FACILITATORS AND LEARNERS' PERCEPTIONS ON THE IMPLEMENTATION ON COMPETENCE-BASED CURRICULA IN ADULT EDUCATION PROGRAMMES IN TANZANIA

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION IN
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CERTIFICATION

The undersigned, certifies that, she has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled: Facilitators and Learners' Perceptions on the Implementation of Competence-Based Curricula in Adult Education Programmes in Tanzania in fulfillment of the requirements for the Degree of Master of Education Administration, Planning and Policy Studies of the Open University of Tanzania.

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Date

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I, Amina Abubakari Msuya, declare that this dissertation is my own work and it has not	
been presented, and will not be presented to any other University or Institution for a similar	
or any other degree award.	
Signature	
Date	

DEDICATION

I dedicate this work to my family and my beloved parents who formed the base on which I developed the habit of eagerness to aspire for educational perfection.

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ABSTRACT

This study investigated facilitators and learners' perceptions on the implementation of Competence-Based Education and Training (CBET) approaches in adult education programmes in Tanzania. The Institute Adult Education (IAE) was the case for this study which examined the extent to which IAE implemented competence based curricula. It also intended to identify challenges faced in implementing competence based curricula. The study employed a case study design under qualitative research approach. Some elements of quantitative research techniques were involved. The sample comprised fifty eight (58) respondents including 15 facilitators, 3 IAE senior officials and 40 students. Facilitators and students were obtained through simple random sampling while IAE senior officers were sampled through purposive sampling. Data collection methods included interview, observation, documentary review and focus group discussion. Qualitative data were analyzed through content analysis employing simple calculations, tables, and percentages for quantitative data. Findings revealed that to some extent the IAE was successful to implement CBET curricula. It was revealed that the effective implementation of CBET curricula was hampered by insufficient teaching and learning resources including inadequate library space. It was concluded that there were changes in teaching and learning from knowledge based to CBET approaches. It was recommended that for the smooth CBET curricula implementation the IAE should ensure availability of teaching and learning resources and staff training; Collaboration with other stakeholders; and conduct further studies regarding CBET curriculum implementation.

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LIST OF ABBREVIATIONS

AAPA American Academy of Physician Assistants

ACES Adult and Continuing Education and Studies

BI Basement One

B II Basement Two

CBE College of Business Education

CBET Competence Based Education and Training

CBC Competence Based Curriculum

DIT Dar es Salaam Institute of Technology

EH Elimu Hall

ENP Elimu kwa Njia ya Posta

IAE Institute of Adult Education

ICT Information and Communication Technology

IFM Institute of Finance Management

IPPE Integrated Post- Primary Education

KBET Knowledge Based Education and Training

LHs Lecture Halls

LH I Lecture Hall One

LH IV Lecture Hall Four

LH III Lecture Hall Three

MoEVT Ministry of Education and Vocational Training

NACTE National Council for Technical Education

NTA National Technical Awards

NVQs National Vocational Qualifications

OBE Outcome Based Education

ODL Open and Distance Learning

OUT Open University of Tanzania

PDPs Personal Development Plans

TAFE Technical And Further Education

TIA Tanzania Institute of Accountancy

SCANS Secretary's Commission on Achieving Necessary Skills

SR Seminar Room

SR I Seminar Room One

SR II Seminar Room Two

SR III Seminar Room Three

SSAFs Student Self Assessment Forms

UNESCO United Nations Education, Science and Cultural Organization

URT United Republic of Tanzania

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Competence - based education and training (CBET) is a currently emerging concept in Tanzania education system. It was introduced in the early 2000's as reaction of the public to the concern that school curricula are not focusing on enabling learners to cope with the world of employment and general life (Meena, 2009). As with any new concept there is no one acceptable definition of this term under operation. The most important thing in CBET is for the learner to be engaged actively in all aspects of knowledge acquisition, skills development and professional behaviours that need to be demonstrated and practiced in a specific discipline.

Sudsomboon, Anmanatarkul and Hemwat (2007) describe competence-based education as the education that enables an individual to perform anything practically and measurably using a set of knowledge and skills acquired through effective training. Competence Based Education and Training (CBET) can be referred as the education approach that produces professionals who have the required competences to be successful in their jobs. It is an approach which focuses on outcomes of learning. Competence is described in terms of skills, knowledge and aptitude or understanding as well as the typical context and level that a person who possesses such a competence could work successfully (Mulder, 2001). Competences describe the ability of the students to apply basic and other high level skills in situations that are commonly encountered in everyday life. Competence addresses what the learners are expected to do after learning rather than on what they are expected to learn.

Furthermore, competence - based education has been described by Mrowicki (1986) as quoted by (Kafyulilo, Rugambuka and Moses, 2012) as a component of essential skills,

knowledge, attitudes, and behaviors required for effective performance of a real-world task or activity. Arguelles and Gonczi (2000) further define competence-based education as education based on outcomes and pre- determined standards, on what students can do.

In this study, Competence - Based Education and Training (CBET) is defined as a perspective on how to prepare competent graduates with knowledge of how to meet the needs of an ever-changing work situation. From this perspective, knowledge, skills and attitudes which make up the essentials of an occupation are not transmitted as separate learning activities or subjects. These competences are acquired in an integrated way through assignments and activities that come as close as possible to the actual context of the occupation. Competence-Based Education uses teaching and learning strategies that facilitate the development and demonstration of competences.

The introduction of competence – based education and training in an education setting leads to competence- based curriculum. In competence – based curriculum (CBC), the focus is to enable learners to master the knowledge, skills and attitudes needed for the world of employment and general life. The curriculum is activity –oriented with respect to the required competencies. It is normally prepared in such a way that it requires learners to perform various tasks as a means of equipping them with knowledge and skills related to their real life situations. In CBC, a teacher is supposed to switch from the role of an expert who transfers knowledge to a coaching role of facilitating and guiding learning process (Biemans, Nieuwenhuis, Poell, Mulder & Wesselink, 2004). The teacher is required to be active in supporting the learning process rather than be active in transferring content. He/she should use didactical approach that is based on the facilitation of active learning including group work, presentations and self study.

The advocacy of Competence Based Curriculum has been witnessed in recent years in various levels of education system in the world. The main reason for this advocacy is to provide quality education in all levels from pre-primary education to the university level. Competence Based Curriculum is the leading paradigm for innovation, both at the system level and at the level of the learning environment (Biemans et al., 2004).

Competence Based Curriculum therefore requires adult learners to take more responsibilities for their own learning process, which is initiated by the competence learning tasks along the continuum of curriculum implementation. This calls for the review of teaching and learning methods as well as assessing learners. Essentially, it leaves behind the traditional instruction and assessment approaches (Kafyulilo et al, 2012).

A competence—based curriculum basically seeks to develop in learners the ability to know, to learn and learn how to learn. CBC also enables a learner to do things competently, to live confidently and work with other people harmoniously (Jallow, 2011). In this context, the introduction and implementation of competence - based curriculum in the education system in Tanzania shifts the orientation of the content largely, away from the rote memorisation of factual knowledge to competency based learning which is largely instrumental. This focuses much more on the understanding of concepts, and the acquisition of skills and competencies, which in turn calls for changes in teaching, learning and assessment approaches (Woods, 2008; World Bank, 2011; Wangeleja, 2010) as quoted by Kafyulilo et al (2012).

The implementation of Competence- Based Curriculum (CBC) leads to new paradigm on the goals, learning process and approach, roles of teachers, learning environment, and assessment in education. CBET curriculum is aimed at reaching the professional practice as it is based on the future occupational practice of the graduate. The curriculum, therefore, has an integral arrangement in which the profession is essential (Boyatzis et al., 1996). The CBET curriculum advocates the learner-centred approach in which the learning process is central. Field and Drysdale (1991) point out some of the aspects of a learner-centred approach such aspects as the use of individualized materials, flexible learning time and continued feedback. In this regard, the implementation of CBC should ensure that all aspects of a learner-centered approach are included in the learning process. The Learning environment in the CBET curriculum is therefore directed towards the development of competencies at the end the study program (Kirschner et al, 1997).

1.1.1 Competence –based Curriculum

The Tanzania's Institute of Adult Education (IAE) is a public institution which is legally responsible for adult education programmes. It started operating before independence, 1961 as a section under the department of extra-mural studies of Makerere University College, in Kampala, Uganda. Makerere University was by then the only university serving the East Africa countries. The IAE catered mainly for people aspiring to join University College through mature age entrance scheme. In 1963, it became part of department of the University College of Dar es Salaam which was established in 1961 as an affiliate College University of London. IAE became an autonomous institution under the parliamentary Act No. 12 of 1975. Currently, it is fully registered and accredited by the National Council for Technical Education (NACTE). The institute's mission is to become efficient and effective in designing, developing and implementing high quality adult non-formal and continuing education programmes that will equip people with enabling knowledge, skills and attitudes to ensure achievement of sustainable development in both urban and rural areas. The implementation of competence-based education and training curricula in Tanzania is one of the major strategies of meeting this mission.

The implementation of Competence-based education and training approach seems to be appropriate to IAE training programmes since it recognizes the characteristics of adult learners. For example, among other things, adult learners come to higher education with a knowledge background which they use to build up new knowledge. In doing so, they need support from their instructors/ facilitators as they examine prior and new experiences. Knowles, Holton and Swanson (1998:26) stated that 'adult learners bring to the classroom a diversified range of individual differences related to their experiences, interests, backgrounds, goals and learning styles. The best way to manage the differences between adult learners is by creating activities that tap into the adults' experience using group discussions, problem-solving activities and simulations' (UNESCO, 2005).

Since this study deals with investigating the implementation of adult education programmes, it is important to conceptualize the term adult education. The term adult education or adult education programmes has been defined by UNESCO (2006) as a multidisciplinary process oriented to favour life long education for all, as well as efficient learning throughout life. UNESCO (2006) also defines adult education—as the entire body of ongoing learning processes whereby people regarded as adults by the society to which they belong develop their abilities, enrich their knowledge and improve their technical or professional qualifications or turn them in a new direction to meet their own needs and those of their society.

Mushi (2010) pointed out that the term adult education is used in two ways: as field of operations (practice) and as a field of study and research. According to him, as field of practice, adult education describes a process of adult learning; that is a process by which men and women seek to improve themselves or their community by increasing their knowledge and skills. As a field of study, adult education can be considered as specialized

body of knowledge arising from study, research, interpretation and reflection (Mushi, 2010). In this study, adult education is defined as a field of study which aims at equipping adults with new competencies which can enable them to fit into the changing world of work.

In Tanzanian context, adult education is concerned with the provision of basic and functional literacy skills which are reading, writing and doing simple arithmetic (3Rs). It also includes efforts to consolidate and sustain the acquired basic skills through post literacy and literacy supporting programmes such as rural libraries, rural newspapers and radio programmes. However, adult education is not just about literacy (3Rs) i.e. training adults to read, write and do arithmetic; it is broader than the 3Rs. It encompasses all experiences of mature men and women by which they acquire new knowledge, skills and values for their own self and community development (Mushi, 2010).

According to Mushi (ibid) there are three modes of adult education. Firstly, it is education for adults outside the formal education system not leading to qualification. This includes literacy training, film education, newspapers, home craft seminars and workshops. Second, it is education for adults outside the formal system leading to qualification. Such education includes evening school classes and correspondence education for higher qualifications. Third, education provided to adults within the formal education system for specific purposes. It includes adult education programmes organized by tertiary institutions, universities and other institutions of higher learning. (Mushi, 2010). In this context and depends on the nature of the study, this study will focus only on the last mode of adult education.

The implementation of competence- based education and training is not only practiced by African countries particularly Tanzania but also in other countries in worldwide as proved by Arguelles and Gonczi (2000). Arguelles and his colleagues examined the implementation of competence-based education and training in a number of countries. They provided case studies of the application of competence-based education and training to Vocational Education and Training systems in countries including Mexico, Australia, Costa Rica, France and New Zealand. These case studies provide insight into the implementation of competence-based education into various cultural and educational systems and show the importance of having the various stakeholders (particularly government, industrial bodies, the education profession and enterprises) working together with a common purpose (Miller, 2001).

In Tanzanian, the implementation of competence- based education and training curriculum is influenced by the Development Vision 2025 which envision Tanzania to be a nation with high level educated citizens at all levels and which produces the quantity and quality of educated people sufficiently equipped with the requisite knowledge and skills to meet the challenges of development and attain competitiveness at regional and global levels (URT, 1991). The intention was that by implementing the CBET system, the institutions will be able to produce people who are competent in their workplaces and who can transform the country to attain its desired vision. It is in this regard that the Institute of Adult Education (IAE) as among the institutions which provides education and training programmes in Tanzania has adopted the CBET curricula since 2009 at the level of certificate, diploma and bachelor degree.

Many studies about the implementation of competency - based education and training curriculum have been conducted particularly at the government primary and secondary schools as well as to the pre- service teacher's training colleges. Most of the findings reveal that the implementation of competence based curriculum in Tanzania is not yet achieved.

Despite the majority of the teachers/facilitators having high level of awareness about competence-based teaching approaches to be used in the implementation of competence-based curriculum they are unable to adopt or practice learner-centred teaching methods. They are implementing the curriculum using the conventional teacher-centred methods (Paulo, 2014; Kyafulilo, Rugambuka & Mosses, 2012). It is thus, likely that teachers' knowledge of competence teaching methods is theoretical and superficial (Paulo, 2014).

Similarly, Mosha, (2012) declare that entire primary school curricula are changed from the traditional content –based curricula to competency –based curricula to make it more relevant and market oriented. However, in classroom situations most teachers implement CBC by using the traditional methods to deliver the content. They implement the curriculum from planning the lesson and instruction to assessing the students. Teachers are unable to select experiences that are student-centered and that are appropriate to specific lesson objectives, and the mental ability or/and age of the learners.

Paulo (2014) points out that majority of the facilitators relay on traditional paper-pencil assessment methods despite changes in curriculum which demands the adoption of authentic and performance-based assessment methods. Hakielimu (2012) reported that portfolios, project work, practical tasks, and written reports though envisaged in the competence based curriculum as among the most important assessment methods are the least used methods by teachers. In the classroom situation, teachers ask verbal questioning to assess what students remember about the previously learned material. They combine their lectures with verbal questioning which call forth memory of facts learned. Innovative modes of assessment require teachers to move from the routine limited factual questions to more open-ended questions and problem solving tasks which evoke broad ranging discussions and thinking in classroom (Black, Harrison, Lee, Marshall & William, 2005).

Kafyulilo et al (2012) also reveal that to a large extent, teachers continue teaching by using the traditional instructional approaches and assessments. Students also continue learning through memorization rather than creating and inventing new ideas through inquiry learning approaches. In this situation, implementation of competence based curriculum using traditional teacher centred methods is against both the demands of the current competence-based curriculum which are based on current perspectives on teaching and learning. In the current perspectives on teaching and learning, learner-centred methods are deemed best practice in situations where curriculum aims to build student's independent study skills, working collaboratively with others and application of academic knowledge and skills in real life situations (Westwood, 2008).

Generally, findings from the recent studies on teachers' classroom practices in implementing the revised competence-based curriculum in secondary schools in Tanzania (Paulo, 2014) shows that majority of secondary school teachers are not implementing the revised competence-based curriculum as directed in the formal policy documents such as syllabus and curriculum frameworks. This is because teachers have narrow understanding of competence-based curriculum and its repercussion on classroom practices. Thus, they have continued to teach and assess using the traditional teaching and assessment methods (Paulo 2014).

Generally, it can be realized that the introduction of competence-based curriculum in Tanzanian education system particularly at the Institute of Adult Education calls for comprehensive change in instructional approach in terms of teaching, learning and assessment processes. Consequently, this necessitates changes in education and training programmes to equip facilitators with competencies that will enable them to effectively handle challenges associated with the implementation of competence-based curriculum in

higher learning institutions (Woods, 2008; Kitta &Tilya, 2010). Where competency based curriculum is not effectively being implemented there is often the danger of sliding back into traditional teaching methods if there is not enough follow-up and training for the facilitators. Similarly, if the competencies and accompanying rubrics are not carefully chosen and planned to ensure successful implementation, the curriculum will not be strong enough to support a true competency-based learning experience.

The Institute of Adult Education as higher learning institution has taken a significant part in implementing Competence Based –Education and Training Curricula to its training programmes offered since 2009, but to what extent has been fully implemented is still unclear. However, the fundamental question which needs to be answered six years since competence-based curricula for IAE programmes were introduced is whether this curriculum innovation is being implemented as intended by policy makers. The question is of great concern because the implementation of competence-based curricula elsewhere in Sub-Saharan region has faced many of challenges (Paulo, 2014). It is therefore the aim of this study to find out the facilitators' and learners' perceptions towards an effective implementation of competence- based curricula at the Institute of Adult Education programmes. The researcher is interested to examine perspectives of facilitators and learners on the teaching and learning strategies, teaching and learning resources as well as the methods of assessment of learning employed by the IAE in implementing competence – based curricula.

This study used a case study design. The researcher adopted a qualitative research approach although elements of quantitative research were also used so as to validate data from qualitative instruments and argumentation. Documentary review, observation, interview schedules and focus group discussion were used as data collection instruments.

1.2 Statement of the Problem

Despite the fact that implementation of competence – based curricula at IAE is about six (6) years now, there is no research based evidence of such implementation. Rweyemamu (2012 -cited in Kafyulilo et al, 2012) points out that competency –based curriculum for secondary schools has been poorly implemented because the majority of stakeholders did not aptly understand the requirements of the CBET educational guidelines (Kafyulilo et al, 2012). Kafyulilo and his associates (2012) declare that the competency- based teaching approaches have not been well implemented in schools because teachers continue to use the traditional teacher –centered methods even after having been trained about the CBET approaches. It is in this context that, this study was intended to investigate the extent to which IAE implements the CBET innovation in its education and training programmes.

The introduction of competence –based curricula to IAE's programmes has raised a question on the capacity which the institute has to manage the implementation of CBET curricula. The institute still faces challenges such as inadequate library services, shortages of teaching and learning resources such as text and references books, insufficient learning infrastructure including classrooms, computer laboratory and internet connectivity which are very essential for implementing the competence- based curricula. The notion of changing facilitators' mind sets from teacher-centered approach to learner-centered approach as well as employing competence- based assessment in the learning processes has also become among the challenges at the Institute. This situation has triggered the IAE to consider appropriate ways of implementing its competence –based programmes in order to produce graduates who are competent in their workplaces.

The available studies at IAE suggest that no one has conducted investigation to specifically focus on the extent to which the Institute implements the CBET curricula. The studies that

have been conducted on the IAE have dealt on issues such as the experience of the IAE to implement the Integrated Post Primary Education curriculum/programme as an innovation in Tanzania (Chuachua and Mafumiko, 2013); establishing competences and curriculum for Integrated Post Primary Education (IPPE) (Meena, 2009).

CBET is now used as an important strategy in most Tanzanian educational and training programmes to promote the quality of the programmes and ensures their sustainability in today's dynamically complex learning and working environment. An appropriate implementation of CBET curricula in IAE programmes is very crucial for labour market competition since the institute does not operate in an isolation from the contemporary global world. This study intended to find out the facilitators' and learners' perceptions towards an effective implementation of competence- based curricula at the Institute of Adult Education programmes. The study was an attempt to guide the effective implementation of CBET curricula through appropriately adopted teaching and learning strategies employed at the institute.

1.3 Main objective of the Study

The main objective of this study was to investigate the perceptions of facilitators and learners on the implementation of CBET curricula for the programmes offered at IAE.

1.4 Specific Objectives

The following list consists of the specific objectives for this study:

- 1. To find out facilitators' and learners' perceptions on the concept of CBET
- To find out facilitators' and learners' perceptions on the extent to which the CBET curricula are implemented at the IAE programmes.

- Determine the perceptions of facilitators and learners on the challenges that IAE encounters in implementing CBET curricula.
- 4. Find out whether there are opportunities that IAE can harness to improve the implementation of the CBET curricula at the institution.

1.5 Research Questions

The following are the research questions for this study:

- 1. What are the perceptions of IAE facilitators and learners on the concept of CBET?
- 2. What are the perceptions of the facilitators and learners about the implementation of CBET curricula at IAE?
- 3. What are the challenges facing facilitators and learners in implementing the CBET curricula?
- 4. What are the opportunities that IAE can harness to improve the implementation of the CBET curricula at the institution?

1.6 Significance of the Study

The study will be useful to researchers so as to be aware of the way CBET is organized and implemented at the Institute of Adult Education (IAE). The study will also sensitize IAE's lecturers on the effective selection of teaching and learning strategies and assessment tools in facilitating CBET. Further, the study will be useful to IAE management and its community as a whole. This is due to the fact that no study has been carried out at IAE about CBET implementation since the programme was initiated. The management will get feedback about the effectiveness of the programmes implementation from facilitators and learners. The feedback might trigger creation of a conducive facilitation and learning environment that enhances and supports smooth implementation of CBET. The study will

also be useful to the government and other education stakeholders as they will be informed on the importance of shifting from knowledge based education to competence based education.

1.7 Limitations of the Study

The researcher encountered some problems during fieldwork. Some of the challenges included difficulties in obtaining students for the focus group discussion sessions. This was because during the study the students were not stationed at the college; most of them were dispersed for academic fieldwork and others were on vacations. The researcher had to reschedule her time table for data collection task. She made new arrangements for focus group discussions during supplementary examinations sessions and when vacations were over. This prolonged the fieldwork period and caused inconveniences for the researcher. Poor cooperation from IAE respondents (facilitators) during data collection also limited the study since most of them were busy in their field work assessment and administrative duties. The researcher sometimes had to wait until they completed their duties and arrange for alternative interview time. This adversely affected the time frame of the study although the information gathered remained valid and useful.

1.8 Delimitations of the Study

This study was confined to the Institute of Adult Education's (IAE), headquarters in Dar es Salaam Region only. The study was confined to facilitators' and learners' perceptions on the implementation of competence-based curricula in adult education programmes in Tanzania particularly at IAE. Hence, the findings from this study might not be equally valid to other settings where CBET programmes are being implemented.

1.9 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from the relevant fields of enquiry and used to structure a subsequent presentation (Reichel and Ramey, 1987). It is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to clearly communicate it to others. When clearly articulated, a conceptual framework has potential use as a tool to assist a researcher make meaning of subsequent findings. It forms part of the agenda for negotiation to be scrutinized and tested, reviewed and reformed as a result of an investigation (Guba and Lincoln, 1989). According to Smyth, (2004) a conceptual framework should assist a researcher to organize his/her thinking and complete an investigation successfully. It must explain the relationship among interlinked concepts. It explains the possible connection between the variables and answers. Mertens (1998) argues that in qualitative research, a conceptual framework is used to focus the research and give its boundaries. It is viewed as a conceptual template with, which to compare and contrast results. The conceptual framework in this study comprised three components namely: inputs, determinants and outcomes which were interrelated and interdependent. This made all the variables to be easily investigated, organized and discussed in a holistic manner as one variable cannot be studied in isolation.

The first component was inputs. Inputs in this study referred to resources that were considered necessary in ensuring the smooth implementation of the competence –based education and training curriculum. These included; availability of library services with relevant up-to-date textbooks, references related to the programmes, and availability of a conducive learning environment. Other resources were such as availability of qualified facilitators, availability of teaching and learning materials and availability of computer laboratory with ICT facilities such as computers and internet connectivity. These variables were interdependent and interacted with each other.

In examining this complex relationship between these variables, it was possible for the researcher to understand the effectiveness implementation of competence based education and training programmes. For example, an institution needs to examine and find out whether or not there are adequate numbers of qualified facilitators and the extent to which standards are maintained and monitored. The same applies to the library services which are also important variable in teaching and learning processes. Since competence based approach promotes learner- centeredness, the availability of library and its services was assessed to find out whether they were available, adequate and relevant to the courses offered.

Availability of the computer laboratory with well furnished ICT facilities like computers and internet connectivity formed very crucial variables in implementing competence based approach. This is due to the fact that in competence based approach, learners get actively involved in learning by searching their own materials/ information related to their courses from different internet sources. They also conduct their individual and group assignments and they also communicate with their facilitators through e- mails and other online social media such as facebook and twitter.

The second components were 'determining factors'. The implementation of competence based education and training was determined by a number of factors that might take place during teaching and learning processes. The first such variable was the application of various methods of assessment of learning. This variable was considered important in teaching and learning process as far as competence based approach was concerned. This is because assessment is an integral part of the learning process in the development of competences. Therefore, examining the methods of assessment helped to determine its effectiveness in the implementation of the CBET curriculum.

The second variable was application of actively participatory teaching and learning strategies during teaching and learning processes. This determining factor was crucial during the implementation of the competence based approach. To integrate knowledge, skills and attitudes in teaching and learning processes requires students to be actively involved in learning process. To examine to what extent the learners are generally actively involved in teaching and learning processes either through individual or group work. This helped to determine the effectiveness of the implementation of competence based phase.

The last component was outcomes; these were the expected results from the well utilized inputs and implementation of constructivist teaching and learning strategies as well as constructivist assessment models during teaching and learning processes. A well implemented competence based education and training curriculum was expected to result into competent graduate professionals who would compete with others in the labour market on equal basis.

1.10 Organization of the Study

This dissertation is organized into five chapters. Chapter one presents Background information; Statement of the Problem; Objectives of the Study; Significance of the study; Limitations of the study; Delimitations of the study; and Conceptual Framework. Chapter two is about Literature Review, while Chapter Three presents Research Methodology. Chapter Four presents Results and Discussion of the Findings while Chapter Five shows the Summary of the Study, Conclusion and Recommendations.

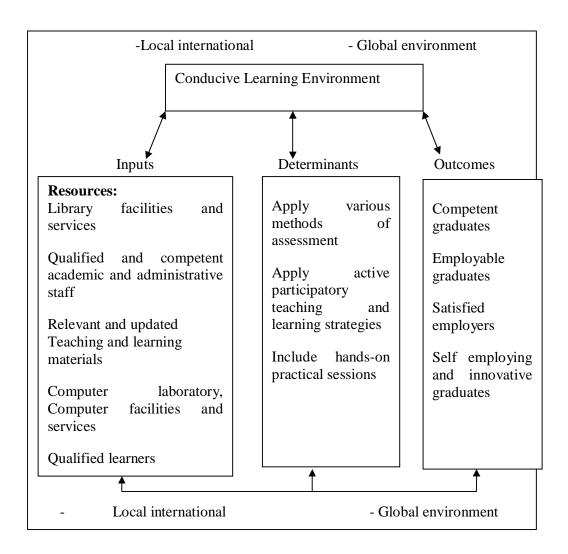


Figure 1.1: Conceptual framework for analysis of the implementation of CBET curriculum

Source: A model adapted from Koontz and O'Donnell (1986).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature and studies related to the study in order to see what others have done concerned with the study and see the rationale of implementing competence based education programmes offered at the Institute of Adult Education and challenges facing its effectiveness.

2.2 Conceptualization of Major Terms

2.2.1 Competence

There is no single standard definition for a competence. Garavan & McGuire (2001) acknowledges that the term competence has no generally accepted operational definition. According to them, competence is "an action, behavior or outcome which a person should be able to demonstrate". This definition constitutes a description of what a person can do (output).

Many literatures have been consulted regarding the definitions of competence. Some of them view competence as output, input and outcome. For example, Field \$ Drysdale (1991) defines competence as ability to perform work roles or jobs to the standard required in employment. They view competence as the ability to perform at a desired level or according to a certain standard. This definition view competence as output. Competence might also be viewed from the possession of certain attributes such as knowledge, skills and attitudes or competence as input. Kirschner et al. (1997) view competence as the ability to choose and use the attitudes (knowledge, skills, and attitudes) that are needed for a performance at a desired level. They argue that "a competent person is within a certain context (situation) is

able/capable to choose a set of available behaviours and to execute suitable behaviours in order to reach a certain goal".

Kouwenhoven (2003) defines competency as "the capability to choose and use (apply) an integrated combination of knowledge, skills and attitudes with the intention to realize a task in a certain context while personal characteristics such as motivation, self-confidence and willpower are part of that context". He views competence as the capacity to realize 'up to standard' the key occupational tasks that characterize a profession. From the above definitions, we learn that when implementing competence based education and training programmes in our institutions three aspects which are knowledge, skills and attitudes have to be integrated together in all learning activities. These learning activities are usually related to competencies required in workplace. In this study, competence is viewed as the integration of knowledge, skills and attitudes with the intention to realize a task in a certain context.

2.3 Overview of competency Based Education and Training (CBET)

Competence-based education was introduced in America towards the end of 1960s when the public reacted that the students are not taught the skills they require in life after school. The National Vocational Qualifications (NVQs) was introduced as the qualifications relevant to employment and it was intended to facilitate entry into or progression in employment, further education or training (Burke, 1989). The same dilemma of graduates not equipped with skills to enter the job market can be seen among Malaysian graduates. This was explained in the study conducted by Hansad (2000) which was mentioned in IPPTN report that unemployed graduate is a major phenomenon in Malaysia. The reasons why graduates were not employable include: some of them lacked communication skills, computer skills and self-confidence.

In Malaysia, the Educational Master Plan 2006-2010 is quoted as emphasizing the mastery of the English language as a tool to widen one's horizon in terms of knowledge. English language is seen as a catalyst that may help to develop competence, as students would be able to access many more different genres of knowledge to make them able to 'do' things rather than just to 'know' them. (Tranter & Warn, 2003).

The Mayer Committee (1992) cited in Tranter and Warn (2003) defines 'competence' more broadly since it recognizes that competence depends on both skill-and knowledge-based understand, and that competence includes the capacity to transfer knowledge and skills to new tasks and situations. The Mayer committee perceived the necessity for a strong knowledge base to underline any ongoing application of skills, thus regarding 'competence' as the fusion of knowledge and skills. This is because when employers interview prospective employees, they expect to see a combination of knowledge and skills being portrayed. (Tranter and Warn, 2003). In addition, potential employees need to show integrity, accountability towards work, readiness to work with others and reliability in managing difficult situations. Those skills are not explicitly taught in a school situation. These competency skills need to be developed over time and should not be rushed upon in students when they were still in school.

Spady (1993) in his report emphasized that 'outcome-based education focuses and organizes a school's entire programs and instructional efforts around the clearly defined outcome we want all students to demonstrate when they leave school. He further adds that CBE is 'about preparing students for life, not simply getting them ready for university, or employment. An education system such as the one in Malaysia highlights the value of academic excellence from its graduates. It has well-defined syllabuses and objectives that educators use to ensure that students achieve the minimum required standard when they complete school. However,

little was prepared for them about survival skills after school especially in the workplace. Even if there is such a program, it will be an entirely separate program that students attend when they have already exited the school system. (Tranter and Warn, 2003).

CBET addresses what the learners are expected to do rather than on what they are expected to learn about. (Berdrow & Evers, 2010). They argue that there are four bases of competence that students need to master in order to achieve high performance in the workplace. Those bases are; managing self, communicating, and managing people and tasks and mobilizing innovation and change. These critical skills are often lacking in graduates to make them sustain in the work environment. These skills should be developed from the school environment when students are involved in societies, club and associations. However, extremely limited number of students is holding posts where these skills could be applied. Many are just ordinary members and they did not get the change to practice these skills.

2.4 The Experience of CBET in the Worldwide Context

Competence Based Education Training (CBET) or Outcome Based Education (OBE) has been significantly adopted by a number of countries in their education system in worldwide. Countries such as the United State of America, Mexico, Australia, New Zealand, Costa Rica, France, Hong Kong and a number of European countries are some of the few who have implemented CBET in their education system. Each country specifies or adapts its own learning outcomes and its own methods of measuring students' achievement to suit with the nation's needs. (Higher Education Institution, Penang, 2002).

In countries like United States of America, the Secretary's Commission on Achieving Necessary Skills (SCANS) is used as guidelines to match the skills and knowledge required by the job sectors from their prospective employees. SCANS were circulated by the United States Department of Labor as a Blueprint for schools and any educational institutions to follow. SCANS were written in a form of easy-to follow manual for all educational institutions to refer to when deciding on the necessary skills to teach in their institutions. This is to ensure a smooth transition from the educational institutions to workplaces. (Higher Educational Institute, Penang, 2002).

Similarly, in Australia the Mayer Key Competencies Standard was introduced to give guidelines to schools and colleges about the skills and competency standard that is required by the country from the workforce. The intention is to make sure that colleges such as Technical And Further Education (TAFE) prepare their graduates with the skills needed for them to get jobs when they have completed their studies. (Tranter & Warn, 2003). In Africa, many countries have adopted CBET system. These include; Ghana, Kenya, Uganda, Malawi, South Africa, Botswana, Namibia and Tanzania.

The experiences from Australia and United States indicate that at national wise, there should be a national qualification framework that will be acted as a quality control to those institutions that adopt competence based approaches. The national qualification framework will be used by all adopted institutions during implementation of the competence based education and training programmes.

In case of Tanzania, these experiences are somehow similar whereby in higher learning institutions particularly technical institutions there is a statutory body known as National Accreditation Council for Technical Education (NACTE) which controls the quality of education and training programmes delivery to those technical institutions. Among these institutions include: Institute of Adult Education (IAE), Dar es Salaam Institute of

Technology (DIT), College of Bussiness Education (CBE), Tanzania Institute of Accountant (TIA) and Institute of Finance Management (IFM). These institutions and others are implementing competence based approaches in the delivery of their programmes. But to what extent the implementation is effective. In other words, do these institutions implement well principles of competence based approach? These questions and others have made the researcher to be interested to find out the views of facilitators and learners on the effective implementation of competence based education and training curricula at the IAE programmes.

The National Council for Technical Educational (NACTE) established by Act of parliament No. 9 of 1997 is charged with the task to ensure that education offered by technical institutions is of high quality and responds to the changing needs as well as technological innovations in the world. The council performs its role by using the established national qualification system that is used by all technical institutions in implementing CBET curriculum.

Ensuring the relevance of technical education and training to the labour market, the NACTE has defined and established a range of national technical awards (NTA) to be conferred in various fields of technical education and training, covered by its five subject boards. These awards are competence based and are designed to testify that the holders can function on a level in accordance with the qualification standards. This means that holders of the awards possess the knowledge, skills and attitudes (competence) that are required in the relevant occupational sectors (NACTE, 2008).

2.5 Implementation of CBET Curriculum

Currently, the movement from knowledge based to competence based approach in delivery of education and training programmes is much more emphasized worldwide. The most important difference between competence based learning and traditional knowledge based is that knowledge, skills and attitudes are acquired integrally. The learning process is beginning from the practical challenges and then integration of the knowledge, skills and attitudes. This implies a shift in the didactical approach from teaching and instructing to facilitating and coaching. In competence based teaching and learning, the didactical approach is based on the facilitation of active learning whereby group work, presentations, self study and work related projects are among the learning activities that facilitate the development of the competencies. These learning activities involve integration of knowledge, skills and attitudes together. Kouwenhoven (2003) suggests that the knowledge, skills and attitudes should be used in an integrated manner although they might be used in varying degrees, depending on the task to be performed.

Integration of knowledge, skills and attitudes during teaching and learning process might lead to the development of competencies. Competencies can be developed by the student himself with the support of the teacher as facilitator of the learning process (NACTE, 2008). In this regard, the role of the teacher is changing from a subject expert to facilitator and coach. The teacher is active in supporting learning process rather than active in transferring content. In order to facilitate learning process which is learner- centered, various teaching and learning strategies are employed to both teachers and learners. The question to be asked here is how teaching and learning strategies are effective regarding CBET.

2.5.1 Teaching and Learning Approaches in CBET

Competence based education and training requires teachers and learners to change their conceptions of teaching and learning practices. A wide range of teaching and learning techniques is used in delivery of competence programmes. In CBET, constructivist teaching and learning is emphasized. Constructivist teaching and learning is based on the belief that learning occurs as learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. This approach fosters critical thinking and creates motivated and independent learning. In constructivist teaching, the teacher's role is to prompt and facilitate discussion. Thus, the teacher's main focus should be on guiding students by asking questions that will lead them to develop their own conclusion on the subject.

Experience in many institutions of Tanzania suggests that the traditional teaching and learning methods are still used by teachers to deliver the contents despite Tanzania's declaration that it has now shifted to competence based approach. This is supported by Mosha (2012) who declared that teachers implementing the curriculum from planning the lesson and instruction to assessing students had not changed at all. This is also supported by Kafyulilo et al (2012) on their study where they concluded that competence based teaching approaches are not well implemented in schools and to a large extent teachers have continued teaching by using the traditional approaches and assessment. They also noted that students have also continued learning through memorization rather than creating and inventing new ideas through inquiry learning approaches. Nevertheless teachers have declared to implement competence based curricula but what they really practice in the classroom setting in terms of the teaching and learning methods, roles of teachers and assessment of learning do not reflect the competence based approach (Kafyulilo et al, 2012).

Competency based education and training demands a different approach to teaching and even assessment and certification (Anane, 2013). This is because conceptually CBET is different from the traditional system. It is based on defined competency standards which are industry oriented. The education and training is more learner-centred (more emphasis is placed on the learner's role in the learning process) than teacher-centred. Anane (2013) highlighted the facilitation methods that are employed for the CBET programmes:

- **Direct Instruction Method:** It is effective when you have to introduce learners to a new study area or define new concepts and show how they are interrelated or for teaching factual information.
- **Discussion Method**: Allows learners to share knowledge and ideas thereby motivating them to achieve more particularly when others respect their contribution. It also helps the teacher to determine whether the learner understands the content of the lesson.
- Small Group Method: Pairing is done in such a way that learners help each other to learn faster than the teacher would have been able to do with the whole class. There may however be difficulties with the physical arrangement of the classroom and individual assessment using group work is difficult.
- **Problem Solving Method**: Provides a challenge to learners; gives them a sense of satisfaction and increases their confidence when they are able to solve new problems and thus gain new knowledge. It also allows the learner to develop critical thinking skills and the ability to adapt to new learning situations. It is however time consuming and because learners sometimes work individually, they may not learn all the things that they are expected to learn.
- Research Method: It is used for workshops and laboratory tasks, field experiments, case studies. It encourages learners to investigate and find answers for themselves and to

critically evaluate information. It however requires a lot of time and careful planning of research projects for the learner.

2.5.2 Competence Based Assessment

Competence – based assessment is a process where an assessor works with a trainee to collect evidence of competence, using the benchmarks provided by the unit standards that comprise national qualifications (Biggs, 1996). The shift from knowledge based to competence based approaches does not only influence the change in teaching and learning methods but also the change in the methods of assessment. This is because when learning outcomes change from the acquisition of knowledge to the acquisition of skills, then the manner of assessment will also change (NACTE, 2008). In CBET there must be sufficient evidence to ensure that a candidate meets the competence specified by the current standard. There is no single approach to competence based assessment. Evidence can be collected using different methods at different times under a variety of conditions (Biggs, 1996).

In this regard, the learning environment should be designed in such way that it focuses on the development of competencies rather than transfer of knowledge. The learning environment should encourage and motivate self—learning and self assessment. This is supported with the availability of the resources that support and encourage learner-centred. These resources include: teaching and learning resources, computer laboratory, library and classrooms which allow interaction of the learners during teaching and learning process.

In CBET, assessment is carried out not only by the teachers but also by the students themselves (student- self assessment) as well as by those representing the labour market (the outsiders). Students play a role of assessing themselves and reflecting upon their actual achievements. They reflect their own learning process through reflective essays, logbooks, Student Self Assessment Forms (SSAFs) and Personal Development Plans (PDPs). In this

context, the collection of evidence to demonstrate that a learner can perform or behave according to specific standards is carried out by both the teachers, students themselves and the labour market representative by using various methods include: tests, examinations, observation, field reports, portfolio, projects, and assignments (NACTE, 2008).

In CBET, assessment is the process of collecting evidence of a learner's performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome laid in a particular course and then making a decision, based on these judgments as to whether a learner has achieved the learning outcome as a whole or not (Anane, 2013). In other words, it is the process of measuring learner's skills, knowledge and understanding against the standards (occupational standards) laid down for a particular course. If a learner can show, by generating sufficient evidence of their competence, that they meet the standards, they qualify for that course.

Therefore CBET assessment measures whether a learner is competent or not competent. Only two possible outcomes can be the result of the assessment process, i.e. they are competent (i.e. they can perform what is stated in the standard) or they are not yet competent (they cannot perform yet what is stated in the standard). The assessment is not designed to measure a learner who is 30% or 50% or 80%, etc. competent. If they do not meet the standards they develop their skills and knowledge further, after which they are assessed again.

Authentic assessment methods are more useful for competence-based curriculum than other forms of assessment because they provide opportunity for students to demonstrate the competencies they have mastered in real life or related situation. In competence based assessment, teachers are required to change from norm referenced to criterion referenced

judgment of learners' capabilities or competencies as supported by Kouwenhoven (2003) who argued that in competence-based education, performance assessment is carried out by giving the learner a clearly defined task and a list of explicit criteria for assessing the performance or product. Criteria are often given in the form of rubrics that can be either analytic (specification of parts) or holistic (looking at overall performance). Finally, teachers are supposed to provide continuous, timely and constructive feedback to inform student about the strength and weakness of their performance.

2.6 Challenges Facing Implementation of Competence Based Curriculum

Aschcraft (1994) reveals that the sources of challenges comprise assessment and classroom management. CBET is learner-centered, hence small class sizes are preferred to enable effective use of CBET facilitation techniques. The ideal CBET class size is between 40 - 50 learners. Currently in most of the institutions in Tanzania, the average class size is hundred students and above. With this number, it is difficult for facilitators to handle class size of hundred and above students. Aschcraft (1994) said that if the number of students is 30 and above it is often difficult to manage the class. This is because the teachers have to pay individualized attention to students, have to motivate and give stimulus to them. In addition, he said that it is very difficult for every teacher to develop soft skills to a large number of students.

Challenges of implementing CBET curriculum is also observed on the aspect of Readiness. The readiness applies for both teachers and students in order that they can undergo successful teaching and learning process. The ideal condition of CBC is that both facilitators and students should be ready to undergo the teaching and learning process in class, but in reality, the opposite condition happens (Hatmanto, 2011). According to him, there are some students and teachers who are not ready to learn and teach respectively. If the students are

ready they can participate fully in class, but if they are not ready, they cannot develop their critical thinking in the class discussion (Hatmanto, 2011). This is also applied to teachers, if teachers are ready to teach, they can apply the various methods of teaching and learning in order to insure that the targeted learners acquire the competencies needed in the real life situation and verse versa.

Another challenge is that students attending the competence based curriculum class should be proactive, but the students still position themselves as passive learners. In this situation, it becomes lecturers' responsibility to encourage them to be more active, as shared by Badan and Biklein, (2003). "Our challenge is when we find that the students are not 'tuned in' in the class. So it is our responsibility to motivate them by stimulating their meta-cognitive" (Garavan & McGuire, 2001). From this context, it is clear that the shift from knowledge based to competence based approach involves not only teachers to change their mindsets but also students need to change too.

Assessment is also a big issue faced by the facilitators during implementation of competence based approach. It is more difficult to assess student's performance in the CBC class than in the conventional class. This might be influenced by the number of students in the classroom if it is big. Hatmanto (2011) argues that "In the conventional class, we just assess the students' hard skill through the fixed mechanism of examination, but in the CBC, we have to assess both hard skills and soft skills of the students. This leads to a very a complex process". The issue of using students' assignments, projects, student-self assessments, portfolio, tests and examinations as the instruments for collection of student evidences on attainment of knowledge, acquisition of skills and attitudes seem to be a challenge to the facilitators. "To assess the hard skills, we have to assess the students work based on their daily basis assignment which is really time consuming. Students have a of lot

assignments on writing and we have to check them one by one. And in the final score, we have to examine all their assignments in the form of portfolio" (Hatmanto, 2011).

Another challenge of implementing competence based curriculum is on the side of teacher changing its roles. It can easily be overlooked how much the role of teacher and (students) changes, when CBET is implementing (Jellema, 2003). In this paradigm shift, the teacher is supposed to switch from an expert role, transferring knowledge towards a coaching role, guiding students' learning processes. Students are supposed to take self-responsibility for their learning whereas the teacher becomes in charge. This requires a totally different attitudes for both parties perhaps even a paradigm shift. This challenge is related to professional development. Unless initial training and follow up assistance is provided for these facilitators on periodic bases (Anane, 2013), there is a tendency to "teach as we were taught" and CBET trainers quickly slip back into the role of the traditional teacher. This is due to the fact that, it is the same teachers who handle the two systems: Traditional and CBET. Switching from one role to the other poses a challenge for the teacher/facilitator. One needs a lot of commitment and determination to switch roles effectively (Anane, 2013).

Some teachers who are coming from knowledge based education and training (KBET) and shift to competence based education and training (CBET) for the first time (or are new to both) feel initially rather overwhelmed with a sense of these differences (Chuachua and Mafumiko, 2013). Teachers have no knowledge and skills of how to implement the Competence based approach. It is a new approach to them. This is supported by Chappel (1996) as quoted by Chuachua and Mafumiko (2013) that 'For many teachers, competency standards are now a central and problematic feature of practice... many of them are therefore faced with the dilemma of implementing a competence based curriculum.'

2.7 Empirical Studies

A number of studies have been conducted concerning with competence based education and training at national and world levels. For instance, Mosha, (2012) carried out a case study of learning materials used to deliver knowledge and skills- or competency – based curriculum in Tanzania. With regards to implementation of CBC, he declared that most teachers are still using the traditional teaching methods to deliver the content. He noted that most teachers implementing the curriculum from planning the lesson and instruction to assessing the students had not changed at all. Teachers were unable to select experiences that were student-centred and that were appropriate to specific lesson objectives, and the mental ability or/ and age of the learners.

Kafyulilo et al (2012) conducted a study on the implementation of competence based teaching approaches in education in Tanzania. A case study was pre- service teachers from Morogoro Training College. The study concluded that competency based teaching approaches are not well implemented in schools and more efforts need to be devoted in the development of tutors' and principals' understanding of competence based teaching approaches.

Kavindi, (2013) conducted a study on the Implementation of Competence Based Curriculum in Teachers' Colleges in Tanzania. A case study was two teachers' colleges located in Mbeya region, Tanzania; Mpuguso Teacher College and located in the urban area Mbeya Lutheran teachers' college. The study again concludes that competence –based curriculum is not implemented as it is intended at the classroom level. The study recommends that policy makers should consider the classroom reality in order to effectively reform education curriculum by providing in-service training to teacher educators.

2.8 Literature Gap

The review of literature has illuminated some gap in literature. Various studies that have been conducted on implementation of competence based curriculum focus on learning materials used to deliver knowledge and skills or competence based curriculum and competence based teaching approaches at the lower level of education. Apparently no study has been conducted as unit of analysis to investigate to what extent the IAE implements the CBET curricula to its programmes as higher learning institution. The few studies that were undertaken at IAE so far have addressed issues such as Experience of the IAE to implement the Integrated Post- Primary Education Programme (IPPE) as an innovation in Tanzania (Chuachua and Mafumiko, 2013); and Establishing competences and curriculum for Integrated Post Primary Education (IPPE) (Meena, 2009). This study was therefore attempted to fill in that gap by investigating the perceptions of facilitators and learners on the implementation of competence based curricula in adult education programmes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the research methodology for the study. It describes a brief presentation of the area of the study, research design and approach, study population, sample and sampling procedures, data collection methods and instruments. It also includes data analysis and a work plan for the study.

3.2 Study Area

The study was carried in Dar es Salaam region specifically at the IAE, headquarters. The criterion that was applied to determine the selection of this region is the fact that most of the academic staff is found in Dar es Salaam, headquarters. This enabled the researcher to obtain data much easier from respondents such as students, academic staff and senior officers including deputy director, head of adult and continuing education and examination officers.

3.3 Research Design and Approach

In this study, a case study design was used. According to Krishnaswami (2003) a case study design involves an in- depth comprehensive study of a person, a social group, an episode, a programme, an institution or any other social unit. The case study enabled researcher to understand how ideas and abstract principles in a given study can fit together (Nesbet and Watt, 1984). The case study enabled the researcher to obtain in-depth and rich data from informants. This is because a case study involves analysis of characteristics of an individual unit so as to probe deeply and intensively the multifarious phenomena that constitute the life

cycle of the unit with a view to establishing generalizations about the population to which that unit belongs (Cohen and Manion, 2000).

In this study, the researcher adopted a qualitative research approach although elements of quantitative research were employed to enhance and elaborate qualitative interpretations and discussions. Mason (1998) defines qualitative research as multi-method in focus, involving an interpretive and naturalistic approach to its subject matter. It implies an emphasis on the qualities of entities; processes and meaning that cannot be experimentally examined or measured in terms of quantity, amount, intensity or frequency.

The qualitative approach was used because it enabled the researcher to obtain and interpret informants' meaning and experiences in their natural setting. According to Denzin and Lincoln (2000), the qualitative approach helps the researcher to study a phenomenon in its natural setting and attempt to make sense of it, or to interpret a phenomenon in terms of the meaning people bring to it. It provides an opportunity for the researcher to modify and make changes during the research process. Furthermore qualitative studies tend to analyze the data inductively focusing on the in-depth of the study (Bogdan and Biklen, 1992). This means that the researcher has to collect much data or evidence from the field before generating any theory or principle. The theory developed in this way emerges from the bottom up rather than from the top down. Therefore; it enabled the researcher to obtain participants' views and opinions on the topic under study.

In this study, this approach was considered suitable as it allowed the researcher to be flexible and interact directly with the respondents bearing in mind that "effective implementation" of a phenomenon is a subjective issue which depends on the individual's outlook and perception. By obtaining views, opinions, and ideas from facilitators and

students, the researcher got a deep understanding and recorded exactly the obtained information through observation, interviews, focus group discussions and documentary review.

3.4 The Target Population

Best and Khan (1998) define population as any group of individuals who has one or more characteristics in common that are of interest to the researcher. In this study the target population was mainly from IAE lecturers/facilitators, IAE students at the headquarters and IAE Management as the key actors in the study.

3.5 Sample and Sampling Techniques

3.5.1 Sample of the Study

Best and Khan (1998), define a sample, as a small portion of a population selected for observation and analysis of data. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn. Miles and Huberman (1994) argue that a small size sample characterizes qualitative studies. It is a sample sufficient to provide maximum insight and understanding of the problem under study. Basing on Miles and Huberman the sample size for this study included 58 respondents as indicated in table 3.1

Table 3.1: Composition of the Sample

	Category of Respondents	Number of Respondents		Total Respondents	
		Male	Female		
1	IAE senior officers	02	01	03	
2	Facilitators	08	07	15	
3	Technician certificate Students	05	05	10	
4	Ordinary diploma Students	06	04	10	
5	Bachelor degree (1, 2 & 3 year)Students	09	11	20	
	Total	30	28	58	

Source: Researcher's data

Table 3.1 indicates the type of respondents involved in the study. Three IAE senior officers who participated in the study were chief academic officer, head of department of adult and continuing education and studies and examination officer. The chief academic officer participated in the study because she is directly involved in coordinating and supervising all the IAE programmes. She is also responsible to provide technical supports to IAE programmes. Her involvement in the study was of great significance.

The Head of Department of Adult and Continuing Education and Studies (ACES) participated in the study because he is directly involved with the IAE implementation of CBET curricula. CBET curricula for certificate, diploma and bachelor degree programmes are coordinated by him. He is aware with all issues related with teaching and learning strategies and methods of assessment used by IAE to implement CBET curricula and challenges that facilitators and learners encounter when implement it. Therefore, his

involvement was crucial in this study. One examination officer participated because the office of examinations is the focal point where it administers and manages examinations at the IAE.

The sample also included selected students from different IAE programmes including students enrolled in technician certificate, ordinary diploma and bachelor degree programmes were asked to provide their views on implementation of CBET curricula at the Institute. The IAE lecturers/ facilitators were involved in the study because they are focal points since they are directly involved in teaching and assessing students and their responses are crucial to the study. The selection of the respondents to be involved in the study was based on purposive and simple random sampling techniques. Purpose sample was used for collecting data from senior officials at the IAE, while the simple random sampling helped to gather data from facilitators and students.

3.5.2 Sampling Techniques

Sampling is the procedure a researcher uses to gather people, places or things to study. It is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho and Kombo, 2002). For this study, purposive sampling and simple random sampling were used to get respondents.

3.5.2.1 Purposive Sampling

Purposive sampling technique is a technique used in selecting categories with special attributes. The technique was used in the study to get respondents from a group of IAE senior officers: chief academic officer, examination officer and head of ACES. The purposive sampling was employed in this group because according to their virtue positions

and responsibilities. The researcher was expected to get the reliable information about the effectiveness implementation of the CBET curricula from this group. These individuals possess required information that could not be provided by other officers at the institute.

3.5.2.2 Simple Random Sampling

Simple random sampling technique is a procedure in which all the individuals in the defined population have an equal and independent chance of being selected as a member of the sample. In this study simple random sampling was used to get respondents in the group of facilitators and students. The facilitators and students in this study are the main actors in the implementation of the competence based approaches, so this sampling enabled the researcher to get respondents who have implemented and practiced competence based curriculum for more than one year.

3.6 Data Collection Methods and Instruments

Data collection refers to gathering specific information aimed at proving or refuting some facts. In this study data was collected using interview, focus group discussion, documentary review and non-participant observation. The researcher employed the above-mentioned variety of data collection methods and that was resulted into triangulation with regard to the whole entire process of data collection. Cohen, Manion and Marrison (2000) define "triangulation as the use of two or more methods of data collection in the study of some aspects of human behaviour". According to Jacobs and Razavieh (1996), triangulation means the use of multiple research methods to verify the findings. Bogdan and Biklen (1992) point out that exclusive reliance on one method may bias or distort the researcher's picture of a particular reality she/he is investigating. What is certain is that research techniques or instruments have shortcomings that need to be complemented by the use of other sources.

3.6.1 Documentary Review

Documents are stable sources of data that can be used repeatedly. They are valued because they can provide more insights into the programme under studied by cross-validating and augmenting evidence obtained from other sources (Yin, 1994). In this particular study, various documents from IAE were reviewed include curriculum documents, academic reports, IAE prospectus, papers, articles, journals and books.

3.6.2 Observation

Observation is a tool that provides information about actual behavior. In observation, observer's role may vary from full participant to complete outsider. It is a very important tool in qualitative research types. It can be of the setting or physical environment, social interactions, and physical duties planned and unplanned activities (Best & Khan, 1998).

In this study, non- participant observation was used for both students and facilitators during teaching and learning process take place in the classroom setting as well as outside the classroom. The focus was to look at the availability of teaching and learning resources including the status of lecture halls and seminar rooms; and teaching and learning approaches used by IAE facilitators in implementing the competence based approaches, and methods used to assess students in CBET. The researcher was also interested to observe the availability of the computer laboratory and the library as whole so to see to what extent these resources promote learner- centred approach as far as competence based approaches are concerned. Non-participant observation provided unique insights. It yielded direct first-hand information, which was more valid than reported information obtained from focus group discussion and interviews.

3.6.3 Interview

Interview is a common and important method in qualitative research. It refers to an exchange of views between two or more people on topics of mutual interest, sees the centrality of human interaction for knowledge production, and emphasizes the social situation of research data (Seidman, 1991). It allows the researcher to enter into person's worlds and understand their inner perspective, including the meaning they make from those perspectives (Best & Khan, 1998). Their major advantage is that they assist the researcher to make best use of the limited time available and at the same time make the process of interviewing different people more systematic. These interviews can further enable the researcher to ask follow –up questions and hence gain a deeper understanding of informants' feelings and perceptions on implementation of competence based education programmes.

The semi structured interviews were used to gather data in the subjects 'own words. The interviews administered to facilitators, chief academic officer, head of department and examination officers. This is due to the fact that, these interviews enabled researcher to obtain the feeling, experience and perceptions from these respondents concerning the implementation of the competence based curricula as well as the challenges that IAE as whole encounters during its implementation. Both opened/closed-ended interview questions were utilized in order to enable respondents to explain themselves deeply and provide opportunities for both interviewer and interviewee to discuss issues pertaining to competence based approach adopted by the IAE to its education programmes in detail.

3.6.4 Focus Group Discussion

This study also adopted focus group discussion. A focus group is usually composed of six to eight people who share certain characteristics, which are relevant for the study, but the size

can range from as few to as many as twelve depending on the research purpose. The focus group discussion was conducted to IAE certificate and bachelor degree students as well as to the ordinary diploma students. Four focus group discussions of ten students in each were formulated by the researcher and the discussion in each group took 45 minutes to 1 hour. This enabled the researcher to get a lot of information concerning the implementation of competence based approach particularly on the part of assessment of learning as well as on the methods/strategies of teaching and learning. The focus group discussion helped researcher to capture the views of the students on the implementation of the CBET curricula and challenges meet during implementation. The discussion was planned and designed in such a way that it was easy to obtain information on the participants' perceptions on a defined area of interest.

3.7 Validation of the Study instruments

Validity refers to the quality that an instrument used in the research is accurate, correct, true, and meaningful and right (Bhola, 1990). In order to determine the validity, the research instruments were presented to the few facilitators who carefully and critically examined the items and gave out their comments. Suggestions and recommendations made were accommodated to amend and refine the instruments. In this way, inherent inconsistencies and ambiguities spotted were corrected before the administration of the instruments. Furthermore, while administering interviews and focus group discussion, the researcher made some clarifications wherever need arose, until the items became clear to the respondents. Therefore, refinement of the research instruments became an ongoing process throughout the field work.

3.8 Data Analysis Plan

Data analysis plan is a systematic process which involves working with data, organizing and breaking them into manageable units, synthesizing them, searching for patterns, discovery what is important and what is learned and deciding what to tell others (Bogdan and Biklen, 1992). The analysis of qualitative data varies with the purposes of the research, the complexity of the research design and the extent to which conclusions can be reached easily (Orodho and Kombo, 2002). In this study, as said in the previous section that adopted a qualitative approach although elements of quantitative research were employed. The qualitative data were analyzed through the content analysis technique involving coding and categorizing into themes and response patterns which were interpreted and arranging in accordance with the objectives of the study. Analysis of quantitative data was done by using computer data analysis software called Statistical Package for Social Sciences (SPSS). Simple statistical methods such as cross tabulation were used to produce various data analysis output in the form of frequencies and percentages. Tables were constructed using Microsoft word.

3.9 Ethical Consideration

Prior to the research, a clearance was issued by the office of the vice chancellor, Open University of Tanzania and addressed to the Director of Institute of Adult Education, who introduced the researcher to the Head of Human Resource Department of IAE who in turn wrote a letter of introduction to all those involved in the study. Individual respondents were assured of their anonymity and confidential treatment of their responses. It was made clear to them that, the information sought was purely for academic purposes and that their participation was voluntary and any decision to withdraw or decline to disclose any information whatsoever at, any time of the study would highly be respected.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the findings, discussion of the data collected and summary of the study. The study was intended to attain five major objectives thus the analysis and discussion of findings are presented based on the objectives and research questions as indicated in chapter one of this document.

4.2 Facilitators' and learners' Perceptions on the Concept of CBET

The aim of the first research task was to examine facilitators' and learners' understanding of the competency based education and training curriculum and approaches. The researcher found that it was important to assess the understanding of IAE facilitators' and learners' understanding of the concept of CBET curriculum and competency based approaches because facilitators and learners form key implementers of competency based curricula at IAE. The successful implementation of competence based curriculum was essentially dependent upon the teachers' and learners' readiness and understanding of the concept of CBET and the initiative. To achieve this objective, facilitators and learners were asked questions around three thematic areas; the general understanding of the concept of competence based curriculum; competence based education and training approaches and how the CBET approach differ from knowledge based approaches.

The findings of the study revealed that some facilitators and students at IAE have little knowledge of competence-based teaching and learning approaches, the situation which would hamper effective implementation of the CBET curriculum.

4.2.1 Facilitators' Perceptions on the Concept of CBET

Facilitators who responded to the study questions revealed that majority of could define and describe a competency based curriculum and competency based teaching approaches. Some of the responses from the facilitators are represented in their citations below: One facilitator said that: "I can explain the CBET curriculum as a curriculum which integrates knowledge, skills and attitudes during teaching and learning processes" Another facilitator explained a CBET curriculum as a "Curriculum which enables learners to master knowledge, skills and attitudes needed for the world of employment and general life"

Third facilitator narrated that,

I can explain a CBET curriculum as a curriculum which is characterized by learner- centered and not teacher- centred. It is normally prepared in such a way that it requires learners to perform various tasks as a means of equipping them with knowledge and skills related to their real life situation.

However, responses from five (33.3 %) facilitators showed that they have little knowledge about competence based education and training curriculum as they were unable to explain clearly the concepts of competence based curriculum and competence based education and training approaches. Though, they pointed out that participatory approaches are highly emphasized when implementing competence based curriculum in the classroom situation, researcher noted that they were not familiarized with the concepts related to competence based education and training practices.

The study findings revealed that some of the IAE facilitators have little knowledge of competence-based curriculum, situation which negatively affected the implementation of the CBET curricula which have been adopted. It can be argued that for curriculum policy to be effectively translated into classroom reality; teachers who form the most single factor which determines the quality of education a child receives (Cooper, 2011) should clearly understand the policy intention. However, findings from the recent study on the

implementation of competence-based curriculum in secondary schools in Tanzania are depressing. This is because most of the secondary school teachers have narrow understanding of competence-based curriculum and its repercussions on their classroom practices (Paulo, 2014). Shemwelekwa (2008) also reported that mathematics teachers in the studied schools had narrow conception of competence based education to the extent of affecting its implementation within classroom.

From study findings, it can be argued that facilitators who do not comprehensively understand competence based curriculum innovations and its impact on their classroom practices are very likely of implement it as ambitiously as intended by policy makers. Lack of clear understanding on competence-based curriculum even among key policy makers and implementers has been mentioned as a big challenge to the implementation of competence-based curriculum (Meena, 2009; Tilya & Mafumiko, 2010; Tilya, 2010 as cited in Paulo, 2014). Researcher noted that narrow understanding of facilitators on the concept of CBET has been characterized to lack of on-going trainings to orient facilitators to the intended competence-based curriculum. The researcher argued that poor facilitators' orientation in the studied areas hindered the implementation of competence-based curriculum. Without comprehensive in-service training for orienting facilitators to the intended curriculum reforms, it will be difficult for facilitators to initiate innovative practices in the classrooms.

4.2.2 Learners' Perceptions on their Knowledge of the Concept of CBET

The findings showed that thirty (75%) learners who responded during focus group discussion did not have satisfactory understanding of the concept of competence based curriculum and they were not knowledgeable about the competence based approaches. For instance, when the respondents were asked to explain how they understand the term 'competence based curriculum' and 'competence based education and training approaches'

five (12.5 %) students out of forty students during focus group discussion responded positively and clearly. The rest were unable to respond and eight (20 %) students said they knew nothing about competence based curriculum. Some of the responses from the students are represented in their citations below:

One student stated that: "Competence based education and training approach is participatory teaching method" Another student labeled as "student two" defined competence based education and training approach as "Participatory teaching and learning approach whereby learners are involved in teaching and learning" Student labeled as student three also explained CBET approach as "a learner-centred approach; for example, the use of question and answer approach or discussion during teaching and learning processes" Student four stated that: "CBET approach is participatory approach that takes between teacher and students in the classroom situation; for example, brainstorming"

Despite the researcher attempted to clarify on each question item asked to make it clear to the respondents during focus group discussion, the respondents showed shallow understanding on the concepts of CBET. When subjected to questions that required them to elaborate what they knew about competence based education and training approaches, majority of them relied on saying it is participatory method they could not provide with satisfactory explanations.

However, when the students were asked to differentiate competence based education and training from knowledge based approaches, their responses and differentiated were shown slightly positive as represented in the citations below:

Student one: "CBET approach is participatory while knowledge based approach is less participatory" Student two: "In CBET approach encourages the use of teaching and learning aids while in knowledge based approach the use of teaching and learning aids not emphasized" Student three narrated that:

CBET approach is learner centred while knowledge based is teacher centred. In CBET approach a learner is involved in teaching and learning processes while in knowledge based approach the teacher is an expert in delivering content to learners.

From these responses, the researcher declared that students as key implementers of CBET curricula at the IAE have some awareness about the two approaches: knowledge based approach and competence based approach. But the challenge they encountered was their ability to analyze and apply the competence learning approaches in learning process as they have shallow knowledge about the CBET concepts.

Generally, study findings revealed that IAE students have shallow knowledge on the concepts of CBET like competence based curriculum and even the competence based education and training approaches. This situation hindered the effective implementation of the CBET curriculum to both facilitators and students. The researcher thought that there is need to prepare these students to adopt curriculum changes by giving them workshops or seminars prior to the programmes commencement in each academic year. The researcher thought that, it is important to orient the students with IAE curriculum documents in order to be aware of concepts like competence based curriculum, competence based teaching and learning and other important concepts. Through orientation, it will be easier for both learners and teachers to implement the adopted CBET curriculum successfully since the role of each implementer will be well-known. This is because in CBET learner-centred approach is more emphasized and teachers have the role to guide the learners to acquire the required competences.

4.3 Facilitators' and Learners' Perceptions on the Implementation of CBET Curricula in the Classroom at IAE

The second task was to investigate the extent to which IAE is implementing the CBET curricula in its programmes. It is important to investigate the extent to which IAE implements the innovative approaches during teaching and learning process because since 2009 the Institute has declared to shift from knowledge- based education and training curricula to competence – based education and training curricula. The question to be asked here is whether implementation of CBET at IAE is effective? In order to respond to this concern the researcher focused on the three key areas; availability of teaching and learning resources, assessment methods and teaching and learning methods used by IAE facilitators to implement CBET curricula. The findings of these focused areas are discussed under the sub-headings that follow.

4.3.1 Teaching and Learning Resources Available for the Implementation of Competence- Based Curriculum at IAE

Study findings indicated that IAE is among academic institutions in Tanzania facing acute shortages of teaching and learning resources relevant for the implementation of competence-based curriculum. Thirteen (86.6 %) facilitators acknowledged that there was an acute shortage of teaching and learning resources such as books, computers, projectors, printers, library services, photocopies and internet services due to inadequate funds for procuring them from suppliers. Shortage of funds has been noted to be the major challenge facing implementation of CBET curricula at the IAE. Eight (53.3 %) facilitators admitted that IAE faces the problem of shortage of funds. This was manifested by shortage of teaching and learning materials and facilities such as computers, photocopiers, printers and reference books in the library. Regarding the teaching and learning resources, the researcher observed that the library available at IAE is too small to accommodate the present number of the

students which was 1770 in 2014/2015 academic year. This number represented the students who conventionally studying at IAE only. Generally, the library available has no capacity to accommodate learners to learn independently.

4.3.1.1 Availability of Library Services and Stock of Books at IAE

Findings obtained through Interview with facilitators revealed that at IAE library, services are a big challenge to both learners and facilitators. One facilitator pointed out that

In reality library needs to be large enough to accommodate more than 500 students at whole but in our case, library is very small cannot accommodate more than 100 students at whole. Now we have about 1600 regular students, here we are talking about students who are using to come here regularly only; we are not talking about ODL learners. Library available is just like mini- library with no enough reference books, the available ones are very old and numbers of copies are very few. If you want current materials you are suppose to download them from website.

This point was supported by another facilitator who reported that: "The library we have has a lot of challenges but the giant problems are; shortages of relevant reference books and insufficient of library space for learners independently studying"

Study findings also revealed that books and other texts available at IAE are inadequate. There were few numbers of copies per subject. The ratio between books and student was as high at one book per fifty students (1:50). In some subjects the ratio was even higher. It was also noted that other books available were outdated (old reference books). Findings obtained through focus group discussion with learners revealed a similar situation. They expressed their views indicating that the library at the IAE does not satisfy the needs of all learners because it has no enough space for individual learning. It is very small compared to the number of the students studying at the institute. For instance, one of the students referred to as student three stated that "In our class there are 300 students but the library has a

capacity of accommodating only 50 students at a time so it is difficult for learners to access the library services at a given time".

Furthermore, students pointed out that teaching and learning materials available at the IAE library are not sufficient in relation to the size of the student body. Other reference books available were outdated and in other courses, they are not available. Student's responses also showed that they were used to share books at the library. This situation was not effective for learners to acquire the required competences. Through observation, researcher noted that other shelves available at library have no books they are empty as shown in figure 4.1. Inadequate library services and relevant texts have made IAE students—to search for these services outside the institute. This condition affected the students academically as they delayed to submit the given assignments to their facilitators on given time and sometimes they spent their money to buy the required books or to photocopy those materials which incurred costs.

It was further revealed through observation and documentary review that the library had the capacity to accommodate only 52 students only at a time. Meanwhile, it was noted that the number of students at IAE in 2012/2013 academic year were 1,047; in 2013/2014 were 1706 and in 2014/2015 were 1770. Making condition even more constrained, there was an addition of more than 30 clients from the public who were recommended to use the library services at IAE. By all standards, the IAE library was considered by respondents to be very small even when it was used by alternating groups of students.

One facilitator pointed out that the IAE library is just a mini-library since it does not adhere to college library standards. As stated in the previous discussion that it has outdated reference materials including books and it is also not automated. Inadequacy of library space at IAE was observed to hinder smooth implementation of competence-based curriculum. Table 4.1 depicts the total number of students at IAE headquarters in each programme during 2014/2015 academic year.

Table 4.1: Total Number of Students at IAE Headquarters During the 2014/2015 academic year

S/N	Programmes	Female	Male	Total
1.	Technician Certificate	350	187	537
3.	Ordinary diploma	371	262	633
3.	Bachelor degree I	137	106	243
4.	Bachelor degree II	81	88	169
5	Bachelor degree III	87	101	188
	Total	1026	744	1770

Table 4.1 shows that there were 350 female and 187 male students pursuing the technician certificate programme. In ordinary diploma programme there were 371 female and 262 male students. As for degree programes there were 305 females and 295 males. In total there were 1770 students out of which were 1026 females and 744 males in academic year 2014/2015. Table 4.1 depicted that the number of IAE students at headquarters was very high during 2014/2015 academic year when compared with teaching and learning resources available such as library services, number of books and computers as discussed in the previous section. This situation really hampered the implementation of the CBET curriculum. To overcome this situation at the institute, it is the researchers' opinion that the use of elearning library should be emphasized to the students. Hence, students need to be encouraged and motivated to change their mindsets of relying use traditional library services

as the only sources of information. The e-learning library would enable students to access books and other texts that are not available at the IAE library.

Inadequacy of teaching and learning resources including books is challenging in implementing competence based curricula at the IAE. This situation de-moralized both facilitators and learners towards to attain the intended goal. This point supported by de Waal (2004) who states that "it is very frustrating for educators, as well as learners, to continue with teaching and learning when there is a lack of resources - it is unfavourable for successful curriculum reform". If there are insufficient resources the implementation of the curriculum is hampered (Mbeshu, 2010). The most important resource for learners and teachers are text books and teacher's guides. Insufficient reference books constrains teachers from being able to deliver their lessons in the classroom, they tend to revert to the traditional method of teaching because they lack the necessary resources needed for the implementation of a learner-centred approach (Mbeshu, 2010). Teachers who do not have the necessary resource material feel completely ill-equipped in introducing and implementing the curriculum successfully and competently, this constitutes signs of demotivation and stress amongst the teachers (Mulaudzi, 2009). Figure 4.1 shows a section of IAE library which clearly depicts a real situation that other shelves have no books.



Figure 4.1: A Section of IAE Library

The researcher explored further on the status of IAE's library in terms of internet services available. Data through interview with facilitators revealed that no internet services at the IAE library and the computers at the library were very few to meet the needs of the learners. There were only eight computers which were not even installed with internet services. The researcher was further interested to know the status of computers at the IAE computer laboratory. The researcher's visit to the laboratory revealed that there were only twenty computers at computer laboratory. These made a total of only twenty eight computers available at IAE which were easily accessible by learners. In addition, the space capacity of the computer at the institute could accommodate only twenty students at a sitting. The condition pertaining to availability of computers at IAE is pathetic since analysis of the situation deals ratio of 1:89 computer student ratios.

Findings also indicated that computer laboratory sometimes is closed and some of the computers were not in working conditions, due to the fact that they are old and incompatible with current models of computers. Maintenance services were also insufficient. Internet services were unreliable because of frequent electricity shortage and limited internet

bandwidth. Through focus group discussion IAE students revealed similar results that the computer laboratory and computers available at the institute were insufficient to accommodate the number of learners at the institute. According to the students internet connectivity was unreliable, a situation that made the computers useless for effective teaching and learning processes. One of the students with psydo name "Student five" pointed out that "I have never seen the computer laboratory opened. Always the computer laboratory is closed and there are only a few computers when compared to the number of students studying here" Another student with psydo name "Student six" informed the researcher that "Since I joined in this institution 2014/2015 I have never used any computer services because it is not easy to access those services"

The responses from IAE students revealed that computer services at IAE were a big challenge at the institute. The students declared that inaccessibility of computer services made the students search for services outside the institute where they have to pay very highly for the services and incur extra expenses to travel to and from the computer services providers.

Generally, study findings revealed that the availability of computer services and computer laboratory at the IAE was a big challenge in implementing CBET curricula successfully. Students declared that it was a hard time for them when they were given assignments which required them to use computers and search materials from the internet.

4.3.1.2 Availability of Lecture Theatres (halls) and Seminar Rooms

The researcher was also interested to obtain views from IAE facilitators and learners on the sufficiency of the physical infrastructure such as lecture halls and seminar rooms. Findings obtained through interview with IAE facilitators showed that lecture theatres and seminar rooms were available for facilitation sessions and seminar presentation respectively despite

the fact that the size of the rooms was a challenge. Through observations, the researcher noted that there were seven lecture halls and three seminar rooms at IAE. The name of lecture halls (LHs) were: Elimu Hall (EH), Elimu kwa Njia ya Posta (ENP), Basement I (BI), Basement II (BII), Lecture Hall (LH) IV, Lecture Hall (LH) III and Lecture Hall (LH) I. Seminar rooms were named SR I, II and III. The researcher observed that all these halls were recently renovated; hence they were in good working condition.

Despite the availability of lecture halls and seminar rooms for facilitation and seminar presentations, it was observed that the number of lecture halls and seminar rooms and their capacities were not adequate to accommodate the number of students studying conventionally with exception of those studying through open and distance learning mode. For instance, Basement I and Basement II halls, each has a capacity of accommodating two hundred and twenty (220) students according to the fixed chairs available, Elimu Hall 250 students per lecture session and ENP 180 students per session. LH III and IV each accommodated 170 students per session. This was according to the fixed chairs available in each of the hall.

Data obtained through documentary review revealed that in the academic year 2014/2015 there were 537 students under technician certificate programme and 633 students under ordinary diploma programme. Even though there studied in two separate sessions: morning and evening in both programmes the number of the students in one session was too big to be comfortably accommodated in the halls available at the IAE.

For the CBET curriculum to be implemented as per plan, the IAE management should ensure that there are adequate resource materials such as reference books, power point projectors, computers, photocopy machines, teaching aids and stationery in order to enable teachers and learners to play their role satisfactorily in the curriculum implementation. The researcher is of the opinion that the IAE management must provide adequate physical facilities such as lecture theaters, seminar rooms, computer laboratory, internet connectivity and library in order to create an environment through which implementation of CBET can be implemented smoothly. The availability and quality resource materials and the availability of appropriate facilities have a great influence on curriculum implementation. According to Mulaudzi, (2009) effective curriculum implementation is dependent on variables such as availability of competent educators, adequate resource provision, suitable infrastructure, and effective supervision among others.

4.3.2 Perceptions of Facilitators and Learners on Programmes Delivery System at IAE

In this section the researcher presents findings on the delivery system of programmes at IAE. The intention of this section was to assess the teaching and learning methods which were used at the IAE. The findings indicated that the following methods were commonly used at the IAE institute; interactive lectures, group discussions, seminar presentations, case studies, projects/ field work, role plays and field trips.

Interview with facilitators revealed teaching and learning methods that IAE facilitators used to implement CBET curricula. The methods mostly incorporated elements of participatory teaching approaches. These included; interactive lecture method, group discussion, seminar presentation, project assignments, field work, case study, question- answer method and brainstorming. Facilitators said that, under these methods there was active interaction between the teacher and learners; and there was also interaction between learners and the content and the teaching/ learning materials. These methods were recommended because

they focused on the students (learner –centered). However, it was revealed that these methods were facing with challenges as one facilitator expressed;

If the number of the learners in the classroom is small, these methods are very effective but when the number is too big it becomes a challenge to us. As you know at IAE one class has 100 students and above, how can we apply these methods in such big classes.

Findings through focus group discussion with learners revealed similar results. Twenty learners (50 %) pointed out that despite other methods such as projects, individual assignments, seminar presentations, group and plenary discussion and field work were employed by facilitators in implementing CBET curricula at IAE. The common one was however the interactive lecture method. They narrated that, in interactive lecture method, the facilitators used lecture method but within lecturing they mixed it with other methods including question – answer, simulations, think-pair share and discussions. This kind of combination made classes to be active and learners participate in teaching and learning processes. They also narrated that facilitators preferred the interactive lecture method because the method enhanced coverage of course content within the time set by the institute's time schedule. Interactive lecture was deemed the most efficient method to use for fast delivery of a given course content.

Another reason of choosing interactive lecture method was the big numbers of the students in the classes. Through observation, interview and focus group discussion, findings showed that there were too many students in the classroom. The classes were congested and this situation worked in favour of interactive lecture method as other methods would require a lot of time to attend to individual students' needs. One facilitator commented that "CBET approaches are good when the number of students in the classroom is few about 45 to 50 but when the number is too big from one hundred to above it is difficult to apply CBET approaches".

Despite the observed overcrowded classrooms, study findings revealed that at the IAE teaching and learning had slightly changed from traditional to competency- based approaches. Facilitators used participatory teaching and learning methods in implementing the competence – based curricula. The methods included: project assignments, individual assignments, group assignments, group discussion, question- answer, interactive lecture, seminar presentations and study tutors. These methods were all learner – centered. Field & Drysdale, (1991) assert that CBET is learner-centred and the learning process is central. In learner-centred teaching for competence development, the teacher is supposed to switch from the role of an expert who transfers knowledge to the role of a coaching who facilitates and guides the learning process (Biemans et al., 2004). Students are supposed to take responsibility for their own learning through direct exploration, experimentation, contextualization and experience, where as the teacher used to be in charge.

It was observed that since IAE adopted competence- based education and training to its programmes, constructivist teaching and learning approaches have been emphasized. Constructivist teaching and learning is based on the belief that learning occurs as learners get actively involved in the teaching and learning process where meaning and knowledge construction take place as opposed to passively receiving of information. The constructivist teaching and learning approaches foster critical thinking and create motivation and independent learning. Through documentary review, the researcher noted that IAE curriculum documents and prospectus stipulate how IAE modules should be facilitated. It was stipulated that each module will be facilitated by using interactive lectures, group and plenary discussion sessions, seminars or tutorials, group assignments, individual assignments, presentations and self study as the teaching and learning methods to be used in the implementation of CBET curricula/ programmes at the IAE.

The constructivist teaching and learning approaches is based on the beliefs that knowledge and skills are not products that can be transferred from teacher to learner rather they are results of learning activities attained by the learners themselves as individual or as groups (Wissselink et al., 2002; Turworth, 2011). This perception calls for teachers to use varieties of teaching strategies such as small groups, discussions and practical activities (Paulo, 2014). In CBET, the role of the teacher is that of a 'cognitive guide' – to encourage students to engage in active inquiry and make explicit their tacit assumptions. Kerka, (1997:1) maintains, "a constructivist teacher is more interested in uncovering meanings than in covering prescribed material." Teachers are supposed to design effective learning activities geared towards the development of specified competences. Students spend most of the instructional time engaging themselves in conducting learning activities than listening or watching what the teacher lectures or demonstrates (Paulo, 2014).

Based on the above discussions, it is the researcher's opinion that to ensure smooth implementation of CBET curriculum, the IAE management should ensure the adequate availability of teaching and learning resources which are essential for teaching and learning processes. The IAE management must provide and support conducive learning environment including suitable infrastructure that encourage both facilitators and learners.

4.3.3 Perceptions on facilitators' Assessment Methods at IAE in the Implementation of CBET

In this section, the researcher was interested to explore assessment methods employed by IAE's facilitators when implementing competence –based curricula. In CBET, assessment is not only used to measure students' learning but it is also used to determine if the students' can develop the next higher competency. Assessment is part and parcel of the learning process. With this regarding, there are many methods of gathering evidence that can be used

to enable an assessor to make judgment about the learner's competence. The method chosen should be the most direct and relevant to the competencies or learning outcomes being assessed.

Through documentary review, the researcher noted that there were two categories of assessment at the IAE. First, continuous assessment which carries 50% marks and it comprises of practical work/ project, portfolio, timed essay/test, presentation and participation and mid-semester examinations. Second, semester examinations conducted at the end of semester and it carries 50% marks to make a grand total of 100%. It was also observed that all IAE curriculum documents and prospectus on the part of assessment stipulate continuous assessment and semester examinations as the modes of assessment grounded on pre-defined competences using authentic assessment methods such as portfolio, practical/project work, individual assignments, group assignments, observation, tests, examinations and field report writings. Furthermore it was also revealed that students' self- assessment practices were emphasized whereby each individual student had to assess her/himself by using Student Self Assessment Forms (SSAFs) and Personal Development Plans (PDPs). In CBET, continuous assessment is designed to give learners constant feedback about their performance and the progress in a nonthreatening way. It gives learners substantial opportunities to practice the skills, gain knowledge and make self-reflection about their learning before they are placed in a high stakes situation (pass or fail).

Findings revealed that assessment practices by all IAE facilitators have generally changed from traditional to competence –based assessments. It was revealed that authentic assessment strategies such as portfolios, presentation and participation, self- assessments, practical/ project assignments, individual/ group assignments, observations, tests and

examinations were commonly used by IAE facilitators in implementing competence- based curricula.

Interview responses showed that 81.3% of the interviewed facilitators named portfolios, project/ practical assignments, individual/ group assignments, student self assessment forms, personal development plan, written reports, written tests and examinations as the major strategies the IAE facilitators employed in implementing competence – based curricula. Facilitators asserted that these methods were most frequently used for assessing students learning during continuous assessments. It was noted that the accumulation of evidence to judge the extent to which learners have acquired the pre- defined competences were collected during continuous assessment processes using different methods at different times under a variety of conditions (Biggs, 1996).

Documentary review findings from the IAE examination office revealed that portfolios, project/ practical assignments, seminar presentations, tests and examinations were assessment practices that were commonly used to assess learning progress at the IAE.

Findings obtained through focus group discussion with learners revealed similar results as they mentioned student self assessments, portfolio, project/practical assignments, individual/group assignments and report writings as among the most frequently methods used to assessing their learning progress. Learners declared that during semester sessions they were very busy with the assignments given by their course facilitators in order to meet submission deadlines. One of the students informed the researcher that:-

During this semester we have had six courses, as you can see we have project assignments, group assignments and presentation works for all six courses. Meanwhile we have also research report writing and other assignments. For each of these assignments we have to meet specified deadlines. We have to go to the library to search for the materials. We have to be prepared to sit for the tests and mid-semester examinations to these six courses. These activities make us very busy throughout the semester.

The researcher was interested to know whether the given assignments helped learners to acquire the required competences. The responses showed ten out of fourty students said that assignments, tests and examinations that were given by their facilitators to some extent helped them to develop the competences needed in the stated CBET curriculum as most of the assignments required learners to attempt them in a practical way. One of the learners informed that "Frankly speaking, the assignments which we are given are very challenging but they are relevant in meeting the needs of the competence – based curriculum".

Generally, study findings revealed that the IAE as higher learning institution in Tanzania has slightly changed from traditional to competence- based assessments. In CBET, the authentic assessments and criterion- referenced assessment are highly emphasized. Hakielimu (2012) admits that portfolios, project work, practical tasks, and written reports are among the most important assessment methods that are used in implementing competence based curriculum despite they were the least used methods by teachers in Tanzania. It is the researcher's opinion that following the findings and other scholars perspectives on implementation of CBET curriculum, IAE management should ensure the facilitators are motivated and encouraged through in- house trainings. These trainings will remind and sharpen them with competences needed for smooth implementation of the curriculum changes.

4.3.4 Professional Development

In this section, the researcher was interested to examine the professional development programmes initiated for facilitators by the IAE management to assist them understand the implementation of the competence –based curricula. The Researcher thought it important to investigate professional development programmes initiated by IAE during implementation of CBET curricula because the programmes would enable facilitators to implement the new

curricula successfully. Professional development constitutes an ongoing change to enhance one's learning so one would be able to teach learners more successfully (Mkhwanazi, 2007). Professional development is conveyed in the structure of "workshops, seminars, conference, or courses" (Ono and Ferreira, 2010).

Findings under this section revealed that during transition period of paradigm shift from knowledge based to competence based curricula, the IAE management managed to organize and conduct a series of trainings/ workshops for IAE facilitators. During the workshops, facilitators learnt how to implement the adopted curricula. For example, in February, 2009 there was a five days CBET training conducted to all academic staff/facilitators at IAE. The theme was to introduce to facilitators the concepts of CBET and CBET curricula. Two months later in April, 2009 training was also conducted to all IAE facilitators. The theme that time was to guide facilitators how to prepare assessment plans and activity plans under the CBET curriculum. Findings revealed that through the workshop trainings, facilitators were given opportunity to receive guidance and training, to familiarize themselves and be aware of effective implementation of CBET curricula. Mulaudzi (2009) opinioned that changes to the curriculum must be well-resourced, and teachers must be developed professionally, so that they take ownership of the reform processes. Teachers without sufficient information about a given curriculum cannot implement it properly.

Ten (66.7 %) facilitators acknowledged that they had received CBET seminars although the trainings were too short to equip the facilitators enough for successful implementation of the adopted curriculum. Facilitators stressed that workshops should be held regularly for facilitators in all learning areas regarding the adopted of the new curriculum. According to Dixon, Scott & Dixon (2008), Professional development of every facilitator needs to be arranged properly. It is of absolute importance to give facilitators quality training so they get

well informed of the current requirements in education; this is a requirement for effective education. Facilitators should be motivated so they get encouraged to improve their knowledge throughout their teaching career. They need to be motivated, so they take ownership of the changes of the curriculum. If facilitators receive the necessary support and guidance from the relevant authorities their lesson presentation in classrooms get enhanced (Erden, 2010).

In contrary to above discussion, findings also revealed that there were facilitators, who had never heard or attended any seminars in competency-based curriculum. This is due to the fact that since 2013 there were no in- house trainings or workshops conducted for IAE facilitators regarding to competence-based curriculum. This situation made those facilitators unable to translate the curriculum documents—into assessment plans and activity plans; hence it hampered the smooth implementation of the CBET. It is the researcher opinion that through professional development IAE facilitators can develop sufficient knowledge and skills, and expand their teaching and learning activities. Hence, effective implementation of CBET curricula need to be treated the same, facilitators need be adequately trained. However, Lack of professional development for IAE facilitators regarding to the CBET was hindered its effective implementation. This point supported by Mulaudzi (2009) who declares that the successful implementation of Outcome Based Education (OBE) in South Africa was hampered by lack of professional framework of continuing professional development and support programmes.

4.4 Perceptions of Facilitators and Learners on the Challenges that IAE Encounters in Implementing CBET Curricula

The aim of the third task was to identify the challenges encountered in the implementation of competence - based curricula at the IAE. The researcher found it important to investigate

the challenges facing the IAE in implementing the competence – based curricula, because addressing challenges constitute the backbone of the institution's success. The assumption by the researcher was that if all the challenges that IAE encounter in its curricula implementation are addressed, the institution will be able to effectively fulfill its tasks that enhance the quality of education in Tanzanian. Findings revealed that the effective implementation of CBET curricula at IAE was encountered several challenges. These challenges included: Large class sizes, shortage of time for curriculum implementation, inadequate relevant books and library space, inadequate infrastructure such as lecture halls and seminar rooms, shortage of computers and computer laboratory space, limited internet connectivity and inadequate professional development programmes. These challenges are presented and elaborated in the subsequent sections of this section.

4.4.1 Large Class Sizes

The first challenge that hampered the effective implementation of competence —based curriculum at IAE was large class size. Findings showed that the teacher: student ratio at IAE was as high as 1:100 (or above 100). Despite facilitators ability to provide assessment tasks at required frequency using the advocated assessment methods, it was deemed hard for facilitators to pay individualized attention to learners, to motivate and give them stimulus to focus on study. It is very difficult for every facilitator to develop soft skills to a large number of students when the facilitation is dealing with many students (Ashcraft, 1994).

Interview responses showed that 86.7% of the interviewed facilitators complained of having many students per classroom as a factor that hindered effective implementation of competence –based curricula at IAE. For instance, one facilitator complained that she had 320 students in her class. She interrogated such a condition saying "I have 320 students in

my class, how can I manage them and how can I assess individual learner's competence in this situation"

According to Harricharan (2011), a teacher often experiences many difficulties with such a large number of learners in one class. Disciplinary problems are particularly problematic leading to the teacher becoming very discouraged. Furthermore, Hatmanto, (2011) asserts that competence – based assessment might be influenced by big numbers of students in the classroom. The issue of using students' assignments, projects, student-self assessments, portfolio, tests and examinations as instruments for collection of student evidences on attainment of knowledge, acquisition of skills and attitudes seem to be a challenge to the facilitators when they deal with big classes.

Since NACTE acquired mandate to run higher education, the IAE student's enrollment has increased year after year. The number of students in the classroom has linearly. This has exacerbated the challenges that hamper smooth implementation of competency- based education and training curricula at IAE. Data revealed that during the academic year 2011/2012, IAE introduced evening sessions for diploma courses. The introduction of new evening diploma classes has been characterized by increase of students' enrolment. Nine (60%) out of fifteen facilitators declared that the new evening programme has increased the number of enrolment at IAE. One facilitator pointed out that "In this year 2014/2015, we have about 600 students for diploma one, although there are two sessions; morning and evening sessions, one session has about 300 students"

The responses from focus group discussion with students revealed that the big number of students during lecture sessions as shown in figure 4.2 was one of the factors that hindered the effective implementation of competence –based curricula at IAE. They commented that,

when given group assignments to perform in their small groups other students become reluctant to fully participate because the size of each group was too big. As a result, only few students who were active in that group performed the given assignments. Competence – based education approaches emphasis cooperation between facilitators and learners and also among students themselves. At the IAE, it was noted during teaching and learning processes that, cooperation was ineffective and it was hard for the facilitators to manage the classrooms due to numbers of students registered for the classes. Figure 4.2 shows IAE ordinary diploma students during lecture session at Elimu Hall.



Figure 4.2: Ordinary Diploma Students during lecture session in Elimu Hall

Source: Data from the field

Study findings revealed that shortage of lecture halls and seminar rooms constituted one of the challenges facing the effective implementation of competence – based curricula at the IAE. The lecture halls and seminar rooms available at IAE as discussed in the previous

discussion were not sufficient to meet the learners' needs. For instance, Elimu Club hall has capacity of accommodating two hundred and fifty (250) students per lecture session, but data revealed that it accommodated even above three hundred students per lecture session. Similarly to Basement I and II halls, each hall has capacity of accommodating two hundred and twenty (220) students (fixed chairs available) during lecture session but findings revealed that it accommodated above 250 students per lecture session. Furthermore, available space is typically characterized by insufficient ventilation.

Through observation, the researcher observed that all lecture halls at IAE had been refurbished with facilities such as fans, loud speakers or alternative sound system and other halls installed with air conditions (A/C). However, researcher noted that the fixed loud speakers and air conditions do not work properly which resulted into low attention of students during lecture sessions. This situation was resulted due to lack of enough ventilation and poorly hearing condition to those students sit at the back of the classroom due to large size of the halls. For instance, during focus group discussion fifteen (37.5 %) out of forty students declared that the IAE lectures halls were not enough in relation to number of the students per lecture sessions. Researcher noted that students complained on issue of lacking of louder speakers in the lecture halls. One student stated "The number of learners at the institute is big so if you sit at the back in the classroom, you can't hear anything from facilitators" This point was supported by another student who narrated that:

Lecture halls have no enough facilities like loud speakers and number of students in the class is big if you sit at the back of classroom during lecture sessions it is difficult to hear what facilitator talks so we are requesting the IAE management to solve this problem by installing all lecture halls with loud speakers.

The point above was also supported by another student who narrated that:

Indeed there are few lecture halls and rooms when compared to the number of students. For example, in diploma two there are about 300 and above students per each session during lecture session the class is overcrowded and you cannot hear well. The facilities like loud speakers are installed at the lecture halls but they are not working which resulted into learners not hearing well during lecture session due to large number of the students.

Generally, study findings revealed that the effective implementation of CBET curricula at IAE was hampered by large number of students in the class. The situation has made the application of CBET approaches difficult. Classroom observations revealed that learners were congested during lecture sessions which made it difficult for the facilitators to make classes active as advocated by constructivists. de Waal (2005) declared that it is very difficult to implement a learner-centered approach to teaching in a class of this nature. Bantwini (2010) viewed that teachers are finding it very difficult to cope with a large number of learners in their classes. According to Rose (2008), a class should not go beyond thirty learners. It is advisable to have a small teacher to learner ratio so the teacher can provide individual attention to those learners requiring more help than others. It is the researcher opinion that following the findings and other scholar's perspectives on implementation of curriculum changes IAE management should ensure that all lecture halls are installed with loud speaker and air conditioning facilities to enhance audibility and sufficient ventilation during lecture sessions.

4.4.2 Shortage of Time for Curriculum Implementation

The second challenge that affected the effective implementation of CBET curricula at the IAE was shortage of time as the contents in the curricula were modularized and the modules in the particular programme were spread over two semesters of fifteen (15) weeks each. Findings revealed that majority of facilitators at IAE were overloaded with administrative responsibilities, thus their concentration on teaching activities were weakened (Shewata, 2008, Timothy, 2011).

Six facilitators (40%) acknowledged that, when there were multiple tasks to accomplish and they were assigned modules to facilitate in the semester, the exercises exerted a lot of pressure on facilitators, some of whom ended up using lecture methods in implementing the curricula with less attention given to learners. Researcher noted that the IAE organization structure was different from other higher learning institution such as Technical Training Colleges in which teachers in each department taught subjects which directly fall under their departments.

The IAE has six (6) departments including the department of Adult Education and Continuing Education that offers certificates, diplomas, and bachelor degrees courses. The other departments are Distance Education, Mass Education and Women Development, Regional Centers Coordination, Personnel and Administration and Financial Services. It was noted that each department had its own responsibilities apart from facilitating classes. Consequently, facilitators from other departments had to attend to multiple roles, i.e. administrative and facilitation of classes. For both roles the facilitators had to meet deadlines for accomplishment. This situation made facilitators to prepare knowledge – based lesson plans to save time for doing other activities related to their respective departments. One facilitator claimed that: I am not in the department that offers training, so I'm just going to facilitate module assigned me as per time table during lecture session after that I go back to my department to perform roles I have on my working desk. It is a really hard time for us who are working in other departments.

The findings revealed that due to shortage of time, facilitators did not even provide constructive comments/ feedback to the learners' portfolios. Portfolios as assessment tools have been commonly used by the IAE to assess whether a particular learner acquired the required competences. Among other things portfolios include student self assessment form

and personal development plan whereby student assess his/ her learning progress thus, weaknesses and strengths on a particular course or subject and also the facilitation methods used. In regarding to this, it was observed that facilitators just put marks on students' portfolios without any comments. In addition, it was also revealed that at IAE there was no specified criterion on marking portfolios; every facilitator has his/her own way of deciding what to mark and how to grade. Despite the portfolio consists of 10 marks out of 50 marks of continuous assessment, thus, there is no benchmarking of assessing it. This condition raised many questions to students what criteria the facilitators used to mark their portfolios. Why almost the similar portfolios of the students varied in marks which marked by the similar facilitators. Based on this situation, it was the researchers' opinion that IAE should set criteria that every facilitator should adhere when marking students' portfolios in order to assess the validity and reliability of the portfolios in assessing students learning progress.

4.4.3 Shortage of Teaching and Learning Materials and Facilities

Shortage of teaching and learning facilities such as computers to access internet services was highly observed in the study. The room in which internet is housed is too small to accommodate even twenty clients at a time. In attempt to solve this problem of shortage of reliable internet services twelve facilitators which constitutes eighty percent (80 %) of respondents said that they normally use their own laptops and modems to search internet services because those provided at IAE are both unreliable and insufficient in terms of small numbers of computers connected to the IAE internet network. Facilitators advised IAE management to improve internet services available and establish internet connectivity in all academic departments to make these services available at the institute. Ten (66.7%) facilitators showed disappointment on the internet services available at IAE and were worried and noted that the problem continues to hamper teaching and learning processes by both facilitators and students.

Inadequacy of teaching and learning resources such as books and other texts, PowerPoint projectors, printers, photocopy machines, library services, teaching aids and stationery was extremely observed in the study. Study revealed that books and other texts available at IAE are inadequate. There were few numbers of copies per subject. The ratio between books and student was as high at one book per fifty students (1:50). In some subjects the ratio was even higher. It was also noted that other books available were outdated.

Study revealed that teaching and learning materials available at the IAE library are not sufficient in relation to the size of the student body. Other reference books available were outdated and in other courses, they are not available. During focus group discussion, student's responses showed that they were used to share reference books at the library. This situation was not effective for learners to acquire the required competences. Furthermore, inadequate library services and relevant texts have made IAE students—to search for these services outside the institute. This condition affected the students academically as they delayed to submit the given assignments to their facilitators on given time. Sometimes students spent their money to buy books or to photocopy those materials which incurred costs.

Availability of teaching and learning resources and facilities are very crucial in competency – based education and training curriculum implementation. It is the researchers' opinion that IAE should ensure that the necessary teaching and learning resources such as books, PowerPoint projectors, computers, internet services, photocopy machines, teaching aids and stationery are made adequately available at the institute. This situation will enable facilitators and learners to play their role satisfactorily in the curriculum implementation.

4.4.4 Lack of Professional Development

Professional development is a method by which teachers reevaluate; modernise; and broaden their responsibility, as transformation managers for the purpose of teaching, so they can obtain and expand their knowledge; skills; attitudes; and values (Mkhwanazi, 2007). It is an ongoing change to enhance one's learning so one will be able to teach learners more successfully. Professional development is conveyed in the structure of workshops, seminars, conference, or courses (Ono and Ferreira, 2010, cited in Harricharan, 2011).

Researcher noted that there was a lot of dispute and doubt regarding many issues of the curriculum implementation. For instance, during interview, seven facilitators (46.7 %) out of fifteen declared that there were not familiar with IAE curricula as they were just given a portion of curriculum (module assigned) to implement/ facilitate in particular semester and nothing else. When they come across with statements such as principal learning outcomes, enabling outcomes and sub-enabling it becomes a difficult to them to interpret because they had never come across with these statements before. Lack of professional development on how to implement CBET curricula was also observed in South Africa as Mulaudzi (2009) comments that many academics pointed out that South African teachers were not given the opportunity of receiving guidance and training, to familiarise themselves and allow effective implementation of (Outcomes – Based Education (OBE).

Changes to the curriculum must be well-resourced, and teachers must be developed professionally, so that they take possession of the reform process (Uiseb, 2007). Facilitators without sufficient information about the curriculum cannot implement it properly. Without proper training for facilitators the CBET curricula cannot be executed or implemented correctly. Findings revealed that there was no enough support provided to the IAE facilitators specifically to newly employed ones concerned with the CBET curricula

implementation. Pudi (2006) viewed out that guidance and support is essential for facilitators in the implementation of curriculum reform. Teachers will be able to apply a variety of teaching techniques in the teaching of their lessons.

It is researchers' opinion that workshop trainings should be held regularly for IAE facilitators in all learning areas on curriculum implementation. Professional development should be an ongoing practice since facilitators need support and direction at all times. Professional development should be part and parcel of all procedures before, during and after the implementation of a new curriculum.

4.4.5 Measures Taken by IAE to Address the Identified Challenges

The fourth task of this study was to identify the measures taken by the IAE to address the challenges facing the implementation of competence – based curricula at the IAE. This was deemed important because the researcher wanted to know how IAE had addressed the challenges identified in the above section in order to make the implementation of CBET curricula at the institute effective and efficient.

4.4.5.1 Measures Taken by IAE Management to Address the Identified Challenges

Study findings revealed that since IAE adopted new curriculum, some efforts have been made by IAE management to rectify the situation. First, it was noted that seven lecture halls and three seminar rooms have been renovated to make the teaching and learning environment more conducive. For instance, the IAE changed the use of its building's basement to lecture halls (basement I and basement II) that each hall accommodates nearly 220 students at a sitting. This was according to the fixed chairs available at each hall. In addition, lecture halls 3, 4 and ENP hall have been modernized by fixing chairs and installing air condition facilities as shown in figure 4.3. Through observation, the researcher

noted that ENP has capacity of accommodating 180 students at a sitting and lecture hall III and IV; each has ability of accommodating 170 students at a sitting. This was according to the number of chairs fixed in each hall. It was also noted that new reference books and furniture were purchased, internet network installed at the institute and library capacity enlarged despite their shortcomings at least they have been made available. Furthermore, internet services have been installed in the computer laboratory though they were still ineffective due to poor connectivity. Study findings revealed that all of these were among of the efforts the IAE had made in the course of implementation of competence based curricula. Figure 4.3 shows a section of ENP hall with fixed chairs.



Figure 4.3: A section of ENP Hall with Fixed Chairs

Furthermore, study findings revealed that the IAE management has been introduced/conducted an in -house training for facilitators in order to sharpen them competences needed for facilitation of competence-based curricula. Through documentation and interview with facilitators and head of training noted that there were series of trainings/workshops conducted for facilitators during transition period of paradigm shift from knowledge based curricula to competence based curricula. However, it was revealed that

facilitators employed at IAE since 2013 onward have not had chances to attend any training/workshop regarding the competence-based curricula. They are just assigned modules to facilitate at particular semester without any training/direction how to go about. The IAE management should have a plan to design professional framework of continuing professional development and support programmes so that any new employee and even senior employees have to attend. The support programmes should be regularly conducted to enhance effective implementation of the curricula.

4.5 Opportunities that IAE can Harness to Improve the Implementation of the CBET Curricula at the Institute

The study findings revealed that there have been no deliberate efforts from the IAE management to find or erect new buildings that can serve as lecture halls, seminar rooms and library. Researcher noted there are a lot of the opportunities available at the IAE regarding the expansion of the institution which in turn would enable improvement of the CBET curricula implementation. First, the researcher observed that at the IAE headquarter building; there is a possibility of making renovation/reconstruction of that building as there is a misuse of the available resources including the spaces. The researcher thought that the reconstruction of the IAE headquarter building will enable the institute to enlarge the library space, increase the number of lecture halls and seminar rooms hence, reduce the problem of overcrowding during lecture and seminar sessions and it will also provide an opportunity to the students to access the library services easily. Competence based teaching strategies; such as group work, role playing, to name a few, need to be exercised where there is enough space to allow active and maximum participation of all learners. The IAE is now critically faced with the problem of limited space for lecture halls, seminar rooms and library. The IAE has to begin to address the problem now before the situation becomes worse hence distorting the reputation of the institute.

Second, the study revealed that the problem of overcrowding during lecture sessions at the IAE headquarter halls can also be reduced if there is proper utilization of resources available at the IAE. For instance, the researcher observed that the IAE has a large campus in Morogoro and Mwanza regions that allow for expansion of enrolments opportunities. Therefore, if the identified places are developed depending on fund availability, the problem of overcrowding in lecture halls will be solved at the IAE headquarter campus. The problem of overcrowding in the CBET classrooms/halls has made the principles of learner- centred such as group work, individual attention not successfully implemented at the IAE. The researcher also considered that if needs are prioritized at IAE, the challenges facing the provision education services will gradually improve and CBET will be successfully implemented.

Study revealed that the IAE also has an opportunity of establishing partnerships with other stakeholders regarding the expansion of library, lecture halls and provision of teaching and learning resources including texts and computers. The researcher thought that the multistakeholder partnerships between IAE, communities, civil society organizations, donors, international organizations, and the private sector will enhance provision of quality education at IAE. It is the researchers' opinion that IAE management should have a plan to collaborate with other stakeholders in the course of the implementation of its programmes.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter consists of the summary of the study, conclusions drawn from the findings and recommendations for action and for further research.

5.2 Summary of the Study

The purpose of this study was to investigate the perceptions of facilitators and learners on the implementation of competence-based curricula at the Institute of Adult Education (IAE) in Tanzania. The study investigated the perceptions of facilitators and learners on their understanding of the concept of CBET. Secondly, the study examined the facilitators' and learners' perceptions on the extent to which the CBET curricula were implemented in the context of IAE programmes. Thirdly, the study investigated the perceptions of facilitators and learners on the challenges that IAE encounters in the course of implementing CBET curricula. Finally, the study examined the measures taken by IAE to address the challenges facing the implementation of competence based curricula and opportunities that IAE can harness to improve the implementation of the CBET curricula at the institute. Literature review covered the theoretical and empirical findings related to the study.

The study has found out that the IAE curricula have been changed from knowledge-based to competency-based although there are challenges in the implementation of the adopted curricula. The implementation of the competency-based curriculum in the classroom in higher learning institutions in Tanzania, especially at IAE faces many challenges. The challenges that IAE faces range from inadequacy of teaching and learning materials and

facilities, overcrowding in the classrooms, lack of space for expansion of the college, lack of library services and lack of training on the adopted curriculum.

The study was conducted at the Institute of Adult Education headquarters in Dar es Salaam city. The study sample comprised 58 respondents of whom forty were students (technician certificate, ordinary diploma and bachelor degree students) and fifteen facilitators (academic staff) chosen by using simple random sampling. Other respondents were three IAE Senior Officers who were purposively selected due to their professional positions at IAE.. Methods used for data collection were interviews, focus group discussion, non-participant observation and documentary reviews. Data analysis started with individual respondents, and then answers from respondents were grouped, compared and clustered on the basis of emerging themes. Data were finally discussed, analyzed, and presented based on the themes developed.

The findings indicated that to some extent the IAE was successful to implement the competence based curricula. It was found out that teaching and learning had slightly changed from traditional- based to competence- based approaches. The IAE facilitators were implementing competence – based curricula by employing participatory teaching and learning methods such as interactive lecture methods, group discussions, study tutors, seminar presentations, individual assignments, project assignments, field work, think-pair-share and question- answer techniques. These methods provide opportunity for learners to interact either with their facilitator, with other students and the study materials. However, IAE has to ensure that there are reliable adequate teaching and learning materials to enhance the teaching and learning processes.

Furthermore, it was also found out that assessment practices by all IAE facilitators had generally changed from traditional to competence –based assessments whereby authentic assessment strategies such as portfolios, presentation and participation, self- assessments, practical/ project assignments, individual/ group assignments, observations, tests and examinations were commonly used by IAE facilitators in implementing the competence-based curricula.

The findings indicated that the effective implementation of the competence base curricula at the IAE programmes was hampered by insufficient teaching and learning resources. Findings revealed that, IAE was faced with the problem of shortage of teaching and learning materials. Facilitators and students mentioned materials such as books as the mostly deficient at IAE. Furthermore, there was the problem of teaching and learning facilities such as computers, PowerPoint projectors, printers, photocopiers and internet. It was observed that there were only eight computers at the IAE library and twenty computers at the institute's computer laboratory. This made a total of only twenty eight computers available at IAE which could be accessed by learners and academic staff.

On the issue of conducive teaching and learning environment in terms of infrastructure, it was found out that lecture halls and seminar rooms have undergone extensive innovations. Hence, it was suggested by facilitators and students that all lecture halls should be installed with loud speaker facilities to improve audibility. Furthermore, it was noted that implementation of CBET curricula at the IAE was hampered by inadequate of library space and library services in general. The library had no capacity to accommodate the number of students registered at the institute. It was noted that each academic year, IAE enrollment was more than thousand students but the IAE library has capacity to accommodate only fifty

students at a sitting. The situation constituted big challenge for students when they require to access library services.

Facilitators pointed out that it was very difficult to implement CBET approaches to teaching in classes with large numbes of students. For example, in academic year 2014/2015 second year students in diploma programmes were about three hundred in one session they were congested during lecture sessions and facilitators found it very difficult to cope with the large number of learners in their classes.

It was also revealed that the implementation of CBET curricula at the IAE was challenged by lack of professional development programmes for facilitators. It was noted that at the earlier stages of CBET curricula implementation at the IAE, in – house trainings/workshops related to competence based education and training were conducted for the facilitators in order to sharpen their competences to enable them cope with CBET but those workshops were not sustainable. Those who attended earlier training recommended that trainings should be held regularly for all IAE facilitators. They suggested that professional development should be an ongoing practice since facilitators need support and direction all times. Professional development should be part and parcel of all procedures before, during and after the implementation of a new curriculum.

5.3 Conclusions

The following conclusions were derived from the findings based on the research questions.

Basing on the findings in the first task, it can be concluded that, students and some of the IAE facilitators have none to little knowledge of competence-based curriculum. The lack of clear understanding of competence-based curriculum among these key implementers became a big challenge to the implementation of competence-based curriculum at the IAE.

The second conclusion is that teaching and learning had slightly changed from traditional-based approaches to competence-based approaches. To CBET, competence-based teaching is learner centred hence, emphasizes the use of participatory teaching and learning methods. There is also emphasis on using authentic assessment strategies such as portfolios, presentation and participation, self- assessments, practical/ project assignments, individual/ group assignments, observations, tests and examinations.

The third conclusion is that, the implementation of CBET at the IAE faced many challenges such as inadequacy of teaching and learning materials and facilities, shortage of library space, highly limited professional development programmes, limited physical facilities such as lecture theaters, seminar rooms, computer laboratory and internet connectivity/services. Other challenges included large numbers of the students in lecture halls and shortage of time for curriculum implementation. These challenges constrained IAE to implement the adopted CBET curricula. If IAE is to succeed in implementing CBET curricula, IAE management should invest in education services. Proper management of the available resources including financial resources should be made high priority for the institute.

Fourthly, it was found out that the measures taken to address the challenges facing effective implementation of competence based curricula were insufficient. The basic challenges such as lack of professional development, insufficient of library space, insufficient of lecture halls and seminar rooms, lack of loud speakers in the lecture halls, lack of computer services, and internet connectivity at the IAE headquarter campus have not been adequately dealt with by the IAE management. Under this circumstance, IAE management should design sustainable strategies that would alleviate the challenges that facilitators and students encounter so as to enable the effective implementation of CBET curricula.

5.4 Recommendations

Based on the study findings and conclusions the following recommendations have been made;

5.4.1 Recommendations for Tanzania Government

- (i) The MoEVT has to allocate adequate funds to IAE so as to enable it implement CBET curricula successfully. Adequate finances is a paramount condition for implementing changes at any institution.
- (ii) IAE and MoEVT should make deliberate efforts to seek funds from various sources including international organizations, NGOs and CBOs so as to improve teaching and learning at the institute.
- (iii) The government, through the Ministry of Education and Vocational Training needs to empower the IAE to establish a large and well equipped academic institutional library and computer laboratory so as to attract and accommodate a large number of the clients/students.
- (iv) There is a need for the stakeholders to subsidize funds for purchasing essential teaching and learning materials and facilities.

5.4.2 Recommendations for students at IAE

(i) Students as key stakeholders of CBET curricula, have to task their leadership to discuss ways of enabling students to meet with IAE management so that the challenges students face in the course of learning are jointly addressed with IAE management so as to alleviate the challenges that constrain the smooth provision of quality education at IAE

- (ii) Students and academic staff need to work closely together to ensure that there is reliable teaching and learning resources so as to enhance provision of quality education at IAE.
- (iii) Students need to be encouraged to buy their own ICT gadgets (e.g. Laptops, high powered mobile phones, Ipods, Ipads and tablet). These would enable them to access books and other texts that are not available at the IAE library. This step is necessary given the need for all global citizens to connect to others as well as to all relevant data deposited on web sites.

5.4.3 Recommendations for the Institute of Adult Education

- (i) It is recommended that, necessary teaching and learning resources such as books, power point projectors, computers, photocopy machines, teaching aids and stationery should be made adequately available at the institute so as to enable teachers and learners to play their role satisfactorily in the curriculum implementation.
- (ii) Department of Adult and Continuing Education and Studies at IAE in collaboration with IAE management should conduct in-house trainings programmes regularly for facilitators to enhance their career skills, in this case CBET implementation skills.
- (iii) Availability of printing and internet services at IAE library and other academic offices need to be made available to increase provision of quality education;
- (iii) IAE has to ensure that all lecture halls are installed with loud speaker facilities and air conditioning facilities so as to enhance audibility and sufficient ventilation respectively during lecture sessions.
- (iv) Inadequate spaces in the library must be expanded or added by the IAE management

(v) Congestion during lecture sessions needs to be addressed by IAE management.

5.4.4 Recommendations for further studies

- (i) It is recommended that other study be conducted on the views of lecturers and students on the effectiveness of using portfolio as assessment tool in implementing CBET curricula at the IAE. The study is needed because portfolio is commonly used to assess student learning progress at the IAE programmes so it important to assess the validity and reliability of this tool regarding competence based curricula implementation and success.
- (ii) There is a need to conduct a similar research in other higher learning institutions which have adopted competence based curriculum to find out similarities and differences in the implementation CBET approaches. Such a study would inform processes of harmonization for CBET.
- (iii) There is a need to conduct a study on the suitability and relevancy of IAE programmes to identify their strengths and weaknesses. Such a study would bring feedback to IAE, so that the identified comments can be used in the review of the existing curriculum.
- (iv) Tracer study should be undertaken to identify where ordinary diploma and bachelor degree graduates are and to what extent they have been effective at their working stations in relation to the training they got from IAE. Such a study would bring feedback to the IAE, so that the institute can improve its quality of CBET provision.

REFERENCES

- Achtenhagen, F. & Grubb, N. W. (2001). *Vocational and occupational education:*pedagogical complexity, institutional diversity. Washington: American Education Research Association.
- Anane, A. C. (2013). Competency Based Training: Quality Delivery for Technical and Vocational Education and Training Institutions. *International Journal of Educational Research*. 2 (2): 5-6.
- Arguelles, A. & Gonczi, A. (eds.) (2000). *Competency Based Education and Training: A World Perspective*. Balderas, Mexico: Grupo Noriega. 229pp.
- Ary, D., Jacobs, L. & Razavieh, A. (1996). *Introduction to Research in Education*. (5th ed.). United States: Wadsworth group.
- Ashcraft, M. H. (1994). Human Memory and Cognition. New York: HarperCollins.
- Bantwini, B. D. (2010). How Teachers Perceive the New Curriculum Reform: Lessons from a School District in the Eastern Cape Province. International Journal of Educational Development. 30 (1):83-90.
- Best, J. W. & Khan, J. V. (1998). *Research in Education*. (8th Ed.). Needham Heights, MA: Ally & Bacon.
- Bennett, N. (1999). Patterns of Core and Generic Skill Provision in Higher Education. *Higher Education*, 37 (1): 71-93.
- Berdrow, I. & Evers, F. T. (2010). Bases of Competence: An instrument for self and Institutional Assessment. Assessment and Evaluation in Higher Education, 35(4): 419-434pp.
- Bhola, H. S. (1990). Evaluating Literacy for Development Projects, Programmes and Campaigns. Hamburg, Germany: UNESCO Institute for Education & German Foundation for International Development.
- Biemans, H., Nieuwenhuis, L., Poell, R., Mulder, M. & Wesselink, R. (2004). Competence-based VET in the Netherlands: Background and pitfalls. *Journal of Vocational*

- Education and Training, 56(4), 523-538pp. Retrieved on 8 August, 2015 from http://www.bwpat.de/7eu/biemans etal nl bwpat7.shhtml.
- Biggs, J. (1996). Assessing Learning Quality: Reconciling Institutional, Staff and Educational Demands; Assessment and Evaluation in Higher Education, 21 (1) 5-11pp.
- Black, P., Harrison, C., Lee, C., Marshall, B. & William, D. (2005). Assessment for learning: Putting it into practice. Berkshire: McGraw Hill.
- Bogdan, R. & Biklen, S. K. (1992). *Qualitative Research for Education*. Boston: Allyn & Bacon.
- Boyatzis, R., Leonard, D.C., Rhee, K. S. &Wheeler, J. V. (1996). Competencies can be developed, but not in the way we thought. *Capability*, 2(2), 25-41.
- Burke, J. W. (1989). *Competency based educational and training*. London: Routledge Falmer Taylor & Francis Group. 1-9 pp.
- Chuachua, R. & Mafumiko, F. (2013). Establishing Competences and Curriculum for Integrated Post Primary Education (IPPE). In; Proceedings of International Open and Distance Learning conference. 25 November, 2013, New Delhi, India. 89pp.
- Cresswell, J. W. (2003). Research design: Qualitative, Quantitative and Mixed methods Approaches. London: Sage Publication.
- Cohen, L. & Manion, L. & Morrison, K. (2000). *Research Methods in Education*. London: Routledge Falmer.
- Cooper, J. M. (2011). Classroom Teaching Skills. *Australia journal of Teacher Education*. 40 (11): 1-20 Pp.
- Denzin, N. K. & Lincoln, Y. S. (2000). Handbook of Qualitative Research. (2nd ed). London: Sage publication.
- De Waal, T. G. (2005). Curriculum (2005): Challenges Facing teachers in Historically Disadvantaged Schools in the Western Cape. Unpublished Masters Thesis, University of the Western Cape, South Africa.

- Dixon, K. Scott, S., & Dixon R. (2008). *The Impact of Increasing Workload on Academics. Is There Time for Quality Teaching?* Perth: Curtin University of Technology.
- Erden, E. (2010). Problems that Preschool teachers face in the curriculum implementation. Unpublished Masters Thesis, Middle East Technical University, South Africa.
- Field, L. & Drysdale, D. (1991). *Training for competence: A handbook for trainers and teachers*. London: Kogan page.
- Garavan, T. N. & McGuire, D. (2001). Competencies and workplace leaning: Some reflections on the rhetoric and the reality. *Journal of Workplace Learning*. 13(4): 144-163, 1366-5626.
- Guba, E. G. & Lincoln, Y. S. (1989). Fourth generation evaluation. Newbury Park, CA: Sage publications.
- Hakielimu. (2012). School children and national examinations: who fails who? A research report on the relationship between examination practice and curriculum objectives in Tanzania. Dar es Salaam: Hakielimu.
- Harricharan, R. (2011). Narratives of Curriculum Adaptation: Teacher Challenges in the Face of Curriculum Reform. Unpublished Master Thesis, Nelson Mandela Metropolitan University, South Africa.
- Harris, J. (1995). Curriculum innovation. London: London Open University.
- Hatmanto, E. D. (2011). Challenges in the Implementation of Competency –Based Curriculum in the English Language Teaching. In; proceedings of TEFL conference, Seoul, South Korea, 15 April, 2011. 10-13pp.
- IPPTN Report. (2002). Unemployment dilemma among the graduates. Retrieved on 7 June 2015, from http://www.usm.my/ipptn/eng/default.asp?menu=11.
- Jallow, S. S. (2011). Competency based curriculum. Teaching and assessing student competencies. UNESCO- BREDA Dakar, Senegal. In; Proceedings of Teacher Education and Development Pan African Conference. 13-15 April, 2011 Lome, Togo.

- Jellema, K. (2003). Competentiegericht leren binnen een AOC. In: M. Mulder, Wesselink,
 R., Biemans, H., Nieuwenhuis, L. & Poell, R. (eds.). Compentiegericht
 beroepsonderwijs. Gediplomeerd, maar ook bekwaam? Houten: Wolters Noordhoff.
- Kerka, S. (1998). *Competency-based education and training: Myths and realities*. Washington, DC: Office of Educational Research and Improvement. Retrieved on November 2015, from http://:www.cete.org/acwe/docgen.asp?tbl=mr&ID=65.
- Kirschner, P., Van Visteren, P., Hummel, H., & Wigman, M. (1997). The design of a study environment for acquiring academic and professional competence. *Studies in Higher Education*, 22 (2) 151-17pp.
- Kitta, S. & Tilya, F. N. (2010). The status of learner-centred learning and assessment in Tanzania in the context of the competence-based curriculum. *Papers in Education and Development, university of Dar es Salaam*, 29:77-91pp.
- Kouwenhoven, G. W. (2003). Designing for Competence: Towards a Competence-Based Curriculum for the Faculty of the Eduardo Mondlane University. Doctoral Dissertation. Enschede, Netherlands: Twente University.
- Knowles, M., Holton, E. & Swanson, R. (1998). The adult learners: The definitive classic in adult education & human resource development. Houston, TX: Gulf.
- Krishnawami, O. R. (2003). *Methodology of Research in Social Sciences*. Mumbai: Himalayas Publishing House.
- Kafyulilo, A. C., Rugambuka, I. B., & Mosses, I. (2012). The Implementation of Competency -Based Teaching Approaches in Tanzania. A case of Pre- service Teachers at Morogoro Teacher Training College. *Universal Journal of Education* and General Studies 1(11): 339-347.
- Kavindi, A. E. (2013). Implementation of Competence Based Curriculum in Teachers' Colleges in Tanzania. Unpublished Master Thesis, University of Oslo, Norway.
- Larson, S. A., Doljanac, R., Nord, D. K., Salmi, P., Hewitt, A. S. & O'Nell, S. (2007)). National validation study of competencies for frontline Supervisors and direct support professional: Final report Minneapolis, MN: University of Minnesota.

- Lekule, A. (2010). Implementation of Secondary Education through Open and Distance Learning (ODL); Unpublished Master Thesis, University of Dar es Salaam, Tanzania.
- Marzano, R., J., Brandt, R. S., Hughes, C. S. & Jones, B. F. (1988). *Dimensions of Thinking: A framework for curriculum and instruction*. Alexandria VA: Association for Supervision and Curriculum Development.
- Mayer Committee (1992). Putting Education to Work: Report of the Committee to advise the Australian Education Council and Ministers of Vocational Education, Employment and Training on employment-related Key Competencies for postcompulsory education and training. Canberra, Australia: Australian Government Publishing Service.
- Mbeshu, N. C. (2010). An Evaluation into the Implementation of Arts and Culture Learning Area in Bizana Schools of the Eastern Cape Province. Unpublished Master's thesis, Nelson Mandela Metropolitan University, South Africa.
- McAshan, H. H. (1979). *Competency-based Educational and Behavioral Objectives*. Englewood Cliffs: Educational Technology Publications.
- Meena, W. E. (2009). *Curriculum Innovation in Teacher Education*: Exploring Conceptions among Tanzanian Teacher Educators. Unpublished doctorial thesis. Abo Akademi University, Finland.
- Mertens, D. M. (1998). Research Methods in Education and Psychology: Integrating Diversity with Quantitative and Qualitative Approaches. Thousand Oaks, CA: Sage Publications.
- Miles, M. B. & Huberman, M. A. (1994). *Qualitative Data Analysis: An Expanded Source book*. Beverley Hills: Sage Publications.
- Miller, P. (2001). Book review of Competency Based Education and Training: A World Perspective by A. Arguelles and A. Gonczi (eds.) (2000). *In: Journal of Workplace Learning*, 13 (6), pp. 260-261.
- Mkhwanazi, F. (2007). The Role of the School Management Team in Leading Professional Development for the Introduction of Further Education and Training Curriculum in 3

- Schools in the Pinetown District. Unpublished Master Thesis, University of KwaZulu-Natal, South Africa.
- Mosha, H. J. (2012). Common core skills for lifelong learning and sustainable development in Africa: A case study of learning materials used to deliver knowledge and skills-or competency-based curricula in Tanzania. A paper presented at the Triennale on education and training in Africa (Ouagadougou, Burkina Faso, 12-17 February, 2012).
- Motschnig –Pitrick, R., & Holzinger, A. (2002). Student-centered teaching meets new media: concept and case study. *Educational technology and society* 5(4):160-172,
- Mulaudzi, N. O. (2009). Implementation of the South African National Curriculum: The Educators' Perspectives. Unpublished Master's Thesis, University of Venda, Limpopo South Africa.
- Mulder, M. (2001). Competence Development: Some background thoughts. *International Journal of Agricultural Education and Extension*, 7(4)147-159pp.
- Mulder, M. (2000). *Competentieontwikkeling in bedrijf en onderwijs*. Inaugural address. Wageningen: Wageningen University.
- Mulder, M. (2004). Education, Competence and Performance: On Training and Development in the Agri-Food Complex. Inaugural address. Wageningen: Wageningen University.
- Mushi, P. A. K. (2010). *Principles and Practice of Adult Education*. Dar es Salaam, Tanzania: University Press.
- NACTE, (2008). CBET Facilitation: Guidelines on How to Plan and Facilitate Competence-Based Learning. Dar es Salaam: NACTE.
- Nijhof, W. J. (2003). Naar competentiegericht beroepsonderwijs? In: M. Mulder, Wesselink,
 R., Biemans, H., Nieuwenhuis, L. & Poell, R. (eds.). Compentiegericht beroepsonderwijs. Gediplomeerd, maar ook bekwaam? Houten: Wolters Noordhoff.
- Nisbet, J. & Watt, J. (1994). Conducting small scale investigation in educational management. London: Harper & Row.

- Ono, Y. & Ferreira, J. (2010). A Case Study of Continuing Teacher Professional Development through Lesson Study in South Africa. South African Journal of Education. 30: 59-74.
- Orodho, A. J. & Kombo, D. K. (2002). *Research Methods. Nairobi*: Kenyata University, Institute of Open Learning.
- Paulo, A. (2014). Pre-Service Teacher's Preparedness to Implement Competence-Based Curriculum in Secondary Schools in Tanzania. *International Journal of Education and Practice*, 2 (7): 220-275pp.
- Pudi, T. (2006). 'From OBE to Curriculum 2005 to RNCS': Are We Still On Track? University of South Africa. *Africa Education Review*. 100-112.
- Raselabe, M. J. (2006). Foundation Phase Educators' Perception of Curriculum 2005 in the Nzhelele West District. Unpublished Master Thesis, University of Stellenbosch, South Africa.
- Reichel, M. & Ramey, M. A. (1987). *Conceptual frameworks for bibliographic education.*Theory to practice. Littleton, Colorado: libraries unlimited Inc.
- Richards, J. & Rogers, T. (2001). *Approaches and methods in language teaching*. New York, NY: Cambridge University Press.
- Shemwelekwa, R. (2008). The effectiveness of adoption of competence-based education for teaching and learning mathematics in secondary schools in Tanzania. Unpublished Masters Dissertation. University of Dar es Salaam
- Smyth, R. (2004). Exploring the usefulness of a conceptual framework as a research tool: a researcher's reflections. *Issues in educational research*, 14 (2), 167-180pp.
- Spady, W. (1993). *Outcome- Based Education*: critical issues and answers. Airlington, VA: Australia Curriculum Studies Association.
- Sudsomboon, W., Anmanatarkul, A. & Hemwat, B. (2007). Development of a competency-based instruction on automotive suspension system subject. In; Proceedings of 5th international conference on developing real-life learning experiences. 20 October, 2007, King Mangkut's University of Technology, Bangkok, Thailand. Retrieved on 18 July 2015 from http://www.kmutt.ac.th/rippc/pdf/abs50/503002.pdf

- Sullivan, J. (2005). Competency based education training. Retrieved on 7 September 2015, from http://www.ehow.com/about 6557185 competency-based-education-training-html1x22107BSPONM.
- Tilya, F. N. & Mafumiko, F. M. S. (2010). The compatibility between teaching methods and competence-based curriculum in Tanzania. *Papers in Education and Development*, University of Dar es Salaam, 29: 37-56pp.
- Timothy, V. A. (2011). An assessment of competence-based curriculum implementation in teaching and learning ordinary level physics. The case of Singida municipality, Tanzania. Unpublished Masters Dissertation. University of Dar es Salaam, Tanzania.
- Tranter, P. & Warn, J. (2003) Education for flexibility in a changing world: a case study of competency development in university graduates, in Learning for an Unknown Future, Proceedings of the 26th HERDSA Annual Conference, Christchurch, New Zealand, 6-9 July 2003: pp 538.
- Uiseb, I. (2007). Strength and Weaknesses of the Previous Century Influencing the Curriculum Reforms of the 21st Century. *Progressio*, 29 (12): 69-82pp.
- UNESCO (2006). Handbook: Non-formal adult education facilitators. Bangkok: UNESCO.
- URT (1991). The Tanzania Development Vision 2025. Dar es Salaam, Tanzania: Ministry of Education and Vocational Training.
- Velde, C. (1999). An Alternative Conception of Competence: implications for vocational education. *In: Journal of Vocational Education and Training*, 51 (3): 437-447 pp.
- Wangeleja, M. J. N. (2010). The teaching and learning of competence based mathematics curriculum: Methods and techniques. In; Proceedings of mathematical association of Tanzania annual seminar, Sokoine University of Agriculture, Morogoro, Tanzania. 13-18 September, 2010.
- Westwood, P. (2008). What teachers need to know about teaching methods. Australia: Camberwell.
- Wisselink, R., Biemans, H. J. A., Mulder, M. & Van den Elsen, E. R. V. (2007). Competence-based VET as seen by Dutch researchers. *European Journal of Vocational Training*. 40(1) 38-51pp.

- Woods, E. (2008). Tanzania case study. In; UNESCO, country profile commissioned for the EFA global monitoring report 2008: Education for all by 2015, will we make it? Paris: UNESCO.
- World Bank (2011). A regional exploration of pathways toward harmonization of mathematics and science curriculum in the East African Community: Discussion Paper. Washington D.C: World Bank.
- Yin, R. K. (2011). Qualitative research from start to finish. New York: Guilford Press.

APPENDICES

Appendix 1: INTERVIEW SCHEDULE FOR SENIOR IAE OFFICERS AND HEAD OF DEPARTMENT

The purpose of this focus group discussion is to collect information about your perceptions on the implementation of competence –based education and training curricula at the Institute of Adult Education (IAE). You are kindly requested to contribute ideas by sharing the following discussion. The information that you provide will be used for research purpose and it will be treated as strictly confidential.

Male:	Female:

- 1. How long have you been working at the IAE?
- 2. What do you understand by the term Competence- Based Education and Training (CBET) approach? Please explain.
- 3. How does CBET approach differ from knowledge based approach?
- 4. How do you support the implementation of CBET curricula at your institution?
- 5. (a) Since inception of CBET curricula at your institute, have you conducted training (seminars, workshop or conference) for your facilitators and learners about CBET curricula implementation?
 - (b) List the type of training conducted and the themes for each training.
 - (c) Explain the effectiveness of the training and the challenges encountered.
- 6. Develop a table indicating the qualifications of your academic staff who teach using the CBET approach.
- 7. An effective implementation of CBET curricula needs to have a variety of teaching and learning resources. These resources include: (i) library services (ii) teaching and learning materials (iii) computer facilities and services, (iv) lecture theatres and (v) seminar rooms.

- a) Explain the extent of availability of each of the resources listed above i.e (i) (v) in relation to numbers of staff and learners.
- b) Does library have available teaching and learning materials such as references that are relevant to the courses offered?
- c) Are the available teaching and learning materials current?
- d) Are there enough computers in the computer laboratory?
- e) What is the status of internet connectivity at the IAE?
- f) Does the institute have enough lecture theatres and seminar rooms?
- 8. What teaching and learning methods are commonly used during implementation of CBET curricula? How do the approaches differ or vary from the CBET approaches?
- 9. What kinds of assessment methods are used during course assessment?
- 10. What challenges does the IAE experience when implementing the CBET curricula? What are the causes of the challenges?
- 11. From your views what measures have been taken by IAE to address the challenges you have identified? Are the measures effective? Why yes (or no)? Explain.
- 12. In your opinion what else do you think should be done to address the identified challenges?
- 13. From your own experience, comment on what should be done so as to strengthen the implementation of CBET curricula in Tanzania particularly at IAE?
- 14. Is there anything that you think is important which we have not discussed?

Thank you for your cooperation.

Appendix 2 : FOCUS GROUP DISCUSSION SCHEDULE FOR CERTIFICATE, DIPLOMA AND BACHELOR DEGREE STUDENTS IN ADULT AND CONTINUING EDUCATION

The purpose of this focus group discussion is to collect information about your perceptions on the implementation of competence –based education and training curricula at the Institute of Adult Education (IAE). You are kindly requested to contribute ideas by answering the following questions in this discussion.

Male	Female	••••
1.	How long have you been studying at the IAE?	
2.	Which courses are you studying at the IAE?	
3.	What do you understand by the term Competence- Based Education and	Гraining
	(CBET) approach? Please explain.	

- 4. How does CBET approach differ from the knowledge based approach?5. An effective implementation of CBET curricula needs to have a variety
- 5. An effective implementation of CBET curricula needs to have a variety of teaching and learning resources. These resources include: (i) library services (ii) teaching and learning materials (iii) computer facilities and services, (iv) lecture halls and (v) seminar rooms.
 - a) Explain the extent of availability of each of the resources listed above i.e (i) (v) in relation to numbers of staff and learners.
 - b) Does library have available teaching and learning materials such as references that are relevant to the courses offered?
 - c) Are the available teaching and learning materials current?
 - d) Are there enough computers in the computer laboratory?
 - e) Are there internet services at the institute? What is the status of internet connectivity at the IAE?
 - f) Does the institute have enough lecture theatres and seminar rooms?

- 6. What teaching and learning methods are normally used in teaching and learning process? How do the approaches differ or vary from the CBET approaches?
- 7. What kinds of assessment methods are used during teaching and learning process?
- 8. What challenges do you experience in learning?
- 9. How do those challenges affect your learning process?
- 10. How do you overcome the identified challenges?
- 11. From your views what measures have been taken by IAE to address the challenges you have identified? Are the measures effective? Why yes (or no) explain.
- 12. In your opinion what else do you think should be done to address the identified challenges?
- 13. From your own experience, comment what should be done so as to improve the implementation of CBET curricula in Tanzania particularly at IAE?
- 14. Is there anything that you think we can discuss concerned with the implementation of CBET curricula?

Thank you for your cooperation.

Appendix 3: OBSERVATION CHECKLIST

The following is a list of items that the researcher observed during the study.

No	Items	Very good	good	Satisfactory
1.	Sitting setup of students during lecture sessions.			
2.	Library and library services.			
3.	Teaching/learning resources: books, photocopying, printing, scanner, power point projectors and stationary			
4.	Lecture halls and seminar rooms			
5.	Students' toilets			
6.	internet connectivity and computer rooms,			
7.	General interactions between students and facilitators			

Appendix 4 : DOCUMENTARY REVIEW GUIDE

The researcher expects to gather information from various documents for purposes of enriching the study. The following documents will be scrutinized during the study:

- 1. Minutes of Academic staff reports concerned with the CBET curricula implementation.
- 2. Policy documents from IAE and ministry
- 3. IAE curriculum documents for certificate, diploma and bachelor degree programmes.
- 4. NACTE ACT No. 9 of 1997 and any other sub-sequent revisions.
- 5. NACTE's CBET facilitation manual: guidelines on how to plan and facilitate competence based learning, (2008).

Appendix 5 : INTERVIEW SCHEDULE FOR IAE FACILITATORS AND EXAMINATION OFFICERS

The purpose of this focus group discussion is to collect information about your perceptions on the implementation of competence –based education and training curricula at the Institute of Adult Education (IAE). You are kindly requested to contribute ideas by answering the following questions in this discussion. The information that you provide will be used for research purpose only and it will be treated as strictly confidential.

Male: Female:

- 1. How long have you been teaching at the IAE?
- 2. What do you understand with the term Competence- Based Education and Training (CBET) approach? Please explain.
- 3. How does CBET approach differ from the knowledge based approach?
- 4. An effective implementation of CBET curricula needs to have a variety of teaching and learning resources. These resources include: (i) library services (ii) teaching and learning materials (iii) computer facilities and services, (iv) lecture theatres and (v) seminar rooms.
 - a) Explain the extent of availability of each of the resources listed above i.e (i) (v)
 in relation to numbers of staff and learners.
 - b) Does library have available teaching and learning materials such as references that are relevant to the courses offered?
 - c) Are the available teaching and learning materials current?
 - d) Are there enough computers in the computer laboratory?
 - e) What is the status of internet connectivity at the IAE?
 - f) Does the institute have enough lecture theatres and seminar rooms?
- 5. What teaching and learning methods do you employ in implementing CBET curricula?

- 6. What kinds of assessment methods are you using to assess your students?
- 7. What challenges do you experience when implementing the CBET curricula?
- 8. How do the challenges affect your facilitation or implementation of CBET curricula?
- 9. How do you overcome the identified challenges during implementation of CBET curricula?
- 10. What measures have been taken by IAE to address the challenges you have identified? Are the measures effective? Why yes (or no) explain.
- 11. From your experiences, comment what should be done so as to improve the implementation of CBET curricula in Tanzania particularly at IAE.
- 12. Is there anything that you think we can discuss concerned with the implementation of CBET curricula?

Thank you for your cooperation.