



**ASSESSING QUALITY ASSURANCE MECHANISMS FOR MANAGING
COMPETENCY BASED EDUCATION AND TRAINING IN COMMUNITY
TECHNICAL COLLEGES IN MALAWI**

BY

MASAUTSO FRANK KAMPHONJE KALUA

**A THESIS SUBMITTED TO THE FACULTY OF EDUCATION IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF
EDUCATION IN LEADERSHIP AND MANAGEMENT**

AT

MZUZU UNIVERSITY FACULTY OF EDUCATION

MZUZU, MALAWI

SUPERVISOR: DR ZIZWA MSUKUMA CHISI

NOVEMBER, 2020

DEDICATION

This research is dedicated to my wife Mary, my mother, my children Tawonga, Emmanuel, Rita and the entire Kamphonje Kalua family.

DECLARATION OF ORIGINALITY

I, **Masautso Frank Kalua**, declare that, the organization and writing of this thesis titled **Assessing quality assurance Mechanisms for Managing Competency Based education and training in Community technical Colleges in Malawi** is entirely my own compilation and has been carried out at Mzuzu University under the supervision of Dr. Zizwa Msukuma.

To the best of my knowledge and understanding, the thesis does not:

- a) Include, without any form of acknowledgement, material previously used and submitted for academic purposes at any higher education institution;
- b) Contain information previously written and published by other people: all published sources of information contained in my thesis have been acknowledged.
- c) Contain any material which is defamatory.

I attest that all material referred and contained in this thesis has been duly acknowledged.

Signed _____

(Student)

Date: _____

Signed _____

(Supervisor)

Date: _____

ACKNOWLEDGEMENTS

I sincerely thank the Almighty God foremost for enabling me to succeed in my studies.

My profound gratitude to Dr. Zizwa Msukuma Chisi, my supervisor for the considerable guidance, contributions, encouragement and patience throughout the study and whose tireless efforts have made timely completion of this thesis.

I owe special thanks to Dr. Margret Mdolo, Master of Education coordinator for untiring determinations to follow up every stage of my study.

Many thanks to the Ministry of Labour, Youth, Sports and Manpower Development for providing access to the Community Technical Colleges. I also thank the respondents for their contributions to the project.

Special thanks to my wife, Mary, my mother, brothers Kondwani, Edward and Alfred for the financial, moral support and patience throughout my studies.

I am grateful to my employer, TEVET Authority for supporting me financially and encouraging me to embark on postgraduate studies.

LIST OF ABBREVIATIONS

CBET	– Competency Based Education and Training
CTC	– Community Technical College
MoLYSMD	- Ministry of Labour, Youth, Sports and Manpower Development
QA	– Quality Assurance
TEVET	– Technical, Entrepreneurial and Vocational Education and Training
TEVETA	- Technical, Entrepreneurial and Vocational Education and Training Authority
TVT	- Technical and Vocational Training
UNESCO	– United Nations Educational, Scientific and Cultural Organisation
ORT	- Other Recurrent Transactions
IV	– Internal Verification
EV	– External Verification

DEFINITION OF TERMS

- Apprenticeship – Is a type of training which combines classroom Instruction under a trade professional and on the job practical skills. Or it is a type of training for both aspects of theoretical as well as practice.
- An apprentice - Learner in the apprenticeship training.
- Competency based Education and Training – An instructional system in which performance – based Learning process is used. The learner demonstrates his/her level of attainment on subject area.
- Community Technical College – Is a training institution whose educational facilities are available to the youth and other members of the community.
- Instructor - A trainer or trade professional. In apprenticeship training, there are college trainers and industry trainers.
- Vocational education - Career education or technical education.

ABSTRACT

Quality Assurance (QA) plays an integral part in Technical and Vocational Training (TVT). Ineffective or absence of QA is an inhibition to the realization of goals of TVT.

The purpose of this paper is to assess Quality Assurance Mechanisms for Managing Competency Based Education and Training in Community Technical Colleges in Malawi. This study trails the launch of Community Technical Colleges (CTC) programme in 2015 by the government of Malawi. CTCs were established to offer life – changing technical, vocational and entrepreneurial skills to school leavers under the project called “Skills for employment creation and poverty eradication”.

The research was guided by Cognitive apprenticeship theory of education and followed a qualitative design. Data was collected through interviews with principals, focus group discussions with instructors and observation of processes and procedures. **Five** Community Technical Colleges (i.e. **two** from the northern region and **three** colleges from central region) were randomly selected and respondents were purposefully sampled for the study.

The major findings from the research are that Competency Based Education and training has not been impressive because of ineffective QA at different levels. Findings indicate that a gap exists between colleges and industry. The system is open ended and there is no follow up on products to match desired standards. Lack of capacity building for instructors, absence and/ or ineffective quality assurance committees in CTCs. Insufficient funding and training resources among others render the system ineffective.

The practical implication is that for TVT to be impactful on progress, employability and national development there is need for the policymakers to focus on Quality assurance of the programmes.

The study has made various recommendations that require different groups at institutional level and government to work together. The government through Ministry of labour should invest massively in training in Community Technical Colleges for the success of Technical and Vocational training.

CONTENTS

DEDICATION.....	I
DECLARATION OF ORIGINALITY	II
ACKNOWLEDGEMENTS	III
LIST OF ABBREVIATIONS	IV
DEFINITION OF TERMS.....	V
ABSTRACT.....	VI
LIST OF FIGURES	XI
LIST OF TABLES	XII
CHAPTER ONE	1
INTRODUCTION AND BACKGROUND OF STUDY	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND OF STUDY.....	1
1.3 STATEMENT OF THE PROBLEM.....	4
1.4 RESEARCH PURPOSE AND OBJECTIVES.....	6
1.5 SIGNIFICANCE OF THE STUDY	6
1.6 LIMITATIONS OF THE STUDY	7
1.7 DELIMITATIONS OF THE STUDY	7
1.8 CONCLUSION	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1 INTRODUCTION	9
2.2 DEFINITION THE TERMS EDUCATION AND APPRENTICESHIP.....	9
2.3 COMPARATIVE STUDIES FROM OTHER COUNTRIES.....	11
2.3.1 UNITED STATES OF AMERICA (USA)	11
2.3.2 CANADA	11
2.3.3 UNITED KINGDOM AND SCOTLAND	12
2.3.4 COMMUNITY COLLEGES IN SWITZERLAND AND GERMANY	12
2.3.5 AUSTRALIA.....	13

2.3.6 INDIA.....	13
2.3.7 MALAYSIA AND PHILLIPINES.....	13
2.3.8 EXPERIENCES IN BENIN AND SOUTH AFRICA	14
2.4. ESTABLISHMENT OF COMMUNITY TECHNICAL COLLEGES IN MALAWI	14
2.4.1 Objectives of the CTC programme.....	14
2.4.2 Implementation arrangements	15
2.5 FINANCE, PLANNING AND ADMINISTRATION FOR COMMUNITY TECHNICAL COLLEGES IN MALAWI	15
2.6 COMPETENCY BASED EDUCATION AND TRAINING (CBET).....	16
2.6.1 QUALITY DEFINED	17
2.6.2 QUALITY ASSURANCE.....	17
2.6.3 Functions of quality assurance	19
2.6.4 Cooperation network	19
2.6.5 Trade Advisory Committees.....	19
2.6.6 Quality manual	20
2.6.7 Material Resources	20
2.6.8 Trainer Qualifications.....	21
2.7 THEORETICAL FRAMEWORK.....	21
2.8 CONCLUSION	23
CHAPTER THREE	24
RESEARCH DESIGN AND METHODOLOGY	24
3.1 INTRODUCTION	24
3.2 RESEARCH PARADIGM.....	24
3.2.1 INTERPRETIVE PARADIGM.....	24
3.3 RESEARCH DESIGN.....	25
3.4 RESEARCH APPROACH.....	25
3.5 STUDY SITES	26
3.5. DATA COLLECTION	28
3.5.1. SOURCES OF DATA	28
3.5.3 PRIMARY DATA	28
3.5.4 SECONDARY DATA.....	31
1.9 3.6 STUDY POPULATION.....	31

3.7 SAMPLING TECHNIQUE AND SAMPLE SIZE	32
3.8 DATA ANALYSIS	35
3.10 TRUSTWORTHINESS.....	37
3.10.1 Triangulation of sources	38
3.10.2 Piloting.....	38
3.11. ETHICAL CONSIDERATIONS	39
3.11.1. CONSENT FROM THE UNIVERSITY	39
3.11.2. PROTECTING PARTICIPANT RIGHTS	39
3.11.3. CONFIDENTIALITY	39
3.11.4. PRIVACY.....	40
CONCLUSION	40
CHAPTER FOUR.....	41
PRESENTATION AND DISCUSSION OF FINDINGS.....	41
4.1 INTRODUCTION	41
4.2. INTERVIEW WITH PRINCIPALS.....	42
4.2.2 Attachment and Monitoring of Apprentices (learners) at industry.....	42
4.2.3 Quality Assurance Decisions.....	43
4.2.4 Promotion of Quality Assurance at institutional level.....	43
4.2.5 Importance of financial Resources to institutional Quality Assurance.	44
4.2.6 Curriculum Versus implementation.....	44
4.2.7 Staff development.....	45
4.2.8 Feedback on quality improvement	45
4.2.9 Quality Assurance Evaluation instruments.....	45
4.2.10 Quality Assurance process.....	46
4.3 INTERVIEWS WITH INSTRUCTORS	47
4.3.1 Effectiveness of tools used in CBET delivery.....	47
4.3.2. Entry qualifications.....	47
4.3.3. On continuous and summative assessments	47
4.3.4 Internal verification of assessments.....	48
4.3.5 Industrial attachment	48
4.3.6 Suggestions from respondents on monitoring of training at industry.	48
4.3.7 Other challenges faced by CTCs.	49
4.3.8 Absence of academic committees in some Community Colleges.	49

4.3.9 On Curriculum versus implementation.....	50
4.3.10 Staff development Programmes.....	50
4.3.11 Constraints at National and Institutional Level	51
4.4 CONCLUSION	52
CHAPTER FIVE	53
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	53
5.1 INTRODUCTION	53
5.2 The Summary of findings	53
5.2.1 Application of Quality assurance systems in Community Technical Colleges.....	53
5.2.2 Effectiveness of Quality assurance systems in Community Technical Colleges.	56
5.2.3 Management and administration of CBET processes and procedures in Community Technical Colleges.	56
5.3 CONCLUSION/RECOMMENDATIONS.....	59
5.4 AREAS OF FURTHER STUDIES	61
6.0 REFERENCES.....	62
ANNEXURE 1: PERMISSION TO COLLECT DATA.....	70
ANNEXTURE 2: REQUEST FOR PERMISSION TO COLLECT.....	71
DATA IN COLLEGES.....	71
ANNEXTURE 3: CONSENT FORM FOR PARTICIPATION IN RESEARCH.....	73
ANNEXTURE 4: INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSION WITH INSTRUCTORS.....	76
ANNEXTURE 5: INTERVIEW GUIDE FOR PRINCIPALS	77

LIST OF FIGURES

Figure 1 Participants according to gender	37
Figure 2 Graph of Participants per college grouped to gender	38
Figure 3: Table showing number of respondents against percentage of satisfaction on Curriculum implementation	61
Figure 4: Graph showing number of respondents against percentage of satisfaction on Curriculum implementation	61

LIST OF TABLES

Table 1. Participants for interviews	36
Table 2: Focus group Participants.....	36
Table 3: participants according to gender	37
Table 4: participants according to gender	37
Table 5: Respondents' satisfaction on curriculum implementation.....	61

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF STUDY

1.1 INTRODUCTION

This chapter provides importance of Technical and Vocational Training in Malawi, reforms in the Malawi TEVET system background, statement of the problem and rationale behind the study. The later part of the chapter highlights objectives of the study, brief account of limitations and delimitations of the study.

1.2 BACKGROUND OF STUDY

Technical and Vocational Training (TVT) greatly promotes social and economic development of the country. Kufaine and Chitera (2013) state that in Malawi, as in other countries, TVT is perceived to be key for development. This training plays a vital role of drilling artisans in various trades to meet demands for skilled workforce in industry.

“Technical and Vocational Training is therefore considered essential because a country cannot achieve economic and social development without a skilled, productive labour force that can meet the changing requirements of its environment” (Atchoarena & Delluc, 2002, p. 15).

The demand from school leavers to join Technical Training has greatly increased in the past decade with seven public National Technical Colleges and eight private National Technical Colleges that were available to offer training. TEVET Policy Review (2010) cements this fact by stating that by 2010, Technical and Vocational training in Malawi was fragmented and offered limited access. The Government Education Sector Implementation Plan II (2013/14 – 2017/18) envisaged that by 2018 enrollment into Technical Colleges should increase up to 11000 from 9832.

In an endeavour to achieve the goal of increasing access to TVT, the Government of Malawi established 11 Community Technical Colleges in the year 2015. Currently, 14 CTCs are operational with 11 more under construction. In spite of the implementation of the TEVET reform project in Malawi in 1997, concerns still remain on the quality of education in most technical colleges. Chafa (2003) observes that TEVET system reforms in the Sub-Saharan region came as a result of low quality standards at the institutional level.

One of the key issues on education in the cooperation agreement between the governments of Scotland and Malawi (2010) states that the segment of technical and vocational education in Malawi faces a number of quality assurance challenges such as unresponsiveness due to its underperformance in the past years, low education output arising from population growth and increased demand for education, inadequate infrastructure, teaching and learning materials and teaching personnel, insufficient financial resources and increased absenteeism and dropout due to factors such as HIV and Aids.

The Malawi 2000 – 2012 Policy Framework records that there is a challenge to enhance capacity of the education system to provide an education of acceptable quality. The scarcity of basic learning resources is true of the tertiary sub-sectors where essential physical facilities and reading materials are lacking in many institutions. The consequences of this situation are that the quality of education provided by the system has deteriorated to a disturbing level.

Furthermore, the Malawi Labour Survey Report (2009) indicates that curriculum development in the TEVET system has not kept pace with the speed of technological change. This has resulted in poor and declining quality due to mismatch of systems to keep up with technology and in occupational areas like motor vehicle mechanics. There is a mismatch between what is demanded in the Competency Based Education and Training (CBET) curriculum and the level of technology available in colleges or in some industrial sites.

Training in Community Technical Colleges follow the apprenticeship system while the mode of delivery is Competency Based Education and training. Seidel (1994) defines apprenticeship training as the acquisition of knowledge and skills by actively participating in socially valued production activities with more experienced workers. Apprenticeship training is a special system of training in a chosen trade where trainees acquire practical and theoretical knowledge as they participate. In Malawi this training is divided into two categories. Institutional Based Training where trainees cover modules while at college and industry based training covers modules which are industrial in nature. Trainees are attached to an employer who assign them to a competent and skilled trainer. After industrial training, trainees are recalled to college on block release programme.

Ministry of Labour and Manpower Development (2014) highlights the following benefits for the TVT apprenticeship system:

- Training for formal apprenticeship is conducted using a standardized curriculum meaning that all students regardless of location will get similar information;
- Regular curriculum reviews are done such that course content is accurate and up to date;
- Acquisition of prior workplace experience through industrial attachment;
- Operating using standardized guidelines which eventually enhance quality assurance;
- Recognition of certificates both locally and internationally, a situation which creates opportunities for continuous professional development;
- Involvement of industry in all training processes, hence making the system more relevant to its needs.

The Malawi TVT curriculum is mainly competence-based. TEVET curriculum delivery orientation manual (2017) stipulate that competencies provide effective platform for experiential learning and achievement of the 21st Century skills such as critical thinking, innovativeness and problem solving among others. This provides a sound basis for socio-

economic development as well as shaping trainees into productive citizens. Under CBET a student takes control of his/her learning and the instructor takes the role of a facilitator. Kufaine and Chitera (2013) define CBET as education based on outcomes and pre-determined standards on tasks that students can perform. CBET provides for instruction, assessment, grading and academic reporting based on student's demonstration of knowledge and skills expected through progress and assessment is done continuously. CBET emphasizes on individual student's attention rather than a group in delivery.

1.3 STATEMENT OF THE PROBLEM

Competency Based Education and Training (CBET) mode of delivery was adopted by Malawi government in 2006 in order to devise a system meant to assist skilled craftsmen perform to the satisfaction of stakeholders. (TEVET Curriculum delivery orientation manual, 2017). Kufaine and Chitera (2013) record that previously, technical colleges offered training using traditional instruction mode of delivery. This approach of instruction is a teacher centred, while the new CBET approach uses a student-centred approach. The Education for All National Action Plan (2004) states that quality of education is the result of interaction between or among inputs, processes, outputs and outcomes. Quality education may be achieved when the school system has adequate qualified trainers, adequate, relevant and appropriate training materials and infrastructure, preparedness of learners and teachers, up-to- date curriculum that is effectively managed and monitored which ensures a conducive teaching and learning environment whose end product is a competent learner.

In spite of the implementation of the TEVET reform project in Malawi in 1997 (SNDP, 2008), concerns still remain on the quality of education in most technical colleges. Phekani and Mtambo (1997) alludes that some skills, are taught outside the real and highly competitive market environment prevailing in Malawi. Kis (2005) concurs with Phekani and Mtambo in

his case study of University Sector College by concluding that there is a gap between what was designed into and expected of the quality assurance system and what is practiced on the ground.

Recipient of graduates from the system the industry, is concerned with low standards of competencies among apprentices. World Bank working paper (2010) and EFA-NAP (2004) concur and further explain that in Malawi TVT is of low quality and relevance to requirements of the industry. The two papers highlight the following general challenges: shortage of qualified teachers, inadequate infrastructure, toilets and desks, shortage of teacher's houses and inadequate teaching and learning materials. Low retention rates/high dropout rates, lack of adequate orientation of teachers and teacher development programmes are also highlighted as challenges to the system. Inspection and supervision is limited to 3 visits per school per year. There is lack of guidelines for potential school leaders to effectively monitor learners and teachers performance. High staff turnover resulting in head teachers being appointed without proper orientation and training. Informal monitoring is usually not documented except for students' performance reports. Compiled inspection/advisory reports are not adequately used. Poor storage of data making referencing and follow-ups on recommendations difficult. Low standards of education due to other factors such as untrained and demotivated teachers. The concerns highlighted have been uncovered from education in general that equally affect Community Technical Colleges.

The environment in which the Malawi TEVET institutions operate is rapidly changing. There is a huge demand and enrolment expansion in TEVET institutions due to the government policy of free primary education which was introduced in 1994. TEVET institutions are required to establish and implement internal quality assurance mechanisms to safeguard and improve the standards and quality of their education programs (UNESCO, 2010). Community technical colleges are no exception in this context. Very little research has been conducted in terms of assessing quality assurance systems in the delivery of Competence Based Education and

Training in Community Technical Colleges in developing countries. In tandem with observations above, this research aims at assessing quality assurance mechanisms on the delivery of Competency Based Education and Training in Community Technical Colleges in Malawi.

1.4 RESEARCH PURPOSE AND OBJECTIVES.

The study was carried out to assess if quality assurance mechanisms match with desired standards in the delivery of Competency based education and training in community technical colleges in Malawi. The research predicted to gain more insight in the management challenges, regarding quality assurance practices in Community Technical Colleges in Malawi.

The general objective of this study was to assess quality assurance mechanisms in the management of Competency based education and training in community technical colleges in Malawi. To achieve the central aim of the study and to answer the key research questions about Quality Assurance mechanisms, the following research objectives were established, and became the focus within the context of the study.

- a) To identify the current practices of Quality assurance systems in Community Technical Colleges.
- b) To explore effectiveness of Quality assurance systems in Community Technical Colleges.
- c) To define the management and administration of CBET processes and procedures in Community Technical Colleges.
- d) To determine challenges faced in delivery of CBET in Community Technical Colleges and their possible solutions.

1.5 SIGNIFICANCE OF THE STUDY

This study is about assessing quality assurance mechanisms in the delivery of Competency based education and training in community technical colleges in Malawi. Academically, the

study will substantially add knowledge to the existing scholarly literature by addressing the gap that is identified in literature.

Findings of this study will improve administration of CBET in Community Technical Colleges. Based on these research findings, it is hoped that a unified system will be put in place for proper delivery in Community colleges as well as National colleges. The study is of great value to all stakeholders in Technical and Vocational Training because it will enhance their effective participation throughout the training. It is hoped that the findings will enable the Government to formulate policies and guiding principles which will focus on effective management of the TVT.

1.6 LIMITATIONS OF THE STUDY

The study was limited by the following factors. The period of data collection coincided with change in academic calendar of colleges which resulted in early closure of institutions. Data was therefore collected in **two** colleges in the north and **three** colleges in the central region instead of the initially planned **six** colleges (i.e. **two** from each of the three regions). Many of the anticipated interviewees were engaged in administration and invigilation of summative assessments. The study was also affected by gender imbalance of respondents as the sector is dominated by males.

1.7 DELIMITATIONS OF THE STUDY

The study was limited to assessing Quality Assurance Mechanisms for managing Competency Based Education and Training with focus on Community Technical Colleges in Malawi. Every aspect such as preparations, review of literature, data collection, data analysis and compilation of findings were conducted towards this cause. The study was designed to source data from Principals and instructors, it did not source views of learners. It is envisaged that the results and

recommendations can be applied to the apprenticeship training in the Community Technical Colleges in Malawi.

1.8 CONCLUSION

Good quality skills are critical, productivity and competitiveness. Despite the current economic crisis, skills are the centre of the new challenge of sustaining, accelerating and sharing the signs of economic growth across many parts of the developing world (DFID 2008). Importance of high quality skills on the labour market cannot be over emphasised. It is therefore imperative that effective quality assurance systems should be put in place in Technical and Vocational institutions to produce a skilled workforce for social economic growth of the country.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of literature conducted in relation to the research. The first part of the chapter defines education and learning in general terms, establishment of community technical colleges in other countries and later apprenticeship training, competency based education and training as well as quality assurance are thoroughly discussed.

2.2 DEFINITION THE TERMS EDUCATION AND APPRENTICESHIP

Education as defined by Curren (2007) is a systematic practice of supervising and guiding activities of persons in ways intended to promote valuable forms of learning and development. Wilson (2013) defines education as the social process by which a new generation is initiated into the language, rituals, roles, relationships and routines which its members have to learn in order to become a member of the society. It is an “initiation into worthwhile activities of society” (Neary, 2002, p. 36).

Apprenticeship Training has several formal definitions. According to Pratt (1998) the apprenticeship perspective involves the learner within an actual, physical context of practice. Apprentices work side by side with an expert in order to learn a specific task (Barab & Hay, 2001). Apprenticeships include the development of learning contexts that model proficiency, “providing coaching and scaffolding as students become immersed in accurate activities, independent practice so that students gain an appreciation of the use of domain-related principles across multiple contexts”(Barab & Hay,2001, p.72). Collins, Brown, and Newman (1989) posit that apprenticeship is a teaching method utilized by educators to teach students how to solve problems, understand tasks, perform specific tasks, and deal with difficult

situations. Furthermore, apprenticeship learning can be a useful supplement for adult educators with other types of instruction (Brandt, Farmer & Buckmaster, 1993)

There are three main stages of apprenticeship learning according to Brandt et al. (1993) and Pratt (1998).

The first stage is for the learner to discover what works with guidance from the expert. The learner uses skills learned from the expert in order to successfully solve a problem.

Secondly, the learner identifies tasks, problems or situations and knows how to handle them. The learner learns the appropriate practical and theoretical knowledge. This acquisition of knowledge takes place in corroboration with other students. Students work in a social setting with lifelike settings in order to learn a specific tasks.

Finally, the learner is able to perform at an acceptable level. The learner is not learning basic skills at a novice level but working with an expert in order to perform at an acceptable level. Students learn skills at a level that is accepted in a specific industry.

In summary, apprenticeship learning is a method of teaching students about a specific task. It is utilized in a problematic situation so students know how to react when faced with a similar situation. Students work very closely with an expert at learning a specific skill. Apprenticeship learning is very beneficial to the learner. Information the student acquires is then applied through practical applications in the field of study

Education Sector Implementation Plan II (2013/14 – 2017/18) states that Rapid development in all sectors of the economy will require highly skilled and educated workforce, and the application of science and technology. The plan outlines strategies as follows: constructing additional school infrastructure; training and recruiting additional teaching staff; improving scientific and technological infrastructure. All the stated strategies require Technical and Vocational Training (TVT) in part of its

implementation or establishment. Activities such as construction of infrastructure, installations and maintenance of plant and equipment are part of the improvements that the government requires.

2.3 COMPARATIVE STUDIES FROM OTHER COUNTRIES.

2.3.1 UNITED STATES OF AMERICA (USA)

In the USA, the name Community College (also called junior Colleges) is derived from the fact that community colleges serve students from the local community and are publicly funded. According to Wiseman, Mayoral, Jamis & Sachdev (2012) the establishment of community colleges in United States of America, was at the time of great depression after the Second World War and these colleges contributed to large growth of the segment of higher education. Community Technical Colleges were established to address community needs by providing Technical and Vocational Education for the marginalised and disadvantaged groups. Public Community Colleges offer local communities with inexpensive or free tuition and respond to cultural activities of the community by offering comprehensive educational programs. The government initiated establishment of Community Colleges in order to boost economic development of the country.

2.3.2 CANADA

A study conducted by Dennison and Ghallagher (2015), reveals that most Community Colleges in Canada are established with governing boards separate from the provincial governments which in a way are similar to college management committees in Malawi. The Canadian government provides financial support to students during their training sessions. In similarity, the government of Malawi subsidises training to in Community Technical Colleges. The only difference is that in Canada government selects candidates for training, retraining or skill upgrading and place graduates in jobs where as in Malawi students are locally selected by the College Committees and that the government does not find jobs for graduates. In the course of

their training however, the College committee in collaboration with teaching staff source attachment places for their students to gain industrial exposure. In Canada, these colleges are adult educational institutions that provide higher education and tertiary education. They offer certificates and diplomas. The government of finance some institution while private colleges run on profit.

2.3.3 UNITED KINGDOM AND SCOTLAND

The case of Scotland according to Bryce and Humes (2008), reveals that significant development for Technical and Vocational Training was championed by government's Public-Private partnership as means of financing the building of new schools. This brought a detrimental effect as the department is equipped with inferior resources despite being small. Another study in Oregon as explained by Bower and Hardy (2004) unveils the same challenges and recommends that the plan of increasing access to Technical and Vocational training must be supported by strong commitments at the state. They further explain that local levels must have clear leadership abilities and that this must be carried out by diverse individuals who understand practical results and effects of decision made in the government's planning process.

2.3.4 COMMUNITY COLLEGES IN SWITZERLAND AND GERMANY.

It is pleasant to note that both countries developed dual-systems in which young trainees spend half their time at school and the remainder in a firm. Atchoarena and Delluc (2002) elaborate a similar system in the case of Cote d'Ivoire where Technical and Vocational Training was established with objectives of giving Technical and Vocational qualifications to students to allowing them acquire and exercise a profession, provide employment Vocational qualifications to populations which facilitate their insertion into active life and to provide qualification which will allow them improve productivity. The case of Cote d'Ivoire like other

cited studies, the organisation of education systems including Technical and Vocational education is the responsibility of the state.

2.3.5 AUSTRALIA

The term “community college” in Australia refers to a small private business running short courses and these institutions are regulated at state and territory level. The case of Australia may be slightly different to Malawi where apart from arts they also offer languages, business and social studies.

2.3.6 INDIA

In India, 98 community colleges are recognized by the University Grants Commission. The courses offered by these colleges are diplomas, advanced diplomas, and certificate courses. The course duration usually range from six months to two years which is quite similar to Malawian style, the only difference is the award of diplomas and advanced diplomas which are offered by national colleges in Malawi.

2.3.7 MALAYSIA AND PHILLIPINES.

The case of Malaysia Community colleges share similarity to Malawi where technical and vocational training is offered to school leavers before they enter the workforce. The community college also provide infrastructure for the rural communities to gain skills training through short courses as well as providing access to a post – secondary education. The only difference is that Malaysian Colleges train up to level 3 or 4 of the curriculum whereas the highest qualification for Malawian community colleges is level 2 and the trainees may opt for continuation at national colleges.

The history of community colleges in phillipines started in 1971. The community college is established by the community and offers training for the community.

2.3.8 EXPERIENCES IN BENIN AND SOUTH AFRICA

Atchoarena and Delluc (2002) outline that another study in Benin uncovered that Vocational Education in general lacks real infrastructure such as computer labs, workshops and classes and that teachers are inadequately qualified. These findings are similar to what Wiseman, et'al (2012) explains the American scenario where Community College classrooms are relatively smaller in size compared to other institutions as a result teachers and students feel less motivated. South African Policy on Community Colleges (2014) explains that establishment and operations of Community Colleges must be founded on a set of principles, which, when construed as collective, should define what community colleges are about. The example of South Africa in setting clear guidelines to uniformly govern and manage Community Colleges can be emulated for Malawi.

2.4. ESTABLISHMENT OF COMMUNITY TECHNICAL COLLEGES IN MALAWI

Community Technical Colleges programme was launched in 2015 by the government of Malawi through the then Ministry of Labour, Youth, Sports and Manpower Development (now called Ministry of Labour, Skills and Innovation) under the project called “Skills for employment creation and poverty eradication”. 11 Community Technical Colleges (CTCs) were established to offer educational facilities to the youth and other members of the community within their reach. Thus it can be called an institution established in a community, owned by a community and run by a community to cater for youth and adults who would like to further their career. Plans are under way to construct more Community Technical Colleges.

2.4.1 Objectives of the CTC programme

According to Ministry of labour, government launched CTCs in order to:

address the prevalence of unemployment among unskilled and unproductive youth.

to strengthen community participation in development projects as well as increase income for the rural masses and increase chances of education progression.

to support establishment of business incubator centers in communities based on the area of focus as one way of enabling prospective entrepreneurs from community technical colleges establish businesses and to support CTC graduates establish enterprises through linking them to financial lending institutions.

2.4.2 Implementation arrangements

The TEVET Policy (2013) outlines implementation arrangements of the TEVET system which also apply to CTCs. Ministry of Labour under Directorate of Technical and Vocational training has the following roles: 1. Provides oversight to policy implementation, 2. Plan and coordinate infrastructure development, 3. Coordinate development partners' support towards TEVET Sector 4. Manage Technical and Vocational training. Government takes a leading role to ensure that the programme is implemented.

On the other part TEVET Authority regulates and facilitates the implementation of training programmes. "It is also responsible for provision of oversight on quality assurance, assessment and certification of Training programmes". (TEVET Policy, 2013, p.5).

2.5 FINANCE, PLANNING AND ADMINISTRATION FOR COMMUNITY TECHNICAL COLLEGES IN MALAWI

Community Technical Colleges in Malawi are established under the Ministry of Labour, Youth, Sports and Manpower Development (MoLYSMD). All members of staff in these institutions are employees of this Ministry. Training is facilitated by Technical Entrepreneurial and Vocational Education and Training (TEVETA), a regulatory body which was established in 1999 by the act of Parliament. The ministry provides funding for day to day administrative

activities, infrastructure and equipment whereas TEVETA facilitates training by subsidizing training, monitoring delivery, assessment, certification and provision of tools to graduates.

The Management Capacity Building for TEVET Providers in Malawi (2018) stipulate that Technical and Vocational training system is highly centralized with little autonomy in the government associated to Community Technical Colleges. It further states that if CTCs were decentralized, the training institutions would have more decision making powers such as quality assurance matters, financial management, and general management.

2.6 COMPETENCY BASED EDUCATION AND TRAINING (CBET)

Competency-based education is referred to as reforms in which students demonstrate mastery of a defined set of competencies in lieu of completing credit requirements based on time in class (Torres, 2015). Other terms that convey the same meaning from the same text are proficiency-based learning, standards-based learning, and mastery-based learning. Bernikova (2017) defines CBET as a system of instruction where students advance to higher levels of learning when they demonstrate mastery of concepts and skills – regardless of time, place, or pace. There are five primary components of CBET related to advancement, objectives, assessments, support and skills training. CBET uses essential learning questions to take a deeper look on the problem and develop foundational knowledge. Understanding by Design (UbD) is a CBET framework for teaching and assessing for understanding and for learning transfer and designing curriculum ‘backward’ from end goal. CBET operates from a constructivist educational philosophy whereby instructors help students construct their own knowledge. CBET develops personalized learning opportunities to meet the diverse needs of students. CBET requires that teachers personalize learning opportunities to meet the needs of diverse student groups.

Harris, Guthrie, Hobart and Lundberg (1995), Torres, Brett and Cox (2015) agree on five basic characteristics that are necessary for CBET as follows:

1. Students advance upon demonstrated mastery. 2. Competencies include explicit, measurable, transferable learning objectives that empower students. 3. Assessment is meaningful and positive learning experience for students. 4. Students receive timely, differentiated support based on their individual learning needs. 5. Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.

2.6.1 QUALITY DEFINED

Quality is about making Organizations perform for their stakeholders – from improving products, services, systems and processes, to making sure that the whole organization is fit and effective. Chandrupatla (2015) defines quality in three ways as follows: 1. It is the conformance to requirements. 2. Quality is fitness for use. Quality is the degree to which performance meets expectations. Managing quality means constantly pursuing excellence thus, making sure that organization's activities are fit for purpose, and keeps improving.

Quality interprets the non-inferiority or superiority of something. It however depends on perception, condition, attribute and may be understood differently by different people. Consumers may focus on the [specification quality](#) of a product or service, or how it compares to competitors in the marketplace. Producers might measure the [conformity to quality](#), or degree to which the product or service was produced correctly. Quality can also be measured in the degree that a product is [reliable](#), [maintainable](#), or [sustainable](#).

2.6.2 QUALITY ASSURANCE

Quality assurance (QA) are performance measures designed by the experts to assess performance of educational institutions with a view of ensuring that learning outcomes meet

the needs of each society (Unisom and Ashibogwu, 2013). QA refers to established procedures, processes and standard systems that support and ensure effective delivery of educational services. Besides, within the policy circles, QA represents a potent “tool which enables policy makers to determine national educational needs, to assess new approaches to resolving issues, and to evaluate the effectiveness of policies and strategies” (Asian Development Bank, 1996:1.) From the foregoing, an effective QA should focus on critical elements such as access/participation, funding, relevance and quality of TEVET (King, 2011). The relationship between the four elements above and TEVET can better be measured through effective monitoring and evaluation of its supply, demand and financing elements (King and Palmer, 2008; King, 2011).

To ensure that quality and standards are maintained different nations and TEVET institutions have QA mechanisms in place to suite their socio-economic and educational aspirations. For example, the United States of America employed the accreditation systems as QA mechanism for effective monitoring and coordination. Australia created has a QA unit called Australian Universities Quality Agency (AUQA) to ensure effective quality control of educational services in tertiary institutions (Mohsin and Kamal, 2012). From the foregoing discourse, the purpose of Accreditation Exercise in USA and Australia is to ensure that standard and quality of higher education are strictly regulated, maintained and enhanced by educational institutions in line with changing needs of the society and the industry (Mohsin & Kamal, 2012; Onyesom & Ashibogwu, 2013).

UNESCO (2002), outlines the following as quality assurance indicators: (a) What learners gain; (b) Quality Learning Environments; (c) Quality Content; (d) Processes that support Quality; and (e) Outcomes from the learning environment. These may act as guide to maintain standards and quality of delivery. Outcome indicators measure complex processes qualitatively (Warglien and Savoia, 2006).

2.6.3 Functions of quality assurance

Quality Assurance as a process of enforcing compliance to set standards has specific functions to facilitate continuous improvement. Scheereens, Ehren, Slegers, De Leeuw, (2012) outline three main functions of Quality Assurance. Firstly, Certification and accreditation forms as a base for checking whether the system conforms to formally established norms and standards. In competence Based Education and Training, certification indicates that the trainee has satisfied all the processes and procedures are performed. Secondly, Quality Assurance checks Accountability. Quality is made available for inspection to other entities or the society at large. Thirdly, organizational learning is another function of Quality Assurance. Since CBET trains apprentices in real work situation, the learner acquires typical work situation ethics, values, attitudes as well as organizational behaviour. Quality assessment is used as a basis for improvement in an organisational set up.

2.6.4 Cooperation network

The quality of apprenticeship training is largely dependent on the degree of competences displayed by the parties that are responsible for the training, such as the employers and the organizers of training. Quality is further influenced by how committed these parties are to the jointly agreed goals and principles. The organizers of training are responsible for the upkeep of an operational network and for selecting the correct cooperation partners.

2.6.5 Trade Advisory Committees

The TEVET Act (1999 cap.55:06) states that Trade Advisory Committees shall be instituted for better carrying out of the following as some of the functions:

- To advise on establishment of new technical training and education programmes and the abolition of obsolete ones.

- Conduct Training Needs Assessment and determine training standards for the specific trades that committee is covering.
- Draw up training specifications and job descriptions for the trades to be taught.
- Ensure co-ordination of related trade training activities.

Training Advisory Committees have a vital role of maintaining checks and balances in Quality Assurance of Technical and Vocational training in Technical Colleges. The study seeks to establish effectiveness of these systems at institutional level.

2.6.6 Quality manual

Quality manual is a pre-arranged document describing the whole of the organization's operations. For effective Quality Assurance, the manual must contain blue prints on planning of the whole system ie strategic plan and its intended objectives as well as principles and procedures of managing quality operations to achieve the objectives. within the organization. The quality manual may also be used to present the activities of the organization to an outside party, its customers or new employees. Quality Manual is very important in apprenticeship training as it clearly demarcates all stakeholders roles and proper time to execute activities and operations.

2.6.7 Material Resources

The apprenticeship training is greatly affected by the economy. Working environment for an apprentice should be heavily equipped with machines, apparatuses, and materials. From the viewpoint of quality management it is essential that material resources are used and that purchases are made in a way that is economic and suited to their purpose. A pleasant and safe working environment is also part of the material resources.

2.6.8 Trainer Qualifications

Qualifications of trainers are very important aspect of quality assurance. Eicker, Haseloff and Lennart (2017) highlight desired qualifications of a trainer such as:

1. Vocational Educational skills, which encompass competence in the use of a wide range of professional pedagogical methods (sovereignty of methods) and for the competence to design and control training processes in the core course. Trainers should be able to tackle challenging and complex issues in their trades. Trainers should possess higher qualifications than trainees.
2. Competence in pedagogy and psychology of youth and adults, understood as the ability to accompany trainees through the entire training process including crises and problems as well as the ability to individualize learning processes, counseling skills that include everything that the full-time vocational educators need for selection, acquisition, monitoring, leadership and guidance.
3. Management skills, such as education marketing, education controlling, acquisition of orders or calculation. A trainer with such attributes is wholesome and can handle a class with confidence.

2.7 THEORETICAL FRAMEWORK

Theoretical framework is the general notion or theme being engaged in the research (Craswell & Poore, 2012). Theoretical frameworks inform the study and guide the researcher to analyze, explain and interpret the data.

This study was guided by the **Situated Learning theory of education** developed by Lave and Wegner in 1991. The theory provided direction and shape to the study as it best describes the processes which are part of mechanisms for managing CBET in CTCs. Situated Learning Theory argues that learning occurs best when it takes place in the context in which it is applied.

Students act in an apprentice capacity within communities of practice where learning opportunities arise situationally. As students gain experience and competence they gradually move from an apprenticeship role to full participants in their community of practice. Farmer and Hughes (2015) define Situated Learning Theory as a process of activity within a community of practice based on participation in authentic social interaction. Bersar (2018) concurs and further state that Situated Learning Theory is rooted in dependable contexts of practice where students are involved in increasingly more complex tasks within social communities. SLT believes that for one to become an effective practitioner, he or she needs to know how the community uses knowledge.

Lave and Wegner (1991), Farmer and Hughes (2015) outline four key elements of Situated Learning Theory as follows: 1. It clinches a sociocultural view of learning where knowledge is seen as being distinct and agreed upon by a society or community. 2. Learning takes place in a typical community of practice i.e. a group of professionals who share a craft. 3. Lave and Wegner argue that learning should take place through an apprenticeship model. In their teaching method, students are embedded in real-world contexts. They follow actual practitioners around to observe their practice and learn from them through guided practice or cognitive apprenticeships⁷.

4. Progression from peripheral to full participation. In a traditional apprentice-mentor relationship, it is the mentor who has control over the gradual release of responsibility to the apprentice. The mentor controls the level of participation and the pace of progression.

Situated Learning Theory however receives some criticisms. It does not acknowledge that people can learn objective knowledge through independent study. Clearly people can learn without social interaction, so this theory does not fully account for how learning happens.

Secondly, SLT encourages learning socially agreed upon information and processes other than individuality. Thirdly, the theory is impractical for Western Education Systems: Western education is designed around learning in classrooms rather than in situated context.

Ormrod (2008) states that a visible change in behavior is the most common proof of learning. The Apprentice Perspective is a holistic field of learning because it involves the education of both the student and the teacher. As the learner develops a schema that begins to incorporate the complexities of the environment, they will be more capable of performing similarly to their peers. Once this is recognized by the trainer, the student will become accepted as a peer; at this point, as the new worker tackles problems through their new and previously existing schema, their individual talents may start to be applied within the group practices.

2.8 CONCLUSION

The literature has defined education in general as acquisition of knowledge, values and attitudes. Apprenticeship training has been discussed as learning through practices, CBET as a mode of delivery has been thoroughly highlighted as learning based on learning outcomes. Establishment and functions of community colleges have been highlighted from different countries. Comparative studies have been drawn from United States of America, Canada, United Kingdom, Switzerland, Germany, Australia, India, Malaysia, Philippines, Benin and South Africa. Importance of quality assurance to Technical and Vocational education has also been discussed and later Situation Learning Theory that directed the study has also been discussed.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the research paradigm, approach, research design, sites and choice of study sites. The second part highlights sample and sampling procedures, subjects, data collection procedures. Finally provides insights of data generation methods and how instruments were used, data analysis techniques, limitation and delimitations of the study, issues of validity, ethical issues and presentation.

3.2 RESEARCH PARADIGM

Mzumara (2016) defines paradigm as a philosophical assumption or theoretical underpinnings of research. Mack (2010) defines paradigm as a loose collection of logically related assumptions, concepts or propositions that orient thinking and research. Paradigms influence traits to be studied, how to study and how results should be interpreted. There are three major paradigms namely; positivism, pragmatism and interpretive or constructive.

3.2.1 INTERPRETIVE PARADIGM

The study used interpretive paradigm as posited by Burton, Brundrett & Jones (2008) in order to explore perspectives and shared meanings to develop insights and deeper understanding of quality Assurance Mechanisms in Managing CBET in Community Technical Colleges by means of collecting predominantly qualitative data. This philosophy according to Burton, Brundrett & Jones (2008) helped to explore perspectives and shared meanings in order to generate perceptions. The researcher developed deeper understanding of occurrences by means of collecting qualitative data and looked for subjective insights of characters. “Interpretivism captures the lives of participants in order to understand and interpret the meanings they attach

to social issues” Ndengu (2012, p. 11). The paradigm is concerned with understanding the world as it is from subjective experiences of individuals in their natural settings. In this study, principals and instructors provided information according to their experiences. More importantly, the interest was understanding and assessing quality assurance mechanisms in managing competency education and training in Community Technical Colleges.

3.3 RESEARCH DESIGN

A Research design according to Mzumara (2016) is an overall plan which spells out the way research is conceived, executed, and how the findings are put together. The research was conducted qualitatively. Basing on the aim of the research which is to assess Quality assurance mechanisms in the delivery of CBET in Community Technical Colleges and considering its objectives, the research adopted an exploratory design (Shukla, 2008; Saunders et’al, 2009). The University of Washington School of Medicine (2012) state that this design has the following advantages: The method relies heavily on interactive interviews. Respondents may be interviewed several times to follow up on a particular issue, clarify concepts or check the reliability of data therefore interactive interviews were conducted in this research. The method is open-ended and has less structured protocols for example researcher may change the data collection strategy by adding, refining, or dropping techniques or informants. Findings are not generalizable to any specific population; rather each case study produces a single piece of evidence that can be used to seek general patterns among different studies of the same issue.

3. 4 RESEARCH APPROACH

There are two approaches to research according to Saunders, Lewis, & Thornhill (2009); namely deductive and inductive depending on the adapted philosophy and the type of research. This study followed an inductive approach where interpretation was drawn from the data, not by deductively testing a hypothesis. The approach was appropriate to this research because it

allowed some flexibility during Focus Group Interviews as it enabled the researcher to be part of the research process (Saunders et al, 2009. Shukla, 2008). It thus provided rich descriptive information for the study.

The inductive process builds the data to broad themes, then to generalised model or theory as illustrated below.

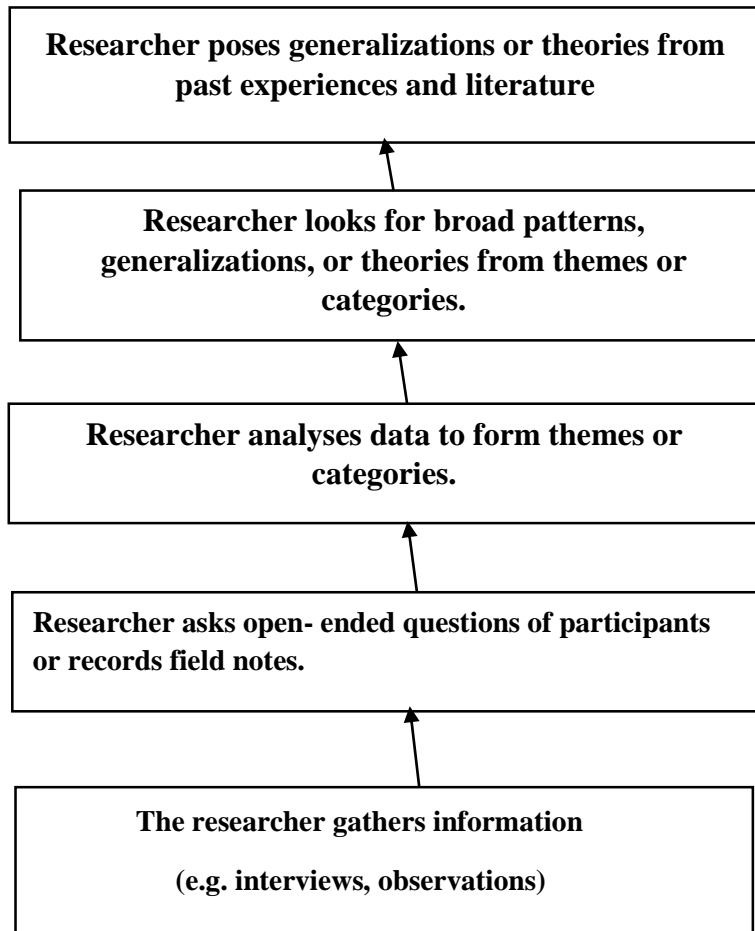


Figure 1. An inductive logic of Research in Qualitative study. Adapted from Cresswell (2009).

3.5 STUDY SITES

The study was conducted in **five** Community Technical Colleges i.e two from the northern region and three from the central region. These NTCs were established in 2015. The following are characteristics of the selected Colleges:

College A

The College has six trades namely, Bricklaying, Carpentry and Joinery, Plumbing, Fabrication and Welding, Motorcycle Mechanics and Tailoring. The institution accommodates 120 students as per government recommendation but can host 130 to 140 students per term. It has 12 instructors comprising of 3 Female and 9 Male.

College B

The College has a capacity of 100 students i.e. 20 per class for the following courses: Bricklaying, Carpentry and Joinery, Plumbing, Fabrication and Welding and Fabrication and Tailoring. It has 10 instructors. 8 Male and 2 Female.

College C

This college C has five courses. The institution can hold a maximum of 130 students per term. The institution has 10 instructors out of which 2 are female and 8 are male. This college offers the following trades: Bricklaying, Carpentry and Joinery, Plumbing, Fabrication and Welding and Tailoring.

College D

This college has five courses namely: Bricklaying, Carpentry and Joinery, Plumbing, Fabrication and Welding, Tailoring and fashion design. The institution handles a maximum of 120 students per term and has 13 instructors out of which 5 are female and 8 are male. Out of the total number of instructors, 7 (i.e. 5 male and 2 female) are employed on temporary basis.

College E

This college has five courses namely Bricklaying, Carpentry and Joinery, Fabrication and Welding, Tailoring and Fashion Design, Plumbing. The institution has a capacity of 120 students per term. The institution has 10 instructors out of which 7 male and 3 female.

3.5. DATA COLLECTION

The following section explains data collection methods. Detailed information has been provided on each of the methods for the study.

3.5.1. SOURCES OF DATA

The primary and secondary data were collected to cover every aspect of the study. The primary data are related to behaviour and response of Principals and instructors. The secondary data included browsing through records, guidelines and policy documents that are used. These data were used in combination as per need of the study. These data having different merits and demerits served the purpose of the study as explained below:

3.5.3 PRIMARY DATA

Primary data is information collected by a researcher, sometimes by researcher's trained observers or interviewers specifically for a research assignment (Rudestam & Newton, 2015).

Primary data are original in nature and directly related to the issue or problem and current data.

This is the data which the researcher collects through various methods like interviews, surveys, questionnaires and many more. Shodhganga (2012) outlines advantages of primary data as follows:

The primary data collected is original, accurate and relevant to the topic of the research study. Primary data can be collected from a number of ways like interviews, telephone interviews, focus groups and many more. It can be also collected across the national borders through emails and posts. It can include a large population and wide geographical coverage.

Primary data is current and can give a realistic

view to the researcher about the topic under consideration. Data is reliable because it is collected by the concerned and reliable party.

Primary data sources for this research included interviews, focus group discussion and observations.

To achieve the intention of the research objectives, interview guides and focus group guides were formulated to College principals and focus group discussions conducted with Community College instructors respectively. The study therefore sought at least approximate explanations in line with the objectives.

i. Interviews.

Face- to-face interviews with the aid of an interview guide were conducted with principals 5 Principals. Robson (2007) posits that the heart of interview technique is the interviewer or researcher who talks to one or more other interviewees or participants. These interviews ranged from fully **structured interviews** where a fully structured questionnaire with closed as well as open questions were conducted with participants to **semi-structured interviews** where the researcher recorded responses from respondents. In semi-structured interviews according to Robson (2007), the researcher does not need to use exact question wording as in the fully structured interview. Ary, et'al (2010) concurs by stating that respondents in semi-structured interviews are given choice to elaborate and interviewer is able to probe further. A consent was sought from interviewees to use an audio recorder to obtain verbatim responses.

ii. Focus Group Discussion

Escalada and Heong (2009) posit that focus group discussion also known as group interviews is a rapid assessment, semi-structured data gathering method in which a purposely selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by

the researcher or facilitator. Five focus group discussions of sixty minutes each were conducted for the study. A focus group discussion guide was used to solicit views from instructors through focus group discussion. Focus group discussion provided valuable in-depth information needed about how instructors think about quality assurance mechanisms, their reasoning about why things are as they are and why they hold the views they do. The method provided a fast way to learn from the target audience.

iii. Observations

Observation involved watching people in some situation making a record of what has been seen. Qualitative researchers according to Rudestam and Newton (2015) place particular emphasis on human observation and make no claims for the reliability and validity of the instrument in the rationalistic sense. Participant observation was conducted for the research which according to Robson (2007) is the role taken by the observer where the researcher is effectively just another member of the group involved. Silverman (2013) and Robson (2007) outline the following advantages of this method: It can be used to observe and analyse a very wide range of situations. There is little or no need for equipment or prior preparation. It provides the possibility of adopting a wide range of different participant roles depending on what is appropriate for the research and which the researcher feels most comfortable with. Participant observation provides an opportunity to understand complex realities and relationships. Five observations were conducted i.e. one in each of the selected Community Colleges. In this method, data was collected by observing lessons in workshops as well as classroom in order to obtain in-depth information on the Quality Assurance mechanisms that are put in place for CBET delivery. Field notes were recorded in a field book for analysis purposes, where necessary, the researcher captured photographs to have a pictorial feeling.

3.5.4 SECONDARY DATA

Secondary sources are work that has been based on primary or other secondary sources (Rudestam & Newton, 2015). They usually interpret, summarise or provide an analysis or a review. For example: reading a book that provides an introduction to a theorist's work, critiques it, or applies the theories in a particular context. Another example is an article that reviews research in a particular area and provides a summary of the key findings.

Secondary data is also used to gain initial insight into the research problem (Shodhganga, 2012). Secondary data is classified in terms of its source – either internal or external. Internal, or in-house data, is secondary information acquired within the organization where research is being carried out. External secondary data is obtained from outside sources. There are various advantages of using secondary data. Secondary data is that it is cheaper and faster to access. Secondly, it provides a way to access the work of the best scholars all over the world. Thirdly, secondary data gives a frame of mind to the researcher that in which direction he/she should go for the specific research. Fourthly secondary data save time, efforts and money and add to the value of the research study (Shodhganga, 2012. Rudestam & Newton, 2015).

Literature was collected from several notable published studies within the University library and other libraries. Information sources included published books, journals, online publications, manuals, papers, periodicals and policy and reform documents and any other relevant working documents from MoL, TEVETA and Community Colleges to provide updated information for the study.

1.9 3.6 STUDY POPULATION

In order to understand and assess Quality assurance mechanisms in the delivery of CBET in Community Technical Colleges in Malawi, the study gathered information from 5 community

colleges i.e. 2 from the north and 3 from the central region. Data was collected from management and academic members of staff.

3.7 SAMPLING TECHNIQUE AND SAMPLE SIZE

Participants for the study were purposively sampled. Purposive sampling is a non- probability sampling technique where a sample is selected based on characteristics of a population and the objective of the study. Non- Probability sampling allows each one in the population to have equal chance of being selected (Saunders et al., 2009). Cresswell (2014) posits that the idea behind qualitative research is to purposefully select participants or sites that best help the researcher understand the problem and the research question. Selection of participants was based on the following characteristics:

- A participant must have served for not less than two years.
- Those who are subject experts.
- Those that are involved in internal or external verification exercises.
- Being Principal or Deputy Principal because they are involved in making decisions on quality assurance.

Table 1. Participants for interviews

No.	Category of participants	Population Size	Sample	Sampling technique	Sampling type
1.	Principals	6	5	Non-probability	Purposive sampling

The population size for interviews with principals was six. Five were sampled and conducted interviews.

Table 2: Focus group Participants

No.	Category of Participants	Population Size	Sample	Sampling technique	Sampling type
1.	Instructors	58	26	Non-probability	Purposive sampling

The study was conducted in five Community Colleges. Two Colleges were selected from the northern region and three Colleges from central region were randomly sampled. Participants were purposely sampled. The table below shows number of participants per College.

Table 3: participants according to gender.

COLLEGE	TOTAL RESPONDENTS	MALE	FEMALE
A	5	3	2
B	5	3	2
C	5	3	2
D	5	2	3
E	6	3	3
Total	26	14	12

The table above shows number of participants according to gender.

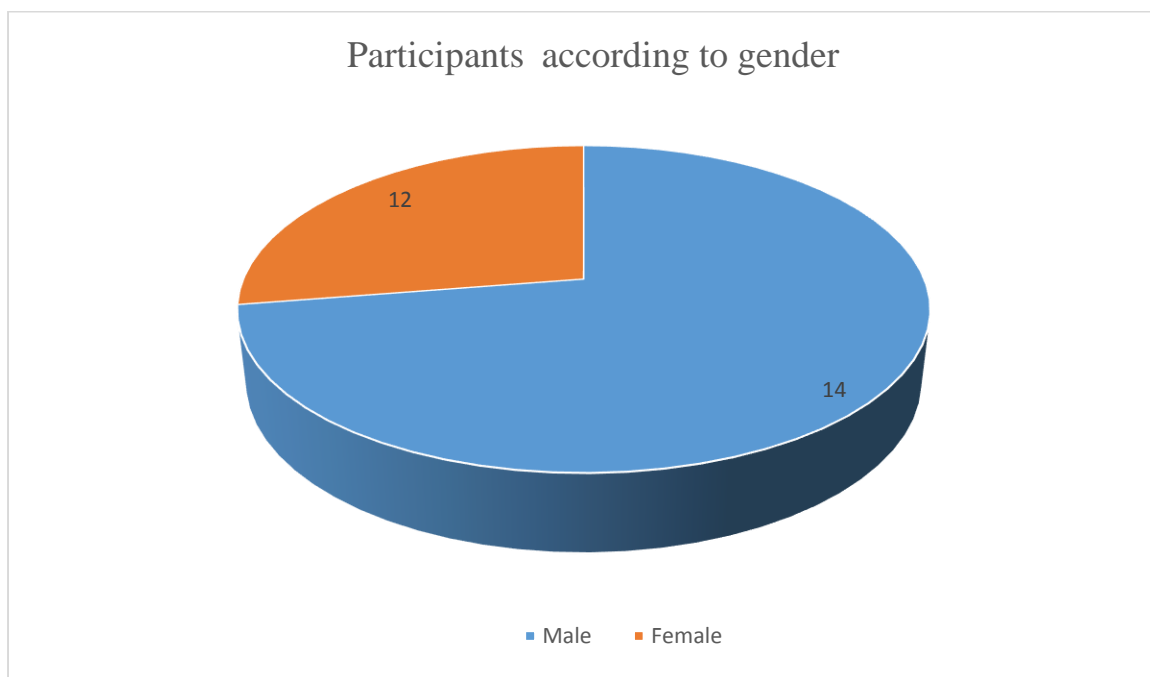


Figure 2. Participants according to gender

A total of 26 respondents were interviewed. Out of this number 14 were male and 12 were female. 5 Principals, 4 were male and 1 female. Respondents were in two categories. Some have been there since inception of Community Technical Colleges in 2015 and others have served for 3 years.

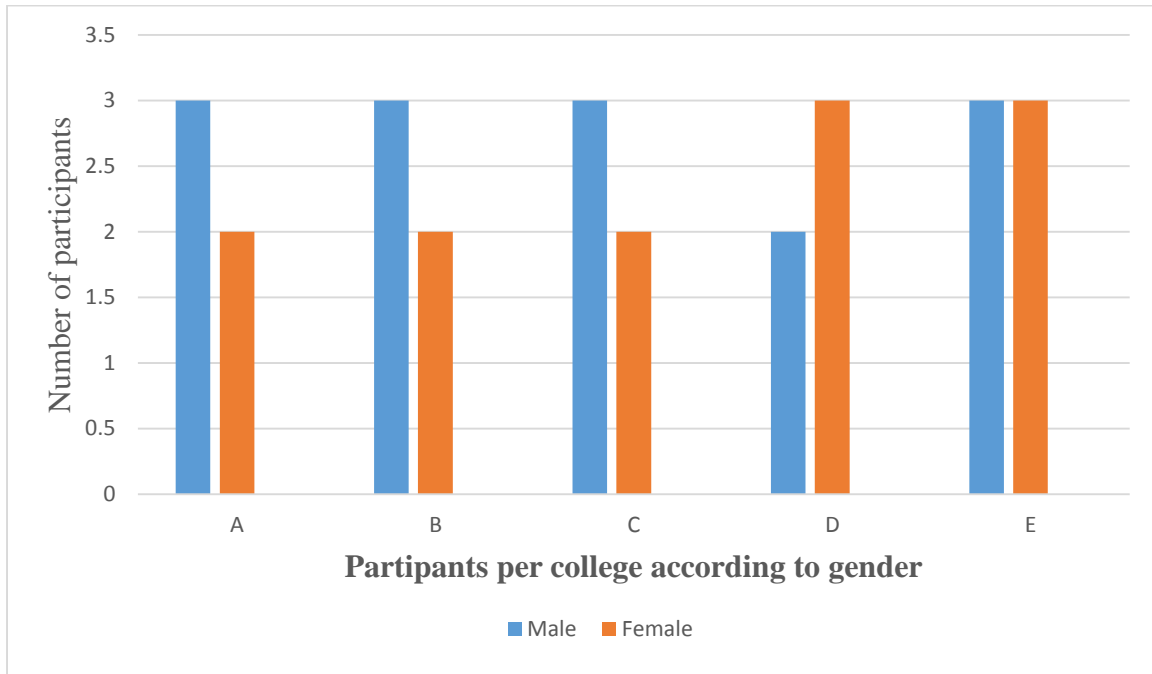


Figure 3: Graph of Participants per college grouped to gender

3. 8 DATA ANALYSIS

The first part provides an overview of how data was analysed. The second part presents the findings from participants. In some instances verbatim accounts are provided to stress on the facts being presented.

3.8.1 AN OVERVIEW OF HOW DATA WAS ANALYSED

Data analysis is defined as a process of interpretation of dealing with the raw data in such ways that the messages contained in the data become clear (Robson, 2007). The data was collected and analyzed qualitatively using content analysis. Cresswell (2014) posits that content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Data collected through interviews together with data recorded in observation note book were transcribed so that the researcher had the following benefits according to Bailey (2008): easy interpretation of data, inclusion of verbatim comments in the report, to enable

follow up and make a detailed examination of the events and to interpret data for quick reporting or browsing.

Data analysis started just when the process of collecting data commenced. Analysis began by reading all the documents to get logic of all data. The gathered data was then coded and grouped (Tiwari, Kesipeddi & Jagda, 2018) following a six-phase guide (Maguire & Delahunt, 2017) which is a very useful framework for conducting analysis as shown below:

Step 1: Became familiar with the data

Step 2: Generated initial codes

Step 3: Searched for themes

Step 4: Reviewed themes

Step 5: Defined themes

Step 6: Write-up.

Table 4: A Six phase guide adapted from Maguire and Delahunt (2017) p3354

Analysis began by reading and re-reading through all the transcripts to be very familiar entire body of data. The second stage was to organize data meaningfully and systematically. Coding was then done in reference with Maguire and Delahunt (2017) to reduce lots of data into small chunks of meaning. Themes were generated according to research objectives. Codes were examined and some of them clearly fitted together into a theme. Data was associated with each theme and considered whether the data really did support it. Final refinement of the themes was done with an aim of identifying the essence of what each theme was about. Subthemes were also created depending on how do they related to the main theme. The Final stage was to produce a write up.

Data obtained from observations and interviews was read several times and analyzed to identify key points.

The following five main objectives guided the process of analyzing data:

- a) To identify the current practices of Quality assurance systems in Community Technical Colleges.
- b) To explore effectiveness of Quality assurance systems in Community Technical Colleges.
- c) To define the management and administration of CBET processes and procedures in Community Technical Colleges.
- d) To determine challenges faced in delivery of CBET in Community Technical Colleges and their possible solutions.

The findings in this section are therefore based on field data collected in during the process.

Data was collected from the following data collection ways:

- a) Interviews with Principals of Community Colleges.
- b) Focus group discussion with instructors.
- c) General classroom Observations and Workshop practices.

3.10 TRUSTWORTHINESS.

Trustworthiness is the standard on which the research is mediated. This basically means the research is well founded and that the results can be depended upon (Richards, 2009. Silverman, 2013). According to Streubert and Carpenter, (2011), trustworthiness is a process during which the reliability and validity of qualitative research study is established. A research study is trustworthy if it represents the views and opinions of participants. This is only possible if the views of participants are properly recorded and represented (Streubert & Carpenter (2011). Trustworthiness is therefore confirmed when the researcher validates the information generated.

The Researcher maintained trustworthiness throughout by using only dependable and reliable sources of information which allowed audit enquiry to review and examine the research process and the data analysis to ensure that the findings are consistent. Trustworthiness was assured through the following processes.

3.10.1 Triangulation of sources

There are four methods of triangulating data according to Patton (1999) namely: Methods triangulation, Analyst Triangulation, Theory/perspective triangulation and Triangulation of sources. The main aim of triangulation is to gain understanding from different perspectives of an investigated phenomenon. Triangulation of sources was used for this research in order to examine consistency of different data sources. For example: comparing people with different viewpoints. This process involved soliciting data from multiple sources as a means of cross - checking and verifying evidence and illuminating a theme or theory. Creswell (2014) points out that triangulation involves using multiple data sources in an investigation to produce understanding. This technique is generally used by qualitative researchers to ensure that an account is rich, robust, comprehensive and well-developed. He further states that the reason for triangulating is that a single way is never adequate to shed light on a phenomenon. The different sources may include additional sources, other methodologies, or previously conducted studies that may help yield different interpretations. Using multiple methods facilitates deeper understanding.

3.10.2 Piloting

Data collection tools were piloted at Mzuzu Technical college to check for ambiguity and inconsistencies. However, the researcher involved peers from Mzuzu University before piloting the instruments to play a role of asking questions about the data collection, data

analysis and data interpretation. Peers provided professional and emotional guide by listening emphatically on the presentations.

3.11. ETHICAL CONSIDERATIONS

Ethical consideration is defined by Fraenkel et al. (2012) as conforming to the standards of conduct of a given profession or group. Data availability was possible because the respondents were willing to provide information. The study followed ethical considerations throughout the process in order “to have a clear purpose” (Clough & Nutbrown, 2012) as outlined below.

3.11.1. CONSENT FROM THE UNIVERSITY

The researcher obtained a consent letter from Mzuzu University to conduct the study and approval was sought from management of MoLYSMD, TEVETA and Principals for Community Technical Colleges where research was conducted.

3.11.2. PROTECTING PARTICIPANT RIGHTS

Participation in research was voluntary for all potential research participants, limited to Principals, Deputy Principals and Community Colleges Instructors. Participants had the right to withdraw from research participation at any time without consequence.

3.11.3. CONFIDENTIALITY

The researcher secured informed consent from participants before collecting data. The informed consent document provided potential participants a description of the study, nature of participation, purpose of the study, duration of the research, assurances regarding confidentiality, consent to be tape-recorded, right to withdraw without penalty, and opportunities for participants to have questions or concerns regarding the research addressed. Participants were provided with a copy of informed consent document to sign before data collection started. This was an important part of the research activity because it paved way for

participants to cooperate and allow them to freely and genuinely accept to participate in the research exercise (Rudestam and Newton, 2015; Mzumara, 2016).

3.11.4. PRIVACY

Privacy is assured when an individual has the freedom to decide on the time and the extent to which private information should be disclosed or not (Burn & Grove, 2011). The study endeavoured to protect participants' privacy by not disclosing their names during the collection, recording or reporting of information. Ndengu (2012) adds that pseudonyms for schools and respondents can be used in qualitative data. The study did not use any assumed names and was conducted in a way that does not affect any of the participants such as using interview guides where the risk of invading privacy was minimized (Fraenkel, et'al, 2012). With this in mind, the study was conducted without violating ethical principles.

CONCLUSION

The chapter has outlined research paradigm, research design, it is discussing the inductive research approach, Study sites and characteristics of the study sites, how data was collected using primary and secondary sources, sampling technique and sample size. The later part of the chapter has further described data that was collected by interviews and observations. Issues of credibility, dependability, and the ethical consideration have also been described.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

This chapter discusses results under the following key aspects: responsibilities of Principals and instructors in managing quality assurance and their roles in promoting quality assurance, QA decisions during industrial attachment of learners, promoting QA at institutional level, importance of financial resources to institutional QA, curriculum versus implementation, feedback on quality improvement, QA evaluation instruments, QA processes, tools used in CBET delivery and their effectiveness, continuous and summative assessments, internal and external verifications of assessments and absence of academic committees in some colleges, other factors though not directly given out by respondents during research have indirect effects on managing quality assurance mechanisms as well. The focus of this study was to assess quality assurance mechanisms for managing CBET in community technical colleges in Malawi.

The findings are presented according to research objectives. The outline starts with responses from Principals then Instructors. The second part gives a summary of findings through observation and secondary sources.

4.2. INTERVIEW WITH PRINCIPALS

4.2.1 Responsibility of Principals in managing quality assurance in the Institutions/ Leadership Roles in implementing and promoting Quality Assurance Mechanisms at Institutional level.

Under this theme one of the Principals responded that he oversees the election of academic and Examination committees and their functionality. Roles of Community College Principals however stem from recruitment, advising the assembly on the required number of students per class and the right candidates i.e. those with Malawi School Certificate of Education as entry qualification. Another responsibility is to check if assessments are conducted according to the curriculum, to make sure that every student is assessed in all designed modules, to make sure that materials are available all the time. One Principal said *“every assessment has to be moderated to maintain consistency because some instructors ask vague questions”*. Internal and external verifications are also supervised by principals or sometimes delegated to deputy head teachers as heads of academics. On external verification of assessments the roles of principals are to formulate calendar for external verifications, to advise external verifiers, making sure that a copy of verification records are safely kept at the head of academics office. According to Principals, procedures for ensuring quality are to make sure students are on time for classes and that instructors on duty are always punctual but also prepared for their duty. Absence of guidelines and checklists compromise standards on the role of Principals of CTCs. Every Principal conducts it the way it desires.

4.2.2 Attachment and Monitoring of Apprentices (learners) at industry.

Industrial attachment is a very important component of the apprenticeship training because it enhances professional practice through skills, values and direct experience (Edziwa and Chivheya, 2015). This is an arrangement where apprentices have to be attached at industry to gain real work exposure. The Principal’s role is to lobby and organize for attachment places.

Monitoring of apprentices during industrial attachment is done by one or two officers from TEVETA. These officers are non-trade experts but entrusted to monitor all apprentices from NTCs and CTCs in any trade thereby compromising standards. One principal said *“I have on several occasions engaged TEVET officials to convince them that monitoring can best be handled by instructors because they are trade experts and can provide direction for industrial attachment”*.

4.2.3 Quality Assurance Decisions

Some colleges have academic Committees responsible for quality assurance, though not formally structured. The committees comprise of Heads of department. It was also discovered that CTCs have no strategic plans, instead staff meetings are conducted regularly where successes and shortfalls are highlighted for proper implementation of the system. On procedures for implementing quality assurance, there is no designed tool. Principals however stated that they make sure that students are on time for classes and that instructors on duty are always ready for duties. Decision making starts at section level with instructors who report to heads of sections then to head of academics (Deputy Principals). There are disparities on how QA decisions are made in absence of guidelines, this is the reason some institutions operate without academic committees.

4.2.4 Promotion of Quality Assurance at institutional level

Products made by students are sold to the community. Sometimes students are engaged in activities such as maintenance of infrastructure in the community around. One Principal commented, *“The way market responds grants us encouragement, even students themselves become confident”*. Community Colleges do not have instruments for quality at institutional level. This contradicts with Screens, etal (2012) who allude that schools are required to produce

various documents such as a school plan and prospectus in which they describe their quality policy and its results.

4.2.5 Importance of financial Resources to institutional Quality Assurance.

All participants indicated that financial resources are very important to quality assurance. Community Technical Colleges receive funding from government through Other Recurrent Transactions (ORT) and materials subsidy from TEVETA which is calculated per student or a particular term. A Community College is supposed to be given K500, 000.00 per month from government as ORT. The current amount that TEVETA pays as Training material subsidy per student is K20, 000.00 per term. Principals lamented that government funding to institutions is intermittent. One Principal said:

“Technical and Vocational training needs a lot of financial resources to run in terms of procuring training materials, but for the last financial year, we only received ORT three times. So you can imagine how we struggle to procure training materials. TEVETA supplements government funding through subsidy, but I feel the amount was adjusted upwards because materials prices are rising each passing day.”

Community Technical Colleges require adequate resources for effective delivery of CBET. Low funding in CTCs negatively affect training.

4.2.6 Curriculum Versus implementation.

Respondents were of the view that only 75% of the curriculum is implemented for the following reasons: some of the contents in the curriculum is not covered e.g. Computer Aided Design because number of Instructors does not tally with number of learners, the contents of the curriculum does not match the period given, instructors do not have pedagogical skills.

Furthermore, workshops do not have adequate equipment and in some instances, some trades do not have workshops at all. Institutions are not provided with extra funds to conduct monitoring of students at industry. It was found that some of the aspects of the curriculum are skipped, sometimes not completed because some instructors in CTCs do not have the capacity to teach some of the modules.

4.2.7 Staff development

Views of principals were that staff development has never taken place since inception of CTCs. The result of it being poor quality of delivery. One of the principals said *“I do not have never gone through any administrative or management training, not even training in teaching methods, I only possess qualifications in my trade”*. Funding and financing has also greatly affected staff upgrading. Institutions do not have money to send their instructors to institutions of higher learning. The highest qualifications Community College Instructors have is Advanced Craft Certificate in their trades.

4.2.8 Feedback on quality improvement

On feedback, respondents stated that feedback from instructors is provided at management level and/or department level. This mostly reported to the principal of the CTC. Inspectors from Ministry and TEVETA rarely visit institutions. In their report for improving education in Netherlands, Sheereens, Ehlen, Slegers and De Leeuw (2012) explain that quality of school self-evaluations and quality care as a whole should be monitored and assessed by the inspectorate to enhance productivity of CTCs. There are no clear guide lines on how many visits should be done per term, per quarter or each year and where reports should be sent.

4.2.9 Quality Assurance Evaluation instruments.

On QA evaluation instruments, one principal said *“Periodic reviews are done at least twice every term thus during opening and during closing”*. CTCs have no structure of conducting

reviews. Students evaluations are done by analyzing assessment results, end of term exams results and oral assessment that are done weekly. Observation of learners' practical work is also done on daily basis.

Student's performance is a platform for teacher's evaluation. Teachers' records also provide a form of evaluation. Management evaluation is established through students' performance, Feedback from industry also helps the management to evaluate its mechanisms. There are no structured mechanisms and tools in conducting this activity.

4.2.10 Quality Assurance process.

Quality assurance process in CTCs start with a meeting at the beginning of the term, where courses are divided to instructors, then schemes of work are compiled and checked by the head of academics, followed by actual execution of duties by instructors. This was discovered by browsing through meeting minutes in principals' files. Assessments are administered at the end of each module and results recorded. Internal Verifications are then conducted prior to external verifications of assessments. Every CTC has its own way of checking quality in absence of checklists and guides to principals.

4.3 INTERVIEWS WITH INSTRUCTORS

4.3.1 Effectiveness of tools used in CBET delivery.

Instructors responded that they use Schemes and records of work where information for each module coverage is recorded, lesson plans contain the flow of each lesson, Summary of modules Learning Outcomes contained in a Module package work as a teaching guide. Checklists provide a ready and daily record of each student's progression. Respondents however indicated that summary of learning outcome does not tell the process of how the student achieved a particular learning outcome. Some modules are limited i.e. very crucial activities are not taught. Observations however showed that very few instructors use schemes of work and lesson plans. The QA mechanism becomes less effective when instructors ignore the use of tools meant for effective delivery of CBET.

4.3.2. Entry qualifications

The entry qualifications for Community Technical Colleges is Junior Certificate but it does not tally with trade related sciences. One instructor said: *“subjects such as strength testing of materials go deep into metallurgy, physics or chemistry and require a background in sciences.”* This leads to delay in delivery because the instructor has to provide a background of the Periodic table and behaviour of materials within the limited time provided.

4.3.3. On continuous and summative assessments

CBET enables a trainees to follow their training i.e. work covered versus number of credits accumulated. Respondents stated that learners do not know the number of credits or percentage accumulated through continuous assessments and Industrial attachments to the final grade on a particular level. One respondent said *“a student may do well in continuous assessments and perform below average on summative assessments, the result will be failure”*. Introduction of

summative examinations by the government defeated the principle of Competence Based Education and training.

4.3.4 Internal verification of assessments

All respondents were of the view that IV provide feedback on coverage for the term and determine how much work is remaining. However, data collected through instructors' files' provided contrary information. IVs are rarely done in Colleges or sometimes done only once a term just before external verifications and summative examinations. Absence of IVs compromise quality of training because EVs evaluate the already assessed work.

4.3.5 Industrial attachment

Instructors are not involved in attachment of apprentices. It is quite challenging to get information from industry. One respondent explained *“Feedback from industry is very important so that instructors adjust on the way they should deliver. Performance at industry is not reported and is rated on interest of industry”*. It was also noted that industry trainers are not conversant with CBET mode of delivery. Students from Community Technical Colleges go for industrial attachment without a guide. Some attachment places are substandard. There are no meetings held between industry and colleges on training of apprentices at industry as a result many issues go unattended to. On monitoring of apprentices at industry, one respondent said *“There are no guides for monitoring apprentices at industry, however, we sit down and formulate guiding tools at institutional level. Officers conducting monitoring have to give reports to their heads of departments”*. CBET delivery standards are affected when there are no clearly defined principles, guidelines and checklists for regulation of industrial attachment.

4.3.6 Suggestions from respondents on monitoring of training at industry.

Respondents suggested the need for instructors to be fully involved in monitoring of apprentices at industry. Instructors from college must meet industry trainers at least once a

term. One instructor reported: *“students are subjected to various forms of abuse, sometimes what is taught in colleges is not complemented at industry. Some owners of shops and companies demand to be given money in exchange for teaching apprentices”*. This so because some industries do not know how the apprenticeship system operates. Industries are supposed to be inducted before handling apprentices.

4.3.7 Other challenges faced by CTCs.

It was recorded that the period for covering modules is too short while there are many modules to be covered i.e. 12 Modules covered in 12 weeks of a term. This makes it difficult to prepare a scheme of work because of limited time. One instructor suggested *“the training period should be divided into semesters and not term as the current scenario in order to provide enough time for coverage”*. Late release of results also affect turn up in Community Colleges as some learners get discouraged on the way. Against this background, it is evidenced that there is laxity in following regulated calendar of events.

4.3.8 Absence of academic committees in some Community Colleges.

Respondents highlighted that the absence of Academic committees result in poor administration of IV and External Verifications as a result the two activities are taken casually. This contradicts with TEVET Curriculum delivery orientation manual which states that an examination committee shall be responsible for moderation of assessments. On the other part, the assessment Committee shall be responsible for arrangement of Internal Verification and compilation of summary of results. One of the instructors stated *“External Verifications should be designed inform of mock examinations administered by a Quality assurance committee at every CTC”*. The findings above point to the fact that assessments and Verifications are not standardized and uniform.

4.3.9 On Curriculum versus implementation

Institutions follow the curriculum through module packages. Assessments are conducted Following Competency Based Education and Training procedures. However, all respondents stated that implementation of the curriculum is slow in some instances because institutions do not have enough equipment such that not all that is in the curriculum is covered fully. This mainly applies to practical work in the workshops. Some trades have only one instructor. This makes it difficult to complete content of a course. One respondent had this to say *“There is no logical arrangement of module with no provision for background information. For example in Bricklaying, there is erecting a wall without prior information of setting out”*. Module packages are prepared by University Lecturers, as a result the content fits University other than Technical Colleges and makes the content to be contrary to industry demands. The aforesaid points to the fact that some of the content of the curriculum is sometimes difficult to implement as it has more theoretical than practical as required in CBET.

4.3.10 Staff development Programmes

Staff development emerged one of the critical issues in this study. Participants observed that staff development is at the core of every profession as it improves employees' skills and competencies. According to participants, this makes employees become efficient and effective. Participants argued that individual efficiency and effectiveness contributes to group and organizational effectiveness since the whole is the sum of its parts. One instructor at college D said *“since inception of Community Technical Colleges, I have never heard of training windows being advertised for employees”*. Lack of training opportunities contributes to teacher attrition in Community Technical Colleges. The highest qualification CTC instructors may have is the Advanced Craft Certificate without pedagogical skills. Another instructor at the same college said *“I improve my teaching skills through reading educational books and i once attended a refresher course organized by TEVET Authority”*. Participants agreed that training

is necessary to equip teachers with additional skills thereby improving their competencies in carrying out their duties. Most of participants explained that MoLYSMD has never sent instructors for further education. This compromises quality assurance. Aamodt (2010) states that staff development opportunities are critical in enriching employees' jobs and therefore it is very critical in their decision to stay in the job. This finding therefore is in support of the EFA Global Monitoring Report on Malawi (UNESCO, 2014) which stipulates that advanced ongoing training has the potential to address knowledge gaps and upgrade and reinforce acquired skills in instructors. It is evident that there are minimum efforts to develop capacity of CTC instructors.

4.3.11 Constraints at National and Institutional Level

Funding and financing - Community Technical Colleges receive insufficient funding from the government. Principal from College C stated *“Community Colleges are not cost centers, hence do not receive direct funding from treasury. We receive an amount of MK 500, 000.00 per month for ORT, which is inadequate and mostly delayed up to three months. On the other part, TEVETA provides us with material subsidy which is calculated at MK15, 000 per student”*. This amount is insufficient considering the ever increasing cost of materials. Quality of training is greatly compromised by financial resources. Late procurement of training materials also affect training because instructors are confined to teaching theory instead of practical.

4.4 CONCLUSION

The chapter has provided detailed discussion of findings according to the main objective which was to assess quality assurance mechanisms of managing CBET in Community Technical Colleges in Malawi. Themes from findings were generated from roles of principals and instructors in quality assurance at the institution as well as during industrial attachment of apprentices in CTCs, decisions made at institutional level and general challenges faced at all levels and how the challenges affect Quality Assurance. The proceeding chapter presents summary of findings, conclusions made and recommendations.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The aim of this study was to assess Quality assurance Mechanisms for managing Competency Based Education and Training in Community Technical Colleges in Malawi. In this chapter the perspective of the problem presented in Chapter One is specified. The latter part presents summary of findings, and recommendations based on findings in relation to research objectives. Suggestions for further research and conclusion have also been provided.

5.2 The Summary of findings

Four themes emerged from data analysis in relation to the objectives application of Quality assurance systems, effectiveness of Quality assurance systems, management and administration of CBET processes and procedures. Challenges faced in delivery of CBET. The following emerged as key findings.

5.2.1 Application of Quality assurance systems in Community Technical Colleges.

The first research objective sought to find the current application of quality assurance in community technical colleges. The findings of the study have revealed that there are several ways of applying quality assurance. The table below shows the summary of findings on application of quality assurance systems in CTCs.

Application of Quality assurance systems in CTCs

Aspect	Explanation
College Leadership	<ul style="list-style-type: none"> • Principals have no formal management qualifications. This makes it difficult for Principals to make informed decisions. • Grade and qualifications of principals are just like any other instructor. As a result instructors underrate instructions from the principal.
Role of Principals in Quality Assurance	<ul style="list-style-type: none"> • Apart from their qualifications in particular trades, principals have not gone through pedagogical training. • There are no guiding tools for monitoring lesson delivery. Personal judgment is employed instead. • Election of sub committees to assist in Quality Assurance matters is at the discretion of the principal. Out of the 5 institutions visited, only 2 had established Academic committees.
Development of quality assurance strategies based on the general institutional strategic framework	<ul style="list-style-type: none"> • CTCs have no structured strategic framework. • Feedback on quality is provided by inspectorate from the Ministry of Labour and TEVETA.
Evaluation instruments	<ul style="list-style-type: none"> • Lack of evaluation instruments at institutional level.

	<ul style="list-style-type: none"> • Evaluation mainly depends on results of summative assessments which are conducted once a year.
Feedback on Quality improvement	<ul style="list-style-type: none"> • Feedback is rarely provided at the end of each inspection. • Institutions are not provided with monitoring reports for improvement.
Lack of Staff development	<ul style="list-style-type: none"> • There is no consideration for staff development in CTCs.

On the question of level of satisfaction for TEVET Curriculum versus its implementation. The graph below summarizes the findings. Respondents rated percentage of implementation out of the total 100%.

Number of Respondents	Rating
4	45%
6	50%
5	55%
6	65%
5	70%

Table 5: Respondents' satisfaction on curriculum implementation

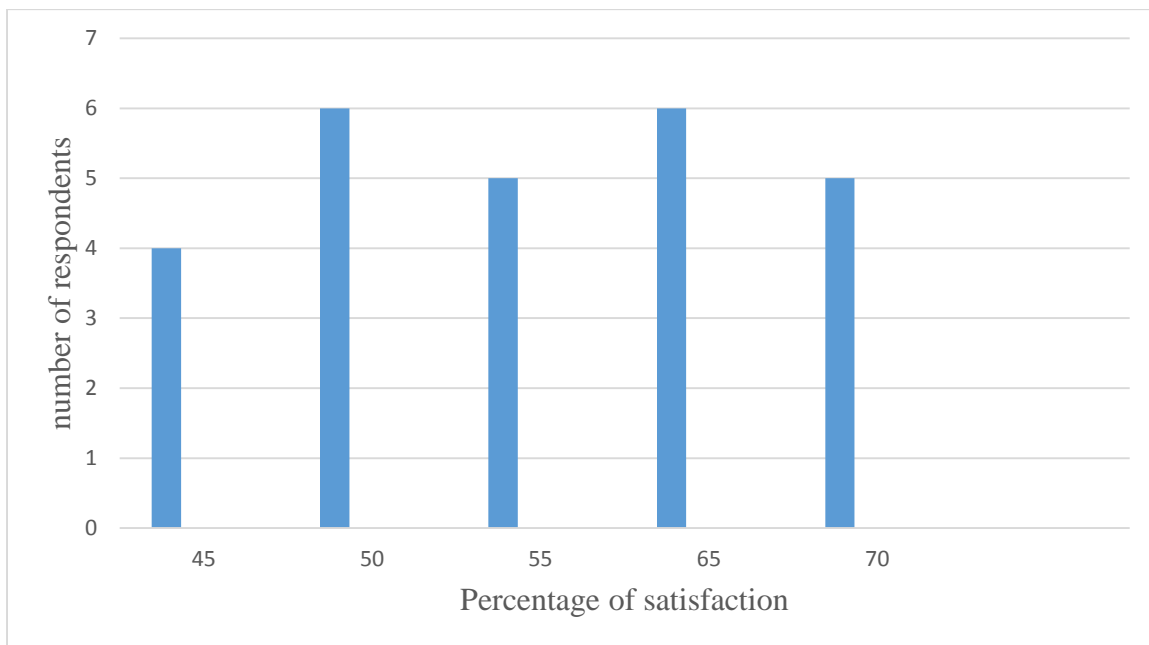


Figure 4: Graph showing number of respondents against percentage of satisfaction on Curriculum implementation

Information from the graph shows that 4 out of 25 respondents rated implementation at 45% of the total curriculum developed, 6 out of 25 rated implementations at 50%, 55% and 70% respectively.

5.2.2 Effectiveness of Quality assurance systems in Community Technical Colleges.

Quality Assurance mechanisms currently in place are not effective as there are no tools of measuring achievement. The system is open ended and there is no follow up on products to match desired standards.

5.2.3 Management and administration of CBET processes and procedures in Community Technical Colleges.

The findings indicate that a gap exists between colleges and industry. There is no interface between colleges and industry over training of apprentices. Instructors are not involved in monitoring and inspections of apprentices at industry. Training is dictated by TEVETA/ Ministry of Labour and instructors have no input in the training organization.

5.2.4 Challenges faced in delivery of CBET in Community Technical Colleges and possible solutions.

Community Technical Colleges offer training from level one up to level two similar to National Colleges, the difference is that National Colleges offer Level 3 and level 4 because of their capacity. However, it has been noted through observations and interviews that CTCs leave a lot to be desired in order to match standards with NTCs.

The table below is a summary of findings on challenges.

Challenge	Explanation
Shortage of instructors	Some CTCs have one instructor per trade which makes it difficult to handle two classes at once. In other cases 25 to 30 students are handled by 1 trainer.
Lack of workshop equipment	There is lack of equipment in the workshops, such that some trades use improvised locally made equipment which sometimes does not portray the actual simulation.
Lack of classrooms and workshops	Some trades conduct lessons under trees. In some cases, classes are also used as workshops. E.g. in tailoring, carpentry, welding and fabrication. Other extreme cases are that workshop practices are done outside due to lack of workshops. Out of 5 institutions visited, it was observed that 3 institutions have no workshops for bricklaying and Carpentry. As a solution, practicals are conducted under the blazing sun and sometimes rains keep them from holding lessons.

Insufficient funding	<p>The funds CTCs receive are not enough to cover administrative as well as material costs. Currently, CTCs are supposed to receive K600, 000.00 as Other Recurrent Transaction per month, but sometimes a term ends without a single subvention.</p> <p>On the other part, TEVETA subsidizes training by paying K20, 000.00 for each student per term towards material costs. The amount is not enough as there is frequent adjustment of prices.</p>
Lack of staff development for CTC instructors	<p>Instructors in CTCs possess skills in their various trades but without pedagogical skills.</p>
Inadequate number of attachment places for apprentices	<p>There is lack of policy to govern attachment of apprentices to industry. Companies and organizations offer attachment places at their own will. As a result, a number of apprentices do not secure attachment places.</p>

5.3 CONCLUSION/RECOMMENDATIONS

This research set out to assess Quality assurance Mechanisms for managing Competency Based Education and Training in Community Technical Colleges in Malawi. Based on this intent, the literature was explored for deeper insight on TVT and Quality Assurance. The findings from inferential indicators carried out were informative. Technical and Vocational Training and skills acquisition should prepare its graduates for the world of work. To achieve this however, the curriculum should answer to the demands of the industry through standardized Quality Assurance systems in institutions.

Flowing from the key findings above, the following recommendations are critical for developing an enduring quality assurance (QA) mechanism that would impact positively on TVT in Malawi.

- a) Academic committees should be instituted in all Community Colleges. These committees must have a clear plan of action to carry out the quality assurance procedures. Orsini (2013) suggests that the quality assurance task must be internalized by all members of the college organization (College Board members, administrators, teachers, support staff).
- a) Government and stakeholders should provide adequate funding for community college institutions in order to meet national aspirations. Adequate funding would boost standards and quality of manpower, instructional resources and infrastructural resources in community technical colleges. At government level, the Ministry should institute the Community College Trust Fund to earmark adequate funding for these institutions considering their importance for national development. In the same vein, the private sector organizations should be sensitized to support community colleges with their corporate social responsibility initiatives.
- b) Instructors should be involved in routine monitoring of training delivery at industry because they are trade experts and are better placed to follow up training of their apprentices.

- c) Exchange programme between Industry and TEVET institutions is inevitable for effective TEVET outcomes that meet industry's needs and needs of individuals for self-employment and improved productivity. Gavazzi (2016) alludes that institutions of higher learning and the communities in which they reside should take a more proactive approach to their Town-Gown relationship. Exchange arrangements often bridge the gaps between theory and practice as well as acquaint the instructors of institutions with the present needs and expectation in the industry.
- d) The government through Ministry of labour should invest massively in routine and periodic capacity-building training programmes for instructors. This effort would keep trainers informed of best practices and methodological changes in their areas of speciality. According to Pophan (2017), training for educators is needed in three areas. First, there must be training in the new teaching and learning processes that are developed. Second, training must be provided in the use of new assessment strategies. Third, there must be training in the principles of the new management system. For Community colleges, this means providing continuous professional development activities for all school administrators, teachers, and support staff.
- e) In order to ensure effective curriculum implementation, supervisory agencies should be instituted to ensure all TEVET institutions implement uniform standards, training, evaluation and certification at national level. At present there are variations in the delivery patterns of formal apprenticeship trainings in community colleges.
- f) In the area of uniform quality assurance, the same Ministry and supervisory agencies are advised to put in place enduring mechanisms for QA. This is imperative to standardise, monitor and control quality of training process, instructional resources and teachers. An effective Quality Assurance should ensure that learners are adequately prepared for the needs of the industry. This can only be possible if regulatory authorities mentioned above

could develop a strong institutional supervision mechanism to regularly supervise the delivery of CBET.

- g) The policy-makers in the Ministry of Labour must go beyond rhetoric to genuinely accord special attention to Technical and vocational training. There should be a policy to govern attachment of apprentices in that every investor in Technical field should attach a specified number of apprentices depending on the size of the company.

5.4 AREAS OF FURTHER STUDIES

This study has unearthed many aspects and practices that deter Quality Assurance. It is believed that if mechanisms for managing Competency Based Education can be amended, training in Community Technical Colleges will greatly improve in Malawi. However, further studies are recommended on relevance of Technical and vocational training to industry demands, total quality management in technical and vocational training.

6.0 REFERENCES

- Aamodt, M. G (2010). *Industrial/Organisational Psychology: an applied approach* (6th ed.). Belmont: Wadsworth.
- Ary, D., Jacobs., C.L., Razavieh, A. & Sorensen C. (2006). *Introduction to research in Education* (7th ed). California: Thomson Wadsworth.
- Asian Development Bank (ADB) (1996) *Case Studies in Education Research and Policy*. Manila: Publisher.
- Atchoarena, D & Delluc, A. (2002). *Revisiting Technical and Vocational Education in Sub-Saharan Africa, an update on trends, innovations and Challenges*. Paris: STEDI
- Bailey, J. (April, 2008). *First steps in qualitative data analysis: transcribing*. Retrieved from www.ncbi.nlm.nih.gov/doi:10.1093/fampra/cmn003.EpubFeb27
- Barab, S.A., & Hay, K.E. (2001). *Doing science at the elbows of experts: Issues related to the science apprenticeship camp*. *Journal of Research in Science Teaching*, 38 (1), 70 -102
- Bernikova, O. (2017). *Competency-Based Education: From Theory to Practice*. St Petersburg: St Petersburg State University.
- Besar, P. (2018). SLT: the key to effective classroom teaching? In: *HONAI: International Journal for Educational, Social, Political & Cultural Studies*, 1(1): 49-60.
- Brandt, B.L., Farmer Jr., J.A., & Buckmaster, A. (1993). *Cognitive apprenticeship approach to helping adults learn*. *New Directions for Adult and Continuing Education*, 59, 69–78.

- Burton, N., Brundrett, M & Jones, M. (2008). *Doing your Education Research*. London: SAGE.
- Clough, P & Nutbrown, C. (2012). *A student's guide to methodology* (3rd ed.). London: SAGE.
- Craswell, G & Poore, M. (2013). *Writing for academic success* (2nd ed.). London: SAGE.
- Cresswell, J.W. (2009). *Research design: Qualitative, quantitative and mixed methods*. (3rd ed.). London: SAGE.
- Collins, A., Brown, J.S & Newman, S.E. (1989). *Cognitive apprenticeship: Teaching the crafts of reading, writing and mathematics*. In L.B. Resnick (ed.) *Knowing, Learning and Instructional Essays in Honor of Robert Glaser*. Hillsdale: Erlbaum.
- Co-operation agreement between Scotland and Malawi* (October 21, 2010).
www2.gov.scot/publications/2005/11/Scotland-malawi-agreement
- Curren, R. (2007). *Philosophy of Education*. Singapore: Blackwell.
- Edziwa, X., & Chivheya, R. (2015). Farm attachment as a training methodology for Zimbabwe agricultural colleges' students, post land reform: Challenges encountered. *Journal of emerging trends in Educational Research and Policy Studies*
- Education Sector Implementation Plan II (2013/14 – 2017/18). *Towards Quality Education* (October 2014) Ministry of Education Science and Technology.
- Eicker, F., Haseloff, G & Lennartz, B. (2017). *Vocational Education and training in Sub – Saharan Africa: Current situation and development*. Berlin: Volkswagenstiftung.

- Escalada, M & Heong, K.L. (2009). *Focus group discussion*. Retrieved from:
Researchgate.net/ publication/242589494
- Farmer, R. and Hughes, B. (2005). A situated learning perspective on learning object design.
In: *Proceedings of 5th IEEE International Conference on Advanced Learning
Technologies*. Kaohsiung, Taiwan.
- Fraenkel, J.R., Wallen, N.E & Hyun, H.H. (2012). *How to Design and Evaluate Research in
Education (8th Ed.)*. New York: McGraw-Hill.
- Gavazzi, S.M. (2016). *The optimal town-gown marriage: taking campus community outreach
and engagement to the next level*. Journal of Higher Education Outreach and
engagement, Volume number 1. P 167 (2017). University of Georgia: Publisher.
- Ghuri, P. & Gronhaug, K. (2005). *Research methods in business studies*. Dorset: Prentice
Hall.
- Government of Malawi (July, 2004). *Education for all national action plan*. Zomba:
Government Print.
- Government of Malawi (2013). *Technical Entrepreneurial and Vocational Education and
Training Policy (2nd ed.)* Lilongwe: Ministry of Labour.
- Harris, R., Guthrie, H., Hobart, B & Lundberg, D. (1995). *Competency Based education
and Training-Between a Rock and Whirlpool*. Melbourne: Mac Millan
- Kelchen, R. (January 2015). *Competency Based Education*. Centre on Higher Education
Reform. New York: American Enterprise Institute.
- King, K (2000). *A Technical and Vocational Education and Training Strategy for
UNESCO*. Paper for the United Kingdom National Commission for UNESCO
and The British Council, London. UNESCO.

King, K. (2011). *Eight Modest Proposals for a Strengthened Focus on Technical Vocational Education and Training (TVET) in the Education for All (EFA) Agenda*, in NORRAG NEWS, Towards a New Global World of Skills Development? TVET's turn to Make its Mark, No.46, September 2011, pp. 122-125.

King, K. and Palmer, R. (2008). *Skill for work, growth and poverty reduction. Challenges and opportunities in the global analysis and monitoring of skills*. London:

British Council and UK National Commission for UNESCO.

Kis, V. (August, 2005). *Quality Assurance in tertiary Education: Current Practices in OECD Countries and Literature Review on Potential Effects*. Retrieved from www.oecd.org/edu/tertiary/review

Kufaine, N & Chitera, N. (2013). *Competecy Based Education and Training in Technical Education problems and perspectives, Education*. Academic Journals.

Retrieved from <http://www.academicjournals.org/LJVTE>

Lave, J & Wenger, E. (1991) *Situated Learning. Legitimate peripheral participation*, Cambridge: University of Cambridge Press

Leeuw, R. (2012). *Organisation for Economic Co-operation and Development Review on Evaluation and Assessment Frameworks for improving School outcomes: Country Background Report for the Netherlands*. Amsterdam: University of Twente.

Mack, L. (2010). *The Philosophical Underpinnings of Educational Research*. Retrieved on 15th July, 2018 Retrieved from <http://www.apu.ac.jp/rcaps/fckeditor/polyglossiaV19lindasy.pdf>

Maguire, M & Delahunt, B. (2017). *Doing a Thematic Analysis: A Practical, Step-by- Step Guide for Learning and Teaching Scholars*. Dundalk Institute of Technology. Volume 3.

Mertler, C.A (2014). *Action Research: Improving schools and empowering educators* (4th ed.). London: SAGE.

Maguire, M & Delahunt, D. (2017). *Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars*. AISHE-J Volume 3.

Dundalk Institute of Technology. Retrieved from: ojs.aishe.org

Malawi Education Sector: Policy and Investment Framework (January, 2001). Lilongwe: Ministry of Education Sports and Culture.

Management capacity building for Technical, Entrepreneurial, Vocational Education and training programme material. (August 2018). Unevoc.unesco.org/tvetleadership/

Modaff, D.P., Butler, J.A., DeWine, S. (2008). *Organizational Communication: Foundations, Challenges, and Misunderstandings* (3rd ed). Glenview: Pearson Education.

Mohsin, M. and Kamal, M. A. (2012). *Managing Quality Higher Education in Bangladesh: Lessons from the Singaporean and Malaysian Strategies and Reforms*. International Journal of Business and Management; Vol. 7, No. 20; pp. 59-70.

Mzumara, C. (2016). *Impact of Technology on Students' school life: Perceptions of Students, teachers and Head teachers in selected Secondary schools in Northern Education Division in Malawi: A Research Thesis in Masters of Education*. Mzuzu: Mzuzu University.

- National Policy on Community Colleges, Department of Higher Education and Training*
(October, 2014). Republic of South Africa.
- Neary, M. (2002). *Curriculum in Post Compulsory and Adult Education*. London: Nelson
Thornes.
- Ndengu, D. M., (2012). *Designing and Conducting qualitative research: A guide for Post
graduate students in the Social Sciences*. Mzuzu: Mzuzu University.
- Orsini, J.N. (2013). *The essential Deming Leadership Principles; from the father of Quality*,
New York. Mc graw Hill.
- Onyesom, M. and Ashibogwu, N. K. (2013) *Towards Quality Assurance in Business Education
in Nigeria: Constraints and Control*. Asian Journal of Business Management
Vol. 5(3): pp. 306-312.
- Patton, MQ. (2001). *Qualitative Evaluation and Research Methods* (2nd Ed.). New York: Sage.
- Phekani and Mtambo (1997) cited in Woltjer, L. (March, 2006). Analysis of Vocational
Education and Training in Malawi. Retrieved from www.jica.go.jp
- Popham, W. J. (2017). *Classroom assessment: What teachers need to know* (8th ed). Los
Angeles: Pearson.
- Pratt, D.D. (1998). *Five Perspectives on Teaching in adult higher education*. Malabar: Krieger.
- Richards, L. (2009). *Handling qualitative data. A practical guide* (2nd ed.). New York: Sage.
- Robson, C. (2007). *How to do a research project; a guide for undergraduate studies*. Sydney:
Blackwell.
- Rudestam, K.E & Newton, R.R. (2015). *Surviving your Dissertation: A Comprehensive Guide
to Content and Process* (4th ed.). London: Sage.

Saunders M., Lewis P., & Thornhill A. (2009). *Research Methods for Business students* (5thed.). England: Pearson Education Ltd.

Scheereens, J., Ehren, M., Slegers, P., De Leeuw, R. (2012). *Organisation for Economic Co-operation and Development Review on Evaluation and Assessment Frameworks for improving School outcomes: Country Background Report for the Netherlands*. Amsterdam: University of Twente.

Seidel, R.J. (1994) *Learning Without Boundaries*. New York: Plenum Press.

Shukla, P. (2008). *Essentials of Marketing Research*. (1st ed.). Bookboon.com.

Silverman, D. (2013). *Doing qualitative research: A practical handbook* (4th ed.). New York: Sage

Strategic Needs Development Plan-Malawi (2008). A policy and Investment Framework For Education in Malawi 1995-2005. Lilongwe: Government of Malawi.

Research Methodology. Retrieved from: Shodhganga.inflibnet.ac.in/bitstream/10603/3704/2/12 Technical Entrepreneurial and Vocational Education and Training Act. (19th February 1999). Lilongwe: Government of Malawi.

TEVET 'Curriculum delivery orientation manual. (January, 2017). Lilongwe: TEVETA.

TEVET Curriculum Orientation Manual. (December, 2016). Lilongwe: TEVETA House.

TVET Policy Review Malawi (2010) United Nations Education, Scientific and Cultural Organisation: France

Terms of reference for Community Technical College Committees (9 October, 2014). Ministry of Labour Youth Sports and Manpower Development. VT/1 /14/35

Tiwari, A., Kesippeddi,S & Jagda, S. (7th March, 2018). *Tips on Transcription process in qualitative research*. Retrieved from www.happycrime.co

Torres, A.S., Brett,J & Cox, J. (2015). *Competency-Based Learning: Definitions, Policies, and Implementation*. Retrieved from www.relnei.org

Warglien, M., & Savoia, M. (2001) *Institutional Experiences of Quality Assessment in Higher Education - The University of Venice (Italy)*. Organisation for Economic Cooperation and Development (OECD). Available : www.oecd.org/dataoecd/48/49/1871205

World Bank Working Paper no. 182 (2010). *The Education System in Malawi*. Washington DC: World Bank.

Zhou, M & Brown, D. (2015). *Educational Learning Theories* (2ndEd.) Education Open Textbooks. 1. <https://oer.galileo.usg.edu/education-textbooks/1>

ANNEXURE 1: PERMISSION TO COLLECT DATA



MZUZU UNIVERSITY

**OFFICE OF THE DEAN
FACULTY OF EDUCATION**

Private Bag 201
Luwinga
Mzuzu 2
MALAWI
Tel: (265) 01 320 722/575
Fax: (265) 01 320 505

Ref.: MU/1/D3.0

11th April 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam

PERMISSION TO COLLECT RESEARCH DATA

Masautso Frank Kalua is a registered Master of Education (Leadership and Management) Program student at Mzuzu University. He is supposed to collect research data for a study titled *Assessing quality assurance mechanisms for managing Competence Based Education and training in Community Technical colleges in Malawi*. The Faculty of Education at Mzuzu university has approved and cleared this research proposal.

Kindly assist him accordingly.

Yours faithfully,

**Associate Professor Victor Mgomzulu
Dean, Faculty of Education.**

ANNEXTURE 2: REQUEST FOR PERMISSION TO COLLECT

DATA IN COLLEGES

Mzuzu University

P/Bag 201,

Luwinga.

Mzuzu

Tel. 0888 151 523/0999 664 426

Email: kaluamasa@yahoo.com/

mkalua@tevetamw.com

The Secretary

Ministry of Labour and Manpower Development

P/B 344

Lilongwe 3

Malawi

Att: The Director for Technical and Vocational Training (DTVTV)

Dear Sir,

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN SELECTED COMMUNITY TECHNICAL COLLEGES

I am a post graduate student at Mzuzu University pursuing a Master of Education in Leadership and Management degree. I am carrying out a study on **Quality Assurance Mechanisms for managing Competency Based Education and Training in Community Technical Colleges** as a requirement for the award of the course. I therefore write to request for permission to carry out this study in some of the Community Colleges.

The purpose of this letter is to seek your permission to conduct my research in selected **Community Technical Colleges** which falls under your ministry. If granted permission, data collection will be done from April to May 2019. All information collected will only be used for research purposes and will be treated as confidential. In the research the name of the college and participants will not be revealed and care will be taken in protecting the identity of the institution and its staff. Participation in the research will be voluntary. The research findings will be given to the institutions and it is foreseen that it will be of great benefit to the institution as part of their strategic planning initiatives.

Your kind consideration in granting permission to conduct the research will be appreciated.

Yours sincerely,



Masautso Frank Kalua

Med Student
Student number 06/18

Email: kaluamasa@yahoo.com



Dr. Zizwa Msukuma

Supervisor

Permission granted/~~Not~~ granted



Secretary for Labour and Manpower Development

ANNEXTURE 3: CONSENT FORM FOR PARTICIPATION IN RESEARCH



Dear Sir/Madam,

CONSENT FORM FOR PARTICIPATION IN A RESEARCH

My name is **Masautso Frank Kalua**, a post graduate student at Mzuzu University. I am pursuing a Master of Education in Leadership and Management, currently carrying out research on **Quality Assurance Mechanisms for managing Competency Based Education and Training in Community Technical Colleges** as a requirement for the award of the Masters Degree.

For the purpose of the study, your college has been selected as one of the research sites where data on Quality Assurance Mechanisms will be collected. Data collection will be done from April to May 2019 atCommunity Technical College. Based on your position and involvement with quality assurance, you have been selected as one of the research participants and the purpose of this letter is to seek your informed consent to participate in the research. If you agree to participate in the research you will be interviewed for 60 minutes regarding your experiences with quality assurance systems and processes within your college. If you agree to it, the interview will be recorded for transcription purposes.

It is important to emphasize that the name of your college, your name and identity will not be revealed in the research and you are assured of complete anonymity. Only the researcher will know your identity. Your participation will be completely voluntary and you may withdraw from the research at any stage. The information obtained will only be used for research purposes and you will have privacy into the transcribed data regarding your interview.

Should you be willing to participate in the research, you are kindly requested to complete the attached consent form.

Yours sincerely,



Masautso Frank Kalua

Med candidate

Student number 0618

Email: kaluamasa@yahoo.com

Dr. Zizwa Msukuma

Supervisor

I, _____(full name) hereby give consent to participate in the research. I understand that:

My name and identity will be protected and will not be revealed in the research

That my participation is complete voluntary and that I may decide to withdraw at any stage without any consequences

That I will have the right to access the transcription of the interview

I also agree that the interview may be recorded for transcription purposes

Signed

Date

**ANNEXTURE 4: INTERVIEW GUIDE FOR FOCUS GROUP DISCUSSION WITH
INSTRUCTORS.**

1. State your gender.
2. Number of years teaching/Managing at a Community Technical College.
3. Were you inducted in CBET and/ Verification exercise when you first joined the College.
4. State the tools do you use for delivering lessons and administering assessments and how each tool is used.
5. How effective are the tools? Does each tool reflect/ give proper guidance on principles and procedures?
 - a) Lesson administration tools.
 - b) Assessment tools.
6. (a). Is there provision for feedback or evaluation to the trainer in each of the tools?
Explain.
 - (b). How do you get information on performance of your learners from industry.
 - (c). If not, give a suggestion on what could be provided to address this challenge.
7. (a). Is there an interface between college and industry trainers? If yes how often.
 - (b). As trainers, how do you consolidate industry based training and college based training.
8. How do you relate the training provided in college to industry demands in your trade?
9. Any suggestions as far as CBET is concerned (both at industry and college).

ANNEXTURE 5: Interview guide for Principals

INSTITUTION MANAGEMENT

INDICATORS	QUESTIONS	AIM
Responsibility	<p>As a head of this institution, you are at the helm of quality assurance</p> <p>Therefore, :</p> <p>What are your roles and responsibilities in the following processes of quality assurance in institution?</p> <ul style="list-style-type: none"> - Recruitment. - Assessments. - Internal and External Verifications of assessments. - Attachment and monitoring of apprentices at industry. 	Examining how the responsibilities in relation to quality assurance.
	<p>Briefly explain tools used in each of the activities mentioned above.</p> <p>How does the process of decision-making on quality assurance work in your institution?</p> <p>Follow-up questions: - Does each department within your institution have an academic staff in charge of quality assurance?</p>	Examining how decision-making on quality assurance is structured in the institution and its influence on the way quality assurance system

	<p>Does the department develop local strategies of quality assurance based on the general institutional strategic framework?</p> <p>Can you describe the procedures in implementing the process of quality assurance within your institution: and how is the issue of quality discussed within the institution?</p> <p>In your opinion, how should quality structure be organized to improve the its implementation in your institution?</p>	<p>is developed in the institution.</p>
<p>Leadership</p>	<p>People say that leadership in institution is very essential to the success of quality assurance process.</p> <p>In your opinion:</p> <p>What are the roles and functions of the Head of institutions' leadership in leading the process of implementing quality system?</p> <p>How do you promote the process of implementing quality assurance at institutional level?</p> <p>Do you think the current way of leading the process of IQA implementation in your institution can support your institution to achieve the quality-oriented activities?</p>	<p>Examining the perspective of HOD's toward the importance of leadership in leading the quality assurance.</p> <p>leadership to the issue of quality assurance</p>

<p>Funding</p>	<p>It is indicated that quality assurance costs resources. Therefore, some people think that the availability of financial resources can partly play a role in the success of IQA implementation. In your opinion:</p> <p>How important is the issue of financial resource to the process of implementing quality system in your institution?</p> <p>Does your institution have financial problems with regards to quality assurance? Can you give some examples?</p> <p>How does your institution solve the problems?</p> <p>In your opinion, how do these problems hinder the implementation of quality management system in your institution?</p> <p>How does your institution get funding for resources?</p>	<p>Examining if financial resource has any influence on the IQA implementation</p>
<p>Curriculum Versus implementation</p>	<p>In general, programs and curricular in TVET institutions are demand driven. However, in order to ensure the quality, the programs and curricular should be designed in a systematic way. In your opinion: -</p> <p>How are the curriculum and educational programs monitored at the level?</p>	<p>Examining to see how programs and curricula are monitored and delivered</p>

	<p>Do you think this way of monitoring the curricula and the programs can help the institution enhance its quality system?</p> <p>How should the curricula and programs at department level be monitored in order to enhance the quality system in the institution?</p> <p>How do you match the standards at College to that of the industry?</p>	
<p>Staff development</p>	<p>As mentioned in many reviews of literature, professional development is considered as a major requirement for raising staffs' quality awareness so that staff will perceive quality assurance process as useful, and therefore the quality assurance process can be implemented effectively within the institution.</p> <p>As a Head of institution:</p> <p>Do you agree with that idea? Why/why not?</p> <p>In your opinion, how does your department develop staff development programs so that they can benefit the quality assurance process?</p> <p>Can you describe the difficulties facing your institution in developing staff development schemes so that they can be linked to internal quality assurance arrangement at department level?</p>	<p>Examining to see if the institution develops staff development scheme in an integrated and coherence way with the issue of quality assurance so that staff will consider the process of implementing quality system as useful</p>

<p>Feed back on Quality improvement</p>	<p>Are the evaluation results read and discussed at institution level as well as department level?</p> <p>Follow-up questions: -</p> <p>Are teaching staff informed the results of their feedback?</p> <p>How are the results of evaluation followed up at institutional level and department level?</p> <p>Does your institution have improvement plans?</p> <p>What are the procedures to develop these improvement plans?</p> <p>What do you think are the most important challenges and constraints at national and institutional levels in terms of enhancing quality of training in TVET institutions in Malawi?</p>	<p>Examining to check how QA systems are monitored and evaluated</p>
<p>Evaluation instrument</p>	<p>The periodic assessment and evaluation are important activities toward the process of internal quality assurance in institutions, so describe:</p> <p>How is the periodic review process of annual plans and long-term plans conducted at institution level as well as department level?</p> <p>Follow-up questions: -</p> <p>Does your institution have course evaluation?</p> <p>How often and how is it done?</p> <p>Does your institution conduct student evaluation and teacher evaluation?</p>	<p>Examining how monitoring tools are used and implemented</p>

	<p>What evaluation instrument does your institution have? For example: - Survey on the satisfaction of students, teachers, staff, Survey on alumni</p> <p>How do you evaluate quality of training in general and the effectiveness of the quality management practices in particular in your institution?</p>	
QA process	<p>In order to implement the education and training objectives effectively, TVET institutions are encouraged to establish a quality management system in accordance with TEVETA Act and the institution's recourses:</p> <p>What methods and procedures are in place to ensure quality of academic offering in your institution</p> <p>What is the level of your satisfaction with regard to the current performance of the institution in enhancing quality of training?</p>	Examining how QA systems are developed and implemented.