    [ ] Yes [ ] No

13. Are you connected to the internet     [ ] Yes [ ] No
14. (a) Do you know of your colleagues who have left for employment in other countries or other institutions? [ ] Yes [ ] No
(b) If yes, has it affected standards of education in the university?
[ ] Yes [ ] No
15. Please comment about the performance of students in the examinations
[ ] Excellent [ ] Very good [ ] Good
[ ] Fair [ ] Poor
16. How do you rate university students today?
[ ] Excellent [ ] Very good [ ] Good
[ ] Fair [ ] Poor
17. (a) Can you say the university education is declining? [ ] Yes [ ] No
(b) If yes, what do you associate with that decline?
…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………
18. Please comment about the general university management
[ ] Excellent [ ] Very good [ ] Good
[ ] Fair [ ] Poor
19. What other problems do lecturers face that may affect quality of university education provision?
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…………………………………………………………………………………………
…………………………………………………………………………………………
20. What are the possible solutions to the above problems?

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Thank you for your participation
APPENDIX 5

Questionnaire for Students’ Associations Leaders

INTRODUCTION

Purpose: The purpose of this questionnaire is to capture data on magnitude of management challenges facing public universities and their implications for the quality of university education.

Instructions: Please fill this questionnaire as accurately as possible. Your responses will be treated with utmost confidence and used only for academic purpose. Do not write your name anywhere in this questionnaire.

1. What is the name of the degree you are pursuing?

………………………………

[ ] A Bachelors degree-----------------------------regular/part-time/open learning
[ ] A Masters degree-----------------------------regular/part-time/open learning
[ ] A PhD-----------------------------------------full time/course work

2. What are the challenges that student face as they pursue their studies in this university?

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3. (a) Are the above challenges likely to affect the quality of their degree?

[ ] Yes   [ ] No

(b) Explain your answer briefly

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(c) What are the possible solutions for challenges identified in question 2 above?
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4. In the table below, rate the adequacy or inadequacy of the resources provided.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Very Adequate</th>
<th>Adequate</th>
<th>Inadequate</th>
<th>Very inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers for use by students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturers</td>
<td></td>
<td></td>
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<tr>
<td>Lecture halls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodation facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra-curricular resources e.g. sports equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory and other technical learning tools/resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet access</td>
<td></td>
<td></td>
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<tr>
<td>On-line learning tools e.g. e-journals</td>
<td></td>
<td></td>
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<tr>
<td>Counseling resources</td>
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<td></td>
<td></td>
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<tr>
<td>Health personnel – doctors, nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Catering facilities – dining</td>
<td></td>
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</tr>
</tbody>
</table>
5. Which other resources do you find to be lacking in the University?

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6. What is the implication of lack of these facilities to the quality of education being offered in the University?

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<table>
<thead>
<tr>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>All the units in the course I am taking are relevant for the job market.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>There is no need for the course units to be reviewed in the near future.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>There are enough learning materials to enable me cover all course outlines successfully.</td>
<td></td>
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<tr>
<td>The education offered in this university is of high quality.</td>
<td></td>
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<tr>
<td>Students should be involved more in decision making at the university.</td>
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<tr>
<td>The university prepares students adequately for the job market.</td>
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<tr>
<td>The way that teaching is conducted at the university does not equip students adequately for research.</td>
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<tr>
<td>There is too much emphasis on theory than</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. In the table below, indicate the extent to which you agree or disagree with each of the statement provided.

**Disagree**

<table>
<thead>
<tr>
<th>Statement</th>
<th>SA - Strongly Agree</th>
<th>A - Agree</th>
<th>D - Disagree</th>
<th>SD - Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>practice in the way teaching and learning is conducted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The university effectively communicates course expectations to the students</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Examination management in the university is effective</td>
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<td></td>
</tr>
<tr>
<td>All lecturers are knowledgeable enough to deliver the curriculum adequately</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All lecturers are willing to assist students overcome any academic difficulties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The University has effective mechanisms to address any students’ welfare problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Who finances for your University education? (Tick all that apply)

   - HELB
   - Parents
   - Guardian
   - Community/university
   - Self
   - Other

9. Do you have sufficient funds for your upkeep? [ ] Yes [ ]
   No

10. How frequent do you interact with your lecturers other than in the lecture hall? [ ] Often [ ] Rarely [ ] Never

11. (a) How do you rate the quality of education in public universities?

   - Very High
   - High
   - Low
   - Very Low
(b) Explain your answer briefly

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12. Give suggestions to improve education quality in public Universities

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13. What are the problems that students experience that hinder the learning process in the university and conducting research?

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14. Suggest possible solutions to the above problems

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15. How do you rate the general management of the university?

[ ] Excellent [ ] Very good [ ] Good

[ ] Fair [ ] Poor

Thank you for your participation
APPENDIX 6

University Management Interview Schedule for the DVC

Administration

Purpose: The purpose of this interview schedule is to find out magnitude of management challenges on public universities and their implications for the provision of quality education.

NB: questions and probing will be based on; management of personnel for teaching and non-teaching staff, student and physical and material resources:

1. What is the impact of the challenges encountered by universities on management of staff and student personnel, physical and material resources in relation to: teaching and learning, research and community service? [probe on health of staff and student, staff development, staff appraisal system and availability of good infrastructure]

2. What are the implications of the challenges experienced by universities on management of staff and student personnel, physical and material resources on quality university education provision in relation to: teaching and learning, research and community service?[probe on staff and student welfare, motivation, competence, training, adequacy and maintenance of physical and material resources]

3. What do you recommend to mitigate the impact of the above challenges on quality of public education provision?
4. What are the measures put in place by the university to ensure quality assurance against the many challenges the institution is facing in this 21st century?

5. Brain drain of the academic members of staff has a big impact on quality of public universities education: if yes or no, please justify your answer.


Thank you so much for allowing me to interview you
APPENDIX 7

University Management Interview Schedule for the DVC Academic

Purpose: The purpose of this interview schedule is to determine the magnitude of the challenges facing public universities management and their implications for the provision of quality education.

NB: questions and probing will be done in reflection of the curriculum and instruction, teaching staff, physical and learning resources, students and community service:

1. Management of curriculum and instruction and community service: what measures has the university put in place to ensure that the curriculum of various causes taught are in line with the changed needs in the country?[probe in relation to curriculum revision, stakeholders involvement, community appreciation ]

2. Management of teaching staff and learning materials: what are the measures the university has adopted to make sure that the academic members of staff are efficient and effective against the many challenges in teaching and learning, research and dissemination of knowledge to the society?[probe in relation to class size, number of units taught by a lecturer per semester, teaching competence of staff, up-to-date of books and if available]

3. Management of student personnel, physical and learning resources: what moves has the university put in place to counter challenges that student face in their learning processes to ensure quality education is
provided.[probe in relation to adequacy of physical, learning resources and staff, conduction of tutorials]

4. Generally, what are the quality assurance interventions that the university has embraced to sustain quality education against the many challenges the institution is facing in relation to; teaching and learning, research and community service?

5. What is the impact of the challenges emanating from management task areas on quality education in relation to: teaching and learning, research and community service?

6. Many challenges the public universities are experiencing are responsible for drop in academic quality: [a] strongly agree [b] moderately agree [c] strongly disagree [d] moderately disagree [e] neither agree nor disagree

7. What can you say about the research done at the universities in the country in this 21st century?
   [a] has it declined or increased?
   [b] What reason would you give for your answer?

8. The society feel the research conducted at the university does not benefit them. What do you think?

9. What are your recommendations that you would propose to mitigate the many challenges the public universities are facing so as to provide quality education in this 21st century?

   Thank you so much for allowing me to interview you
APPENDIX 8

University Management Interview Schedule for DVC [Finance, Planning & Development]

**Purpose:** The purpose of this interview schedule is to determine magnitude of management challenges facing public universities management and their implications for the provision of quality education. The questions and probing will be based on finance, physical and learning resources.

1. Management of finance and physical resources: To what extent do the challenges emanating from finance and physical resources affect public universities in relation to teaching and learning, research and community service?

2. Management of finance and physical resources: What measures that have been put in place by public universities to ensure quality education does not suffer under massification i.e. expansion, diversification and commercialization of public university education in relation to teaching and learning, research and community service?

3. Please comment about the funds available for the general running of the university. [Probe if adequate or inadequate, sources, how much allocated for research and how it affects quality education]

4. Please comment on the challenges that come from, finance, infrastructure and teaching staff in teaching and learning processes? [Probe in relation to sufficiency ]
5. What is the implication of the challenges that the public universities are facing in their Endeavour to fulfill their missions of teaching and learning, research and community service?[probe]

6. How do the above challenges impact on the quality of public university education?

7. What do you think are the solutions to the many challenges facing public universities today?

8. What measures have the commission for higher education put in place to ensure quality is sustained to counter emerging challenges in public universities?

9. Are the measures above effective now that there so many satellite campuses opened by public universities?

   Thank you so much for allowing me to interview you
APPENDIX 9

University Management Interview Schedule for the Vice Chancellor

The purpose of this interview schedule is to determine magnitude of challenges emanating from management task areas facing public universities and their implications for the provision of quality education

1. What are the management challenges that the university has been facing in regard to physical and material resources, finance, staff personnel, students personnel, curriculum and instruction and the university and community service?

2. What are the impacts of the above challenges on research, teaching and learning and service to the community?

3. What do you recommend to mitigate or cope with the above challenges?

4. What is the magnitude of the challenges in relation to; teaching and learning, research and dissemination of new knowledge to the community? [Probe using words like expansion, diversification and privatization of public university education.]

5. What measures have the CHE embraced to ensure that there is quality assurance in public universities? Are they effective?

6. Is CHE of any help towards sustaining quality education in public universities?

7. What quality assurance mechanisms has the university put in place to maintain quality against myriad of challenges the institution is facing in this 21st century?

Thank you for allowing me to interview you even when you have a busy schedule
APPENDIX 10

University Management Questionnaire for the Leaders of Non-Academic Union. The purpose of this questionnaire is to determine magnitude of the management challenges in public universities and their implications for quality education. Please fill the questionnaire as accurately as possible.

Your responses will be treated with utmost confidence and only used for academic purpose.

1. Name of the Union? ...........................................
2. What is your post? ........................................... 
3. How long have you been serving under this post? ......................... 
4. How many members of the Union do you represent? .......................... 
5. Are you motivated in your job? 
   [ ] Yes               [ ] No               [ ] I don’t know
6. How do you rate the relationship of the university management and the non-academic Union?  [ ] Excellent               [ ] Good
   [ ] Fair               [ ] Poor
7. What are the views of the members you represent about the university management?  [ ] Excellent               [ ] Good
   [ ] Fair               [ ] Poor
8. What are the major challenges that the Union face in its day to day activities?

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9. What do you recommend as the solutions to the above challenges and problems of the Union members in general?

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10. Is the university management always willing to handle your problems?

[ ] Yes  [ ] No  [ ] I don’t know
APPENDIX 11

University Management Interview Schedule For Managers in Boarding and Accommodation Department

The purpose of this interview is to find out magnitude of management challenges in public universities and their implications for quality education

1. Are the boarding and accommodation facilities
   a. Enough for the students and members of staff?
   b. Are they habitable ie in good conditions for sleeping and making studies?

2. What is the extent of the challenges that this department face on boarding and accommodation?

3. Please give recommendations to the above challenges.

4. Can the above challenges affect quality of education among students and members of staff?

Thank you for allowing me to interview you
APPENDIX 12

Spot Check Observation Form

1. Name of the university………………………………………………….
2. Its location province and if rural or urban…………………………….
3. Comment on the general outlay of the administration block (in terms of neatness, arrangement etc.
4. Comment on the campus compound in relation to safety, cleanliness, etc.
5. Comment on the physical structures in the university i.e. lecture halls, offices, laboratory, workshop, library, kitchens, toilet, dining hall, hostels, etc in relation to:
   i. Sanitation
   ii. Safety
   iii. Maintenance, space and adequacy
6. Comment on adequacy and the standards of maintenance of material resources (textbooks, laboratory equipment, desks, etc)
7. Any other comments in relation to management of the physical and material resources.
APPENDIX 13

Research Authorization

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Our Ref: NCST/5/832/R/4

Daniel Mange Mbirithi,
Kenyatta University,
PO BOX 43844,
NAIROBI.

Date: 2nd SEPT 2009

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Management Challenges Facing Kenya’s Public Universities and Implications for Quality Education" I am pleased to inform you that you have been authorized to undertake your research at Kenyatta, Nairobi and Egerton Universities for a period ending 30th October 2010.

You are advised to report to The Vice Chancellors of the Respective Universities before embarking on your research project.

Upon completion of your research project, you are expected to submit two copies of your research report/thesis to our office.

PROF. S. A. ABDULRAZAK Ph.D, MBS
SECRETARY

Copy to:
The Vice Chancellor
University of Nairobi
P.O Box 30197
Nairobi
APPENDIX 14

Research Permit