

**MANAGEMENT, INFRASTRUCTURE AND FACULTY OF
SELECTED EMERGING UNIVERSITIES IN KABWE**

By

Chisenga Jacob

*A dissertation submitted to the University of Zambia in association with
Zimbabwe Open University in partial fulfilment of the requirement for the
award of the degree of master of education in educational management.*

THE UNIVERSITY OF ZAMBIA

LUSAKA

October, 2017

©Copyright 2017

All rights reserved.

No part of this dissertation may be reproduced in any form without permission from the author or from the University of Zambia

Declaration

I, Chisenga Jacob do hereby declare that this is my own work, and that all the works of other persons used in this report have been duly acknowledged, and that this work has not been previously presented in this university or any other for similar purposes.

Authors Signature _____

Date_____

Supervisor: Dr. Gift Masaiti

Signature_____

Date_____

Approval

This dissertation of Chisenga Jacob is approved as a partial fulfilment of the requirements for the award of the degree of Master of Education in Educational Management and Administration of the University of Zambia.

Examiners' Signatures.

1 _____ Date _____

2 _____ Date _____

3 _____ Date _____

Dedication

This work is purely dedicated to my late Dad Musekelampende. Muneka. Chisenga, my Mother *Ba* Violet Kunda Dickson, my caring wife Charity and my sons Musekelampende and Musambachime.

Acknowledgements

I would like to express my sincere appreciation and gratitude to the following people for the excellent contribution towards the success of this study. My supervisor and mentor Dr. Gift Masaiti for his academic advice and guidance throughout my course. My course mates David Kalunga and Andrew Tembo whom we have come a long way for their encouragement and inspiration that one day it will come to pass. My sincere gratitude also goes to Dr. Tommie Njobvu and Dr. Dennis Banda who made the course MDEA 560 understandable. Many thanks also go to Mr. Boniface Makungo who always gave me permission to do my studies and research even when I was very much needed at the station. I cannot forget Dr. Lungu Deputy Vice Chancellor Mulungushi and Nkrumah Universities and Professor Machuta of Paglory University as well as all the staff of the Universities I conducted research from for welcoming me and giving me the academic information which I needed. I also thank Allan Mwape and Mubanga Kanyanta who helped me in many ways.

A profound appreciation, love and gratitude go to my late Dad who has been resting in peace for twenty years. My ever loving and caring Mother, *ba* Violet Kunda Dickson who was forced to leave school while in grade three for not singing the National Anthem because of the Jehovah's Witness doctrine, but instilled in me the drive to take advantage of the educational opportunities that she never had during her time. She will definitely smile to see me graduate. To my wife and best friend Charity for her encouragement, support, understanding and endurance day and night during my stay away from home as well as my boys Musekela Mpende Chisenga and Muneka Musambachime Chisenga.

TABLE OF CONTENTS

Declaration.....	ii
Approval	iii
Dedication.....	iv
Acknowledgements.....	v
List of figures.....	viii
List of tables.....	ix
Acronyms.....	x
Abstract.....	xi
CHAPTER ONE: INTRODUCTION.....	1
1.0 Background of the study	1
1.2 Statement of the problem	5
1.3 Purpose of the study.....	5
1.4 General Objective	5
1.5 Specific objectives	6
1.6 Research questions.....	6
1.7 Significance of the study.....	6
1.8 Limitations of the study	7
1.9 Theoretical framework (Open systems theory).....	7
2.0 Conceptual framework.....	10
2.1 Clarification of terms	11
CHAPTER TWO: LITERATURE REVIEW	13
2.1 The delivery of Education in Zambia in institutions of Higher learning.	13
2.2 Studies on university management	16
2.3 Literature on Faculty in higher education	19
2.4 Studies on university infrastructure	21
2.5 General studies.....	23
2.6 Gap in literature	25
CHAPTER THREE: METHODOLOGY	29
3.1 Introduction.....	29
3.2 Research design	29
3.2 Population	30
3.3 Sample size and Sampling Technique	30
3.4 Instruments for data collection.....	30

3.4.1 Questionnaires.....	30
3.4.2 Semi-structured interviews	31
3.5 Data analysis and presentation.....	31
3.6 Validity and Reliability	31
3.7 Ethics	32
CHAPTER FOUR: PRESENTATION OF FINDINGS	33
4.1 Introduction.....	33
4.2 Social demographic characteristics of respondents.....	33
4.3 Findings on Faculty of the Institutions	35
4.4 Findings on the Infrastructure of the Institutions.....	42
4.5 Findings on Management of the institutions.....	45
4.6 Summary	49
CHAPTER FIVE: DISCUSSION OF FINDINGS	50
5.1. Introduction to the Chapter	50
5.2 Discussion of the Findings.....	50
5.2.1 Mixed picture of management and management styles	50
5.2.2 Inadequate infrastructure but different extent	53
5.2.3 Better qualified faculty in Public Universities than Private Universities.....	54
5.3 Summary of the discussion	55
CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS	57
5.0 Summary	57
5.1 Conclusion	57
5.2 Recommendations.....	59
5.3 Recommendations for future research	60
REFERENCES	61
APPENDIX 1: QUESTIONNAIRES-FACULTY.....	67
APPENDIX 2: INTERVIEW GUIDE- MANAGEMENT	71
APPENDIX 4: INTRODUCTORY LETTER	72

List of figures.

Figure 1: Open system	8
Figure 2: Conceptual framework model	11
Figure 3: Gender representation of sample population.....	34
Figure 4: Employment status of sample population	35
Figure 5: Intentions to Stay in Organisation	40
Figure 6: Histogram of Faculty of Institutions	42
Figure 7: Infrastructure adequate in fostering quality education	43
Figure 8; Histogram of Infrastructure of Institutions.....	44
Figure 9; Differences in management of institutions between public and private universitie.	48

List of tables.

Table 1: Gender representation of Sample Population	34
Table 2: Employment Status of Sample Population	35
Table 3: Perception of Factors Affecting Quality Education.....	36
Table 4: Table of Public university lecturers' qualifications (10/7/17).....	38
Table 5: Motivation Variables influencing decision to stay as perceived by faculty	40
Table 6: Results On Faculty Of Institutions	41
Table 7: Results On Infrastructure Of Institutions.....	43
Table 8; Results On Management Of Institutions.....	47

Acronyms

UNZA	University of Zambia
CBU	Copperbelt University
KNU	Kwame Nkurumah University
TAVETA	Technical Education, Vocational and Entrepreneurship Training
ICT	Information and Communication Technology
MoE	Ministry of Education
MoGE	Ministry of General Education
GRZ	Government of the Republic of Zambia
PhD	Doctor of Philosophy
MoFNP	Ministry of Finance and National Development
SNDP	Sixth National Development Plan
7NDP	Seventh National Development Plan
NAPSA	National Pensions Scheme Authority
SPSS	Statistical Package for Social Sciences
ZRA	Zambia Revenue Authority

Abstract

Quality in education is a concept that is of paramount importance. In studies of quality issues in education all over the world, it is pointed out that there is as yet no consensus on the definition of the term “quality”. Although it cannot easily be quantified in education terms, factors objecting its enhancement can however be determined based on the perceptions of the various stakeholders entwined to the education system. Among the identified factors critical for quality education are management, faculty, and infrastructure, and these are proving elusive for Universities even worse for emerging ones. Thus the general objective of this study was to assess the quality of management, faculty, and infrastructure in emerging universities as these are crucial for quality education. This study investigated three emerging universities, one public university called Kwame Nkurumah University, and two private called Paglory and Mukuni universities, in Kabwe district of Zambia.

This research employed a descriptive survey design method where both qualitative and quantitative data are used to explain a present conditions as viewed and interpreted through various responses. The study used a sample size of 80 respondents who were purposefully selected from the sample population. A questionnaire, and semi-structured interviews were used to collect data from the respondents. Quantitative data was analysed using inferential statistics while qualitative data was analysed thematically. The following were the major findings from the research.

Firstly, it was found out that the faculty of the emerging universities was not fully qualified. It was observed that some lecturers lacked proper qualifications and experience in both types of universities. For example, in the public university, some lecturers were still degree holders teaching degree programmes and even worse in the private sector where some lecturers were diploma holders teaching degree programmes. Other findings revealed that the major factors hindering delivery of quality education as perceived by faculty include: Inadequate resources (modern books, printers, projectors, and computers); inadequate lecture halls; Curriculum not up to date; Lack of active research; and limited sponsorship for further education.

On infrastructure, it was established that the general state of infrastructure was poor and also inadequate to meet both faculty and students teaching/learning needs. The universities were observed to have inadequate lecture halls, lecturers’ offices, and other infrastructural learning

facilities. Lecturers in the public university were forced to share offices while in the private university, some were reduced to using their motor vehicles as their offices.

The study also uncovered three major challenges facing management of the emerging universities. It was found out that management of these universities were predominantly faced by financial constraints, inadequate infrastructure and faculty retention. Respondents in both types of the universities further singled out the financial constraint as the source of all managerial problems. Some strategies that had been put in place to alleviate these challenges included the introduction of distance students who brought in additional funding, sponsorship of lecturers for further education to improve faculty retention, and partnering with the international community for funding. It was also observed that better and adequate infrastructure is being constructed to mitigate the infrastructure problem.

Based on the findings of the study, the level of faculty, infrastructure and management of these emerging universities is below standard with the public sector performing better than the private sector in all the areas. The study recommended that all universities practice revenue diversification as a way of reducing dependency on the available limited sources of finance and strongly advocates for non-monetary motivational strategies such as recognition, and sponsorship for further education to retain faculty. Finally, it is recommended that the ministry of Higher Education should physically assess the management, infrastructure, and faculty of all institutions before registering such as a university.

CHAPTER ONE: INTRODUCTION

1.0 Background of the study

According to the Seventh National Development Plan (2017), improved education and skills development are instrumental in creating societies that are better able to respond to social and economic challenges they face. This realization that human capital is an essential factor for national development has given rise to the number of emerging universities in Zambia to promote higher education. The education Policy document of Zambia: Educating our Future, gives a broad definition of what higher education is (Educating our Future, 1996: 91-93). “Among other things, this type of education encompasses elements such as developing skills, teaching, research, creating new knowledge and its dissemination and the transfer of such knowledge and skills generated elsewhere in the world.” Higher education is of central importance to the economic and social development of a country. The activities of higher education level institutions and the recipients of higher education advance and preserve a society’s intellectual, scientific, and cultural and artistic endeavors. This conservation and furtherance of a society’s accomplishments entail that higher education institutions pursue a vigorous and sustainable critical evaluation of the society past and present achievements and, on the basis of such evaluation, chart the possible directions for future developments. (Educating our Future, 1996)

Public universities in Zambia from the 1980s to 90s were confronted with rapidly increasing enrolment, poor infrastructure, and inadequate government financing (Kelly, 1991, and Masaiti, 2013). As a way of responding to this austerity, the government attempted to put different policies to improve the outlook of public universities based on decentralization and democratic principles of efficiency, equity, accountability and cost effectiveness (Ministry of Education, MOE, 1996). The national policy on education themed ‘Educating Our Future’ of 1996 for a long time provided guidelines on how university education was to be run and gave details of management structure and autonomy as well as jurisdictions over management of funds and resources. The policy also advocated for increased entrepreneurial activities that the universities could venture in to avoid dependency on government funding which is usually affected when there is a national crisis but without prejudice to the preservation of the highest standards of quality in their essential educational, research and development roles. The ratification of Education Act NO 23 of 2011 by parliament in order to regulate the provision

of accessible, equitable and qualitative education; provide for the establishment, regulation, organization, governance, management and funding of educational institutions; provide for the establishment of education boards and for their functions; domesticate the Convention on the Rights of the Child in relation to education; repeal and replace the Education Act, 1966, and the African Education Act, 1951; and provide for matters connected with, or incidental to, the foregoing has resulted into upgrading of some colleges into universities as well as the participation from the private sector (Education Act, 2011). In addition, Part V of the Act gives details of the operations of public education institutions where the government through the ministry of higher education is responsible for establishing and maintaining a teachers' resource center, laboratory, school clinic or any other facility or service at an educational institution as is necessary for the benefit of learners and teachers; and Establishment and maintenance of public educational institutions as well as establish and maintain a hostel or any other building for the accommodation of learners at an educational institution (Education Act, 2011).

The Education Act of 2011 is a notable transition since 1999 on higher education which has resulted into an increased participation of the private sector in offering higher education in various disciplines (Ministry of Education, 2011). Under the Education Act of 2011, Part VI allows for proprietors to establish and maintain a private educational institution. The proprietor is mandated to appoint a board of management which will be responsible for managing the institution. This act has provided a framework under which existing and emerging private universities' operations are governed and regulated (Ministry of Education, 2011). To further increase the number of institutions offering higher education, conversion of the colleges into a University was started by repealing the College Act of Parliament, No.21 of 1972. Following that Act, the college was removed from the powers of the office of the Vice President to the Minister of Education. Since 1985 some Colleges have been transformed into universities.

Incidental to this, Zambia has experienced a tremendous increase in awareness for the importance of education at all levels which has warmly been embraced by the countries citizens thus there has consequently been an improved endeavor to augment higher education accessibility in essentially every part of the country as is evidenced by the upgrading of colleges into universities (University Act, 1999; Education Act, 2011; Mwelwa, 2014). The government has in the recent past encouraged private sector participation at tertiary level which has seen the emergence of fourteen (14) private universities against one new public university, the Mulungushi University (Ministry of Education [MOE], 2010). This led to an increase in

enrolment at tertiary level from 19,086 students in 2009 to 35,027 in 2014. Similarly, in terms of skills development, enrolment in TEVET institutions increased from 30,511 to 60,399 students between the period 2009 and 2014 respectively (MoFNP, SNDP 2015).

The increased number of universities is notably a positive step towards enhanced economic citizen participation for national development. However, the other side of this transcendence is the implication it has on management, infrastructure and faculty of these universities (Masaiti, 2015). The increasing enrolments might seem a good indication for profit maximization as is objective in the private universities, whereas is an indicator for quality education offered for public universities; both parties have on their agenda the need to maintain the extra capacity of students which was not strategically planned for (King, 2015). Their inclusion has adverse implications on the infrastructure (lecture rooms, library, hostels etc) which ultimately chews on the inadequate financial resources (Masaiti and Shen, 2013). Such concerns were equally shared by Professor Goma (1984) who admonished that: “the university must never be allowed to abandon the idea of excellence or the pursuit of the first rate in its effort to serve large numbers and in its dedication to meet the needs of Zambia. Excellence should not be sacrificed to mediocrity, the needs of Zambia demand that those who come out of the university should be men and women of integrity, competent and capable of facing new problems thoroughly and objectively with the desire to find constructive solutions to the problems rather than augment partisan controversy...in addition to producing high level manpower, the university must educate the whole man (Goma, 1984)

Scott (2009) consents to this assertion by adding that most managers of education institutions focus on increasing enrolments as an avenue for finances but do not anticipate the capacity constraints this has on the existing infrastructure. Institutions that use this avenue are usually characterized by vandalism, outdated equipment and poor security among others (Mulenga, 2014). Such is typical of public universities in Zambia where there is lack of sense of ownership on the side of students (Tuchili and Ndhlovu, 2017). Currently, an upswing in the number of private Universities being commissioned and public colleges being upgraded into universities begs the attention of modern discourse to identify the challenges faced by management of these universities in terms of their role in enhancing quality delivery of education and work out measures to mitigate them.

Another critical issue in emerging universities is faculty. Though there are many other factors which have reduced government funding to public universities in real terms, the trend shows

a clear correlation between the ever increasing student numbers sponsored by government and the progressive failure to finance the universities effectively especially capital projects related to expansion of infrastructure and staff emoluments (Beele, 2012). The government is the major source of finance for public universities and is influential in allocating these finances for capital projects and faculty salaries. Funding of these universities is subjective to governments budget allocation hence management of these universities does not really have flexibility in terms of manipulating cash flows (Masaiti and Mulenga, 2014). In an effort to raise extra finance, management attempts to increase tuition fees but the government, responsible for paying faculty salaries and capital grants and a major sponsor of students, disapproves any fee increases by universities (public) (Beele, 2012; Masaiti and Shen, 2013). This makes administration of public universities difficult, the fact that government indirectly assumes financial control through its erratic funding schemes. The case is different with private Universities which are independent from government control or influence (Saunders, 2009). Private universities operate under a “unit cost tuition model” with extensive revenue diversification which enables them raise finances from the fees they charge aside from government grants which they receive occasionally (Masaiti, 2015; Masaiti et al, 2014). They are able to pay staff salaries as they fall due unlike public universities which depend on government funding which is untimely as governance of the university (private) is just like any traditional business regarding its faculty as traditional workers, and its students as customers (Saunders, 2009; Mulenga, 2014). It is imperative that emerging universities just like any other organization retain their faculty staff by creating good working conditions (Armstrong, 2006). This is where motivation of staff becomes crucial especially taking into account the fact that these universities are still in their early stages of growth and that losing key staff at this stage greatly jeopardizes any efforts to grow (Chitra and Badrinath, 2014).

A high standard of quality is a *sine qua non* for relevant high education. The caliber of teaching staff, adequacy of physical facilities, sufficiency of consumables, quality of library holdings, and availability of necessary transport, all play an important role in determining the quality of those who emerge from higher level institutions. (MoE, Educating our Future, 1996). It is under this background that the study sets to look into management, infrastructure and faculty of emerging universities in Zambia and any implications these may have on the quality of education.

1.2 Statement of the problem

Zambia has been struggling as a low income country facing numerous economic challenges at national level which has seen the country suffer tremendously in delivering functions in the education sector, health sector and agricultural sector among others. Since education is a fundamental solution to economic problems, the government has deliberately facilitated an increase in the acquisition of education especially at tertiary level. For example, the government has directed the University of Zambia and the Copperbelt University to increase the number of admissions. However, these increased admission have introduced a number of challenges at in terms of faculty, infrastructure, and management at these institutions. Zambias Copperbelt University and the University of Zambia. For example, the lecture to teacher ratio has reduced tremendously, infrastructure is barely adequate to hold even half the universities' population, and management are constantly under financial and managerial problems. As a solution to the above problems, the government has encouraged the establishment of more public universities and the participation of the private sector in the delivery of tertiary education. This has led to the establishment of private universities as well as the upgrading of colleges across the country into universities with the aim of meeting the labour market demand for qualified graduates with proper education. However, with the limited resources available both in the public sector and private sector, the problems of faculty, infrastructure and management which have been facing the old universities' are not alien to these emerging universities. If these emerging universities do not invest in their faculty, infrastructure, and management, the implications on quality education will be disastrous.

1.3 Purpose of the study

The study is centred on bridging the gap in the literature currently available on the role that management, infrastructure and faculty play in achieving quality education in emerging universities in Zambia.

1.4 General Objective

The general objective of this study was to assess the quality of management, faculty, and infrastructure in emerging universities as these are crucial for quality education.

1.5 Specific objectives

The specific objectives were to:

1. Assess the effectiveness of management of the emerging universities towards achieving quality university education.
2. Determine the adequacy of infrastructure on university education management.
3. Ascertain the qualification levels of faculties in the emerging universities.
4. Identify strategies put in place by emerging universities in order to cope with challenges being faced in pursuance of quality education.

1.6 Research questions

To investigate the proposed topic, the study will be guided by the following questions which mirror the set specific objectives:

1. Is the available infrastructure adequate in fostering quality education in emerging universities?
2. What factors affect faculty of emerging universities in delivering quality education?
3. What are the strategies put in place by emerging universities to cope with challenges hindering delivery of quality education?

1.7 Significance of the study

Firstly, the findings of the study will 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 teaching and learning environment. This research will reveal a magnitude of management challenges emerging universities in Zambia are experiencing and their effects on the quality of education. Secondly, the findings of the study may help emerging universities to re- focus their strategies and policies of university education so as to cope with the challenges facing them to ensure maintenance of quality education. Thirdly, the findings will be useful to the Ministry of Higher Education and policy makers in terms of provision of information relevant for future 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 university education.

1.8 Limitations of the study

Saunders et al (2009) describe limitations to mean those conditions which are beyond the control of the researcher and may also place restrictions on the conclusions of the study. Hindering factors to this study are the period of time allocated to conduct this study and the limited availability of finances for use in conducting this research. Further, the generalisation of the findings was limited because the results were typical of one public and two private universities, however, the researcher conducted a comprehensive study to establish the base for further debate.

1.9 Theoretical framework (Open systems theory)

This study was guided by the Systems theory and its sub-variation; the open systems theory. The development of the Systems theory can be traced back to the work of Ludwig Von (Owens 1981). A system is an entity made up of two or more interdependent parts that interact to form a functioning organism. An organization like an education system is a perfect example of a system. The phrase ‘interdependent parts’ is very important in this definition and it means that a manager should not look for a single cause of a problem. A system can either be open or closed. An open system interacts with its environment. Traditional organization theorists regarded organization as closed systems while modern view is to treat it as an open system having constant interaction with its environment. In other words, an organization is an open system that interacts regularly with external forces such as government agencies, customers and suppliers. These external forces have an impact on organization practices. The open system concept is the first part of the two parts of systems theory. The second part is the impact of changes within an organization. The changes in one part of the organization affect all other parts of the organization. This interdependence complicates the manager’s job. The boundaries of open systems are permeable or penetrable, flexible and changeable depending upon its activities. The function of the management is to act as a boundary-linking pin among the various subsystems within the organizational system. Further, a system should be able to adapt and adjust to the changing conditions of its environment and exercises control over its operations through feedback. Information flows to appropriate people as feedback to carry out this function.

University education can be modelled as an open system that adapts and adjusts to the changing conditions of its environment. This can be through updating of curricula and other necessities. In the systems theory, two or more interdependent parts interact to form a functioning organism. To produce quality education outcomes, the main elements necessary for quality education should work together as interdependent parts to produce the intended outcome. Thus, management functions, infrastructure and faculty of an education institution should work together as interdependent functions to produce better education outcomes. In addition, Education institutions are social systems in which two or more persons work together in a coordinated manner to attain common goals (Norlin, 2009). This definition specifies several important features of education institutions: (1) they consist, ultimately, of people; (2) they are goal-directed in nature; (3) they attain their goals through some form of coordinated effort; and (4) they interact with their external environment. According to open-systems views, education institutions constantly interact with their environments. In fact, they need to structure themselves to deal with forces in the world around them (Scott, 2008). Systems theory works on the inside and outside of the organization, as a way of understanding and anticipating the consequences of any decision (Ahrweiler, 2011). Senge, (2006) defines a system as an interrelated set of elements functioning as an operating unit. As depicted in Figure 1, an open system consists of five basic elements (Scott, 2008): inputs, a transformation process, outputs, feedback, and the environment

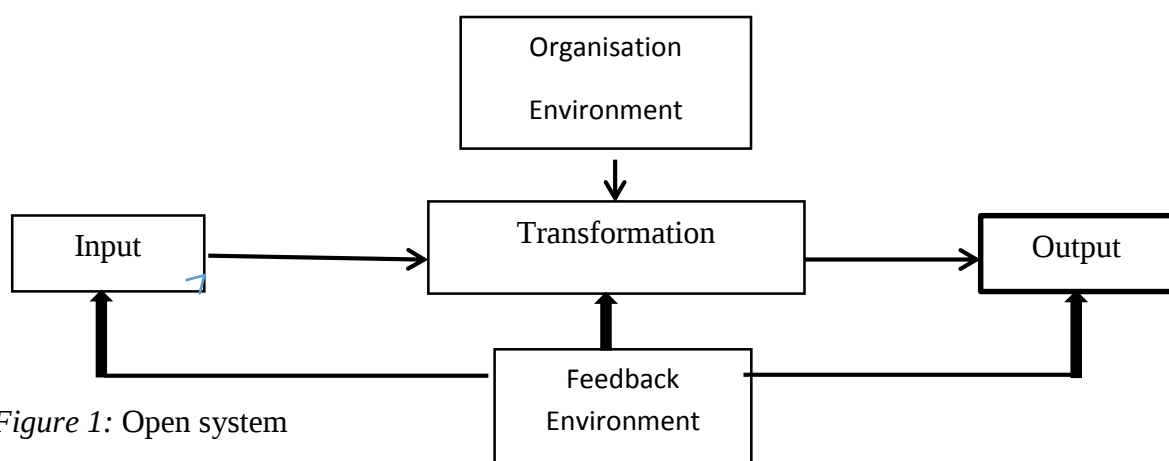


Figure 1: Open system

Source: Scott, (2008)

Education institutions use four kinds of inputs from the environment namely human resources, financial resources, physical resources, and information resources. Human resources include among others administrative staff, faculty and students. Financial resources are the capital the institution uses to finance both ongoing and long-term operations. Physical resources include supplies, materials, facilities, and equipment. Information resources are knowledge, curricula, data, and other kinds of information utilized by the institution.

Management's job involves combining and coordinating these various resources to attain the institutions goal which is primarily ensuring learning for all. The interaction between students and faculty is part of the transformation or learning process by which students become educated citizens capable of contributing to society. To accomplish this, some kind of work is done in the system to produce output by adding value to the work in process (Shaw, 2006). This transformation process includes the internal operation of the organization and its system of operational management. Some components of the system of operational management include the technical competence of school administrators and other staff, their plans of operation, and their ability to cope with change. Tasks performed by school administrators within the organization's structure will affect the institutions outputs.

It is management's responsibility to secure and use inputs, transform them while considering external variables to produce outputs. In social systems, outputs are the attainment of goals or objectives of the institution and are represented by the products results, outcomes, or accomplishments of the system. Although the kinds of outputs will vary with a specific institution, they usually include one or more of the following: growth and achievement levels of students and faculty, student dropout rates, employee performance and turnover, institution-community relations, and job satisfaction. An education institution must ensure that members of its community are satisfied beyond the physiological needs (salary, working conditions and job security) (Herzberg, 2009). Education institutions must provide for employees' needs for affiliation, acceptance, esteem, and perhaps even self-actualization if they hope to retain a motivated, committed work force capable of performing at maximum levels (Maslow, 1998).

Feedback is crucial to the success of the operations of the institution. Negative feedback, for example, can be used to correct deficiencies in the transformation process or the inputs or both, which in turn will have an effect on the institutions future outputs.

The environment surrounding the education institution includes the social, political, and economic forces that impinge on the organization. The environment in the open systems model takes on added significance today in a climate of policy accountability. The social, political, and economic contexts in which management of institutions work are marked by pressures at the local and state level. Thus, managers today find it necessary to develop internal operations while concurrently monitoring the environment and anticipating and responding to external demands.

2.0 Conceptual framework

In an attempt to conceptualise this research, three key terms of the study were used to develop a conceptual framework. Management in this model represents management functions and personnel responsible for running the institutions, while faculty includes all relevant staff involved in the teaching process and preparation of teaching materials, and then infrastructure includes all physical infrastructural facilities necessary in the university. The three conceptual terms are related as shown in the conceptual framework in figure 2 below.

Management of Universities in both private and public is responsible for ensuring quality of education. This is achieved through incorporation of various stakeholders in the learning process. Critical to the study is infrastructure and faculty and their implications on the quality of education. The study assumes that management among its responsibilities sets out plans for infrastructural expansion and retention of faculty to achieve its objectives. The argument posed by the underlying concept is that management through its policy on infrastructure and faculty is able to improve the quality of education outcome. By building infrastructural capacity in lecture halls, libraries, information technology, residence halls among others, it is probable that the quality of education may be enhanced. This is coupled with a sound faculty that is motivated towards achieving the set goals. Education outcome in this context is simply ensuring that the majority of enrolled students complete their programs and graduate. Thus, the concept denotes education outcome as a dependent variable whereas management, infrastructure and faculty are the independent variables whose manipulation can either lead to enhanced outcomes or vice versa.

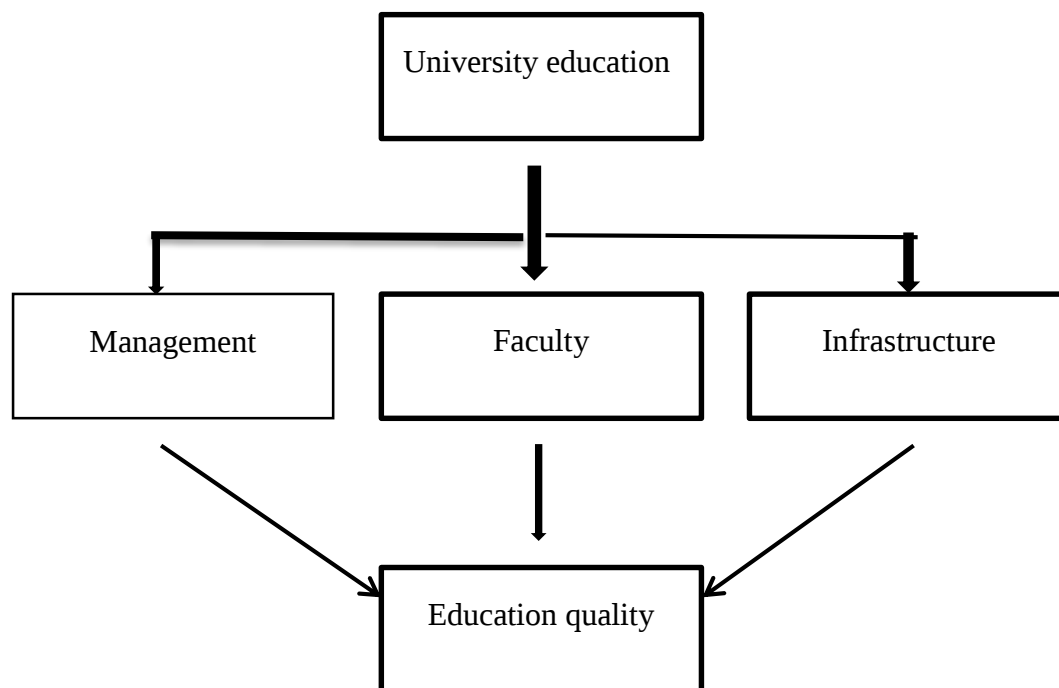


Figure 2: Conceptual framework model

Source: Author (2017)

2.1 Clarification of terms

Clarification of the key terms and concepts of relevance to the study are given below. Different forms exists of these terms/concepts exist but the section below is useful in ensuring clarity as to the meanings ascribed to these terms/concepts in this research project.

- **Public University:** A university solely owned and managed by the state through the respective ministry. The state is fully responsible for setting up the management team and policies of the institutions through the ministry of higher education.
- **Private University:** A university owned by private individuals or firms. Though the state through the ministry of higher education sets the standards for higher education, private management handles the universities internal management and they set the policies of the universities.

- **Emerging Universities:** these are new upcoming universities or newly transformed universities. They include both public and private institutions which have been approved as universities through the ministry of higher education.
- **Faculty:** This includes the teaching or research staff of a University. It includes all personnel involved in lecturing, tutoring, and preparation of teaching materials in a university.
- **Infrastructure:** this represents the physical infrastructures needed for the operations of an institution which includes lecture rooms, library, and hostels among others.
- **Management:** the administration, coordination, organising and controlling of the general affairs of an institution. It also includes the personnel involved in these managerial activities of the universities.
- **Quality education:** this refers to acceptable standard of education delivered to so students that enables them to be highly skilled and efficient in discharging their duties. It is linked to the notions of excellence, of a standard so high, it is rarely attained without proper necessities and it represents something that to which most institutions or scholars aspire.
- **Higher Education:** education acquired in learning institutions such as universities especially at the minimum of degree level.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This section reviews literature related to the topic under study. Newman (2011) contends that the review of literature involves pulling together, integrating and summarizing what is known in an area being investigated. Firstly, the delivery of quality education in institutions of higher learning in Zambia is presented focusing on the challenges being faced by Zambian universities. Then a number of studies that have been done relating to the topic are discussed in order to establish the relevance of this study.

2.1 The delivery of Education in Zambia in institutions of Higher learning.

Over the years, Zambia has seen a rapid increase in the number of institutions of higher education, with private institutions out-numbering public ones. This has been largely due to the high demand by the citizenry for higher education and the inability by the public institutions to meet it. For many years, Zambia had only two (2) public universities, namely, the University of Zambia and Copperbelt University. This has however changed with the introduction of private institutions of higher learning. According to a report of 2014 by the Higher Education Authority committee, established under the Higher Education Act of 2013, the quality of education had become an issue especially after the entrance of private providers and trans-national universities. Further, the Government had drastically reduced funding to public tertiary learning institutions despite the increasing demand for higher education. This has caused a decline in the quality of graduates because of a number of challenges facing these institutions of higher learning.

With regard to the challenges facing the delivery of quality education in institutions of higher learning, the Higher Education Authority committee, conducted an assessment on education science and technology in Zambian Universities to established challenges facing higher learning institutions. The University of Zambia (UNZA), which is the oldest and most preferred higher learning institution in Zambia, was used as a study case whose results can relate to other higher learning institutions. The committee reported in 2014 that since UNZA was opened in 1966, the institution had accumulated over 24, 000 students with staffing levels of above 2,500 employees by 2014. Being a public university, the Institution's operations were largely financed by the Zambian Government. However, for over two decades, the University had not been fully funded as per its budget. Often times, Government allocations fell far short of the

institutional budget. To this end, managing the University of Zambia had been more of innovation by its Council and Management through generating funds for operations. The lack of adequate financing for higher education was not only peculiar to the University of Zambia, but to many other public universities worldwide. The recent upgrading of some of the public colleges to universities would no doubt de-congest UNZA and the Copperbelt University (CBU) in terms of student enrolments. Specifically, the committee reported that public and private universities were beset with the following challenges.

Firstly, the institutions were faced with low staffing levels. In every institution, the core resource of any university lay in its diversity of highly qualified and skilled, academic, administrative and technical staff. However, this is not present in most institutions. In 2014 for example the University of Zambia, for instance, has a total of 598 full-time lecturers, while the total establishment stood at 967 against a total population of over 20,000 full-time students, translating into a lecturer student ratio of 1:33 against the ideal ratio of 1:10. This was compounded by the lecturer attrition rate that stood at 4 per cent per annum. The leading cause of attrition was death and labour relocation, which constituted 12.5 per cent of all annual attrition. Similar results are observed in private universities which are characterised by low staffing levels without proper qualifications (Masaiti and Mwale 2017).

Another challenge facing institutions of higher learning is poor infrastructure. The infrastructure of a university includes the lecture theatres and rooms, libraries, students' hostels, the offices for central administration and office spaces in schools, directorates, institutes, centres and units. However, while the figures for student enrolment had been steadily increasing due to pressure to enrol more students as a result of expansion at secondary and primary school levels, the facilities mentioned above had remained the same for years, leading to over-crowding. The following are the key infrastructural related problems identified by the committee. (a) Dilapidated infrastructure and poor physical working and learning environment. Much of the infrastructure was not user and gender friendly, especially to the physically challenged. (b) Inadequate and poorly- equipped lecture theatres, libraries, laboratories and offices. (c) Poor state of infrastructure - infrastructure, particularly in public institutions, was in a state of disrepair due to inadequate funding. While universities had embarked on rehabilitation of some of the infrastructure, budgetary constraints had hampered progress. It was noted that much of the rehabilitation had focused on provision of temporary solutions at

the expense of long term ones. Inadequate accommodation was also a big challenge in universities. For instance, UNZA had a total of 3, 700 bed spaces against a population of 20,000 full-time students. This meant that the University was only able to accommodate 19 percent of the students. (Masaiti and Mwale 2017). For new public institutions such as Nkrumah University, the university infrastructure was designed for a small student population, but there was an increasing number of students which was unmatched by facilities and this had impacted negatively on the quality of education. Over the years, no corresponding additional infrastructure had been made available, making the number of students admitted in the higher education institution not proportionate to the facilities available. However Nkrumah had new facilities under construction. (d) The financing model of higher education in public universities was outdated and remained one of the major destabilising factors in higher education. Institutions such as Nkrumah have at times gone for the entire year without receiving any grant from the Government. The grants or recurrent departmental charges were, if they were disbursed, less than the unit cost of students. This usually forces the University to cut down on some of its core academic activities. As the politics pertaining to the increase in fees rage on, the quality in the provision of education had suffered. Fees charged at most public universities are lower than those charged at some private secondary and pre-schools in the country. (e) The ICT infrastructure was currently inadequate to meet the dictates of modern learning, research and teaching. (Lecturer, 2017)

Further, these higher learning institutions are faced with inadequate teaching systems. Despite their latent capacity to provide a wide range of academic programmes, staff at public universities did not have adequate equipment for efficient delivery of lectures and for carrying out research. This was compounded by the high teaching loads and the high lecturer-student ratio and which in turn affected the teaching schedules. This is further worsened by poor research output: The Committee was further informed that Research and Development in any university was important for the attainment of academic excellence. While public universities have a critical mass of skills, there was inadequate research taking place due to the following problems: (a) meagre funding for research; (b) academic seminars were no longer part of the schedule of teaching and research in most schools due to overloads on existing staff; and (c) journals were printed outside the University and this has financial implications. (Higher Education Authority committee report of 2014)

Most institutions are running on inadequate financing and financial management systems. The University of Zambia and other public universities for instance, Nkurumah University, depend on Government grants, constituting 54 per cent of its budget, while tuition fees constituted 36 per cent and other incomes constituting 10 per cent. Most of the funding covers personal emoluments and partly operational costs. The Committee learnt that very little was released for maintenance of infrastructure and construction of new additional infrastructure. In addition, there was inadequate financing generated from both tuition and other income generation activities due to charging of fees that were not cost-effective. The fees coming from Government sponsored students were not paid in time and fully, thereby affecting operations and quality of education. The trend had resulted into these institution incurring a number of debts which had worsened the problem (Higher Education Authority committee report of 2014). For example, terminal packages for all categories of staff still continue to be a major contributing factor to UNZA's and CBU's indebtedness. The public universities were also heavily indebted with respect to statutory obligations and contributions to the Zambia Revenue Authority (ZRA), National Pensions Authority (NAPSA) and superannuation payroll creditors due to poor funding.(Masaiti and Mwale 2017)

The challenges identified above by the Higher Education Authority committee report of 2014 can be said to affect the institutions management, faculty, and infrastructure of these institutions. A number of studies on these aspects of higher learning institutions towards delivery of quality education have been conducted by a number of scholars. The following sections provides a review of this literature under management, faculty and infrastructure of higher learning institutions.

2.2 Studies on university management

The functions of management in any organization include planning, organizing, controlling and decision making (Armstrong, 2006). In higher education institutions like universities, these functions can be limited depending on whether the university is private or public. In private universities, there is no interference from the government in managements operations unlike public universities where the government exercises significant influence as it is the major source of funding (Masaiti, 2015). Vast literature exists on this topic drawing attention to the nature of the university (private or public) as these function differently based on the distinct policies adopted in each.

The primary function of university management public and private alike as far as planning is concerned is to determine sustainable sources of finance to invest in infrastructure and faculty in an attempt to enhance quality education. Masaiti (2015) in examining Zambia's public universities focusing on effectiveness and viability of revenue diversification concluded that this policy is not fully exploited in Zambia's public universities citing sponsorship of students by government as one of the causes. He contends that the revenue diversification can only be effective, viable and sustainable if government gives true autonomy to management of public universities to determine tuition and fees compounded by government sponsoring students at a truly economic per student costs. Augmenting this, Masaiti and Shen (2013) in their investigation on prospects and challenges in public universities of Zambia as a result of the governments cost sharing policy established that the major challenge that management of public institutions face is that of financing. They recommend that government should avoid unbridled interference in terms of the determination of cost sharing, releasing grants, determining tuition fees and engineering the election of university administration as this has strong negative impact on the daily operations of the university. A similar study on management challenges in public universities in Kenya also cited government unbridled interference as the major hindrance to development (Mbirithi, 2009). The author argued that erratic funding by the government made it impossible for management of public universities to operate according to plan since the universities largely depend on funding from the government to pursue capital projects which are critical to meeting the increasing faculty and student capacity. On the contrary, in a study by Riechi (2012), he argues that despite reduced government funding to public universities, total revenues for Kenyan national universities has not declined, meaning that it is possible for these public universities to survive in the face of scarce and declining resources from government. He further adds that the availability of funds from non-governmental sources has enabled Kenyan universities to move from a situation of what he called 'hand-to-mouth' dependency to one where autonomous initiative, planning and allocation has become a reality. Management of Zambia's universities can learn from this Kenyan experience by focusing on revenue diversification as a way of reducing over dependency on government funds (Masaiti, 2015). Once implemented, revenue diversification initiatives can bring about efficiency in the education system thereby enhancing accountability, responsibility, self-reliance and greater autonomy (Reichi, 2012).

Revenue diversification is one of the mechanisms that management of higher education institutions can use to improve sustainability (World Bank, 2010). The emphasis in this initiative is on higher education institutions generating their own financial resources. World Bank (2008; 2010) suggested avenues from which management of higher education institutions could derive these financial resources such as continuing training programs (degree and non-degree), services pertaining to specific vocational training, and expert or research services. In pursuit of these alternatives, autonomy is a crucial attribute in developing income-generating activities for higher education institutions as this will allow for proper management of budgeted expenditure in correspondence to developmental objectives (World Bank, 2010). In addition to this, transparency in the redistribution of generated resources is also vital. Masaiti, (2015) contends that once these measures are coordinated and adapted to national conditions, they may provide guidance on developing government policies that are centered on identifying viable solutions to the financing challenges that management of higher education institutions face.

The role that management of universities ought to play in addressing the financial constraint is paramount for their organization's survival in the competitive environment where flexibility of the education system continues to determine which learning institution takes centre of the competitive advantage (Masaiti and Chita, 2014). It is possible that management of universities can utilize the available resources to generate extra income. McNernery (2009) asserts that revenue diversification activities take the form of non-traditional interrelationships among students, lecturers and the institution with the external private and public interests. In a typical Zambian context, Masaiti (2013) notes that revenue generation for management of universities can be enhanced by exploiting industry related research and development undertaken by the faculty but funded by the private sector, consultancy opportunities for faculty members, technology transfer through patenting and licensing fees, educational activities outside of the traditional undergraduate classroom (such as continuing education and lifelong learning in various forms), introduction of parallel programs and the commercialization of physical university assets including agricultural land, halls of residence, cafeterias or even the limited sports facilities. Public universities are characterised by a lot of bureaucratic procedures when attempting to make investment decisions with much influence from the government and political interference especially in countries with multi-democratic system of governance (Masaiti, 2012). This makes it difficult for management of these universities to set and

adhere to strategic goals as change of government is more likely to affect management of the universities since the new government has in place a distinct manifesto that might not prioritize the course of the existing management (Masaiti and Shen, 2013). There are many problems affecting revenue diversification in Zambia, among the notable ones include; existing management structure of public universities, mostly which are managed as quasi-government or simply put as government parastatals (Masaiti, 2015). More specifically, Masaiti (2015) quoting SARAU (2012) identified the constraints which affect revenue diversification in these public institutions including among others; inadequate operational capital, the usage of unskilled management and lack of skilled manpower, lack of clear internal autonomy, lack of direct access to the revenue generated and in some cases low staff morale especially in the two oldest universities (UNZA and CBU). Literature on Zambia argues that the effectiveness of management of public universities lies in the degree of internal autonomy in making investment decisions and determining when to undertake capital projects with limited funds in the university accounts (Masaiti and Chita, 2014). Scholars in Zambia have recommended several measures that would make management of public universities more effective and objective in their daily operations. Masaiti (2015) strongly advocates for the need to avoid political meddling in policy of financing public universities by government especially after policies are formulated. He argues that public institutions need to be made independent in daily operations ascertaining that the government of Zambia should avoid unbridled interferences in terms of the determination of cost sharing, determining tuition fees and engineering the election of university administration and council. He further recommends that the decision-making process be decentralized thereby allowing universities to charge economic fees, among other actions. These studies revealed on management's role in university education all argue that effective management of public universities stems from the degree of institutional autonomy as well as revenue diversification.

2.3 Literature on Faculty in higher education

The best-organized institution is worth nothing if it does not have a qualified teaching staff; an unqualified staff means poor teaching and unimaginative research (Hirsch and Webber, 1999; DIUS, 2008). Bridges, (2000) ascertains that to teach curriculum as well as employability skills successfully, universities need to develop the new capacities among their traditional teaching staff and new approaches to their teaching. Higher Education Institutions will need to develop faculty and staff dedicated to engaging a diversity of learners with more complex learning

needs. Higher Education Institutions can offer different types of training for their staff so that they can be up to date with current Higher Education environment and can develop themselves where necessary (Hanna, 2003; Biggs and Tang, 2007). New generation staff should consider education as a continuing process hence the need to stay up to date with the current changing Higher Education environment is crucial in delivering quality education (Biggs and Tang, 2007).

Studies on faculty in higher education have shown that there is a relationship between faculty performance and various motivational variables such as training and development, financial incentives, employee involvement, job satisfaction among others. Kulkani (2013) in her study under the theme “literature review on training and development and quality of work life for faculties in Indian universities” concluded that Training and development programs play a vital role in improving faculty performance, updating their knowledge and enhancing their personal skills thereby avoiding managerial obsolescence. With the use of these programs, it is easier for the management to evaluate the job performance and accordingly take decisions like promotion, rewards, compensations, welfare facilities among others (Deshmukh et al, 2013). These training programs also help the managers of the universities in succession planning, faculty retention and motivation. The need for training and development is determined by the employee’s performance deficiency (Kulkani, 2013). Training enhances the overall performance of an organization in various ways. Because education is an on-going process constantly advancing, it is also commensurate that faculties undergo further training to stay abreast with the current practices in the higher education sector (Biggs and Tang, 2007).

Umaru and Obugus (2017) in their study on the determinants of job satisfaction of colleges of education lecturers found that excluding job retention, staff training affects efficiency in performance, quality and quantity of human resources, achievement of organizational goals, productivity, commitment, professional growth and motivation on job satisfaction of lecturers. Further, they also found that salary/wage payment decreases absenteeism and withdrawal from job and has effects on commitment, productivity and motivational desires on job satisfaction of lecturers. This is in line with Rosser (2004) who concluded that attractive remuneration packages are one of the important factors of staff retention and Lavania et al (2011) whose findings showed that faculty is more likely to remain in the same organization only if they found there career development opportunities, autonomy, power, position and involvement in decision making. On the contrary, the authors found that non-competitive salaries represented the most-cited factor in faculty retention, especially among male faculty as did Umara and

Obugus (2017). Soomro et al. (2013) proposed transparent point system for both the administration and faculty of higher education in an effort to foster retention at the same time relieving unwanted faculty. The authors argued that it should also be noted that the firing of the faculty create lots of other problems for administration, such as cost of hiring, non-availability of faculty on time among many hence suggesting that the best way to deal with this situation is that, when a faculty fails quality-wise, with whatever the reason may be (teaching, research and/or community service), higher education administration should play an intelligent role to overcome these deficiencies. Soomro et al. (2012) adds that if for instance faculty is not performing reasonable in teaching then training sessions may be provided to the faculty to overcome teaching issues, which may occur due to new environment or student behavior.

Tamilenthi et al. (2012) in their study on status, perception and evaluation of Zambia's higher education used five variables to determine the relationship between private and public higher education institutions. Their findings on lecturers' job satisfaction showed that there is a significant difference between the private university and Government University in academic satisfaction of the Lecturers with reference to time allocation for lesson preparation, appreciation and rewards for the teachers, monetary benefit for additional work load of the staff and superiors interference. The authors perceived that generally the work load, unnecessary interference and lack of appreciation prevails in the private institution further suggesting that government should monitor this kind of problem to save the teaching community. Faculty retention is very cardinal as the loss of key employees to any organization translates into unnecessary costs of replacement and also emoluments for the employees leaving therefore, to achieve quality education, universities need to retain their key employees.

2.4 Studies on university infrastructure

Hasbullah et al. (2010) in their study discuss the components of infrastructure in higher education referring to facilities such as buildings, grounds, utilities, and equipment. These they suggest will typically represent the majority of an entity's capital asset. However, facilities are normally designed or selected based on the needs of operation processes of the organization (Kasim et al, 2013). The features of facilities normally reflect the specific needs of occupying organization and occupants, thus as substantial part of the resources used during the transformation from input to output within office-based organizations, facilities can have a significant impact on the performance of the entire organization and individual employees (Hassbullah et al, 2010; Kasim et al, 2013).

In a study by Kwok-Chiu Fung (2011), he estimated that US\$ 750 billion is required for infrastructure projects in East Asia and Pacific regions during the period 2010-2020 in the education sector focusing on energy, telecom, transportation facilities, water supply and sanitation facilities. Further, the author informs that as production networks in Asian countries continue expanding due to regional and global businesses; investment is highly needed in cross-border infrastructure projects having many complex issues with them. Kwok-Chiu Fung (2011) adds that infrastructure projects need huge investments because these projects would not only bring capital but technological knowledge and knowledge of managing these big projects thus the private sector should be encouraged to play their intermediary roles.

Carpenter and Oluafa (2015) identified physical facilities of higher education as comprising buildings, land, compound, equipment's, tools, space and so on, while the non-physical facilities include consultancy, catering, security, supply, relocation and event. Both (Physical and Non-physical facilities) are required to be planned, designed, documented, resourced, provided or delivered and monitored. A report by the International Facility Management Association (IFMA) (2017) referred to facilities as organizations' resources just like human, finance and time emphasizing their facilitating role which provides all the necessary support to an organization so that it can successfully carry out its business. These strategic roles and contributions include improving quality working life (IFMA, 2017). Facilities are instrument of productivity; as Facilities includes buildings, grounds, utilities, and equipment, and will typically represent the majority of an entity's capital asset (Kasim et al, 2013). However, facilities are normally designed or selected based on the needs of operation processes of the organization. The features of facilities normally reflect the specific needs of occupying organization and occupants, thus as substantial part of the resources used during the transformation from input to output within office-based organizations, facilities can have a significant impact on organizational performance (Hassbullah et al, 2010; Kasim et al, 2013).

In a study by Isa and Wan Yusoff (2015) focusing on Nigeria's higher education institutions concluded that availability, adequacy and quality of school facilities affects the morale of the students and later has an impact on their academic performance as well as the effectiveness of faculty in delivering quality education. This conclusion is similar to that of Masaiti and Chita (2014) who conducted an overview of formal education in Zambia. The authors argue that facilities in higher education institutions must not only be available but must be adequate and in good condition in order to encourage students achievement especially in developing countries like Zambia in pursuit of quality manpower supply and well trained graduates who

can compete in the international market. If higher institution of learning legitimately wish to produce graduates who will be able to compete favorably in the international job market, there is need to pay more attention to the state of existing facilities in tertiary institutions.

2.5 General studies

General studies on higher education take many fronts to pose the most critical implications that higher education has on national development. Studies across Asia and America in relation to the implications that higher education has on national development have advocated for the improvement of higher education so as to attract foreign direct investment as a proxy for national development (Usman et al., 2014). In their study, Usman et al. (2014) concluded the following: the results of their study are in conformity with the results of (Tien, 2010) who found that higher education significantly determines the level of foreign direct investment inflows; their study also confirms the results of (Vlad, 2011) whose results showed that higher education is a more important variable than primary education in attracting foreign direct investment; their results are also in accordance with the results obtained by (Sjöholm, 2010) who observed that the determinants about locational decision of foreign multinational corporations include higher education, better institutions and liberal trade policies; and their results augment Salehizadeh (2005) who found that highly educated employees and managers significantly attract the multinational firms' investments in the United States.

Kokko (2002) pointed to the importance of improving the education level and human capital to such an extent that labor force can quickly and easily adapt the foreign technology and both of these variables can lead to sustained economic growth of the country in the long run. Private sector participation can play an important role in improving the tertiary education in countries where Multi-National Corporations are contemplating to invest (Kokko, 2002). Kokko (2002) argued that private sectors Multi-National Corporations are actively playing an important role of improving the universities and institutions in the host countries alongside imparting scholarships for education. Spillover benefits of these investments in higher education can only be realized when local firms have the capacity to absorb foreign technology, basic level of the workforce is there and competition barriers are not high (Kokko, 2002).

Varghese (2009) explored the link between globalization and higher education by explaining cross-border movement of the institutions, teachers and students. Varghese (2009) argues that proper regulations and framework is required to be there for multiple operators from private

and cross-border institutions. If regulatory framework is absent from the equation it would not be possible to sustain the long term development of the country.

Barry (2005) focused on the connection between industry strategy of a country which is directed towards foreign direct investment and third level education system in Ireland. Barry (2005) concluded that Multi-National Corporations are investing in Research and Development in countries where local environment facilitates innovation.

Sass (2003) states that macro-economic stability, infrastructure as well as education and training are very much important to attract capital in a country. Sass (2003) found that a key problem in attracting foreign direct investment is workforce not having medium level of education and also training methods of higher education are not up to the mark.

Firms cannot sustain growth in the absence of skilled labor force and also there is a strong link between higher education system of a country and its innovation ability. Don Almeida (2010) suggests that there is a need to focus on investment in the sector of education for at least one or two decades if a country wants to improve in industrial development and knowledge-based innovation.

Shatz (2001) recommends that in order to attract fresh investment in a country there is need to develop markets, costs of trades should be lowered, improve export processing areas but among these better education (secondary and higher education) is highly important in the long run. Education hubs are being created by the people for the purpose of training and education, knowledge and using all these activities for innovation purposes. For all these activities, cross-border interactions are being used by various stakeholders. Knight (2011) further studied these hubs by including students, skilled labor and knowledge and innovation hubs.

Khan (2007) argues that well-educated skilled workforce is helping countries to move from labor-intensive to skill-based, advanced technological countries. Khan (2007) informs that South Asian countries focus on simple education level of the workforce, therefore knowledgeable and advanced skilled-based workforce is scarce in these countries. These conditions are highly detrimental in attracting foreign direct investment in these countries. Khan (2007) further argues that countries like Singapore, Malaysia, Korea and Ireland have successfully attracted and sustained foreign direct investment through human resource development. The most important thing that (Khan, 2007) described is that Singapore without

having sufficient natural resources had consistently attracted foreign direct investment through human resource development pioneered by an enhanced higher education system.

Tamilenthi et al. (2011) focusing on the barriers to higher education in Zambia and Tanzania suggested an establishment of new universities both private and public as well as more investment in existing institutions of higher education. In the same study, the authors advocate for collaboration with developed nations in the field of educational research project in order to meet the global demand for skilled manpower. Tamilenthi et al. (2012) augment that non-profit organization should be welcomed in the global level in order to reduce the education cost of the individual. It is inevitable owing to the escalating unemployment conundrum in developing countries that more vocational education institutions are established as a counter measure to mitigate the implications of this problem (unemployment) thereby encouraging self-employment (Tamilenthi et al., 2012).

According to Anitha (2012) in her study on the role of funding in higher education on national development iterated that the public Universities in Zambia, like many other universities in the region, face many challenges among which the biggest is perhaps the increased student enrolments. Enabling larger numbers of students from socially or economically marginalized group's access to the higher education and the opportunities it brings, while maintaining or improving the standards of quality of education is a line too thin to balance (Anitha, 2012). In order to do this at its best would require substantial investment in institutional infrastructure and professional development of academic staff although many of these have been made possible by external funding received by public Universities (Masaiti, 2015). Clearly Zambia's emerging universities should pay much attention to faculty retention and infrastructure development as these have already proven a menace in the already existing institutions of higher education.

2.6 Gap in literature

Very little literature exists in Zambia on studies in university education today. Nevertheless a few that is available has been reviewed to show the gap that exists hopefully which the study will help bridge.

Tamilenthi et al. (2012) in their study on status, perception and evaluation of Zambia's higher education used five variables to determine the relationship between private and public higher education institutions. Their findings on lecturers' job satisfaction showed that there is a significant difference between the private university and Government University in academic

satisfaction of the Lecturers with reference to time allocation for lesson preparation, appreciation and rewards for the teachers, monetary benefit for additional work load of the staff and superiors interference. The authors perceived that generally the work load, unnecessary interference and lack of appreciation prevails in the private institution further suggesting that government should monitor this kind of problem to save the teaching community.

Tamilenthi et al. (2011) focusing on the barriers to higher education in Zambia and Tanzania suggested an establishment of new universities both private and public as well as more investment in existing institutions of higher education. In the same study, the authors advocate for collaboration with developed nations in the field of educational research project in order to meet the global demand for skilled manpower. Tamilenthi et al. (2012) augment that non-profit organization should be welcomed in the global level in order to reduce the education cost of the individual. It is inevitable owing to the escalating unemployment conundrum in developing countries that more vocational education institutions are established as a counter measure to mitigate the implications of this problem (unemployment) thereby encouraging self-employment (Tamilenthi et al., 2012). According to Anitha (2012) in her study on the role of funding in higher education on national development iterated that the public Universities in Zambia, like many other universities in the region, face many challenges among which the biggest is perhaps the increased student enrolments. Enabling larger numbers of students from socially or economically marginalized group's access to the higher education and the opportunities it brings, while maintaining or improving the standards of quality of education is a line too thin to balance (Anitha, 2012). In order to do this at its best would require substantial investment in institutional infrastructure and professional development of academic staff although many of these have been made possible by external funding received by public Universities (Masaiti , 2015). This study hopes to investigate the emerging universities in Kabwe if such are the challenges they are also going through.

For study conducted at the University of Zambia, Chipindi. F (2009) questions whether this caution for quality education had not been abandoned after the year 2000 when the population growth at the two public University had increased by approximately 67% without accompanying capacity building (MOE,2005:107 and MOE, 2007:117). He investigates the quality quantity trade-off implications as a result of the expanded enrolments at the two public universities of Zambia. In this study, he assesses the impact of increased student populations on the quality of education, Lecturers teaching activities, and Lecturers research activities, and makes a comparison of the impacts at the two universities.

The elements that produce quality education which include management, infrastructure, and faculty were largely destroyed by factors clearly emanating from the highly expanded enrolments at the two public universities in Zambia. According to Chipindi (2009) Sixty-five per-centum of the lecturer-respondents in the study were deeply concerned by the rapid deterioration of standards in their teaching and research activities as the number of students under their courses expanded. The reduced individualized interaction between the Lecturers and their students was strong evidence of a departure from the correct mode of instruction as variously espoused by a number of writers on 'quality in education.' (Fraser, 1989). Further, environmental aspects like buildings; classrooms, boarding facilities, and libraries were incapable of handling the expanded population. Educational resources like books in the libraries and other instructional instruments were proving to be insufficient. And finally, management methods and policies for improving the quality of instructions were proving difficult to implement due to overcapacity of students to management ratio. Clearly, the over enrolment at the two universities was an expense of the quality of instructions at both Universities.

Chipindis'(2009) study established the negative impact of over enrolment on the quality of education at the Universities without corresponding capacity building. However, it is important to note that the reasons for an expanded enrolment at these two universities are; offering of education on government sponsorship and being the highly recognised universities of Zambia. This study investigates one public university and one private university not affected by over enrolment and hence its relevance.

Another study of particular importance to this topic was done by G. Masaiti and Hong Shen (2013). The Authors investigated prospects and challenges facing public universities in Zambia after the introduction of cost sharing models in these universities. Cost sharing is a policy by which all students in higher learning institutions are required to pay fees for tuition, board and accommodation (MOE, 1996). To accomplish their task, Masaiti.G and Shen. H (2013) used students perception to examine the cost sharing policy and explore its underlying factors which could make it more effective and sustainable.

The finding from this study reviewed that the policy of cost sharing was appropriate but lacked the government support in its implementation. This was so in particular because it enabled less fortunate students to be subsidized financially to pursue their studies but no clear and detailed guidelines were provided about the cost sharing policy. Furthermore,

Masaiti.G and Shen. H (2013) identify the biggest challenge and hindrance to achieving the full potential of the policy as government which still sponsors students at subsidized rates which were not commensurate with the actual operational costs which resulted in increased austerity in these institutions.

Masaiti. G and Shen. H (2013) investigates prospects and challenges in public universities of Zambia as a result of the government cost sharing policy. In fact, they investigate and establish that public institutions face the challenge of financing. Whereas this study identifies the challenges and recommends that government should avoid unbridled interference in terms of the determination of cost sharing, releasing grants, determining tuition fees and engineering the election of university administration, the study only derives its results from student perception. Clearly there was a need to also involve administration and lectures. Another recommendation of the study was that a true cost sharing model should be implemented which is more effective and sustainable. However, the Authors recognise the need to extend the study to private universities in investigating the policy and resulting institutional challenges. It is from these recommendations to investigate educational quality from a group of relevant stakeholders like administration and students, and the inclusion of private universities that this research will prove to be useful.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter presents the method used for conducting the research. It consists of the research design chosen for the research, the population for the study, sample size and sampling technique, instruments for collecting data, instruments for analysing and presenting data, validity and reliability of research instruments, and ethical considerations in conducting the research.

3.2 Research design

A research design is viewed as a program to guide the researcher in collecting, analysing and interpreting observed facts (Bless and Achola, 1988). This research adopted a descriptive survey design research method. The term survey can be used to designate any research activity in which the investigator gathers data from a portion of a population for the purpose of examining the characteristics, opinions or intentions of that population

A descriptive research involves gathering, tabulating, depicting, and describing the data collected in a study. (Glass and Hopkins, 1984). According to Burns and Grove (2003), descriptive research “is designed to provide a picture of a situation as it naturally happens”. It may be used to justify current practice and make judgment and also to develop theories. The descriptive research attempts to describe, explain and interpret conditions of the present i.e. “what is”. The purpose of a descriptive research is to examine a phenomenon that is occurring at a specific place(s) and time. A descriptive research is concerned with conditions, practices, structures, differences or relationships that exist, opinions held, processes that are going on or trends that are evident. This research adopted such a design method so as to provide a picture, explain the current state of management, faculty, and infrastructure of the emerging Universities in Kabwe. Also, this research adopted a descriptive survey research method because it does not fit neatly into the definition of either quantitative or qualitative research methodologies but instead it can utilise elements of both. Further, although survey research can yield data that are compared and analysed at a more complicated level, the simplest use to which survey data can be put is a description of how the total sample has distributed itself on the response alternatives for a single questionnaire.

Descriptive studies yield rich data that lead to insightful findings and important recommendations.

3.2 Population

The study assumed a population of all emerging universities in Zambia focusing on their management, infrastructure and faculty.

3.3 Sample size and Sampling Technique

From the population, three universities in Kabwe district made up the sample. These were one public university;- Kwame Nkrumah university, and two private universities;- Paglory university and Mukuni University. Respondents from each university constituted both faculty and management personnel with a total sample size of 80 respondents from the universities.

The sampling technique adopted was non-probability sampling technique particularly the purposive sampling technique. Non-probability sampling techniques such as quota, purposive, snowball, self-selection and convenience sampling involve subjective judgment in selecting the sample (Saunders et al., 2009, p.233) thus the sample selected may therefore not represent characteristics of the population from which it was selected. Consequently, non-probability sampling strategies preclude generalizing sample results to the population on statistical grounds although Yin (2010, pp. 99-100) asserts that it is possible to generalize findings to theory, a concept he referred to as ‘analytical generalization’.

3.4 Instruments for data collection

The research made use of both primary and secondary data. Primary data was collected using questionnaires and semi-structured interviews whereas secondary data was collected from publications on similar topics, books, journals and university records as well as existing publications from the ministry of higher education.

3.4.1 Questionnaires

The study distributed questionnaires to the selected respondents from which feedback was received. Questionnaires are regarded as reliable for the study in that respondents are given ample time to respond to the questions in the leaflet at their own convenience. Saunders et al. (2009) assert that reliability of a questionnaire largely depends on questionnaire design, structure and rigor of pilot testing. However, in view of the time constraint, the research was not able to conduct a pilot test. Thus validity and reliability of the questionnaire were largely depended on pre-coding.

3.4.2 Semi-structured interviews

Semi-structured interviews were conducted on personnel occupying management positions. The limited rigor attribute of this instrument allowed for a non-standardized approach in asking questions thereby giving the interviewer flexibility in probing for possible answers.

3.5 Data analysis and presentation

Data obtained from the research was analyzed using computer software packages such as SPSS v.16. This is an accurate tool from which analysis of data was conducted in various perspectives to review any relationships among the variables in the conceptual model. Column histograms and tables were then used to present the results. Findings are mainly proportions and percentages.

3.6 Validity and Reliability

Validity is a term used to describe the integrity of the conclusions generated from a particular research. According to Bryman, (2008), validity entails the extent to which an instrument used in research fairly and comprehensively represents the factors under study. This questions the accuracy and precision of the data and whether a repeated study conducted using the same study instruments and sample population would yield the same results. To attain validity in this study, Criterion related validity was used in this study. Firstly, the sampling procedure was purposeful as mentioned under sampling technique. Secondly, all instruments to do with qualitative and quantitative data were personally administered by the researcher who ensured that all clarifications on research instrument items were made. Further, the researcher made notes from the interviews conducted in order to further strengthen the validity of the data collected.

Reliability is the degree to which measures or results are free from error and therefore yield consistent results. In order to address the concept of Reliability, all research instruments were piloted by the research supervisor. According to Bless and Achola (1988), reliability is concerned with the degree of consistence of the results obtained from a measuring instrument. Using the research objectives and the developed research questions, repetitive corrections and modifications were made to the research instrument to make sure that the data collected using them would reflect an appreciable measure of reliability hence trustworthy. Further, a mixed method of qualitative and quantitative data type was incorporated into the research instrument in order to avoid inconsistencies (Patton, 1990) Therefore, Validity and Reliability were thoroughly addressed in this study.

3.7 Ethics

It was imperative that ethical issues are put into consideration before the research is conducted. There are simply two parties in every research namely the researcher and the respondents. It was vital that the researcher establishes an atmosphere of confidentiality with the respondents as this enabled them to disclose sensitive information which the researcher sometimes needed. In addition to confidentiality, informed consent was also paramount. Respondents were informed in ample time that a research will be conducted within their premises and they too will be participants. In addition, objectives of the research were communicated as well as the benefits that the findings of the research will have on the scope of employees work. Nevertheless, concerns raised by the employees as to how discretion of the information they had disclosed will be exercised was resolved by telling them that the results will be generalized. As a researcher, one needs to identify the best system that will ensure proper collection, storage and disposal of sensitive data once analyzed and findings yielded. This is significant because once this sensitive information ends up in the wrong jurisdiction; it could result into catastrophic consequences. This study ensured that these highlighted ethical issues were adhered to.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.1 Introduction

This chapter focuses on the presentation of findings from the data collected during the study from which conclusions will be drawn and recommendations made. The data was collected from the sample population described in chapter three, methodology. In order to have a comprehensive understanding of the data collected, the findings are presented as collected through the questionnaires and observations, and then grouped under the three aspects of the research namely, Management, Infrastructure, and Faculty

The Data collected is analysed using descriptive statistics and mainly presented as percentages of the responses from questionnaires capturing the perceptions of the respondents on various topics. The mode of presentation used is tables and column histogram as well as narrative approach to capture responses from the interviews conducted.

In the process of presenting the findings of this research, an attempt is made to present the general findings of the studied upcoming Universities as a whole, and then a distinction of public and private upcoming university is made.

4.2 Social demographic characteristics of respondents

For the purpose of this study, a sample population of 80 respondents were chosen from the study population using non-probabilistic purposeful sampling. All norms of a good sample population were followed as presented below;

4.2.1 Gender and Age of Respondents

One good characteristic of a sample population is an even, or close to even representation of both genders in the sample population in order to have unbiased results. In this study, demographic characteristics of respondents showed that 37 (46.25%) respondents were female and 43 (53.75%) were male. Most of the respondents 56 (70%) were from Kwame Nkrumah, 14 (17.5%) from Mukuni University and 10 (12.5%) from Paglory. Further result indicate that 62 (77.5%) of lecturers were married and only 18 (22.5%) were unmarried or single. These results are shown in figure 3, and table 1

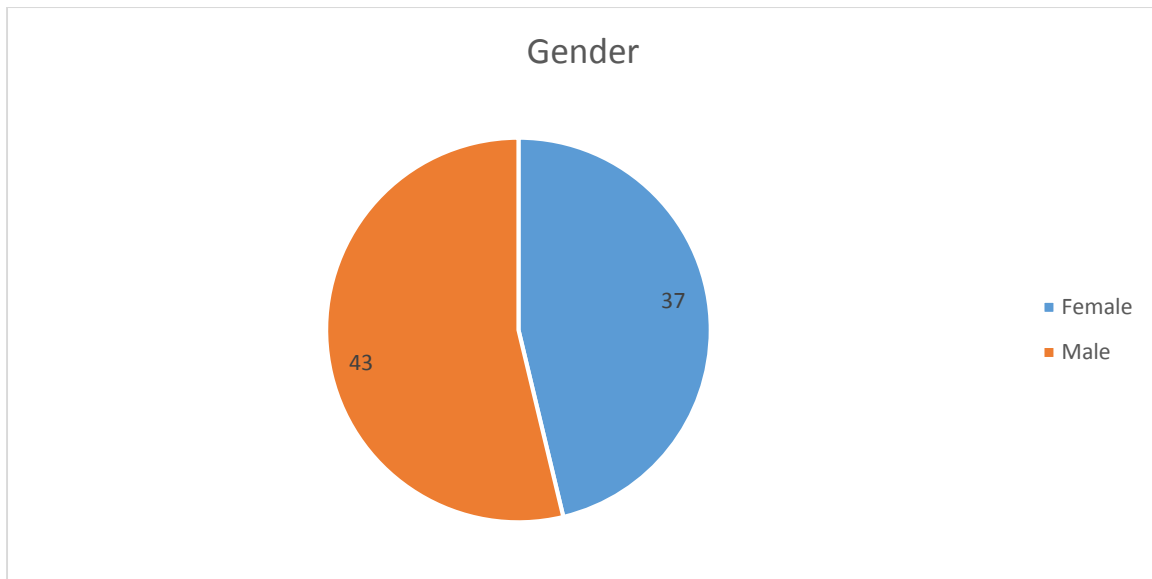


Figure 3: Gender representation of sample population

Table 1: Gender representation of Sample Population

University	Respondents		Gender	
	No.	%	F	M
Kwame Nkrumah	56	70	25	31
Mukuni	14	17.5	8	6
Paglory	10	12.5	4	6

4.2.2 Work Status of Respondents

Respondents in the study included persons from the management departments of the institutions and lecturers at the institutions though some lecturers had managerial duties as well. For the lecturers, most of them were on permanent employment condition 48 (60%), 20 (25%) were on contractual employment, 10 (12.5%) were part time employment and 2 (2.5%) were on other arranged types of employment. Figure 4 and table show the results of work status of respondents.

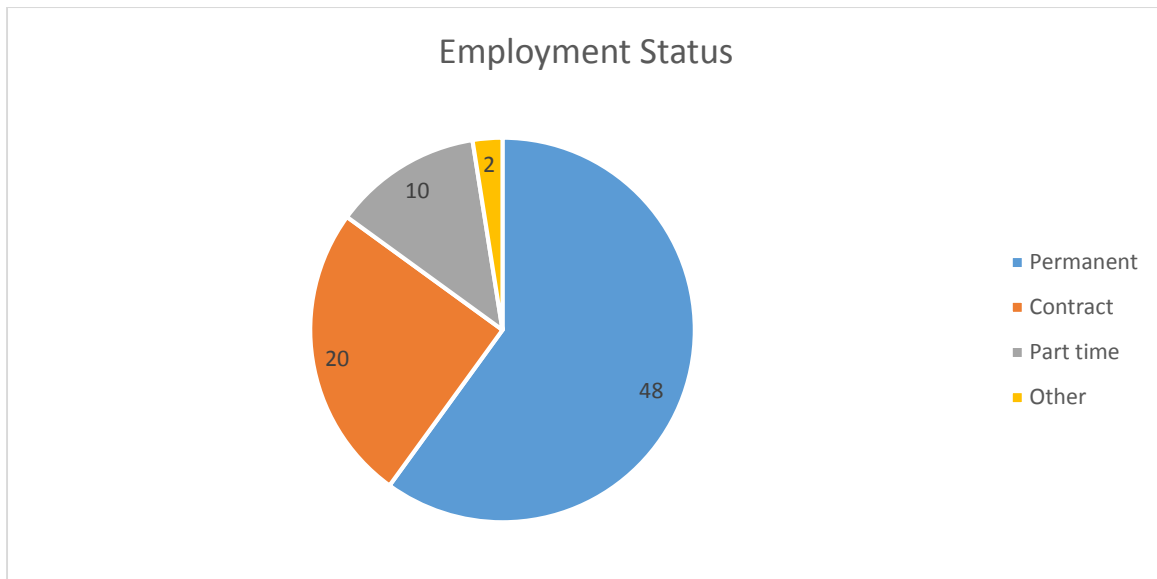


Figure 4: Employment status of sample population

Table 2: Employment Status of Sample Population

University	Respondents		Employment		
	No.	%	Permanent	Contract	Other
Kwame Nkrumah	56	70	36	15	5
Mukuni	14	17.5	8	5	1
Paglory	10	12.5	3	5	2

4.3 Findings on Faculty of the Institutions

Faculty of the institutions includes qualifications of the lecturers, the quality and adequacy of the material used in the teaching process, the state and relevance of the curriculum followed, lecturers' development initiatives, the integration of information technology into the curriculum and other elements involved in the teaching process. For faculty to attain quality, become effective and efficient in the teaching process, a great deal of factors needs to be satisfactory, adequate and available. Faculty respondents were asked to indicate their level of agreement on the 18 factors that affect the achievement of quality university education by

simply stating for each item whether Agree, Moderate or Disagree as exhibited in Table 1 below. We present the different findings from the questionnaires administered.

Table 3: Perception of Factors Affecting Quality Education

Questionnaire Question	Agree		Moderate		Disagree	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Q7 staff selection criteria is satisfactory	42	52.5%	20	25%	12	15%
Q9 resources are adequate to aid teaching	22	27.5%	30	37.5%	28	35%
Q10 information technology has been incorporated	40	50%	25	31.25%	15	18.75%
Q11 lecture halls are adequate	16	20%	14	17.5%	50	62.5%
Q15 curriculum is up to date	20	25%	10	12.5%	30	37.5%
Q15c lecturers have jurisdiction over preparation of teaching material	51	63.75%	14	17.5%	15	18.75%

Q21 the university provides faculty with opportunities to attend education conferences	25	31.25%	15	18.75%	20	25%
Q23 the university academic staff are active in research	20	25%	10	12.5%	50	62.5%
Q22 the university offers sponsorship for faculty to further their education	28	35%	20	25%	32	40%

4.3.1 Qualifications of Faculty

As shown in table 1, regarding the selection criteria for faculty driven by both qualification and experience (Q7), 52.5% of the respondents agreed, 25% were moderate and 15% disagreed. Excellence in teaching is determined by factors such as the inspirational nature of individual lecturers, their qualifications, experience, the organisation of presentations, their interaction with students as participants and how well the information provided meets the learning objectives of the course. On the faculty of the institutions, the complete qualifications of the lecturers were a difficult question to ascertain as the respondents sometimes choose not to answer. Fortunately, some findings were obtained enough for the purposes of this research. Table 4 shows the number of lecturers by level of qualifications and sex for Public University investigated.

Table 4: Table of Public university lecturers' qualifications (10/7/17)

Level of Qualification	Male	Female	Total
PhD	3	4	7
Masters	42	29	71
Bachelors	4	0	4

From the table above, the Public University has a strong faculty based on lecturers qualifications. As laid down in the procedures for establishing a university (Education Act NO 136, 1992), an institution offering should contain faculty of higher qualifications compared to the programmes it offers. This was clearly observed in the case of Public Universities where degree holders are taught by Masters and PhD holders with a very little number of degree holders. However, the scenario was different for the other two private universities. For the private universities, the number of lecturers fluctuates according to the students' needs, and some are still diploma holders lecturing degree programmes. Student lecturers are often used who instead of just tutoring are sometimes offering lectures. Therefore, these emerging universities are facing a number of challenges on their faculty in their attempt to provide quality education.

4.3.2 Teaching Resources

As far as lecture halls being adequate to meet the teaching requirements (Q11) was concerned, only 20% of the respondents agreed with 17.5% moderate and the majority 62.5% disagreeing. Concerning the adequacy and availability of resources to aid the teaching process (Q9), 27.5% agreed, 37.5% were moderate and 35% disagreed.

4.3.3 Curriculum, and Information and Communication Technology

In the case of curriculum being up to date (Q15), 25% agreed, 12.5% were moderate and 37.5% disagreed. Similarly, when asked whether lecturers had jurisdiction over preparation of teaching material (Q15c), the majority 63.75% agreed, 17.5% were moderate while 18.75% disagreed. Incorporation of information technology to enhance the teaching process (Q10) had 50% respondents agreeing, 31.25% moderate and 18.75% disagreeing.

4.3.4 Sponsorship of Faculty

Crucial to the study was determining whether faculty are given opportunities to attend conferences on education to keep them abreast with current affairs in their sector (Q21), 31.35% agreed, 18.75% were moderate and 25% disagreed. In a similar context, concerning faculty being active in research (Q23), 25% agreed, 12.5% moderate and the majority 62.5% disagreed. Lastly, on the item involving sponsorship of faculty to further their education (Q22), 35% agreed that these opportunities were available, 25% were moderately in consent while the majority 40% disagreed.

4.3.5 Motivation of Faculty

However, faculty were further asked how long they intended to stay in their organizations upon identifying the above factors. The majority 41.25% (33 respondents) said between 2 and 5 years, followed by 36.25% (29 respondents) who said more than 5 years, then 13.75% (11 respondents) who said more than 10 years and finally 8.75% (7 respondents) who said less than 2 years as shown in figure 3 below. It was evidenced that respondents who had already worked for more than 5 years had intentions of not wanting to stay for another 5 years. One respondent commented that;

“...concerning how long I would stay here, I can't say for sure but am confident for not more than five additional years again. This is because the room for taking on more responsibility is narrow. Senior staff positions have been held for decades and are non-rotational like in other public universities, for example UNZA and CBU. (Lecturer, Public University, 2017)”

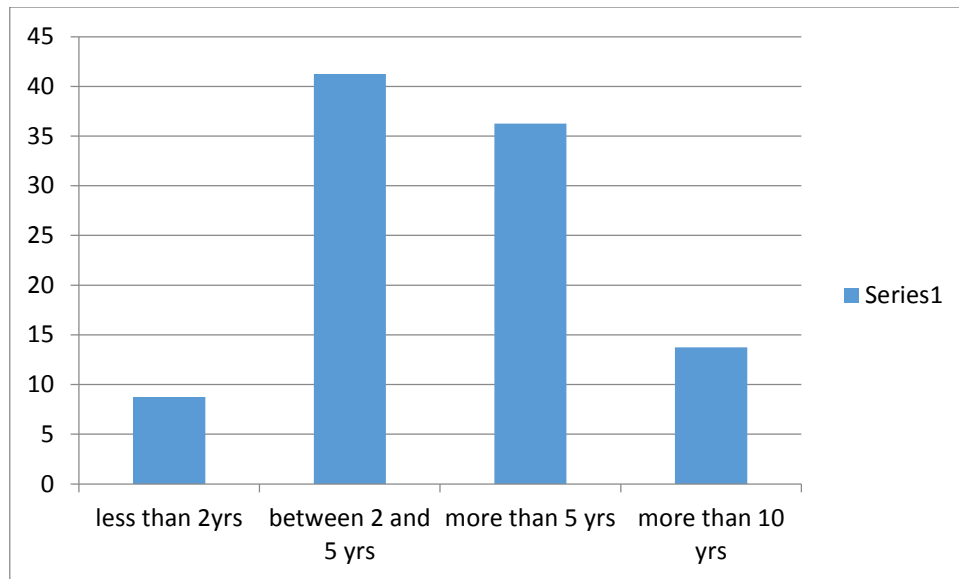


Figure 5: Intentions to Stay in Organisation

The intention to stay in the organization was greatly influenced by the motivation variables put in place by management of the organizations. Faculty were asked to rank the motivational variables which they thought would make them stay in the organization quite longer. It was actually surprising that most respondents did not so much regard salary as the main variable that would influence their stay. In fact, 65% (52 respondents) said their salary was fair, 18.75% (15 respondents) said it was good, 8.75% (7 respondents) said it was very good, 7.5% (6 respondents) said it was poor and non-said it was excellent. The motivation variables influencing faculty decision to stay in the organization in their order of supremacy as perceived by faculty are exhibited in table 2 below.

Table 5: Motivation Variables influencing decision to stay as perceived by faculty

Motivation variable	Frequency	Percentage
Training and sponsorship for further education	51	63.75%
Better allowances and benefits	48	60%
Inclusion in decision making	39	48.75%

Change in supervision style	27	33.75%
Better salary	28	35%

4.3.6 Comparison of Public and Private University Faculties under Study

The results were grouped under lecturers qualifications, quality of instructions delivered, and the teaching material. The results from the respondents were analysed and results are shown below.

Table 6: Results On Faculty Of Institutions

Research Aspect	Public University		Private University	
	Response	State%	Response	State%
Lecturers Qualification	Very Good	90	Above Average	65
Instructions Delivered	Good	80	Above Average	70
Teaching Materials	Good	75	Above Average	65

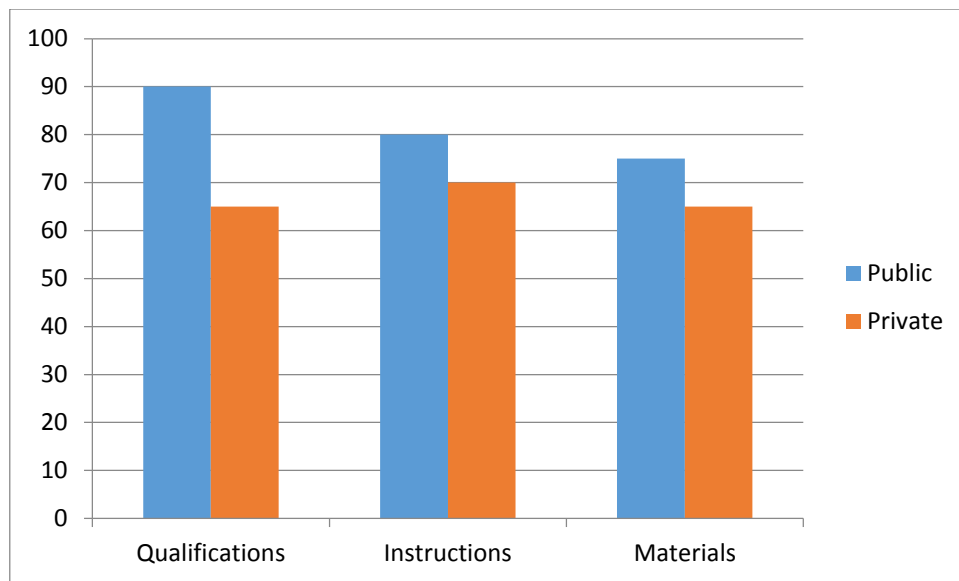


Figure 6: Histogram of Faculty of Institutions

4.4 Findings on the Infrastructure of the Institutions

Faculty responses on the adequacy of infrastructure towards fostering quality education were investigated and the results were categorised as strongly agree, agree, moderate, disagree and strongly disagree. From the respondents, 2.5% (2 respondents) strongly agreed to infrastructure being adequate, 3.75% (3 respondents) simply agreed, 11.25% (9 respondents) were moderate, while 35% (28 respondents) disagreed and the majority 45% (36 respondents) strongly disagreed.

The state of infrastructure was observed to be so inadequate that both the private and public universities had to hire building space elsewhere in order to conduct classes. In Nkurumah University, some projects which were commenced in 2009 including building of a science laboratory, and residential houses for lecturers have not yet been completed. For the private sector, many of their plans to improve their infrastructure are just on paper due to lack of finance. Management mentioned that the institutions are ready to expand the number of lecturer theatres and build ICT rooms. This has greatly brought down the state of infrastructure in these universities. Worse enough was that sometimes, classes had to be conducted in car park at the investigated public university.

One respondent in the public university admitted that;

“Sometimes we are forced to conduct lectures in the car park because of inadequate lecture rooms and the need to cover syllabus material on time. This has an adverse effect on the lesson as students concentrations are easily divided and teaching resources are not present. (Lecturer, Nkurumah University, 2017”

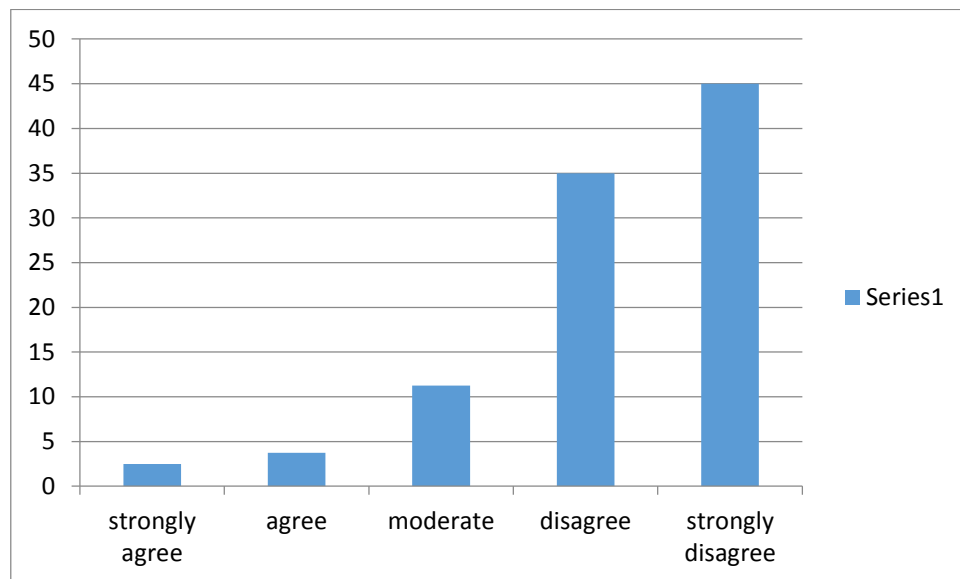


Figure 7: Infrastructure adequate in fostering quality education

4.4.1 Comparison of the Infrastructure of the emerging Universities

Respondents were asked to comment on the state of their respective institutional infrastructure. This comprised of the staff offices, Lecture halls, the libraries and other facilities like the sports hall, and computer rooms. The results were grouped under staff offices, lecture halls and other facilities and the following are the results after the analysis.

Table 7: Results On Infrastructure Of Institutions

Research Aspect	Public University		Private University	
	Response	State	Response	State

Staff Offices	Very Good	95	Average	50
Lecture Halls	Very Good	65	Above Average	60
Other Facilities	Above Average	70	Below Average (poor)	30

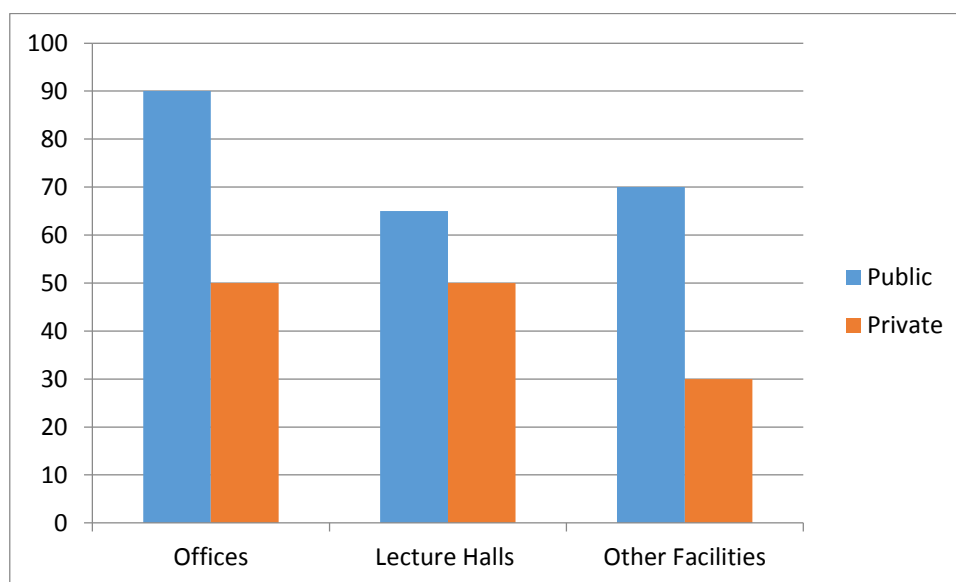


Figure 8; Histogram of Infrastructure of Institutions

4.4.1 Library Infrastructure

In comparison, library infrastructure in public university was observed to be better than in the private universities. The public university had a small library in capacity now that it was converted to a university. However, the private universities had relatively smaller library infrastructure for its population. It was also noted that a bigger library was under construction in the public university as funds had already been released by the Government of the Republic of Zambia (GRZ).

4.4.2 Lecture Halls

Lecture halls, tutorial rooms and other academic rooms for teaching purposes are an important aspect in the delivery of quality education. In this study, both the private and public universities were observed to have low standard lecture halls which were small in holding capacity and number. However, management in both types of universities have commenced building modern infrastructure for lecture halls.

4.4.3 Lecturers offices and Accommodation

Concerning lecturers' offices and accommodation, both types of universities have offices below standard and inadequate in number with regards to the lecturers population. In the public university, lecturers are sometimes forced to share offices with personnel from different departments' in order to have a place where to work from after normal lectures. Worse enough is in the private sector where some lecturers have turned their vehicles into offices. One lecturer in the private sector lamented;

“ the inadequacy of lecturers offices is a challenge to overcome daily at this institution. If I haven't gotten permission to operate in someone's office, or they are present, I am forced to conduct my office work in my vehicle. (Lecturer, Private University, 2017)”

4.4.4 Other institutional infrastructure

University institutions require other infrastructure that facilitate the delivery of quality education. One such an infrastructure is the schools multi-purpose hall where exams, other academic functions, and indoor sports activities can be conducted. In this study, the public university had a multi-purpose school hall though small in capacity. For the private universities, one does not have while the other has a very big multi-purpose hall which sometimes hosts activities for the province.

4.5 Findings on Management of the institutions

It was discovered that management at the public university had changed because the Government had sent the new Administrative Staff from Mulungushi University to help in the fully transitional of Nkrumah into a full flagged university. For private university management is quite fair in the running of the University as the same Staff managed the University when it was a college.

4.5.1 Challenges on Management

An important question that was investigated to establish the state of management of the institution was “What are the strategies put in place by management of emerging universities to cope with challenges hindering delivery of quality education?” To answer this question,

semi-structured interviews were conducted with management personnel responsible for making decisions that govern the daily and long term operations of the organization. First and foremost, respondents were asked to identify the major challenges they face in running the organization and specify how these hinder the achievement of quality education. Although a number of challenges were raised, the study streamlined all of these into three main themes namely financial constraints, poor and inadequate infrastructure and faculty motivation and retention. Under financial constraint, one Management interviewee in the public university mentioned that;

“ the most challenging issue in management is the financial problem. We survive mostly on tuition fees brought in by the students. Distance students also bring in something to suffice. However, this is not enough as our financial burden outweighs our receipts. Further, Government grants are always delayed to be received and this further worsens the situation. (Administrator, Public University, 2017)

The financial problem was also present in the private universities. To clearly convey its adverse effects to the management of the institutions, one interviewee from the private university had the following to say;

“ it is extremely difficult to manage an institution based on student fees alone as a source of finance. Even though we have receive funds from both distance students and full time students, we are always under budget in terms of funding. This has prompted us to include the hiring out our infrastructure in attempt to lessen the financial problem. (Administrator, Private University, 2017)

These exact sentiments were shared by both private universities as observed in the findings. The effects of financial constraints were then spread to other areas of the institutions For example, because of financial constraints, the respondents said that it was difficult to engage capital projects due to limited sources of finance and thus the expansion of the organizations are limited. Concerning infrastructure, respondents acknowledged that the state of the existing infrastructure is not only inadequate but also poor requiring refurbishment.

Further findings on management challenges were regarding the retention of key employees. Crucial to the survival of an organization is the aspect of human resource. The respondents attested to the fact that the growing labour market has brought a lot of competition which consequently has resulted in the loss of key employees as they pursue attractive and better

conditions elsewhere. The challenge is retaining these key employees to the organization amid limited financial resources.

4.5.4 Comparison of the Management of the emerging Universities

Under the investigative aspect of “Management”, the state of the management structure of the institutions was investigated in reference to the standard management structure recommended for Universities. Management functions of motivation and retention, generation and use of resources and funds, development of curriculum and integration of information technology were grouped under management functions. A review of strategies under the different aspects needed to improve the institutions like strategies for infrastructure development, strategies for increase of financial resources and others, were grouped under management strategies. These results were analysed from the perceptions of the respondents and rated using the average of their perception.

Table 8; Results On Management Of Institutions

Research Aspect	Public University		Private University	
	Response	State	Response	State
Management Structure	Almost Complete	90	Above Average	70
Overall Management Functions	Fairly Good	80	Above Average	60
Strategies	Good	85	Above Average	65

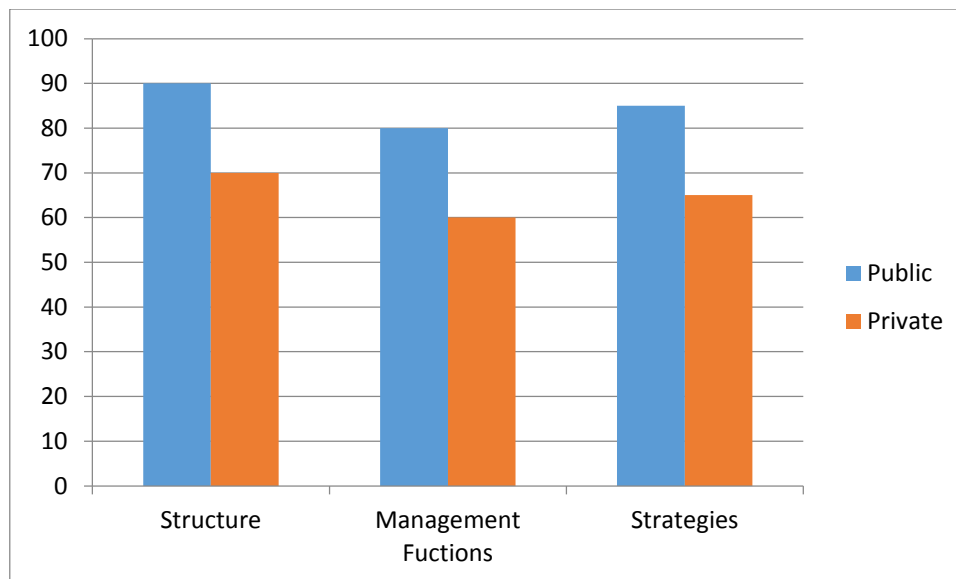


Figure 9; Differences in management of institutions between public and private universities

4.5.3 Strategies for Mitigating the Challenges

Nevertheless, upon identifying these challenges, management personnel were asked to outline the measures that they have put in place to cope with the challenges. Firstly in trying to increase sources of finance, it was a prominent response among the personnel interviewed to increase either student fees or student enrolments although this would require consultation with various stakeholders before either of the two suggestions is adopted. Another strategy to lessen the financial challenge was the introduction of distance students who bring in additional finance in both the private and public universities under study. Further, it was also a common response on the infrastructural challenges being faced at the universities. Management personnel referred to this as a long term strategic objective in ensuring continuity. Capital projects were already underway for the construction of 2 lecture halls and 2 hostels for example at Kwame Nkrumah University and also the consideration to expand library space at Mukuni University although discussions were still in progress. Basically, management of the universities are aware of the long term implications inadequate infrastructure poses to the provision of quality education hence the study attests that indeed measures to build infrastructure capacity has been highly prioritized in all the institutions sampled. In the matter concerning faculty motivation and retention, the institutions policies on this are guided by those of the Ministry of higher education as the majority of the faculty employed by the public university are in the civil

service. Most of these policies are not effective owing to inadequate financing to implement them hence employees are presently demoralized and lack motivation due to their inadequate salaries for instance which are sometimes not paid in time. This does not preclude personnel in management. Not much can be done on monetary remunerations as motivational avenues owing to the inadequacy of financial resources. However, non-monetary alternatives can be enhanced as a proxy for monetary alternatives with careful and detailed implementation plans.

4.6 Summary

Chapter four of this dissertation presented the findings of the research as collected from the research instruments. Generally, the emerging universities under study are faring poorly in all the three aspects of the study. Their faculties are challenged by unqualified lecturers, insufficient resources among other. The state of infrastructure in these universities is also inadequate as shown in the findings. On management, the inadequacy of funding has placed a huge constraint of management functions. The next chapter discusses the findings.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1. Introduction to the Chapter

This Chapter presents a discussion of the major findings of the study in chapter four. The discussion is based on the research objectives, and the researchers view. Firstly, a discussion of the challenges facing the universities under study is presented in terms of management, infrastructure and faculty of the institutions. Then a general discussion derived from the results is presented.

5.2 Discussion of the Findings

From an early conception of the university education in Zambia, the pursuit for quality education has always been the goal. This meant that if the University was to carry out its mission effectively, the dimensions for the delivery of quality instructions and ensuring better educational outcomes should be met. The University must work in an atmosphere that makes this possible, have qualified lecturers, adequate infrastructure, and a sound management staff. When these aspects for quality instructions are either absent or endangered, the quality of education at the Universities begins to be brought into question. Though major public universities in Zambia (UNZA and CBU) are scoring appreciable success in this aspect, this is not the case with emerging universities. Therefore, this research sought out to investigate management, faculty and infrastructure of emerging Universities in Kabwe district of Zambia. These universities have emerged as a result of the need to increase the provision of university education in Zambia.

5.2.1 Mixed picture of management and management styles

In this study, management of the emerging universities in Kabwe was investigated as an aspect necessary for delivering quality education. The study established a mixed picture of management in discharging of its functions with different management styles. For the public universities considered, Kwame Nkurumah university, management structure was determined to be 90% completed, management functions were calculated at 80% execution rate, and management strategies at 85% rate. Considering the management structure, this public university has the recommended structure which comprises the senate of the institution and other qualified staff. However, this universities is yet to have the vice chancellor appointed by the government through the ministry of higher education as needed in a complete university

structure. Further, this universities was affiliated to the Old Universities of Zambia (UNZA and CBU) Affiliation in this context means that the diplomas that are offered by this institution are underwritten and approved by the these old Universities. It also means that the courses offered at this college are usually agreed upon by the two sides while the Ministry of Education acts as the main guide. There is also continued collaboration between the staff of these Old universities and those of the affiliated new university through committees such as the In-service Education Advisory Services. This makes their management structure very competent. Under management functions, we observed that better motivational strategies are in place with the provision of training and sponsorship for further education being the most appealing one. In addition, management function of provision of better salaries, human resources management, and recruitment strategies were highly rated by most of the respondents. When considering strategies, the management of these public universities have good strategies for retention of employees with better benefits and strategies of improving the infrastructure. However, in their attempt to perfect their management functions, they are often faced with the challenge of limited resources and this makes the delivery of their functions challenging and so most of their strategies are only on paper.

On the other hand, the emerging private universities considered in the study was observed to be fairing badly in comparison with the public universities. Firstly, no comprehensive management structure recommended for universities is in place. This university is run by the proprietors who make up the administration. Secondly, there is no strict adherence to the need for qualified staff as the institution has financial challenges to accommodate a fully qualified management staff. Under management functions, some motivational strategies like sponsorship for further education, and inclusion in decision making are limited only to a very few staff members. However, it is important to note that this institution recognises these challenges and has come up with strategies to curb these challenges though increasing their financial capacity still remains a challenge. This is because their main source of finance is through tuition fees which cannot be increased without limit to meet their needs.

In this study, management of an institution refered to the administrative and management staff of an institution. These are tasked with overseeing the affairs of the institution including planning, development of institutional management structure, management of employees and students, and other management functions. In an effort to identify strategies put in place by management of emerging universities in coping with challenges affecting quality education,

three main challenges were uncovered in this study (although not new). First is financial constraint, second is infrastructure inadequacy and third is faculty retention.

Public Universities rely heavily on government funding to execute most of their operations (daily and long term) as confirmed from this study. In fact, Masaiti (2012) asserts that about 50 percent of the total nongovernmental revenues for Zambia's public universities accrue from academic related income generating initiatives meaning that external sources of revenue for these institutions, which include university linkage programs and donor grants account for far less. Budget allocations to Public Universities has continued to decline as student sponsorship to these universities is on the rise hence governments effort to fund both management and students continues to remain imbalanced (taking priority of one than the other). Management of public universities ought to consider revenue diversification options as proposed by Masaiti (2015) in an effort to reduce dependency on government funding. Quite a number of challenges have been highlighted by Masaiti (2015) and SARAU (2012) on the implementation of revenue diversification but critical to this study are challenges emanating from existing management structure of public universities, inadequate operational capital, the usage of unskilled management personnel and faculty, lack of clear internal autonomy, lack of direct access to the revenue generated and low staff morale. These were a common response from the interviews conducted thus the study suffices to note that strategies or policies to help management of public universities cope with the challenges uncovered in this study must focus on remedial action to build financial capacity as this is the pillar of all other challenges.

Employee retention also proves to be a menace not only in education institutions but also in most organizations regardless of discipline or sector. In education however, this has serious negative implications. Institutions of learning rely heavily on competent faculty for quality delivery of education. Losing these employees not only costs the organization but it poses a threat to its long term survival as replacement of these employees with others is a challenging task. However, to avoid this, it calls for effective motivation measures. Given that public universities are already financially impaired in Zambia like many struggling developing countries, obviously monetary measures cannot be so much reliable later on effective. Non-monetary measures hence must be encouraged. Recognition for instance can prove effective in this regard. In fact Naluyela (2011) advocate for the same although their focus was on Zambia's Ministry of Education employees.

5.2.2 Inadequate infrastructure but different extent

The second aspect in this study for delivering quality education by emerging universities was infrastructure. Infrastructure is an account of the staff offices including lectures offices, lecturing halls, the library, information technology rooms and sporting facilities. The state of infrastructure in the emerging universities was established to be poor and the capacity inadequate to meet the increased enrolments of students (a measure by management to increase revenue). Results from faculty respondents showed that, 2.5% (2 respondents) strongly agreed to infrastructure being adequate, 3.75% (3 respondents) only agreed, 11.25% (9 respondents) were moderate, while 35% (28 respondents) disagreed and the majority 45% (36 respondents) strongly disagreed. Respondents in total who disagreed and strongly disagreed accounted for 80% of the sample which means that faculty are not satisfied with the current infrastructural capacity in the universities. Inadequate infrastructure has strong implications on the quality of education offered by an education institution. This finding is in line with Isa and Wan Yusoff (2015) in their study focusing on Nigeria's higher education institutions where they concluded that availability, adequacy and quality of school facilities affects the morale of the students and later has an impact on their academic performance as well as the effectiveness of faculty in delivering quality education. Similarly, Chita (2014) in their study under the theme 'An overview of formal education in Zambia' argued that facilities in higher education institutions must not only be available but must be adequate and in good condition in order to encourage students achievement especially in developing countries. Other scholars who advocate for proper and adequate infrastructure in education institutions include: Hasbullah et al. (2010); Kasim et al (2013); and Carpenter and Oluafa (2015).

In this study, the public universities were rated at 95% for staff offices, 65% for lecture halls, and 70% for other facilities. The shortages in infrastructure percentages were as a result of the low capacities in comparison to lecturers, and students using them. It is worth noting that the two public universities investigated also had information technology rooms, and sports halls. Unlike the public universities, the private university was found to have poor to average infrastructure. Lecturers' offices were found at 50%, lecture halls at 60% and a poor 30% on other facilities. Not all lecturers had offices, the lecture rooms were very low on capacity in relation to the student population, and there were little or no sporting facilities.

5.2.3 Better qualified faculty in Public Universities than Private Universities

On the final element of investigation in the study, the faculty of the institutions was investigated. In particular to the research study on faculty, public universities lecturers were mostly well qualified with Masters Degrees, and a very few with Doctorate Degrees (PhD). The respondents acknowledged the presence of good teaching materials and very rich curriculum. Further, most of the lecturers were on permanent employment basis. The respective rating from the study were; Lecturers qualifications 90%, delivery of instructions 80%, and quality of teaching materials 75%. Through mostly qualified lecturers, good teaching materials like up to date curriculum, projectors and well-staffed libraries, good quality instructions were being delivered. However, the institutions had their own problems in-terms of faculty as well. One problem facing the faculty of the institution was the lack of an all-inclusive support strategy for research and furthering of education of education for the lecturers. This was as a result of the problem of financial constraints. On the other hand, the faculty of the private university investigated was just above average having; lecturers qualifications as 60%, delivery of instructions as 70%, and the quality of teaching materials as 65%. It is sad to note that even though some lecturers are qualified with Masters Degrees to teach undergraduate courses, some even have diplomas but are teaching undergraduate degree programmes. Further, only a few lecturers are on permanent employment with low chances of them being sponsored for further educational development. Teaching materials like text books and the library are also not well equipped. These challenges have been named as a result of the financial challenges the university faces.

It was determined by the study to identify factors that hinder delivery of quality education in emerging Public Universities as perceived by faculty. Firstly, 62.5% of the respondents cited inadequate lecture halls and lack of involvement in research activities by faculty as the major factors hindering delivery of quality education. As argued in the study, infrastructure plays a crucial role in fostering quality education. Research on the other hand equips faculty with the ability to cultivate new and better methods of teaching as well as put this into practice. It is very cardinal that faculty is active in research. In line with this, sponsorship package for faculty to enhance their education was perceived to be inadequate (40% of the respondents disagreed). These packages allow faculty to undergo training and acquire more knowledge that not only benefits the organization but also faculty as well. Kulkani (2013) in her study under the theme “literature review on training and development and quality of work life for faculties in Indian universities” concluded that Training and development programs play a vital role in improving

faculty performance, updating their knowledge and enhancing their personal skills thereby avoiding managerial obsolescence. The state of curriculum was perceived not to be up to date as the majority of the faculty (37.5%) stated. This affects the delivery of quality education. Another finding from the perceptions of faculty was the inadequacy of resources to aid the teaching process where the majority of the respondents disagreed (35%). The focus of this question was to capture the availability of such resources as books, tools, computers, printers, projectors among others in the delivery of quality education and these were perceived as inadequate for faculty.

The implications of the findings of this research on the conceptual framework is that these emerging universities are prone to be highly unsuccessful regarding educational outcomes. In the conceptual framework adopted for this study, having a good faculty in terms of teaching staff only as established in this research is not enough for good education outcomes. The study established that both public and private emerging universities have inadequate infrastructure and poor management, though with varying degrees, meaning that the three dimensions needed for good educational outcomes are lacking. However, the theory – practice relationship does not have a correlation as presented in the conceptual framework. According to Willower, (1980), the theory- practice gap stands as a Gordian knot of educational administration. Therefore, although the conceptual framework gives the results of the quality of education from these institutions to be highly unsuccessful, it is just what it is, a conceptual framework as practical results may be otherwise.

5.3 Summary of the discussion

Quality of education in higher institutions of learning as argued in this study is of paramount importance for countries that continue to seek national development. This lies in the fact that graduates from these institutions are responsible for taking up the course towards developmental issues by applying what was learnt in school. For quality education to be achieved, all stakeholders (students, parents, university management, faculty and government) must play their roles effectively. For a long time now, Zambia's Universities have been haunted with challenges that have been the aftermath of strategic errors since their inception. For instance, escalating enrolments with limited infrastructure for their sustainability is a conundrum that previous government regimes in Zambia have only managed to procrastinate yet failed to fully apprehend. With examples of these problems prevalent in older Universities

(UNZA and CBU), emerging ones however are set for much worse in this dynamic environment where new paradigms of the education process bring with them sophisticated challenges. This eventually questions the state of quality education in these emerging Universities.

This study has established that the key factors affecting faculty include: Inadequate resources (books, printers, projectors, and computers); inadequate lecture halls; Curriculum not up to date; Lack of active research; and limited sponsorship for further education. It was also established that the general state of infrastructure was poor and also inadequate to meet both faculty and students teaching/learning needs. The study also uncovered three major challenges management of public emerging universities face categorized into financial constraints, inadequate infrastructure as mentioned earlier and faculty retention. Policies to cope with these challenges have already been formulated although at the time of the study much was to be implemented especially in the subject of building infrastructural capacity

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Summary

This study was aimed at investigating the faculty, infrastructure, and management of the emerging universities in Kabwe district. In chapter one, a background of the study was provided, statement of the problem presented, purpose of the study, objectives and research questions to guide the research outlined. Further, the significance of the study, delimitation and limitation, theoretical and conceptual frameworks, operational definitions of terms and structure of the dissertation were also discussed in the same chapter.

In chapter two, a thorough review of literature in line with the subject was presented. An effort was made to discuss literature from outside Africa, within Africa, and in Zambia particularly. Chapter two was summarized by a discussed of the gap in literature which this research hoped to fulfill. Chapter three highlighted the methodological issues used in the collection and analysis of the data collected in the study. A presentation of research findings and the subsequent discussion of the major findings were presented in chapters four and five respectively.

In this chapter, the conclusion to the study is presented. Further, recommendations of the dissertation based on the findings are made to various stake holders and finally, recommendations for further research is made.

5.1 Conclusion

This study investigated management, infrastructure and faculty of emerging public universities in Kabwe district of Central Province of Zambia. From the findings presented in chapter four and the ensuing discussion in chapter five, the following are the research conclusions.

Faculty of the Institutions; The research established that faculty of the institutions is not adequate for delivery of quality education. Firstly, only a few lecturers are well qualified and had enough experience. Further, factors affecting faculty like resource materials, an updated curriculum, incorporation of ITC into the curriculum, the sponsorship of faculty members for further educations were lacking in adequate amounts in these institutions. Among the outlined factors affecting faculty, it was impressive to note that these institutions are constantly trying to update their curriculum though they have been met with financial challenges lowering the standard of their curriculum. Another important variable affecting faculty was motivation. As

a result of motivation incentives in particular, the salaries, the emerging public university lecturers were better qualified as compared to the lecturers in the private universities. In comparison, the faculty in private universities is far below adequate and most faculty members are on part time as established in the study while in public universities, a large proportion of the faculty members are on full time basis of employment. In addition, most lecturers in private universities were qualified as compared to the public university.

Infrastructure of the Institutions: An investigation of the state of infrastructure of the emerging universities reviewed that these institutions were confronted with major shortage of necessary infrastructure. Lecture halls, lecturers' rooms, and the library infrastructure were inadequate to accommodate the university populations. In both types of universities, outside infrastructure like lecture rooms had to be rented to alleviate the situations. This situation was observed to be worse in the private universities where classes were also conducted in the university garage.

Management of the Institutions: In an attempt to discharge their duties effectively, management of the institutions were also observed to be faced by a number of challenges. Firstly, the right and recommended university structure were either absent or incomplete in private and public universities respectively. This posed a number of challenges in managing the general affairs of the institutions. Further, some personnel were both lecturers and involved in full time management and these made both areas of the institutions suffer. In comparison, the public universities were found to have better management structures and functionality than the private university.

The findings further reviewed that the most challenging aspect of management was their low and far inadequate finance. This affected all areas of the institution including faculty improvement, infrastructure development, and smooth management of the institutions affairs. Considering the findings of the study in totality, it can be concluded that faculty perceptions on the factors hindering delivery of quality education, inadequate infrastructure, and management problems are all as a result of inadequacy of both financial resources. Management personnel also attributed their challenges to these factors. It is now obvious that financial resources are the backbone of the future of the emerging universities as almost all the findings of the study seem to suggest strong negative implications of their inadequacy. Perhaps a notable factor not requiring a lot of finances to improve is updating of the curriculums. This

was perceived a crucial factor by faculty. It has been evidenced also that much needs to be done in the area of faculty retention as most of the faculty expressed strong intentions of not staying in the organizations for more than 5 years. These were mostly male and were married.

5.2 Recommendations

From the findings of the study, the following recommendations are made;

- There is need for all universities, and in particular emerging universities when starting up to strongly consider revenue diversification. All the factors cited as hindering delivery of quality education require finances to improve. If the universities continue to depend on one erratic source of finance, this might be detrimental to their future survival. A notable strategy that some universities' are using is the introduction of distance education which is bringing in additional funds
- The area of faculty retention also requires much attention in all universities. Qualified lecturers who have stayed with institutions for long are better adapted to use of teaching materials and other faculty challenges. Although emerging public universities might be financially impaired due to degrading government funding, instead of considering monetary rewards as the only means of motivating their faculty, non-monetary schemes should be used as a proxy. Recognition has been proven to be very effective in influencing employees towards desirable performance. This must be encouraged at all levels of the organization structure to enjoy its benefits.
- All emerging Universities should be encouraged to employ qualified staff if they are to produce quality educational outcomes. Measures should be put in place by the Government through the Ministry of Education for higher learning to state the minimum qualifications for lecturers needed in a university according to the programmes it offers. Further, monitoring teams should be established to make sure these rules and regulations are followed. Alternatively, those already established universities should be encouraged to develop sponsorship packages for further education. This can be done through partnerships with the outside community
- It is recommended that the Ministry of Higher Education should physically assess the management, infrastructure, and faculty of an institution before registering such as a University.

- And finally, it is recommended that Quality Assurance teams be mobilized for frequent quality checks in these emerging universities if they are continue providing quality education.

5.3 Recommendations for future research

The study focused mainly on identifying factors that hinder delivery of quality education as perceived by faculty as well as identifying strategies formulated by management of emerging Public universities in coping with these factors. No perceptions were targeted from students to capture their views on the quality of education they receive especially that they are the major recipients and beneficiaries. This could give a true picture from both ends (faculty and students) hence factual conclusions could be drawn.

REFERENCES

- Anitha, M.J (2012), "*The role of higher education funding in national development*," Educational Research Vol. 3(6)
- Ahrweiler, P. (2011), "*Innovation in complex social systems*," New York, NY: Taylor & Francis.
- Barry, F (2005), "*Third-Level Education, Foreign Direct Investment and Economic Boom in Ireland*," Dublin: Centre for Economic Research.
- Burke, J. and Larry, E. (2012) *Educational research: Quantitative, qualitative and mixed approaches*, (4th edition). UK: Sage publications Ltd.
- Beckey, J. (2015), "*Doing Your Research Project: A Guide for First Time Researchers in Education, Health and Social Science*," (5th ed.). Maidenhead: Open University Press.
- Bless, C. and Achola, P. (1988). *Fundamentals of Social Research Methods: An African Perspective*. Lusaka: Government Printer.
- Bryman, A. (2008). *Social Research Methods*. Oxford: Oxford University Press.
- Carpenter, C and Oluafa, A (2015), "*Post-Occupancy Evaluation of Buildings and Development of Facility performance criteria*," Journal of Architectural Engineering Vol. 1 No. 2, Pp. 77-81
- Chipindi. F. M (2009): *The Quality Quantity Trade-Off: Implications of Expanded Enrolments at Two of Zambia's Public Universities*. The University of Zambia.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). London: Sage Publications Ltd.
- Creswell, J. W., and Plano Clark, V. L. (2011), "*Designing and Conducting Mixed Methods Research*," (2nd ed.). London: Sage Publications Ltd.

Deshmukh, G.K, Sanskrity, J, Dewangan, R (2013), *“Training Redial: Three Factor Approach”* Research world, Journal of Arts, Science and Commerce, E-ISSN 2229-4686 and ISSN 2231-4172.

Don Almeida, R. C. (2010). *Government’s Many Roles in Fostering Innovation*. PricewaterhouseCoopers LLP.

Glass G. V and Hoptkings K D (1984) *Statistical methods in education and Psychology*. Englewood Cliffs. NJ: Prentice Hall.

Goma, L.H.K. (1984). *Miscellaneous Addresses in Tembo*, L.M. (ed). *The African University:Issues and Perspectives*. Lusaka: NEDCOZ, pp43-90

Herzberg, F. (2009), *“One more time: How do you motivate employees?”* Boston, MA: Harvard Business School Press.

Hasbullah, A, Isma’il, M and Wan Yusoff, W.Z (2010), *“School committee performance using community based facility management (cbFM) in the education system of Batabura district in Indonesia”*, 2nd International congress on engineering education; transforming engineering education to produce quality engineers

IFMA (2017), *“Operation and maintenance benchmarks,”* Research Report 21 International Facility Management Association

IFMA (2016), *“What is FMI,”* Available at: www.ifma.org/whatisfm/index.cfm.

Kasim, R. Abubakar, M. A and Ishiyaku, B. (2013), *“Assessment of service user’s experience on the facilities provision at UTHM students’ residential colleges,”* presented at 3rd international conference on Technology Management and Business Entrepreneurship (ICTMBE2014), on 23 to 24 at Mahkota Hotel, Maiacca, Malaysia. Pp 265-275

Kokko, M. B. (2002), *“FDI and Human Capital: A Research Agenda,”* OECD Development Centre.

Khan, D. M. (2007), *“Role of Human Capital in Attracting Foreign Direct Investment: A South Asian Perspective,”* SAARC Journal of Human Resource Development, 5-25.

Knight, J. (2011), *“Education Hubs: A Fad, a Brand, an Innovation?”* Journal of Studies in International Education, 15(3), 221-240.

- Kelly M. J. (1991), *“Education in a Declining Economy,”* Washington D.C: World Bank.
- Kelly M. J. (1999), *“The origins and development of education in Zambia: From pre-colonial times to 1996,”* Lusaka: Image printers.
- Lavania D, Sharma H and Gupta N (2011), *“Faculty Recruitment and Retention: A Key for Managing Talent in Higher Education,”* International Journal of Enterprise Computing and Business Systems. Vol. 1, Issue 2, July 2011. [Online] Available: <http://www.ijecbs.com/July2017/32.pdf>
- Mwanakatwe, J. (1968), *“The growth of education in Zambia since independence,”* Lusaka: Oxford University Press.
- Maslow, A. H. (1998), *“Maslow on management,”* New York, NY: Wiley.
- Masaiti G and Naluyele P.N (2011), *“Strategies to retain and motivate employees in Africa: Examining the case of the ministry of education in Zambia,”* African Journal of Political Science and International Relations Vol. 5(8), pp. 409-423, Available online at <http://www.academicjournals.org/AJPSIR>
- Masaiti, G. (2015), *“Effectiveness and Viability of Revenue Diversification in Sub-Saharan Africa’s Higher Education: Examining Zambia’s Public Universities,”* IJHSSE 2(5), pp: 33-44.
- Masaiti, G and Mulenga, I (2014), *“The Relationship among Education, Economy and Employment: Is higher Education Curriculum an Ingredient?”* In C.C, Wolhuter and H.J, Steyn (eds), Comparative Education, the Education System and Educational issues in International Perspective. Keurkopie: Noordbrug.
- Masaiti, G and Chita, J. (2014), *“An Overview of Formal Education in Zambia,”* In C.C, Wolhuter and C, Brock (Eds), Handbook on Education in Central and East Africa. Continuum Books: London.
- Masaiti, G. and Shen, H. (2013), *“Cost Sharing in Zambia’s Public Universities: Prospects and Challenges,”* European Journal of Educational Research. Vol. 2(1), pp. 1-15.
- Masaiti, G. (2013), *“Students’ Perceptions of Financing Public Universities in Zambia: Towards a More Sustainable and Inclusive Policy Strategy,”* In D. Teffera Funding Higher

Education in Eastern and Southern Africa: Modalities, 'Challenges, opportunities and Prospects. Palgrave Macmillan: New York.

McNernery, F (2009), "*Policy Options to Finance Public Higher Education in Afghanistan*" PhD Dissertation submitted to University of Massachusetts Amherst: Retrieved on 15.07. 2017 from scholarworks@library.umass.edu

Ministry of Education, (1996) *Educating Our Future*. Lusaka: Ministry of Education

Ministry of National Development Planning (2017) Seventh National Development Plan. Republic of Zambia.

Norlin, J. M. (2009). *Human behaviour and the social environment: Social systems theory*. Upper Saddle River, NJ: Allyn & Bacon.

Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed). Newbury Park: Longman.

Rosser, V. (2006), "*Faculty Members' Intention to Leave: A national study on their work – life and satisfaction*", *Research in Higher Education*, 45(3), 285 -309.

Senge, P. (2006). *The fifth discipline: The art and practice of the learning organization* (re. ed.). New York, NY: Currency/Doubleday.

Scott, R. W. (2008). *Organizations and organizing: Rational, natural, and open systems perspectives*. Upper Saddle River, NJ: Prentice Hall.

Soomro, T.R and Ahmad, R (2012), "*Quality in Higher Education: United Arab Emirates Perspective*," *Higher Education Studies*. Vol. 2, No. 4, Canadian Center of Science and Education. DOI: 10.5539/hes.v2n4148. [Online] Available: <http://www.ccsenet.org/journal/index.php/hes/article/view/22581>

Saunders, N. K. M, Thornhill, A. and Lewis, P. (2009), "*Research Methods for Business Students*," 5th Edition, London: Apprentice Hall.

Sjöholm, R. E. (2010), *“FDI and Growth in East Asia: Lessons for Indonesia,”* Stockholm: Research Institute of Industrial Economics.

Salehizadeh, M. (2005), *“Foreign Direct Investment Inflows and the US Economy: An Empirical Analysis,”* Economic Issues, 10(2), 29-50.

Soomro, T.R and Ahmad, R (2013), *“Faculty retention in higher education,”* Vol2, Available from: www.sciedu.ca/ijhe [Accessed; 17 July 2017].

Shatz, H. J. (2001), *“Expanding Foreign Direct Investment in the Andean Countries,”* Center for International Development at Harvard University

Tien, A. F. (2010), *“African Leaders: Their Education Abroad and FDI Flows,”* Institute for the Study of Labor IZA.

Tuchili, A.M and Ndhlovu D (2017), *“Behaviour modification through guidance and counselling among students in selected public universities in Zambia: Is it possible?”* Vol4, Available from: www.arcjournals.org [Accessed; 15 July 2017]

Tamilenth, S. et.al (2011), *“The barriers of higher education in the African countries of Zambia and Tanzania,”* Archives of Applied Science Research, 3 (4)

Tamilenth, S and Annanth, T.X.A (2012), *“Status, perception and evaluation of higher education: A case study of republic of Zambia,”* African journal of sciences and research Vol1 (1), Available from: <http://aijsr.rstpublishers.com/> [Accessed; 19 July 2017].

Umara, R.I and Ombugus D.A (2017), *“Determinants of job satisfaction of colleges of education lecturers: A study of Nasarawa state college of education, Akwanga. Vol 4,* Available from: www.arcjournals.com [Accessed; 17 July 2017]

Usman, S, Masood, S and Akbar, M.T (2014), *“Higher education, infrastructure and foreign direct investment in Pakistan,”* IOSR journal of business and management Vol5, Available from: www.iosrjournals.org [Accessed; 19 July 2017]

Varghese, N. (2009), *“Globalization, economic crisis and national strategies for higher education development,”* Paris: International Institute for Educational Planning.

Vlad, M. S. (2011), "*The Relationship between Education and Foreign Direct Investment: Testing the Inverse U Shape*," *European Journal of Economic and Political Studies*, 4(1), 27-46.

Willower, D. J. (1980). Contemporary issues in theory in educational administration, *Educational Administration Quarterly*, 16: 3, 1-25.

World Bank. (2010). *Financing Higher Education in Africa*. Washington DC: World Bank.

APPENDIX 1: QUESTIONNAIRES-FACULTY

UNIVERSITY OF ZAMBIA (UNZA) - ZIMBABWE OPEN UNIVERSITY (ZOU)

SCHOOL OF EDUCATION

MASTERS OF ARTS IN EDUCATION MANAGEMENT AND ADMINISTRATION

Dear respondent,

I am a post - graduate student registered in the department of education management and administration, university of Zambia (UNZA) - Zimbabwe Open University (ZOU). i am currently carrying out a study on “management, infrastructure and faculty of selected emerging universities in Kabwe district.”

The questionnaire attached herewith is meant to gather information for this study from you. All responses will be confidentially treated. The results will be reported only in terms of entire population.

You are kindly requested to respond to all items in the questionnaire.

Your positive response will be highly appreciated.

Yours faithfully,

Chisenga. j

QUESTIONNAIRE – FACULTY

INTRODUCTION

The study assesses management, infrastructure and faculty of selected emerging universities in Kabwe district.

INSTRUCTIONS:

1. Please answer all questions
2. Tick the appropriate answer in the spaces provided.
3. Your responses will be treated with utmost confidentiality.

SECTION A: PERSONAL INFORMATION

1. Please indicate your gender.

Male () female ()

2. Please state your age.....

3. What is your marital status?

Married () Single () Divorced ()

4. What is your employment status?

Permanent condition () Part time () Contract () Other ()

5. How long have you been lecturing at the university?

Less than 5years () More than 5years () More than 10years ()

6. How long do you intend to work before moving to a new organization?

a) Less than 2 years ()

b) Between 2 and 5years ()

c) More than 5 years ()

d) More than 10 years ()

SECTION B: PERCEPTION ON FACTORS HINDERING DELIVERY OF QUALITY EDUCATION

7. Are you satisfied with the selection criteria employed by management in selecting staff for employment in the university?

Agree () Moderate () Disagree ()

8. Do you think staff selection is based more on qualification than experience?

Yes () No ()

9. Are you satisfied with the availability of resources to aid the teaching process?

Modern text books: Yes () No ()

Printers: Yes () No ()

Projectors: Yes () No ()

Computers: Yes () No ()

10. Has information technology being incorporated to enhance the teaching process?

Agree () Moderate () Disagree ()

11. Are lecture halls adequate to meet the teaching and learning goals of the university?

Strongly agree () Agree () Moderate () Disagree () Strongly disagree ()

12. Does the adequacy/inadequacy of lecture halls affect the teaching/learning process in the university?

Yes () No ()

13. Are there any measures that have been put in place to cope with challenges related to lecture halls?

Yes () No ()

If yes, briefly state these measures.....
.....
.....

14. What is the general state of infrastructure at the University?

Very poor () Poor () Fair () Good () Very good ()

15. Do you think that the curriculum used in teaching is up to date with the requirements of the modern labour market?

Agree () Moderate () Disagree ()

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

a) Curriculum needs to be updated ()

b) Curriculum meets job market demands ()

c) Curriculum has already being revised ()

d) Curriculum must encourage lecturer manipulation to meet modern requirements where necessary ()

16. 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 ()

17. Attest whether these are some of the challenges you face in relation to curriculum and teaching?

- a) Curriculum is governed by obsolete literature ()
- b) The university does not have modern books to use as reference teaching material ()
- c) Lecturers do not have jurisdiction over preparation of teaching materials ()

SECTION C: MOTIVATION PACKAGES

18. How would you describe your salary at the university?

- (a) Poor ()
- (b) Fair ()
- (c) Good ()
- (d) Very good ()
- (e) Excellent ()

19. What will make you stay in the university for the next five years without thinking of leaving? (rank the options provided from most important to least important with five (5) being the most important and one (1) being the least important)

Ranking

- (a) Better salary ()
- (b) Better allowances and benefits ()
- (c) Inclusion in decision making ()
- (d) Change in supervision style of management ()
- (e) Training and sponsorship for further education ()

If there is any other variable indicated on the list, please state.....

20. Are you satisfied with the current motivational packages you are enjoying at the university?

Yes () No ()

21. Have you had the opportunity to attend conferences on education?

Agree () Moderate () Disagree ()

22. Scholarship and sponsorship package for lecturers to further their education are available and adequate?

Agree () Moderate () Disagree ()

23. Faculty is active in research activities

Agree () Moderate () Disagree ()

APPENDIX 2: INTERVIEW GUIDE- MANAGEMENT

1. Given that your organization is still an emerging university, would you retain that management has been effective in its functions to oversee the transition?

If not, which functions should management improve on to better achieve organizational goals?

2. What are the sources of the funds used in the general running of the university?

Are the funds from these sources adequate or inadequate for the running of the university?

What strategies has management embarked on to generate more funds for the running of the university?

3. What projects has management implemented to build infrastructural capacity for both students and faculties?

Are these projects currently being implemented and executed?

What are the expected benefits these projects will bring to the faculty and students?

4. What is the current strategy on integrating information technology in the teaching and learning process?

5. What is management's position on the curriculum being used in the teaching process?

Are there any plans to update the curriculum?

6. What policy is used in recruitment and selection of faculty staff?

Is this policy effective in capturing qualified and competent staff?

7. What strategy does management use to foster retention of key employees?

Has management's policy been successful in retaining key employees?

APPENDIX 4: INTRODUCTORY LETTER