An Assessment of the practice and challenges of implementing competence based TVET in Addis Ababa

Addis Ababa University

College of Education& Behavioral Studies

Department of Curriculum and Instruction

By

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ID. No GRS/2810/11

June, 2019

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A Thesis Submitted to **College of Education& Behavioral Studies**

In partial Fulfillment of the Requirements for the Award of the Degree of Masters of Arts (MA) in Management of Vocational Education

June, 2019

Addis Ababa

DECLARATION

I hereby declare that, this thesis is my original work has not been presented for a degree of any other University, and all sources of material used for the thesis have duly acknowledged.

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Approved by Board of Examiners

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Dedication

This work is dedicated to my family who have always loved me unconditionally and encouraged me to work hard to fulfill my aspirations.

Acknowledgments

First of all, I would like to thank my God for His kindness and support. Next, I appreciate my advisor Dr. Getachew Habtamu for his valuable comments and professional support to complete this thesis.

Additionally, I want to thank all of my family especially my wife, Almaz Itana, for her special help in writing of this thesis and my elder brother Ato Zena Yitbarek for his kindly support. My deepest gratitude also goes to Ato Damen H/silase for his unreserved support .Finally; my great gratitude goes to all individuals who helped me directly and indirectly to accomplish this work.

List of figures

Acronyms and Abbreviations

- ***TVET*** Technical vocational education and training
- ***MOE*** Ministry of education
- ***OCACC*** ***O***ccupational competency assessment certification center
- **CBET** **C**ompetence based education and training
- **OS** Occupational Standard
- **DCUM** Develop Curriculum
- **KSA** **K**nowledge skill and attitude
- **ADDIE** **A**nalysis, design develop implementation evaluation
- **NTOFW** **N**ational TVET qualification framework
- **ICT** **I**nformation communication technology
- **ILO** **I**nternational labor organization
- **MPDE** **M**aterials production and distribution enterprise center
- **CBLM** **C**ompetency based learning materials

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Abstract

The Ethiopian TVET system has been guided by the competence-based training approach since 2008 with the expectation of producing competent workforce in various occupational fields. To what extent the approach is practiced in TVET colleges need to be investigated. The purpose of the study was to investigate the practice and challenges encountered in implementing the competence-based TVET approach, taking the experience of polytechnic colleges in Addis Ababa. The research approach followed in this study was a mixed research, incorporating both qualitative and quantitative methods. This thesis was conducted in three selected Polytechnic colleges, General Wingate, Entoto and Tegbared which are located in Addis Ababa Administration. The respondents' categories were 104 trainers, 38 trainees, 4 staff officers from Addis Ababa OCACC and TVET and 3 from Industries. The respondents (trainers and trainees) were from General metal fabrication, Construction, Wood works and Manufacturing. The respondents were selected using purposive sampling and data were collected through interview and questionnaires. The collected data were analyzed using qualitative and quantitative data analysis. The finding showed that the current states of Addis Ababa center of competencies is not sufficient enough in terms of human and non-human resources. In addition to this, during the assessment implementation, there is lack of clearness for the schedule of assessment, lack of enough awareness for candidate and delaying the implementation of assessment seasons. Furthermore, there is week integration and there is gap of information between TVET Colleges. To solve these problems, the center should provide enough awareness for trainees, about national assessment, avoid discrimination in the duration of assessment, and avoid unethical assessor's; increase the integration of colleges. In addition to this, the center collaboration with TVET partners and NGOs share the experience of benefited countries and implement. Addis Ababa city administration gives attention for the organization to fulfill the adequate and qualified human and non-human resources.

Chapter 1
Introduction

1.1 Back ground of the study

The historical back ground consideration of Technical Vocational Education and Training (TVET) indicates that its beginning is difficult to trace. There have been different ways of perception by different people. Although education and training began in the pre – historic period with the transmission of knowledge, skills and competencies, technical and vocational training had been considered as an extra part of other discipline or historic events (Pascal, 2000). Vocational schools were founded around the first quarter of twentieth century and, since then there have been significant changes and development in the Technical and Vocational fields (Nasta, 1994). As a result, modern TVET system has become one of the major means for the socio economic development plans of both developed and developing nations. This is because the training and education in the stream aims at the provision of knowledge and skill to trainees to enable them fulfill National work force requirements of various sectors such as Business, Industries, Agriculture, etc. (Winch, 2007).

TVET is an area of study which is to be freely and willingly chosen as a means by which to develop talents, interests and skills leading to perspective employment (UNESCO, 1983).Before 1940s, there was no formalized technical training institution in Ethiopia beyond the non-formal ones provided by master artisans and craftsmen where instruction was through "observation and participation. Formal technical vocational education and training in Ethiopia was introduced after Italian war in 1941, recognizing TVET at the government level as an essential instrument for socio-economic development which led to establishment of the first technical school, Addis Ababa Technical School. Its expansion continued in the Military socialist system (1974 – 1991) and current Federal system of governance (1991 to the present). From 1994 onwards, TVET is divided in to two periods from 1994 to 2008 and from 2009 to the present (Getachew, 2016).

TVET, described as the acquisition of practical skills and attitudes according to the current UNESCO definition, has been relevant for mankind even since ancient times with early humans needing to pass o survival skills in order to acquire food, clothing and shelter.

Although the history of Ethiopian TVET has been insufficiently studied, describe the evolution of the development of the TVET system in Ethiopia chronologically, dividing it in to four main areas. This

analysis is based on empirical evidence acquired from different sources, the chronological order has been demarcated as the traditional/ancient age, which expands from very early in the nation's history; the classical stage, which is characterized as the period during which the Emperors attempted to expand their territories in order to unify Ethiopia; the premodern stage, which covers the Italian invasion and post liberation times and the modern period, in which present time development are located (Menkir, 2017)

To accelerate the economic and social development of the country and to make the country one of the middle income generating countries, the Ethiopian government designed and implemented urban and rural development, industrial developmental strategy for growth and transformation plan (GTP, 2010). In order to implement these strategies effectively, qualified and competent man power, the use of better technology and good working procedure paramount importance to continue with result achieved so far, and attain the growth and transformation plan (GTP) of the country. Since 2008, the Ethiopian TVET has provided outcome based training through different levels in each occupation (i.e. from Level 1 to Level 5); which is totally different from the old TVET system that was 10+1, 10+2 and 10+3 systems (MOE,2008), which was a radical shift in TVET policy (Getachew, 2016).The driving goal of National TVET strategy of Ethiopia (2008) is strengthening the culture of self-employment and support job creation in the economy (MoE,2008).

The TVET strategy pressures the necessity for creating one coherent, outcome based TVET system which includes formal, non-formal, informal initial and further training for all sectors. TVET institutions are increasing from time to time (MoE, 2012). With the introduction of the new middle TVET programs, and industrial attachment period has been introduced to formal TVET. TVET curriculum was developed based on the outcome-based (competence-based) system; occupational standards were also developed as a basis for the curriculum by involving industries supported by various guidelines for implementation. This does not necessarily mean that the Ethiopian TVET system is operating smoothly. Its implementation has faced a number of problems associated to TVET teachers, students and industrial attachment programs.

This paper addressed the practice and challenges that the outcome-based TVET system of Ethiopia has faced in implementing the programs taking the experience of Addis Ababa City Administration.

1.2 Statement of the problem

Competence based education and training possession and application of acquired knowledge, development of skill and change in behavior attitudes, to accomplish a work to the standard expected in the work place according to occupational standards which are classified by the unit of competence. More emphasis is put on performance in order to produce competent work force trainees, in relation to the demand of industries level or companies need with an education and training program that should be understandable and visible in both design and measurement of accomplishment (MOE 2008). According to the TVET strategy, the training is more need oriented, flexible and performance based. This emphasis on performance in line with this context the training system is beneficial for the developing countries like Ethiopia which have surplus human resource.

The TVET system, however, has faced challenges in implementing the training and smooth conduct of the cooperative training scheme. TVET teachers still lack motivation; lack of cooperation from employers is observed in running the cooperative scheme smoothly. Lack of resources was also among the problems encountered by TVET institutions. Hence, the main purpose of this study is to assess the major factors affecting the implementation of the competence based training program. In order to meet the above stated objective of the study, the following questions are addressed.

According to Wana the validity of vocational program correlates with other development processes. In the absences of this, no educational programs could contribute much to the society. In the Ethiopian situation, the role of vocational education has not been assessed to ascertain its benefits. The introduction of a program into any school system should not be an end in itself. (1992)

Alemayehu (2010) also states that the Ethiopian government has entrusted the responsibility of preparing skilled labor force and providing entrepreneurial; skills in varying levels to the technical vocational education and training (TVET) system. This specialized educational system has the dual responsibilities of training the Ethiopian Youth for salary/wedge and self-employment. Nevertheless, due to oversupply and skills gap, some of the TVET graduates could not secure employment, even in highly demand jobs. It is also noted that in entrepreneurship is

devoid of practical application and has not enabled graduates to initiate self-employment an alternative to salary employment.

1. Is the TVET training market-oriented?
2. Are TVET colleges well organized to provide competence based training?
3. What is the level of involvement of stakeholders?
4. What problems do TVET trainer's encountered in implementing the competence based approach?
5. Do trainees have acquired the planned occupational knowledge, skill and attitude?
6. Is there efficient and effective resource utilization?

1.3 Objectives of the study

1.3.1 General Objective

The main purpose of the study is to assess the practices and challenges of implementing competence based training program taking TVET colleges in Addis Ababa city administration.

1.3.2 Specific Objectives

The following specific objectives were targeted by the researcher.

- To assess the extent to which the TVET training is market-oriented
- To examine whether TVET colleges are well organized to provide competence based training?
- To investigate the level of involvement of employers in the cooperative training
- To assess the problems about TVET trainer's encountered in implementing the competence based approach
- To examine the extent to which trainees have acquired the planned occupational knowledge, skill and attitude
- To investigate the extent to which training resources are available and efficiently used

1.4 Significance of the Study

It is expected that the results of this study are useful for TVET managers to improve the implementation of competence-based training by highlighting the major challenges encounter by teachers and students and other stakeholders. The study also serves as a basis to conduct a comprehensive research in the future on TVET in the country.

1.5. Scope (delimitation) of the Study

The study was conducted in Addis Ababa City administration, involving three polytechnic colleges as all the existing polytechnic colleges offer similar TVET programs. Four areas of training were involved namely, manufacturing, general metal, construction and wood technology as many students are enrolled in these areas. The study is restricted to the current practice and challenges of implementation as perceived by TVET teachers, students and administrators, not on the curriculum and policy issues.

1.6 Definition of key Terms

- ***TVET qualification framework-*** an outline of the system in TVET qualification defining qualification levels, relation between qualifications, rides to make between levels and between qualification level, rules for assessing levels, to qualification or part of qualification.
- ***Competence-*** it is the capacity to accomplish "up to standards" the key occupational task.
- ***Competence based training-*** a cluster of related knowledge, skill and attitude that affect a major part of one job.
- ***Certificate-*** the process by which an awarding body contains that a candidate has undergone the process of issuing the certificate.
- ***Stakeholders-*** all role players in TVET system including TVET provides and institution. Instructor's employers, employees, trainee's parents, policy makers, NGOs, and other institutionally involved in training and human resources development and education institution donors.
- ***Cooperative training-*** it encompasses all forms of training conducted by TVET institution and enterprise. The training takes place alternatively in school environment and in the real life environment of the work place.
- ***Competency standard-*** an industry determined specification of performance which sets out this skills, knowledge and work attitude to operate employment, competency standards are made up of unit of competency together with performance criteria, arrange variables and an evidence guide.

- ***Operational standard***- it is a set of jobs whose main task and duties performed or meant to be performed.

1.7 Organization of the Study

The study was organized into five chapters. Chapter one reports the background of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, and limitation of the study. This study was mainly limited on studying the current practice and challenges of implementation as perceived by TVET teachers, students and administrators, not on the curriculum and policy issues.

Chapter two presented the review of related literature with a variety of ideas which are relevant to achieve the intended goals of the research work. Chapter three is concerned with research methodology where the research method, source of data, sampling, data gathering tools, and the analysis will be described. Chapter four deals with the presentation, analysis and interpretation of data. Chapter five presents: summary, conclusion, and recommendation of the study.

Chapter Two
Review of Related Literature

2.1 Historical View

Throughout its history, vocational education has gone through many changes in meaning and scope. In general, vocation is characterized by teaching skills to students in order to help them in the world of work; this explanation however does not fully depict the dimensions of vocational education, particularly in how it is used in today's society (Getachew, 2016)

Brewer, (year; citing Keller, year) stated that vocational education was viewed in a unique way. Keller believed that vocational education was actually a way of living one's life , i.e., vocational educators were charged not only with teaching specific skills, but also with teaching students how to live and act in the work place and in society. He attributes the first form of vocational education to monks, going as far as back in history as 7th century. Even before more structured form of apprenticeships evolved, Keller claimed that monks were teaching each other the productive life in the monastery. This background has also a similarity in Ethiopian context where the origin of formal education in highly associated to orthodox Christian church (Menkir, 2017)

Ernest. W Brewer, in his article history of career and technical education has quoted. F. J. Kellr a notable historian in the subject, who looked at vocational education in a unique way. According to him, Keller believed that vocational education was actually a way of living one's life Keller, believed that vocational educators were charged not only with teaching specific skills, but also with teaching students how to live and act in the work place and in society. He attributes the first form of vocational education to monks, going as far as back in history as 7th century. Even before more structured form of apprenticeships evolved, Keller claimed that monks were teaching each other are the productive life in the monastery. This background has also a similarity in Ethiopian context where the origin of formal education in highly associated to orthodox Christian church. (Fikadu, October 2017)

2.2 Determination of the term TVET

Trajectory of TVET has gone through different courses of history until it is conceived the terminology as it is known today as technical vocational

education and training- TVET. Various terms such as career and technical education CTE, vocational education and training- VET, work placeeducation with. These terms have been also used in specific geographic areas alternatively. The term technical and vocational education, TVE was in use when UNESCO has organized the first international congress on the development and improvement of technical and vocational education was held in 22 June- 1st July 1987 in Democratic republic of Germany, in which Ethiopia had also its representation. However, it has been known that for the first time the term TVET is used and endorsed by participants of the world congress held on TVET in 1999 in Seoul, south Korea for the first time and reflected in the name of UNESCO- UNEVOC international center in Bonn, Germany, which was established in 2000 as a direct result of recommendations arising from the Seoul congress 1999.

The following definition of TVET by UNESCO as those aspects of the educational process involving, in addition to general education the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic life" is often in use by writers and researchers in the subject.

Originally, the direct preparation for work was the main goal of TVET, and this remains prominent in many developing nations. However, with the technological revolutions and innovation in science and technology, during the 20th century, new domains of knowledge and new disciplines have become important at all levels of education and training. Further, the upward differentiation of TVET from first to second level and then to third level of education has been an important development of the 20th century and sets the stage for the 21st century. The current focus is increasingly up on preparing knowledge workers to meet the challenges poised during the transition from the industrial Age to the information Age, with its concomitant post- industrial human resource requirements and the changing world of work.

2.2.1 Internationalization of TVET

Another milestone in historical development of TVET is the third international congress on TVET that took place in Shanghai in May 2012, which played an important role in future enhancing the debate on the role of TVET in the 21st century, providing a forum for discussion on the challenges faced by TVET systems and the appropriate responses to them. One of its important outcomes was the production of a set of key recommendation to governments and other TVET stakeholders in UNESCO member states, presented under seven strands it its perhaps useful to remained ourselves of them now as they certainly relate to many of the ideas that are still in discussion in the field of TVET.

The following recommendations were portrayed by the Shanghai consensus.

1. Enhance the relevance of TVET
2. Expand access and improve quality and equity
3. Adapt qualifications and develop pathways.
4. Improve the evidence base
5. Strengthen governance and expand partnerships
6. Increase investment in TVET and diversity financing
7. Advocate for TVET (Menkir October 2017)

2.2.2 Evolution of TVET in Ethiopia

TVET, described as the acquisition of practical skills and attitudes according to the current UNESCO definition, has been relevant for mankind even since ancient times with early humans needing to pass o survival skills in order to acquire food, clothing and shelter.

Although the history of Ethiopian TVET has been insufficiently studied, describe the evolution of the development of the TVET system in Ethiopia chronologically, dividing it in to four main areas. This analysis is based on empirical evidence acquired from different sources, the chronological order has been demarcated as the traditional/ancient age, which expands from very early in the nation's history; the classical stage, which is characterized as the period

during which the Emperors attempted to expand their territories in order to unify Ethiopia; the pre-modern stage, which covers the Italian invasion and post liberation times and the modern period, in which present time development are located (Fikadu, 2017)

2.2.2.1 Traditional/Ancient Stage

The emergence and process of acquiring craft skills almost century dates back to ancient times, when human kind needed to pass on survival skills, striving to fulfill basic requirements such as food, shelter and clothing, the really of this situation shows that the process of acquiring skills, which eventually grew to become formal TVET, was part of peoples day to day live long ago in pre-history.

In Ethiopia, as in many other countries of the world, skills and crafts man ship has traditionally been transferred from generation to generation through informal leaning, which took place between family members, in particular form parents to children, children learned different skills form their parents, and this phenomenon continued for centuries. Examples of this range from mothers showing daughters how together and prepare food and spin and wave clothing for the family, fathers showing sons how to hunt and perform farm activities. Although Ethiopia is known to have a long history of traditional crafts and arts in many disciplines, such as pottery, weaving and black something, these values have not, for various reasons, been nurtured and developed. One notable reason could be societal stigma and prejudice, which even extended to arts man and crafts men becoming out casts, the lack of modern technology and modern education and training system which could underpin the development of crafts man ship, is believed to be the other reason.(Getachew,2016)

Ancient historical monuments such as Axum obelisks, labella rock hewn churches and the castles of Fasiledes, which were built by ancient Ethiopians is a living example of endowment of rich crafts skill and cultural art of the

country. However, this historical value of Ethiopians in traditional arts crafts and skills still remains in irony and controversial in contrast to the prevailing substandard practices, and low value perceived by the society in the field, compared to the developed world. (Ricardo, 2017)

2.2.2.2 Classical stages (1850-1900)

The classical stage, characterized by the desire of Ethiopia's rulers to adopt western technology by bringing in European artisans to train Ethiopians, in said to have been advanced during the regimes of several Ethiopian Emperors. Emperor Tewordros, who ruled Ethiopia between1855-1869, was the first Emperor who attempted to bring in European technology, in particular armaments, technology. His strong desire for military technology and modern armaments coincided with the incursion of protestant missionaries form Europe. Some of the missionaries had given some form of training in craftsmanship in addition to their technological instruction; this phenomenon inspired the Emperor to use their skills for the purpose of producing armaments to define and unity the country. Emperor Tewordros desire European technology and asked to hire specialist, who would come to Ethiopia and train his people and transfer technology.

However, this was in vain, the response form the Europeans and the missionaries was instead to send gifts of scriptures and artifacts, the purpose of which were simply to convey the power of their own civilization to the Emperor. Many argue that this situation contributed to the Emperor developing a grievance and revulsion towards his rest while European partners. This strong desire for technology combined with the negative responses from the Europeans further provoked him, to the extent that he attempted to produce his own cannon, known as "Sevastopol", using the traditionally acquired skills of indigenous craftsmen of the time. In Ethiopia, long before TVET began to be formally offered, Emperor Menelik(who ruled between 1989-1913)

This also attempted to bring in technology from the industrialized west, including the railway, telephone and electric light. Supported by scholars from Germany and France, the Emperor tried to train technicians in different fields, including the aviation sector. The development of railway in restructure during this regime had also provided an opportunity for tradesmen and merchants from different countries to travel to Ethiopia, which in turn contributed to brining in various skills in difference sectors, the unique and in many ways, better life styles of foreign artisans and expats also began to inspire many Ethiopians required in different sectors in order to get jobs and earn a better income (Getachew, 2016)

2.2.2.3 Pre modern times (1934-1939)

One consequence of the attempted invasion of Ethiopia by fascist Italy between 1934 and 1939, and the increased urbanization and establishment of small industries and vehicle maintenance work shops in the wake of that invasion, was to lay the foundations for increased demand for technicians in different disciplines. This demand, in turn, further escalated after the Italians were defeated, in order to maintain and repair facilities and infrastructure destroyed during the war. It is believed that this situation played a role in showing how imperative it was to established skills training institutions in Ethiopia.

Technical training was formally offered for the first time between 1938 and 1941, through the integration of the countries education and training policies. During this time students were offered technical training in addition to academic education, with the intention of introducing the values of manual work, craft skills and work ethics in their future lives and careers. Even though there were more than 30 schools offering modern education though there were more than 30 schools offering modern education before this time, none had been known to offer any sort of technical education prior to 1936. As such, the history of formal skills training can thus be generally dated back to the last 75 years, which can be divided in five tiers based on the different stages of development. (Getachew, 2016)

The first stage is pre modern development stage characterized as a post liberation time since 1941 up to around 1960s during when institutions such as Addis Ababa Tegbared, Addis Commercial School, Ambo and Jimma agricultural colleges and Behaidar Poly Technic Institute, Awasa Technical School, Addis Ababa School of fine Arts, Training Institute Addis Ababa Railway Handcraft, school were established and began offering technical education and Training programs. (Fikadu, 2017)

The second stage covers the duration from around 1960 up to 1980 during which vocational and technical education had been offered in comprehensive high schools in the country, during this period, had been offering vocational training programs in electricity, wood work, metal work, automotive technology, home economics, and commerce in parallel to academic studies.

Being influenced by different domestic and international contents, various terms and definitions had been used to express technical education and training endeavors in Ethiopia.

The term manual arts and industrial arts had been popularly used in Ethiopia during this period of time. The term manual arts were used to emphasize the practice and traditional crafts movements to prepare trainees to be able to produce traditional hand crafts and jewelries that are made up of gold, silver, horns, ivory, leather etc… to be mainly consumed in domestic market and at some extent also exported to international market. Ethiopia had crafts training center named after Empress Mennen, the wife of Emperor Haile Selassie, was the first Institutions to offer, manual arts training in the country. In 1978, during the social regime in Ethiopia, this center was transformed and upgraded as a trainings center with the objective of supporting handcrafts and small industries in Ethiopia. On the other hand, the terms industrial arts and productive technology training were used and offered in parallel with academic education in comprehensive high schools. (Getachew, 2016)

The industrial arts training programs embraced skill training in the fields of metal work, wood work, electricity, automotive, home economics and commercial fields some training programs that were sponsored by different NGOs in different part so the country had been also operating under the name trade schools and offered similar skill trainings for those in need.

This period in evolution of Technical and vocational education development in Ethiopia is also known for the first study that had been conducted in to vocational trainings and technical education by international experts, drawn from ILO and UNESCO under a 1965 program known as expanded program of technical assistance.

This study is almost certainly the first initiative by the Ethiopian government to request internationally relevant organizations to assess the status of Ethiopian vocational training and technical education. It was also the first to seek recommendations about how to improve the system in order to fulfill the man power requirements of different sectors in order to realize the second five year development plan of 1963-1967. It had been half a century ago, made recommendations about the need for an autonomous structure for vocational training and technical education situated under the drawn from employers, occupational associations and sector ministries. This was demand necessary if the system was to work efficiently and effectively and to meet the rest while development goals. Interestingly enough, these recommendations are still valid in discussions of the global contemporary TVET system.

Therefore, it is possible to conclude that the importance of technical vocational education and training in Ethiopia is not only a current issue, but was perceived as an instrument which could contribute to the economic and social development of the nation as long as half a century.

2.2.2.4 Modern Times (1980- early 2000)

The third stage, from 1980 to 2000, is one during which the concept and conviction of establishing and advocating independent technical vocational

education and training institutions matured. Accordingly, 17 institutions were established which could offer technical and vocational training at a qualification level of 10+ 3 programs in 1987, Ethiopia also participated in an international congress on vocational education and training organized by UNESCO in what was then the German Democratic Republic.

The modern period in the evolution of technical vocational education and training in Ethiopia approached its appear in 1981 when the Ethiopian government constructed 25 skill development century (SDCS) in Oromia, SNNRP, Amhara, and Tigray regional states, with the aim of providing students completing the Ethiopian school leaving examination with employable skills, and preparing them for the world of work. Following this new education and training policy, the TVET agenda gathered momentum and tis governance was institutionalized under the ministry of education, as an independent entity, in addition to general education and higher education the national TVET act of 2003/4 is accordingly is used to be a legal framework for TVET implementation and this stage of development.

2.2.2.5 The Beginning of Recent Development (2002- to date)

Since the late 1990s, the government has committed itself to overhauling and reforming the basic frame work and conditions of the TVET system. This measure recognized the fact that while the country was in dire need of crafts people and technicians, training programs lacked relevance to work place reality. In recognition of this situation, the first TVET strategy was formulated in 2003 to embrace the outcome based TVET system in the country the strategy was formulated in such a way that become an integral part of other National implementation strategies, such as the rural development strategy, urban development strategy, industrial development strategy, and science and technology and innovation policies and strategy, the 2003 strategy has been formulated with vision, mission and objectives (Getachew, 2016).

2.3 Ethiopian TVET Trainers and Leaders Development

The development of TVET trainers and leaders is another critical major component of the TVET reforms, as identified in the TVET strategy document, the Achilles heel of the program in that the trainers and leader lack the capacity and competence to provide the quality delivery of TVET programs and the effective management of TVET. The strategy, particularly 1:3:7 ,clearly states that the lack of skills and practical hands-on experience of the TVET teachers and management competence of the TVET leaders remains one of the major obstacles in the development and pursuit of TVET in Ethiopia. To deal with this problem, in 1998/99 the Ethiopian TVET developed a TVET leaders and trainers qualification framework (TLTQF). This serves as a guide to the hiring and development of the careers of trainers and leaders. The framework describes the qualifications required to trainers in TVET, and also identified the competences that each level shall undertake.

The highest level of TVET trainers is A-level, which requires a Master's degree qualification in the occupational area of expertise. B-level trainers must have a Bachelor's degree qualification. The lowest level is the C level trainers, who will be technical certificate graduates in a particular occupational area though they differ in terms of educational qualification all are required to pass the National assessment in their respective field of occupational area. The A-B-C levels of trainers are also expected to have undergone the trainer's methodology course which give them the opportunity to learn how to develop the curriculum and TTLM, as well as plan sessions, deliver outcome based training, manage the workshop and conduct institutional assessments. TVET leaders meanwhile are trained on units of competences for institutional leadership and management. (Ricardo, 2017:37, 38).

HR development by TVET institution (IT) for leaders and trainer central to all this are the aims of strengthening of the TVET trainers and leaders development, and sustaining the continuous supply of TVET trainers, while avoiding big turnover of TVET trainers to industry. Exmoursultilhorum hokum

to achieve this, the federal TVET agency has created and institutionalized the operation of the TVET institute, established under proclamation 245/2011 the establishments of the TVET institute is considered one of the major achievements of the Ethiopian TVET, looking after the continuous training and development of TVET trainers and leaders, as fits their particular needs, the institute takes on the responsibility from the previously selected Ethiopian universities.

Among these higher institutions Adama science and Technology University, Hawasa University, Bahirdar University and Mekelle University which were previously selected by FTA to train the TVET trainers and leaders, and provide Bachelor and Master's degree programs suitable for them. Vitally, the institute provided Bachelor and Master's programs for selected five occupations and has continuously expanded this offer to other sector occupations, currently, the Institute has selected thirteen satellite institutes or existing, capable TVET poly technical colleges to offer Bachelor degree programs, with the aim of increasing capacity and accommodating more in service trainers to become B level Trainers. The TVET institute in Addis Ababa will meanwhile, concentrates on offering Master's degree programs in various occupations to produce more A level trainers, and will eventually offer PHD programs in selected occupations. In addition to this, the institute also offers upgrading of leader's management skills in short term and long term programs, such as Master's and eventually PHD programs. The federal TVET agency has targeted about 17,000 A-B-C TVET trainers for regular training and development in different qualification levels and occupations throughout Ethiopia.

For the year 2015 a number of 17,322 is reported (C-level trainers11, 890, B-level trainers 4,891 and A-level trainers 541) by the year 2021 the overall number is expected to reach 123,259. It is also the institute mandate to train and produce high level technicians that will support the industry needs for high level occupation competences that bridge the gaps between the engineers and low-level technicians. (Ricardo, 2017:37-38)

2.4 Competence knowledge, skills and attitude

Learning outcomes in sense of required occupational competences are formulated in terms of knowledge, skills and attitude (KSA).Hence it is important to develop a consistent and coherent terminology of (KSA) in order to define competence and learning outcome requirements. Learning out comes constitute the central part of specification of common level descriptors with in the NTQF and development of occupational standards.

2.5 Aiming at a comprehensive and integrated TVET system

The previous TVET environment in Ethiopia was characterized by fragmentation and lack of coordination between the different delivery systems. Formal TVET was concentrated on secondary school leavers. On formal TVET offers were available to other selected target groups they did not know ever reach the broader range of groups in need of TVET. No normally recognized TVET certification was available for learning outcomes achieved through non formal and informal model of training or learning. There was coordination between public and privet TVET supply. Furthermore, TVET targeting of groups in rural areas was divided into agriculture and non-agriculture TVET running side by side without joint and coordinated planning this situation resulted in the efficient use of scare resources available for TVET in Ethiopia lack of transparent and low quality offers and duplication of programs and efforts.(Strategy,2008:16)

2.6 Stakeholder's involvement

TVET is operating at the interface of different sectors of society notably the education sector, the labor market, industry, MSE sectors, agriculture and rural development, and public administration. In order to serve and relate to all these sectors through high quality and demand repulsive instruments. The TVET system must be streed and implemented with the involvement of a wide stakeholder group. Different stakeholders will each contribute their own expertise, experience and capacities. In order that their combined efforts

improve the relevance and effectiveness of the TVET system. Especially stakeholders are needed to play a major role in the following functions of the TVET system.

- Policy development and policy drafting and reviewing through participation in relevant bodies and panels.
- Financing through contributing resources to the TVET system.
- Quality assurance through active involvement in the setting of occupational standards and conducting occupational assessment.
- TVET delivery through the provision of training to their own staff, offering internships to trainees and providing apprentship training
- Monitoring and evaluation through participation in TVET councils Federal and state levels and taking over key roles on the management of boards of TVET institutions.

Stakeholder participation however does not come without cost and efforts, stakeholders who were previously mere customers of TVET services are now expected to invest time, thoughts, ideas and finances towards the improvement of TVET. In order to encourage stakeholders to undertake such investments, the government is prepared to share responsibility proportionate to the capacity of the respective stakeholders and entertain different interests and options (TVET strategy 2008: 19-20).

2.8 Developed and developing countries TVET practice

2.8.1 The case of Germany

The specific features of vocational training in government, the dual system with the strong role of private companies, can be traced back to the tradition of independent craft organizations, the guilds, and guilds used to supervise training by their members, conduct assessment and issued certificates. Today, their successors, the chambers of craft, are still performing a crucial role in the vocational training system. However, during the second half of the 19th century the advent of mass production organized by big companies necessitated

adjustments of the system in order to safeguard a competency poll for the growing and diversifying needs. Factors began to train on a big scale employing experienced workers as trainers of apprentices in practical and theoretical matters of the respective trade. Big companies even established schools for general education and relevant theoretical knowledge in this context, they laid the foundations of the dual system, the hall mark of today's vocational training system in Germany(as well as in Switzerland and Austria). In the year of 1938, Germany introduced such schools as public institutions and made attendance mandatory for trainees. (Fikadu, 2017)

In firm practical training in conjunction with general and theoretical learning at school is the nucleus of the dual system which was systematically introduced by law in 1969, the law defined the responsibilities of the state the private sector, and the trade unions are representatives of the apprentices. In particular, it provides for a strong role of the private sector companies are employers of the apprentices based on an apprenticeship contact which obliges the employee in order to train according to statutory standard.(Fikadu, 2017)

Chambers take influence in defining training objectives, designing the standards and related curricular and take the final assessments. Trade unions use to negotiate the apprenticeship contacts in the framework of collective barging in the respective trade. Therefore, the vocational training system is tripartite institution, which distinctly reflects the specific socio economic background of Germany. It therefore does not lend itself easily to transfers to different social and political environments.

Recent research has confirmed the advantage of the dual systems approach to vocational training the informal training helps graduates to shorten the job search during the transition from training to work. For companies, the major advantage of a labor pool trained both in practical competency lies in strong capabilities to quickly adopt and disseminate technological innovations from the green table down to the machine hall. Besides the engineering excellence of

companies, not least of the many small and medium sized <unknown world champions>, it is particularly of the industry crafts man-ship of highly skilled workers which forms the backbone of Germany's strong position in the global economy(Fikadu, 2017: 5-6)

2.8.2 The Route of Singaporean TVET

A fierce determination to match the performance of the best in the world while constantly learning from the best. They are relentless bench markers. They drew heavily, for example, on Germany's key competencies Model and their apprenticeship model (the dual system). Their curriculum development process for TVET is adapted from the DACUM model from the United States. The design of their diploma level culinary arts program came from the Institute Paul Because in France. The Singaporeans systematically look the world over the best examples they can find anywhere of outstandingly successful policies and practices, and then they weave them together with their own ideas in a unique configuration that fits their own circumstances, value, and aims.(Fikadu, 2017: 5-6)

Step-wise, aligned, coherent planning the current Singaporean TVET did not spring all at once. It proceeded in different stages (labor intensive, capital intensive, and knowledge intensive). At each stage, the system was coherent and aligned internally and very closely aligned with the contemporary needs of evolving Singaporean economy. Government did not try to make every major component of the system state-of-the-art at the same time, but instead, invested in cycles. In one five-year period, it might be vocational education system, in another compulsory system, in another the polytechnics and so on. But, at every stage, everyone was at the table that needed to be at the table to make sure the system was coherent, efficient and pointed in the right direction. That typically included the people responsible for setting manpower targets, the people responsible for setting qualification standards, for deciding on assessment tools, for the quality of the system's human resources, for

economic strategy and so on. This created a culture in government that, at one and the same time, provided for an unusual degree of coordination.

A strong link to the national economic development strategy//Any TVET program is linked to national economic strategy to be successful Singapore is a textbook case for how to do it. First of all, they have, from day one, had a sound long-range strategy of which the human resources component has been a very important part and have laid detailed plans for achieving it. Because the most senior officials of government have been deeply involved in creating and revising the strategy, including the human resources components, they have provided strong support for the nation's TVET program whenever it was needed. It delivered in part because the policy makers and top managers for the TVET program had been deeply involved in making the economic development strategy and knew what they had to do to deliver what the government needed.

A strong compulsory education system//The Singaporean have learnt through the TVET development trajectory that TVET system can be no better than the compulsory education system on which it is built. In his case, Singapore built a world-class compulsory education system, so the skills and knowledge of those in the lowest quarter of the graduates, the students entering the institute of technical education (hands-on, minds-on, hearts-on education), measured above the median of the skills in the whole OECD student population. This gave Singapore's TVET system a big leg up on success.

The idea of the learning Factors; though the ideas that underlie the TVET system in Singapore came from all over the world, this one came from Singapore and it is a very powerful idea. Within the scope of one objective policy, it enables Singapore to train its workforce to truly state-of-the-art standards, to engage industry as a close partner in training, to enable students to train in an environment that is designed for training, but which, at the same

time, is similar enough to the real thing to present challenges for the students very much like those they will face in the workplace. In many respects, it combines most of the advantages of a first-rate CT system with the advantages of a first-rate center-based TVET system.

A determination to do what it would take to change the brand of TVET in Singapore; All advanced industrial economies, in varying degrees are challenged by the low status of TVET relative to other forms of education and training that provide access to high status professional and managerial occupations requiring a baccalaureate or more advanced degrees. This may be especially true in Asian countries; where one's educational credentials are more closely tied to social status than is typically true elsewhere. In Singapore, in particular, where vocational education was for a very long time viewed as a dumping ground, the effort that government made to rebrand vocational education as a valued and respected option was desperately needed and remarkably successful. This was the result of a very large investment of financial resources, but also of a very carefully planned and very well-executed rebranding campaign.

2.8.3 Competence based training in Ghana

For the past two decades, Ghana has been one of the most politically stabled countries in sub Saharan Africa. Despite this stability the country faced serious poverty related social changes, one of the most pressing development challenges is the urgent need to improve access to quality vocational training aimed at improving and modernizing the informal sector. To respond to this problem the country has developed the technical vocational education and training (TVET) policy framework which calls on institutions to provide quality, industry focused, competency based training programs. Best practices or implementation in Ghana. The center for intercultural learning was asked to assist in the design and facilitation of this workshop. The center has developed and implemented many workshops of this type as part of its IFOD (international facilitation the workshop paid careful attention to Ghanaian

hierarchy and protocol assures, including opening and closing by higher level of officials and prayers.)

Bow valley partners in Ghanaian government were committed to the success of the workshop and worked actively in shopping its design and in ensuring that key stakeholders were invited and attended. One of Africans leading authorities on implementation of CBET in the workshops closing remarks. The workshop represented one of the major chapters in the evolution, of TVET in Ghana<, and as another guest speaker remarked, the key to Ghana's development to education, but technical education is the master key (FITT national conference, 2006 v-2 N/3.)

From the above Ghana's experience the students researcher evaluate the partner of TVET well support the competency based training program and also the industries, NGOs are highly involved and support in the system, whereas, our countries on text the system implementation is only in the government. Furthermore, the Ghana experience focused on committed to the success of workshop and worked actively in shopping its design and in ensuring that the key stakeholders were invited and attended.

2.8.4 Nigeria TVET system

According to history, SMEs in Nigeria have existed since the country's independence in 1960, probably before independence but since independence Nigeria has had series of seminars, studies and workshops, each of which appraise the excellence, importance and need to facilitate the establishment and sustainability of SMEs. All the national four year development plans from 1962-63 to 1984-85 have laid strong emphasis on strategies of government-led industrialization mount on import as substitution. In addition to the structural adjustments program active involvement in indoctrination by a process of commercialization and privatization. Special attention was then shifted from large scale industries to small and medium scale enterprises, which has a prominent potential for developing domestic linkages for effective growth,

sustainable industrial development. Bigger and greater leaning were then placed on the organized program. The sector was further actively encouraged by more incentives; these were directed at solving on at least alleviating the huge problems that were encountered by the industrialists in the country and therefore enabling them greater leeway towards increasing their contribution to the national economy.

The Contributions of MSES to the Nigerian economy

SMEs have contributed to the Nigerian economy in some ways; a few years ago SME represent about 90 percent of the industrial sector in terms of number of enterprises and furthermore, they contribute almost 40 percent of their GDP.

In many other countries SMEs forms an important part of the business landscape, but they are faced with significant challenges and obstacles that compromise their efficient ability to function and to give or contribute to the Nigerian economy. The corporate affairs commission in Abuja estimates that 90 percent of all Nigerian business in 2001 employed less than fifty people. Similarly, a study that was conducted by the international finance corporation during the about the same period estimating 96 percent of all business in Nigeria are SMEs, compared to 53 percent in the USA and 65 percent in EU. The SMEs in these two parts of the world accounts for 50 percent of their respective country's GDP.

This clearly shows that given necessary support, SMEs could become an important play maker in the development processes of the Nigerian economy; it has proved to be one of the most viable sectors with economic growth potential. A broad insight into the investment activities and the earnings of SMEs can be gained by examining and analyzing the finding of the Nigerian institute of social and economic research..(Fikadu, 2017: 5-6)

NISER has been surveying business conditions, experience, expertise and expectations of the operators of the Nigerian manufacturing sector almost decade. The survey has enormously included SMEs in a major industrial cluster (Kano, Asaba-Onitsha-NnewiKaduna-Jos and Lagos in Nigeria.

Another significant role of the small and medium scale enterprises in Nigeria shows that they have been identified as the source through which several problems have been approached and solved e.g. Job creation, poverty alleviation an industrialization growth, SME in Nigeria has gradually and steadily become an important topic in recent years, apart from the numerous goods produced by SMEs; they provide a variable large scale employment because they are labor intensive, they also provide training grounds for entrepreneurs, mainly because they rely more on the use of local material.

Okogbue (2004) states that the only way to revitalize, nurture and sustain small and medium scale enterprises is to complement simultaneous small and medium scale enterprise through designing, building equipment and machines through the use of local materials.(World Bank 2001)

2.9. Addis Ababa TVET Bureau Report July-March 2010E.C

In government and private colleges and Institutions 22,118 new trainees (Level 1 and 2 14,424, in level 3 and level 46,732, level5 962 was planned for training). Level 1 and 2, 13,122 Level 3 and 4, 10,032 Level 5, 1,120 Trainees Total 24,274 are on the training centers implementation 110%. In addition from Addis Ababa police commission in Business fields Male 1,082 female 385 Total 1,440 police members in six Poly-technic colleges were trained. Government and private colleges from levels who are promoted 17,833 last year trainees are taking training. Collaboration with the stake holders in Government and private colleges Male 14,023, Female 12,998 Total 27,021 facilitated training. The action plan was estimated to be 41,000 the implemented is 66%. In Government and private in collaboration with companies and Enterprises out of 42,107 trainees 36,212 trainees in 1,607 companies and 935 enterprises total 2,542

companies and enterprises trained in cooperative training, the implantation is 86%.

In four sub cities Bole, Yeka, Kality and Kolfe to construct four new colleges to start the construction land already provided. Except Yeka subcity the other three received site plan. The construction bureau prepared design and it is similar with subcity site plan. When Yeka subcity finish the site plan the design will prepared, then bid will be notify and construction can be started. Eleven manufacturing workshops are ready to function in 2009 E.C in five colleges' seven manufacturing G+2 workshops and seven G+2 technology centers are being built.

In nine months it was planned to copy 450 technologies 591 were copied implementation is 113.3%. It was planned to transfer 450 technologies for enterprise 361 were transferred implementation 80% the copied technologies 350 enterprises multiply the copied technologies 312 were practical so implementation 89.1%. When this transferred technologies in terms of money is estimated ten million birr was planned birr six and half million was achieved implementation 65%.

For 6,512 old MSES and 2,810 new MSES micro and small Enterprises total for 9,327 Enterprises/for 31,240 MSES owners industry extension support and upgrade them it is being facilitating those who are supporting industry extension MSES, MSES can be promoted manufacturing. Based on Industry extension support up to level four it was planned 5,000 MSES operators for COC from level 1-4 3,704 were addressed implementation was 74.1 %.(Source Addis Ababa TVET Bureau.)

2.9.1 Addis Ababa TVET Bureau nine months 2010 E.C Budget

For the Bureau physical budget birr 33,162,640.00 and capital Budget 300,000,000 total 333,162,640.00 for nine-month according to the plan to be implemented in each department. (From July-March 2011 E.C)

No.	Department	Approved Budget	Nine Months plan	Nine months Implementation	Implemented
1	Supportive staff	18,287,100.00	13,153,789.27	6,134,683.22	46.60
2	Institutions training quality approvment core process	3,076,929.00	2,388,272.50	1,474,295.24	61.70
3	Outcome based core process	4,709,364.00	4,030,666.30	2,190,026.90	54.30
4	Research and Technology Transfer core process	4,591,482.00	3,323,856.26	1,692,666.72	50.90
5	Trainers and Training coordinators core process	2,497,765.00	2,717,669.27	1,116,883.69	41.10
6	Total	33,162,640.00	25,614,283.00	12,608,557.77	49.20

Source-Addis Ababa TVET Bureau

This table shows the total amount of budget allocated for Addis Ababa TVET Agency by the government for ten months.

2.9.2Distribution of Government TVET Institution Addis Ababa Sub cities 2010 E.C

No	Sub City	No.of Colleges	No.of Institution	Total
1	AddisKetema	2	2	4
2	Arada	1	1	2
3	Gulele	1	2	3
4	Kirkos	1	-	1
5	Yeka	2	4	6
6	Ledeta	2	1	3
7	Nefas silk Lafto	2	2	4
8	Bole	1	1	2
9	KolfeKeranyo	1	1	2
10	Akakaikalti	1	2	3
	Total	14	16	30

Source. Addis Ababa TVET Bureau

Figure 2.9 shows the distribution of TVET colleges and Institutions in Addis Ababa in all over the ten sub cities.

2.9.3 Addis Ababa TVET Bureau Data Institutions capacity building Addis Ababa TVET Bureau Institutions and colleges year 2010 E.C

No	Ownership	Training Rank	Quantity	Total
1	Government	College	14	30
		Institutions	16	
2	Private	College	71	316
		Institutions	245	
3	NGO	College	5	25
		Institutions	20	
Total			371	371

Source Addis Ababa TVET Bureau

Figure 2.9.3 shows the number of colleges and institutions owned by both the government and private stack holders.

2.9.4 Addis Ababa city TVET Trainers academic ranks

Year (in E.C)	Sex	No. of Trainees and Ranks			Total
		C Level	B Level	Masters	
2006	M	689	348	44	1,081
	F	167	200	8	375
2007	M	867	341	70	1,278
	F	175	173	24	372
2008	M	847	334	86	1,267
	F	201	167	36	404
2009	M	828	408	80	1,316
	F	223	176	29	428
2010	M	1,112	788	94	1,994
	F	356	379	35	770
Total		5,465	3,314	506	9,285

Source. Addis Ababa TVET Bureau

Figure 2.9.4 shows the academic status of Addis Ababa TVET teachers in all levels (from Level A up to level C)

2.9.5 General Wingate polytechnic college Budget allocation

The TVET public Institutions and colleges fund only supported from government budget. So I have taken a sample of budget allocation of General Wingate TVET polytechnic college for 2010 E.C

Recurrent and capital project Budget

S/NO	Budget Code	Description	Allocated Budget
1	6100	Humanitarian service	28,493,549.00
2	6200	Materials Service	13,676,404.00
3	6300	Fixed asset purchase	1,500,000.00
4	6300	Capital project/for construction	4,300,386.00
Total			47,970,339.00

Source General Wingate Poly Technic College

Addis Ababa TVET Chart/Data Institutions capacity Building Addis Ababa TVET Institution and colleges in year 2010 E.C

Figure 2.9.5 shows the budget allocation of General Wingate TVET polytechnic college for 2010 E.C

Chapter Three
Research Method

In this section, research approach and research design, sources of data, sampling design, data collection instruments, data analysis methods and ethical considerations are presented.

3.1 The Research Approach and Design

The research approach followed in this study was a mixed research, incorporating both qualitative and quantitative methods because of qualitative method elaborate define expressed and deeply indicate the attitude ,understanding and experience of stake holders ,trainers ,trainees and officers towards practice and challenges of implementing competence based TVET and on the other hand the quantitative method was to describe the magnitude of the challenges and practice of implementing competence based TVET. To conduct this research, a descriptive survey research design was implemented as the descriptive design goes with the purpose of the study which is to assess the current practice and problems of implementing competence-based TVET system.

3.2 Data Sources

For this study, data were collected from both primary and secondary data sources. Primary data sources were TVET teachers and students (trainees), TVET college deans, department heads, officials of TVET agency and partner companies for the cooperative training. Secondary data sources were policy/strategy documents, reports on TVET, research articles and books.

3.3 Sampling Design

There are six polytechnic colleges in Addis Ababa from which three Poly Technique colleges, namely, Tegbared, General Wingate and Entoto (50%) were involved in this study as the colleges provide more or less similar programs. Data were collected from 38 TVET teachers from 110 total populations; 180TVET students from 400 total populations, 4 officers from Addis Ababa TVET Bureau and OCACC from 60 total populations, and 3 stakeholders from different

industries in relation to cooperative training. Those participants were selected using Purposive Sampling Techniques. The reason of selecting this sampling technique is that we can manage a maximum variation/heterogeneous sample in a selected and diverse range of cases which is relevant to a particular phenomenon or event. The purpose of this kind of sample design is to provide as much insight as possible into the event or phenomenon under examination. Teachers and students were selected on availability basis at the time of data collection as it was difficult to apply random sampling due to large number of TVET teachers and students whose presence cannot be predicted. College deans, department heads and officers were selected from those colleges and their fields are Wood works, Construction, General metal fabrication and Manufacturing based on purposive sampling.

3.4 Data Collection Instruments

In this study, questionnaire and interview were used for collecting data from the selected respondents. Questionnaire with open and closed ended questions were distributed from 60 TVET teachers(teachers, department heads and Deans) from 110 total population,180TVET students from 400 total population from this 76 questionnaire from students are not returned and 28questionnaire are not returned from teachers , 4 officers from Addis Ababa TVET Bureau and OCACC from 60 total population, and 3 stakeholders from 9 total population different industries and also the nature of the questionnaire are partial scale-based which is five item likert scale (strongly agree, agree undecided , disagree and strongly disagree). The returned questionnaire is38 from teachers (teachers, department heads and deans) and 104 questionnaires from students. Semi-structured interviews were conducted with teachers, officers and cooperative training partners and the data was captured by deep and attentive interview which was held in February and March months on working days i.e. about 20 days by meeting each of them alone at their work place or their offices. The time consumed for interviewing one respondent varies person to person but the average is 1:15 (one hour and fifty minutes). Furthermore, the research procedure also includes the pilot study to determine the result of the study.

3.2 Data analysis

The quantitative data collected through questionnaire were first screened to check whether it was filled correctly and non-presence of unfilled questions. After screening, the data analyzed using descriptive statistics mainly percentage with the support of SPSS version 20.The analyzed data were presented through figures. The qualitative, i.e., interview data was analyzed using the narrative analysis technique.

3.3 Ethical Consideration

The highest ethical standard was applied for the data collection and analysis of the raw data. Before collecting data, explanation on the purpose of the study was given to the participants. The questionnaires were distributed and interview was conducted after checking the willingness of participants, the participants were told that their response will be kept anonymous and will not be used for any purpose other than for this thesis.

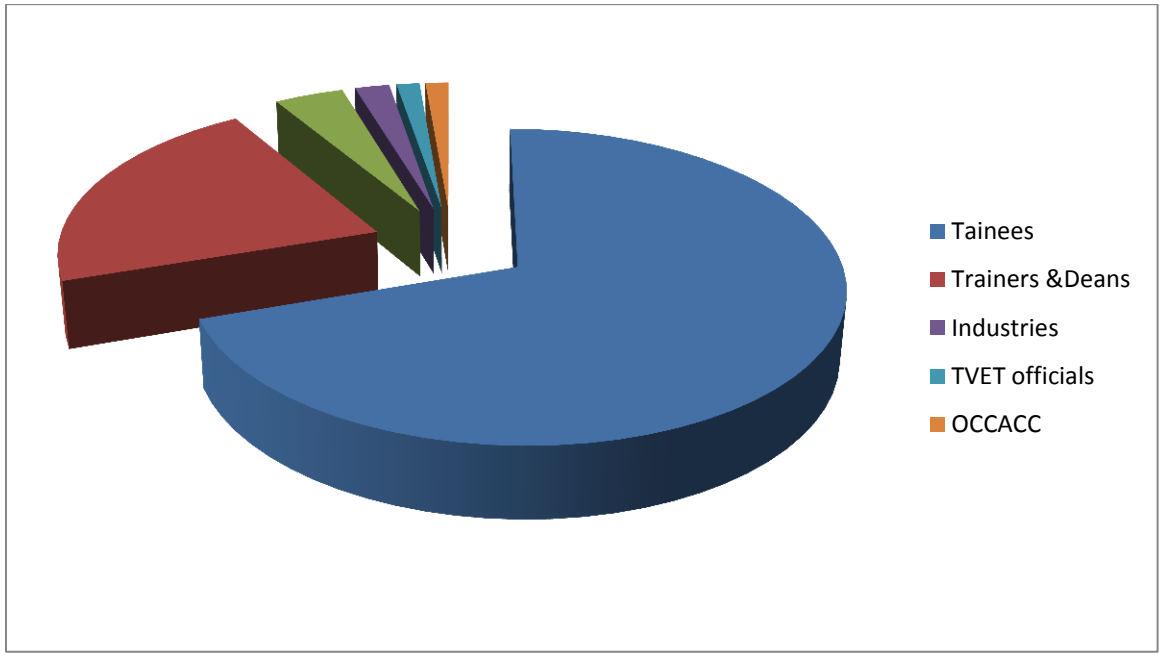
Chapter Four
Data presentation, Analysis and Interpretation

In this chapter, the analysis and interpretations of the data obtained through questionnaire and interview is presented in charts and tables.

4.1 Background Information

As observed in pie chart 4.1 below, the participants were from different areas and they vary in type and number (size).

Figure 4.1 Type and size of respondents



As the above bar graph showed, 149 participants from different categories were involved. Traineeswere104 (70 % of total sample) whereas Trainers (teachers, deans, department heads) were 38 (25.5 %). From the industry, 3 were involved and TVET officials were four.

4.2. Demographic background of Participants

Table 4.2 personal information

No	Sex	Number of Participants	Percent
1	Male	113	75%
2	Female	36	25%
Total		149	100%

As Table 4.1 showed, 113(75%) were male and 36 (25%) were female, showing that most of the participants were male.

4.3 Age classification of Participants

No	Age categories	Number	%
1	18-20	55	37 %
2	21-25	75	51 %
3	26-35	12	8%
4	≥ 36	7	4 %
Total		149	100%

As the table 4.2 indicate the age classification of participants were 55 participants age was between 18-20 which is 37% , 75 participants age was between 21-25 which is 51% , 12 participants age was between 26-35 which is 8% and the rest seven participants age was above 36 which is 4% .The maximum number or the highest amount of participants was between age of 21-25 which is 51% and the smallest number or amount is above 36 which is four.

As can be seen in figure4.4 below, the educational qualification of the respondents vary.

Figure 4.4 Qualification of all Participants

No.	Educational status	Number	%
1	Level Ⅲ	26	17.5%
2	Level Ⅳ	78	52%
3	Level B	34	23%
4	Level A	11	7%
Total		149	100

Figure 4.4 shows all participants: Trainees, Trainers, Deans, and other stack holders.

Respondents with Level III were 26 (about 17.5%); those with Level IV were 78(52%); Level B was 34(23%) and those with Level A were 11(7%). Thus, these sizes of participants who have Level IV were largest which accommodate more than half of the total number of participants, i.e., 52%.

4.5 Degree of Agreements of participants on practice and challenges of implementing competence based TVET

Table 4.5peRespondents agreement practice and challenges of implementing competence based TVET.

No.	No. of	Issues measure the implementation of competence based TVET trainings	Degree of agreement				
			SA	A	U	D	SD
1	142	TVET curriculum was developed based on occupational standards developed from the labor market and periodically revised to reflect the need in the labor market.	12 8%	8 5%	12 8%	70 49%	40 30%
2		Industry professionals have participated in determining the occupational standards of TVET curriculum.	10 7%	12 8%	20 14%	48 34%	52 37%
3		The competence profile of the TVET graduates is clearly expressed in the curriculum.	22 15%	18 13%	10 7%	60 77%	32 42%
4		In TVET curriculum, knowledge, skills and attitudes to be developed are clearly expressed.	15 7%	20 14%	5 4%	42 29%	60 42%
5		Performance-based assessment is considered as the core system of measuring trainees' achievements.	25 18%	15 11%	10 7%	72 51%	2014 %
6		TVET trainees usually go to industries to practice what they have learned in TVET colleges and The training is conducted in such a way that individual competence development is ensured.	55 39%	25 18%	20 14%	22 15%	20 14%
7		In the process of training, teacher-student feedback system is well established and practiced	10 7%	15 11%	15 11%	62 44%	4022 8%
8		The TVET institutions provide training based on trainees' occupational choices and lifelong learning	20 14%	15 11%	10 7%	35 25%	62 44
9		Training workshop and facilities (machineries, tools, equipment, etc.) are sufficiently available, well designed and located in line with developing trainees' competence, for individual practice.	30 21%	20 14%	-	47 33%	45 32%
10		The college administration structure isin line with competence-based training and Administrative support for trainers and trainees is adequate enough to run the programs.	25 18%	15 11%	4	45 32%	52 37%
11		Employers are cooperative to run the cooperative training and Employers' evaluation of trainees assigned for cooperative training is credible.	15 7%	18 13%	17 12%	42 29%	50 35%
12		There are sufficient employing organizations (industries) in all training areas for cooperative training.	25 18%	15 7%	12 8%	40 28%	50 35%
13		Many of the college's TVET graduates successfully pass the COC examination and pass institutional assessment at once	35 25%	10 7%	-	45 32%	52 3%

As the above table 4.5 indicate there are 142 total participants are involved to respond the mentioned measurable issues, from those participants 104 were trainees and 38 were trainers which are in percent 73% and 27 %respectively .According to this table the attitude of respondents towards to the items administered was failed between strongly agree, agree, undecided, disagree and strongly disagree. Based on the above table attitude of participants towards TVET curriculum was developed based on occupational standards developed from the labor market and periodically revised to reflect the need in the labor market was12 participants are strongly agree, 8 are agree, 12 are undecided, 70 are disagree and the rest 40are strongly disagree which was in percent 8%, 5 %, 8 %, 49 %and 30 % respectively.

The attitude of participants towards industry professionals have participated in determining the occupational standards of TVET curriculum was 10 participants are strongly agree, 12 were agree,20 are undecided ,48 are disagree and the rest 52 are strongly disagree which was in percent 7 %,8 %,14 %,34 %and 37 % respectively.

The attitude of participants towards the competence profile of the TVET graduates is clearly expressed in the curriculum was 22 participants are strongly agree, 18 are agree, 10 are undecided , 60 are disagree and the rest 32 are strongly disagree which was in percent 15 %,13 %,7 %,42 %and 77 % respectively.

35 participants responses that TVET curriculum, knowledge, skills and attitudes to be developed are clearly expressed and 102 are response was they are not clearly expressed which is in percent 24%, 72 % and the rest 4 % are undecided.

From the respondents respond 40 of them are agreed that Performance-based assessment is considered as the core system of measuring trainees' achievements , 92 are disagree and the rest are undecided which was in percent 28%,65% and 7% respectively. 80 respondents are agree on TVET trainees usually go to industries to practice what they have learned in TVET colleges and The training is conducted in such a way that individual competence development is ensured and 42 are says trainees didn't go to industries usually and the rest 20 are undecided which is in percent 56%,30% and 14 % respectively.

25 respondents says there are teacher-student feedback system is well established and practiced, 102 are says no and the rest 15 are undecided which are in percent 17%, 72% and 11%

respectively. The TVET institutions provide training based on trainees' occupational choices and lifelong learning and the respondents agreement was that about 35 participants response agree ,10 are undecided and the rest 97 are disagree which are in percent 25%,7% and 68% respectively.

50 respondents are agreed on fulfillments of Training workshop and facilities (machineries, tools, equipment, etc.) are sufficiently available, well designed and located in line with developing trainees' competence, for individual practice and 92 are not agree which are in percent 35% and 65 % respectively. 40 participants answer that there is adequate administration structure which can run training in line with competence-based training and Administrative support for trainers and trainees is adequate enough to run the programs , 97 are answer no and the rest 5 are undecided. 33 participants responses that Employers are cooperative to run the cooperative training and Employers' evaluation of trainees assigned for cooperative training is credible and 92 says no or disagree and the rest 17 are undecided which was in percent 23%,65% and 12% respectively. Around 40 participants answer or agreed that there was sufficient employing organizations (industries) in all training areas for cooperative training and 90 are respond disagree and 12 are undecided which are 28%, 63% and 7% respectively.45 participants are agreed on Many of the college's TVET graduates successfully pass the COC examination and pass institutional assessment at once and 97 are disagree which are in percent 32% and 68 % respectively.

Generally according to the above table those mentioned issues are administered for assessing challenges for practice of competence based trainings. Base d on this table most of the respondents respond or answering that there are challenges such as;-

TVET curriculum was not developed based on occupational standards. Rather it was developed from the labor market and didn't periodically revise to reflect the need in the labor market. So there are enormous problem of marketing or the trainings provided are not market oriented.

Industry professionals have not participated in determining the occupational standards of TVET curriculum. The competence profile of the TVET graduates and, knowledge, skills and attitudes to be developed are not clearly expressed in the curriculum.

Performance-based assessment is not considered as the core system of measuring trainees' achievements .In the process of training, teacher-student feedback system is not well established and practiced. The TVET institutions do not provide training based on trainees' occupational choices and lifelong learning.

Training workshop and facilities (machineries, tools, equipment, etc.) are not sufficiently available, well designed and located in line with developing trainees' competence, for individual practice.

The college administration structure is not in line with competence-based training and Administrative support for trainers and trainees are not adequate enough to run the programs.

Employers are not cooperative to run the cooperative training and Employers' evaluation of trainees assigned for cooperative training is not credible.

There are in sufficient employing organizations (industries) in all training areas for cooperative training. Many of the college's TVET graduates do not successfully pass the COC examination and do not pass institutional assessment at once.

Industry professionals have not participated in determining the occupational standards of TVET curriculum. The competence profile of the TVET graduates and, knowledge, skills and attitudes to be developed are not clearly expressed in the curriculum.

Performance-based assessment is not considered as the core system of measuring trainees' achievements in the process of training, teacher-student feedback system is not well established and practiced. The TVET institutions do not provide training based on trainees' occupational choices and lifelong learning Training workshop and facilities (machineries, tools, equipment, etc.) are not sufficiently available, well designed and located in line with developing trainees' competence.

TVET curriculum was not developed based on occupational standards developed from the labor market and didn't periodically revised to reflect the need in the labor market. So there are enormous problems of market or the trainings provided are not market oriented.

Industry professionals have not participated in determining the occupational standards of TVET curriculum. The competence profile of the TVET graduates knowledge, skills and attitudes to be developed are not clearly expressed in the curriculum. Performance-based assessment is not considered as the core system of measuring trainees' achievements in the process of training, teacher-student feedback system is not well established and practiced. The TVET institutions do not provide training based on trainees' occupational choices and lifelong learning.

Figure 4.6The Extent of Trainees and Trainers Motivations to skill trainings

No.	Participants	Extent of motivation to skill trainings				
		Very high	High	Medium	Low	Very low
1	Trainees	8	23	50	10	3
2	Trainers	4	15	15	1	1
Total		12	38	65	11	4

The table above indicates the extents of trainer's and Trainees motivation to skill trainings. As it indicates out of total number of samples i.e104Trainees, around 94 respondents filled the questionnaires administered, and out these very highly motivated are 8, highly motivated are 23, again moderately motivated are 50 ,10 of them are motivated low and the rest (3) of them motivated very low which means the highest number of participants i.e. around 81 out of 94 participants were highly and moderately motivated to skill trainings and 13 of the rests are lowly motivated to skill trainings .

The same to trainees ,trainers were also motivated to skill trainings which are from 38 of total samples administered 36 of them are filled the questionnaires ,out them 4 were very highly motivated , highly motivated are 15, again moderately motivated are 15 ,1 of them are motivated low and the rest (1) of them motivated very low which means the highest number of participants i.e. around 34 out of 36 participants are highly and moderately motivated to skill trainings and 2 of the rests are lowly motivated to skill trainings .Generally majority of participants were motivated to skill trainings .

FIGURE 4.7 Responses of Trainers towards proper and efficient utilization of resources in the process of trainings

No.	Types of participants	Responses of Participants					
		Yes ,there is	%	To some extent, yes	%	No, there is No	%
1	Trainers, Department heads, Deans, and coordinators	5	13.5%	29	78%	3	8%

As the figure above indicates that on the process of training there are different attitudes and attentions by trainers on proper and efficient utilization of resource. The questionnaire were administered for 37respondents and majority of them answered there to some extent, i.e. about 29 or 78%, 5 or about 13.5% are answered yes there are and the rest 3 or about 8 % of them answered no there is no proper and efficient utilization of resource on the process of training because there is no enough materials, maintenance problem, management and purchasing problem.

Figure4.8 about colleges skill gap and upgrading schedules for teachers

No.	Types of participants	Responses of Participants			
		Yes , it has	%	No it doesn't have	%
1	Trainers ,heads ,deans ,and coordinators	28	80%	7	20%

As the above table indicate the respondents have different responses towards colleges planned skill gap and upgrading training schedules which was from 35 participants about28 or 80% response is yes colleges have planned skill gap and upgrading training schedules for teachers

and the rest 20% or 7 out of 35 answer that there colleges have no planned skill gap and upgrading training for teachers.

Figure 4.9the constraints and measurements should be taken to overcome the problems.

No.	Number of participants	The problems	The measure taken to overcome the problem
1	23	- There are no enough materials - Unorganized work shop - Unbalancing between number of equipment's and tool with number of trainees - There are no regular maintenance machines - There are no enough reference books - No punctuality by trainees	- The curriculum would be revised on the basis of market need - Apply proper plan for training - There would be planned skill gap for trainers - The administration and teaching wings would be work together - The salary would be better improved

In addition to the another respondents the TVET officials also participated to certain interviews and their responses (qualitative data) was explained carefully as follows;

The TVET1 and officials play essential and important role in competence based training program ,In order to implementing competence based trainings there are preconditions required ,those are prepared plan of action, provide supervision ,continuous support for TVET institutions and colleges and evaluate contributions of competence based training is successful by school assessment, OCACC assessment plus cooperative training evaluation.

In this program there are certain problems for example the purchasing schedule doesn't go properly with training program m.

Figure 4.10 assessments on OCACC overall endurance on implementation of compete

As the table above indicate in order to implementing competence based training program the OCACC has several shortage of facility shortage ,have transparent assessment systems, its assessors have enough knowledge, skills to assess candidates according to occupational standards, provide enough orientation about national assessment and objective of competence center for trainees, assess trainees according to practical timetable.

Figure 4.12 degree of stakeholders awareness and involvement in competence

As Figure 4.12 above showed, enterprises' voluntarily acceptance of trainees in cooperative training, awareness of competence based training, their capacity of knowledge based training appropriate occupational standard, their level of trainee's acquisition of necessary skill and Existence of information gap between colleges and stakeholders was medium.

On the other hand, the enterprises participation in TVET and Financial support for trainees in the process from stakeholders was low.

An Interview response by TVET 1

1. What are the preconditions required in competence based training program from your organization side?

Answer: prepare plan of action, provide supervision, and continuous support for TVET Institutions and colleges.

2. Have industries enough knowledge and skill to design appropriate occupational standard?

Answer: They have knowledge and skill on particular occupational standards related to their enterprise.

3. How do you evaluate the contributions given by the competence based training program? Is it successful, as it is expected?

Answer: from school assessment, OCACC assessment and cooperative training evaluation.

4. How do you evaluate in assessing the top management in TVET colleges?

Answer: Evaluation is based on their current achievement in implementing TVET training.

5. Is the procuring policy appropriate for government TVET colleges?

Answer: The purchasing schedule did not go in line properly with the training program.

6. As a TVET expert how do you take a problem faced in competence based training program?

Answer: First of all identify the problem, put in order and bring solutions.

An Interview response by TVET 2

1. Is the organization fully organized with necessary materials and facilities? If not, how do you assess?

Answer: No, because equipment's and materials were provided by TVET colleges and institutes.
2. Do the assessors have enough knowledge, skill to assess candidates according to the occupational standard?

Answer: Well, most assessors have enough knowledge and skill. In other words some assessors have short comings. 3. Do you have good communication with TVET colleges to achieve the National TVET strategy?

Answer: there was lack of collaboration with TVET Institutes and colleges.

4. According to your opinion trainees get enough orientation about national assessment and objective of the center of competency?

Answer: No, because of low transparency with colleges.

5. Do you have any controlling systems? To what extent the systems are transparent?

Answer: Controlling systems were not transparent due to unplanned schedule.

6. What is the contribution of the COC center to the achievement of competence based training?

Answer: the COC center conduct assessments form level one to level five.

7. Do you assess trainees according to the scheduled timetable?

Answer: In practical assessments sometimes there were materials shortages.

An interview response by TVET 3

1. Did the Enterprises voluntarily accept the trainees in cooperative training?
Answer:
Yes the enterprises voluntarily accept trainees in cooperative training
2. Did the Enterprises have the awareness of competence based training?

Answer: They have neither absolute nor poor awareness about the competence based training.

3. Did they have the capacity of Knowledge and skill to design appropriate occupational standards?
Answer: some of them are qualified experts; while the others are not.
4. What was their participation in TVET policy development and involvement in the board?
Answer: They were not fully participated in the board.
5. Did you think the trainees acquire the necessary skills?

Answer: Most of them have been acquiring the major skills on their occupational standards.

6. What was the level of existence of information gap between colleges and stake holders?
Answer: there was lack of transparency among them.

7. What was the level of financial support for trainees from stake holders?
Answer: previously there was a support from the stake holders but these days there is no as such a meaningful support for the trainees.

Summary of the major findings from the TVET 1

The Training program basically plans an action, provide supervision and gives continuous support for TVET Institutions and colleges. The industries also have sufficient knowledge and skill to design appropriate occupational standard. The competence based training program also provides meaningful contribution for the program. Regarding the top management in TVET program, the evaluation is based on the current achievement in implementing TVET training.

There are also some drawbacks in this sector. One of the acute problems is the purchasing schedule; it did not go in line properly with the training program. Regarding the problems shown in competence based training program, identifying the problems and solving them in their order of importance is the suggested solution forwarded by the institution.

Summary of the major findings from the TVET 2

Continuous support for TVET Institutions and colleges is carried out by the competence based training program. The school, the OCACC, and the cooperative training evaluation is also handled by this institution. Industries are in a better position to design the occupational standard. Regarding the task force issue there was lack of collaboration with TVET Institutes and colleges. Because of low transparency with colleges trainees didn't get enough orientation about national assessment and the objective of the center of competency. The Controlling systems were not transparent due to unplanned schedule. The COC center basically conducts assessments form level one to level five. But in practical assessments sometimes there were shortage of materials.

Summary of the major findings from the TVET 3

Enterprises working coolaborately with institutions and colleges voluntarily accept trainees in cooperative training. But the problem is they don't have sufficient knowledge and understanding about the TVET program. Regarding the design of appropriate occupational standards, they are not absolute qualified on the issue. Furthermore they are not fully participated, in TVET policy development. The other major problem in the sector is that financial support given for trainees from the stake holders is not promising.

Chapter Five

Summary, Conclusions and recommendations

This chapter presents the summary of main findings, conclusion and recommendation based on the findings.

5.1. Summary of the major findings

The challenges and practice of implementing competence based trainings. The purpose of this study was to assess competence based training practice and its challenges in some selected government TVET colleges, Stakeholders (industries) and intuitions in Addis Ababa. Thus the study comes up with challenges and practices in implementing competency based training program. The research put forward the following questions to get the raw data, find out problems and to suggest possible solutions.

1. Is the TVET training market-oriented?
2. Are TVET colleges well organized to provide competence based training?
3. What is the level of involvement of stakeholders?
4. What problems do TVET trainer's encountered in implementing the competence based approach?
5. Do trainees have acquired the planned occupational knowledge, skill and attitude? Is there efficient and effective resource utilization?

The challenges have different magnitude according to the findings and based on these findings;

-The trainings provided by TVET colleges moderately market oriented not all in all market oriented so; the trainees are less motivated to plan to acquire the trainings.

- The trainees have acquired the planned occupational knowledge, skill and attitude moderately

-The Trainers are not highly motivated to provide the trainings because of several reasons such as there are no enough materials ,Unorganized work shop ,Unbalancing between number of equipment's and tool with number of trainees ,There are no regular maintenance machines ,There are no enough reference books ,there is no enough

salary and No punctuality by trainees at the time of training sessions, so, totally the TVET colleges are not well organized to provide efficient and effective trainings.

- Concerning the budget, majority of the respondents have assured that there is no enough budget to the departments.

According to national TVET strategy objectives (2006), it claims to create motivated and competent work; of establish and capacitate necessary institutions. In spite of this, the status of TVET College, as stated by large portion of respondents, is below capacity because of the following constraints:

Shortage of consumable materials, machines, tools according to number of trainees

a.Inadequate, work shop, laboratory, quality control room, assessment room.

b.Lack of reference books, relevant training materials and up-to- dated text book.

c. Lack of internet access, computer, projector, and maker

-It is known that the participation and involvement of stakeholders are essential in realization of competence based training program. So the Enterprises participation in TVET and Financial support for trainees in the process from stakeholders was low.

Generally, major challenges encountered in implementing competency based training program based on the finding, grater part of the respondents agreed on the following impact of competency based training .

5. 2.Conclusion

The major purpose of competency based training program is to create competent work force for the world of fulfill the demands of the industries. In order to achieve the training program, conducive training environment and applicable occupational standard and curriculum are needed, like consistency of occupational standards and curriculum, adequate training materials, attentiveness of trainees, involvement of stakeholders, appropriate procuring policy implementation, qualified and experienced trainers, conducive work shop with adequate training materials and support and follow up from concerned bodies. In view of this, the following conclusions have been drawn.

TVET curriculum should be developed based on occupational standards which are developed from the labor market .The current Curriculum also needs to be periodically revised in order to reflect the need of the labor market. Due to these major problems a number of inconveniences occurred in the market. Beside this the programs should be market oriented.

On the other hand, professionals in the Industry should be participated in determining the occupational standards of TVET curriculum. The competence profile of the TVET graduates, knowledge, skills and attitudes should be developed clearly so that it could be briefly expressed in the curriculum.

Performance-based assessment should be considered as the core system of measuring trainees' achievements. Moreover, In the process of training, teacher-student feedback system should be well established and practiced.

The TVET institutions should provide training based programs based on trainees' occupational choices and it has to consider lifelong learning policy. In addition to this Training workshop and facilities (machineries, tools, equipment, etc.) should be sufficiently available, well designed and located in line with scale up trainees' competence, and individual practice.

The college administration should be arranged in line with achieving competence-based training and also the administration has to support the trainers and trainees adequately in order to run the programs and to achieve the intended goals.

Employers should be cooperative to run the cooperative training and the organization s which are in charge of evaluating the trainees should be active and cooperative by releasing the actual evaluation point of the trainees who engaged during the cooperative training. Thus, there should be sufficient employing organizations (industries) in all training areas to conduct the cooperative training.

There should be sufficient employing organizations (industries) in all training areas for cooperative training.

5.3. Recommendations

The purpose of research is investigating problems, and suggesting solution. In line with this, the study focused on the implementation and challenges of competency based training programs. This training program is very much useful to our country since our abundant resource at this time is unskilled man power. In order to reduce poverty to make employable youth and to create salable work force, competency based training program is suggested to be best way. Based on this, the Federal Addis Ababa TVET Agency need to give due attention to minimize or avoid the hindrances. From this implication; the following can be possible suggestions for successful implementation of competency based training program.

Implementation of competency based training requires effort and involvement of various section of society. Among those, companies and industries have a great role. To meet this demand, Federal and Addis Ababa TVET agencies should give attention while designing and developing the occupational standards and curriculum based on market demand. First, they should assess the needs of the industries and then collaborate with industries and exporters of TVET and trainers to prepare appropriate occupational standards. In addition; supervisions and follow up are necessary for TVET colleges, thus has advantages for government, as well as trainers and trainees in terms of saving material, man power, time, and budgets. The TVET agency and college deans should provide awareness for industries and companies in the form of conference, plasma, face to face discussion and providing intensive programs in various ways in addition to this formulate the employment office, unions, and various chambers.

Concerning the availability of regular maintenance, majority of the respondent agreed that it is in adequate. Besides; preparing the plan for practical implementation is low.

According to the real situation, TVET Colleges do not have proper way of using and recycling materials. Due to the excessive wastage of materials the TVET institutions are getting into problems. This resulted in shortage of materials which could be basic input for the training.

TVET Colleges should provide maintenance and training in various sectors. They should also give incentives for the services provider, trainer and trainees.

Shortage of training materials has negative impacts, such as poor results of national assessment. Due to a shortage of tools and equipment's, trainees were not trained in a practical work and most of them were not competent. To minimize the shortage, Addis Ababa TVET agency and

TVET College deans should flourished the institutions, compensate the shortage, solve the budget constraints, and minimize the problems in collaboration with donors. In addition to this, Addis Ababa TVET agency should design appropriate manuals for income generation. At this condition the colleges have begun to generate income. Consequently, the colleges, trainers and trainees and communities will be benefited**.**

The implementation of procuring policy should match with demands of the TVET College. To resolve this problem, The Federal TVET should modify the policy and make it appropriate. Furthermore, Federal TVET, Addis Ababa TVET agency and colleges should prepare training manuals, and also awareness should be created for TVET partners, like suppliers and merchants regarding the national TVET strategy implementation, characteristics of public procurement and their duties and responsibilities.

In the TVET Colleges, qualified, experienced teachers/trainers are the key factors for the successful implementation of the training program. In spite of this, shortages of competence and experienced trainers have existed. To minimize these problems TVET agencies and TVET Colleges should motivate trainers by giving fringe benefits, apply good governance, improve practical carrier, rules, salary increment, and avoid discrimination and promote merit based employments..

According to the national TVET strategy, the eight work sections should effectively involved in competency based training program. Adequate training facilities are very essential; to accomplish the objectives of the national TVET strategy and the interest of the industries like practical room, assessment room, quality control room, contextual room, computer lab room, resources room.

To solve this problem TVET agencies and College dens and trainers should make standardized work shop and well organized facilities according to **Kaizen principle**.

Based on the finding, TVET colleges faced shortage of reference books, text books, relevant training materials, and other necessary and appropriate resources. To avoid these difficulties TVET colleges should fulfill the necessary resource in collaboration.

The finding confirmed that the current status of Addis Ababa center of competencies should be improved with human and non-human resources. In addition to this, during the assessment time it is clearly observed that there is lack of clarity and giving awareness for candidates.

Furthermore, there is weak integration and there is also gap of information between TVET Colleges. To solve these problems the following points are recommended:

The center should provide enough awareness for trainees, about national assessment, and avoid discrimination during the assessment period, and avoid unethical behaviors. Also improving the collaboration among the TVET colleges, Federal TVET, cooperative centers, and other stockholders should be a vital issue for the achievement of our goal.

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Appendix I

Addis Ababa University

College of Education and Behavioral studies

Department of Curriculum and Instruction

Questionnaires to be filled by TVET trainees

The purpose of the questionnaires is to gather relevant information for a study in assessing the implementation of competence based training program and its challenges in Addis Ababa city administration TVET colleges. The study is intended to identify the problems that exist in the implementation of the program and suggest possible intervention to improve the process. In this regard you are the right person to provide relevant information for the study in which your responses have a great contribution. You are kindly requested to respond to every item in the questionnaire. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

General directions:

i. No need to write your name
ii. Please put" ✓ " mark in the boxes provided corresponding to each alternatives.
iii. For the open ended item that should be filled by writing your opinion on the space provided.

1. Personal information

1. Name of the training college:_____
2. Your field of specialization:_____
3. Sex: a) Male ☐ b) Female ☐
4. Age: a) Below 18 ☐ b) 21-23 ☐ c)24-25 ☐
5. Level of training: a) Level II ☐ b) Level III ☐ c) Level IV ☐

Part Two

Read each statement carefully and respond to each item by expressing your degree of agreement or disagreement by putting a " ✓ " mark in the agree-disagree column.

SA-Strongly agree (5) A-Agree (4) UD-undecided (3) SD-Strongly disagree (2) D-disagree (1)

No.	To what extent is TVET Training competence-based?	Degree of agreement				
		5	4	3	2	1
1	TVET curriculum was developed based on occupational standards developed from the labor market.					
2	Industry professionals have participated in determining the occupational standards of TVET curriculum.					
3	The TVET curriculum fully reflects the needs of the Industry.					
4	The competence profile of the TVET graduates is clearly expressed in the curriculum.					
5	The TVET curriculum was periodically revised to reflect the need in the labor market.					
6	In TVET curriculum, knowledge, skills and attitudes to be developed are clearly expressed.					
7	Performance-based assessment is considered as the core system of measuring trainees' achievements.					
8	TVET trainees usually go to industries to practice what they have learned in TVET colleges					
9	In the process of training, teacher-student feedback system is well established and practiced					
10	The training is conducted in such a way that individual competence development is ensured.					
11	The TVET institutions provide training based on trainees' occupational choices and lifelong learning					
	2. Are TVET colleges well organized to provide competence-based training?	**5**	**4**	**3**	**2**	**1**
12	Training facilities (machineries, tools, equipment, etc.) are sufficiently available for individual practice.					
13	The college administration structure is in line with competence-based training					
14	Administrative support for trainers and trainees is adequate enough to run the programs.					
15	Training workshops are well designed and located in line with developing trainees' competence.					
16	The number of training workshops is proportional to the number of trainees					
17	Consumable training materials are sufficiently available whenever trainers require them.					

18	There exists transparent and participatory management in TVET colleges					
19	Regular maintenance program for machines, equipment and tools is available.					
	3. To what extent is the cooperative training scheme implemented?	**5**	**4**	**3**	**2**	**1**
20	Three is a regular program for TVET trainees to visit industries for practical learning.					
21	Employers are cooperative to run the cooperative training.					
22	Employer's evaluation of trainees assigned for cooperative training is credible.					
23	Employers and TVET colleges have regular meetings to monitor the cooperative training practices.					
24	Employers assign trainees placed for cooperative training to work on their area of training.					
25	There are sufficient employing organizations (industries) in all training areas for cooperative training.					
26	Cooperative training coordinators are assigned by the TVET colleges.					
	4. Do trainees have acquired the planned occupational competence to the level required?	**5**	**4**	**3**	**2**	**1**
27	Many of the college's TVET graduates successfully pass the COC examination.					
28	Many of the college's TVET trainees successfully pass institutional assessment at once.					
29	Employers' feedback is positive on the competence level of the college's employed graduates.					

በአዲስ አበባ ዩኒቨርስቲ

የትምህርትና ሥነ ባሕርይ ጥናት ኮሌጅ

የሥርዓተ-ትምህርትክፍል

በቴክኒክናሙያ ትምህርትና ስልጠና ኮሌጆች በሰልጣኞች የሚሞላ መጠይቅ

የመጠይቅ አላማ

የዚህ መጠይቅ አላማው በአዲስ አበባ ቴክኒክና ሙያ ትምህርትና ስልጠና ኮሌጆች ብቃትን መሠረት ያደረገ ስልጠና መርሃ ግብር ትግበራና ያጋጠሙ ችግሮች መለየትና የመፍትሔ አስተያየት ለማቅረብ ነው፡፡ለዚህ ትክክለኛው ሰው አንተ/አንቺ ስለሆናችሁ የምትሰጡ ትመረጃ ለጥናቱ ትልቅ አስተዋጽኦ አለው፡፡ለሁሉም መጠይቆች መልስ እንድትሰጡ አሳስባለሁ፡፡የሚሰጠው አስተያየትና የመፍትሔ ሃሳብ ለትምህርት ጥናት ብቻ የሚውል መሆኑን አረጋግጣለሁ፡፡ለሚደረግልኝ ትብብር በቅድሚያ አመሰግናለሁ፡፡

አጠቃላይመመሪያ

1. ስም መፃፍ አያስፈልግም
2. እባክዎ ካሉት አማራጮች “✓” ምልክት ባለው ሳጥን ይሙሉ፡፡

ክፍልአንድ

1. የግልመረጃ
   1) የስልጠና ኮሌጅ ስም_____
   2) የስልጠና ዓይነት_____
   3) ፆታ ሀ) ወ ☐ ለ) ሴ ☐
   4) ዕድሜ ሀ) ከ18 ዓመት በታች ☐ ለ. ከ19-21 ዓመት ☐ ሐ) ከ22-25 ዓመት ☐
   5) የስልጠና ደረጃ ሀ) ደረጃ II ☐ ለ) ደረጃ III ☐ ሐ) ደረጃ IV ☐

ክፍልሁለት

እያንዳንዱንዐረፍተነገርበጥንቃቄካነበባቸሁበኋላየምትሰጡትመልስመስማማትወይምአለመስማማት “✓” ምልክትበመልሱአንባርአስቀምጡ

በጣምእስማማለህ (5) እስማማለሁ (4) ገናአልወሰንኩም (3)

አልስማማም (2) በጣምአልስማማም (1)

ተ.ቁ	የቴክኒክናሙያትምህርትስልጠናምንያህልብቃትንመሠረትያደረገነው	የስምምነትደረጃ				
		5	4	3	2	1
1	የቴ/ሙ/ት/ሥሥርዓተትምህርትየተቀረፀውበሙያውብቃትደረጃናሙያውጎበያላይተፈላጊነትተመሥርቶነው					
2	የኢንዱስትሪውሙያተኞችበሥርዓተትምህርቱቀረፃ (በመሳተፍ) የወሳኝነትሚናአላቸው					
3	የቴ/ሙ/ት/ሥልጠናሥርዓተትምህርትሙሉበሙሉየኢንዱስትሪውንፍላጎትየሚያንጸባርቅነው					
4	የሙያብቃትማረጋገጫመረጃበሥርዓተትምህርቱመሰረትየቴ/ሙ/ት/ሥልጠናተመራቂዎችንብቃትሙሉበሙሉየሚያጋግጥነው					
5	የቴ/ሙ/ት/ሥልጠናሥርዓተትምህርትየወቅቱንየሙያገበያፍላጎትንለማሟላትበየወቅቱይከለሳል					
6	በቴ/ሙ/ት/ሥልጠናሥርዓተትምህርትውስጥየሚዳብሩትእውቀት፣ክህሎትናየባህርይለውጥተገልፀዋል					
7	ተግባርተኮርምዘናዋናየሰልጣኞችውጤትመመዘኛተደርጎይወሰዳል					
8	የቴ/ሙ/ት/ሥልጠናሰልጣኞችበአብዛኛውወደኢንዱስትሪዎችበመሄድበተቋምየተማሩትንይለማመዳሉ					
9	በስልጠናውሂደትውስጥየአሰልጣኝሰልጣኝግብረመልስስርዓትተመሥርቶሥራላይውሏል					
10	የሚካሄደውስልጠናእያንዳንዱሰልጣኝጥራትያለውየሙያብቃትእድገትየሚያረጋግጥነው					
11	የቴ/ሙ/ት/ሥልጠናተቋማትበሰልጣኞችየሙያምርጫመሠረትዘላቂነትያለው /የዕድሜልክ/ ትምህርትይሰጣሉ					
	2. የቴ/ሙ/ት/ሥልጠናኮሌጆችብቃትንመሠረትያደረገስልጠናለመስጠትበአግባቡተደራጅተዋል?	**5**	**4**	**3**	**2**	**1**
12	የማሰልጠኛመገልገያዎች /ማሽኖች፣መሣሪያዎችናየሥራልብስ/					

	የመሳሰሉትበብቃትለእያንዳንዱሰልጣኝይደርሳል					
13	የማሰልጠኛውየአስተዳደርመዋቅርከስልጠናው ሥርዓትናደረጃጋርተመጣጣኝእናየተገና ዘበነው					
14	የኮሌጅአስተዳደርስርዓቱለአሰልጣኞችናለሰልጣኞችብቃትያለውድጋፍለማድረግችሎ ታአለው					
15	የማሰልጠኛውቤተሙከራዎችከሰልጣኞችሙያብቃትደረጃናእድገትጋርየተደራጁናየተ ማከሉናቸው					
16	የማሰልጠኛቤተሙከራዎችከሰልጣኞችቁጥርጋርተመጣጣኝናቸው					
17	አላቂየማሰልጠኛዕቃዎችከሰልጣኞችፍላጎትጋርተመጣጣኝናቸው					
18	በስልጠናኮሌጆችመናበብናአሳታፊአመራርአለ					
19	መደበኛየጥነገናመርሀግብርየማሽኖችመሣሪያዎችናየእጅመሣሪያዎችአለ					
	3. የትብብርስልጠናመርሀግብርአተገባበር	**5**	**4**	**3**	**2**	**1**
20	ለሰልጣኞችየተግባርስልጠናመደበኛመርሃግብርበኢንዱስትሪዎቸጉብኝትአለ					
21	ሥራቀጣሪዎችኢንዱስትሪባለቤቶችለትብብርስልጠናተባባሪዎችናቸው					
22	ሥራቀጣሪዎችኢንዱስትሪባለቤቶችለሰልጣኞችበትብብርስልጠናየሚሰጠውምዘናነጥ ብለምደባዋጋአለው					
23	ሥራቀጣሪዎችኢንዱስትሪባለቤቶችከቴ/ሙ/ት/ሥልጠናኮሌጆችጋርመደበኛስብሰባና ቁጥጥርስለበትብብርስልጠናትግበራያደርጋሉ					
24	ሥራቀጣሪዎች /የድርጅት/ ኢንዱስትሪባለቤቶችሰልጣኞችንበስልጠናመስካቸውመሠረትበትብብርስልጠናጊዜይ መድቧቸዋል					
25	በሁሉምየስልጠናመስኮችለትብብርስልጠናሰልጣኞችበቂቀጣሪድርጅቶች/ኢንዱስትሪ ዎችአሉ					
26	የትብብርስልጠናአስተባባሪዎችበኮሌጆችይመደባሉ					
	4. ሰልጣኞችበታቀደውለሙያብቃትደረጃቸውየሚመጥንየሙያብቃትአላቸው	**5**	**4**	**3**	**2**	**1**
27	አብዛኞቹየቴ/ሙ/ት/ሥልጠናተመራቂዎችየሙያብቃትማረጋገጫምዘናበጥሩውጤትያ ልፉሉ					
28	አብዛኞቹየቴ/ሙ/ት/ሥልጠናሙያሰልጣኞችየተቋሙንምዘናበጥሩውጤትበአንድጊዜያ ልፉሉ					
29	ቀጣሪዎችስለተቀጣሪዎችየሙያብቃትለማሰልጠኛኮሌጆችየሚሰጡትግብረመልስአዎን ታዊነው					

Appendix II

Addis Ababa University
College of Education and Behavioral studies
Department of Curriculum and Instruction

Questionnaires to be filled by TVET Deans, trainers, Department heads and training coordinators

The purpose of the questionnaires is to gather relevant information for a study in assessing the implementation of competence based training program and its challenges in Addis Ababa city administration TVET colleges. The study is intended to identify the problems that exist in the implementation of the program and suggest possible intervention to improve the process. In this regard you are the right person to provide relevant information for the study in which your responses have a great contribution. You are kindly requested to respond to every item in the questionnaire. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

General directions:

iv. No need to write your name

v. Please put" ✓ " mark in the boxes provided corresponding to each alternatives.

vi. For the open ended item that should be filled by writing your opinion on the space provided.

Part one

1. Personal information

6. Name of the training college_____
7. Your field of specialization_____
8. Sex a) Male ☐ b) Female ☐
9. Age a) below 25 ☐ b)26-30 ☐ c)31-36 ☐ d) Above 36 ☐
10. Qualification a)"C" level ☐ b)"B" level ☐ c)"A" level ☐
11. Service year in TVET a) below 2 year ☐ b) 2-5 years ☐

c)6-10 years ☐ d)11-15years ☐ e)16-20 years ☐

12. Field Teaching/Training in your college_____

Part Two

Read each statement carefully and respond to each item by expressing your degree of agreement or disagreement by putting a " ✓ " mark in the agree-disagree column.

SA-Strongly agree (5) A-Agree (4)UD-undecided (3) SD-Strongly disagree (2) D-disagree (1)

No.	To what extent is TVET Training competence-based?	Degree of agreement				
		5	4	3	2	1
1	TVET curriculum was developed based on occupational standards developed from the labor market.					
2	Industry professionals have participated in determining the occupational standards of TVET curriculum.					
3	The TVET curriculum fully reflects the needs of the Industry.					
4	The competence profile of the TVET graduates is clearly expressed in the curriculum.					
5	The TVET curriculum was periodically revised to reflect the need in the labor market.					
6	In TVET curriculum, knowledge, skills and attitudes to be developed are clearly expressed.					
7	Performance-based assessment is considered as the core system of measuring trainees' achievements.					
8	TVET trainees usually go to industries to practice what they have learned in TVET colleges					
9	In the process of training, teacher-student feedback system is well established and practiced					
10	The training is conducted in such a way that individual competence development is ensured.					
11	The TVET institutions provide training based on trainees' occupational choices and lifelong learning					
	2. Are TVET colleges well organized to provide competence-based training?	**5**	**4**	**3**	**2**	**1**
12	Training facilities (machineries, tools, equipment, etc.) are sufficiently available for individual practice.					
13	The college administration structure is in line with competence-based training					

14	Administrative support for trainers and trainees is adequate enough to run the programs.					
15	Training workshops are well designed and located in line with developing trainees' competence.					
16	The number of training workshops is proportional to the number of trainees					
17	Consumable training materials are sufficiently available whenever trainers require them.					
18	There exists transparent and participatory management in TVET colleges					
19	Regular maintenance program for machines, equipment and tools is available.					
	3. To what extent is the cooperative training scheme implemented?	**5**	**4**	**3**	**2**	**1**
20	Three is a regular program for TVET trainees to visit industries for practical learning.					
21	Employers are cooperative to run the cooperative training.					
22	Employers' evaluation of trainees assigned for cooperative training is credible.					
23	Employers and TVET colleges have regular meetings to monitor the cooperative training practices.					
24	Employers assign trainees placed for cooperative training to work on their area of training.					
25	There are sufficient employing organizations (industries) in all training areas for cooperative training.					
26	Cooperative training coordinators are assigned by the TVET colleges.					
	4. Do trainees have acquired the planned occupational competence to the level required?	**5**	**4**	**3**	**2**	**1**
27	Many of the college's TVET graduates successfully pass the COC examination.					
28	Many of the college's TVET trainees successfully pass institutional assessment at once.					
29	Employers' feedback is positive on the competence level of the college's employed graduates.					

Part three

1. To what extent are the trainees motivated to the skill training?

   a) very high b) high c) medium d) low e) very low

2. Do you think there is proper and efficient resource utilization in the process of training?

   a) Yes, there is c) To some extent, yes c)No, there is no

3. If your answer for question 2 above is 'no proper and efficient resource utilization', what do you think are the reasons?

_____

_____

4. Does your college have a planned skill gap and upgrading training schedules for teachers?

   a) Yes, it has b) No, it doesn't have

5. What are the constraints/problems teachers encountered in implementing competence based training?

_____

_____

_____

_____

_____

6. What measures do you take /should be taken to overcome the above problems?

_____

_____

_____

_____

Thank you for your cooperation.

Appendix Ⅲ

Addis Ababa University

College of Education and Behavioral studies

Department of Curriculum and Instruction

An Interview to be respond by Addis Ababa TVET Bureau officials.

The purpose of the interview is to gather relevant information for the research design in assessing the implementation of competence based training program and its challenges in Addis Ababa city administration TVET colleges. It is blended to identify the problems that exist in the implementation of the program, solutions will be suggested. In this regard you are the right person to provide relevant information for the study therefore; your responses have a great contribution. You are kindly requested to respond to every item in the interview. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

General directions:

i. No need to write your name
ii. Please put" ✓ " mark in the boxes provided corresponding to each alternatives.
iii. For the open ended item that should be filled by writing your opinion on the space provided.

Part one

Personal and general information

1. Name of TVET Bureau_____
2. Your field of specialization_____
3. Sex a) Male ☐ b) Female ☐
4. Age a) below 25 ☐ b)26-30 ☐ c)31-36 ☐ d) Above 36 ☐

5. Qualification a) “B” level ☐ b) “A” level ☐ c) Others ☐
6. Service year in TVET Bureau a) below 2 years ☐ b) 2-5 years ☐ c)6-10 years ☐
   d) 11-15years ☐ e)16-20 years ☐

Part Two

An interview to respond by Addis Ababa TVET bureau officials.

1. What are the preconditions required in competence based training program from your organization side?

_____

_____

_____

_____

2. Have industries enough knowledge and skill to design appropriate occupational standard?

_____

_____

_____

_____

3. How do you evaluate contributions competence based training program is successful as expected?

_____

_____

_____

_____

4. How do you evaluate in assessing the top management in TVET colleges?

_____

_____

_____

_____

5. Is the procuring policy appropriate for government TVET colleges?

_____

_____

_____

_____

6. As a TVET expert how do you take a problem faced in competence based training program?

_____

_____

_____

Appendix Ⅳ

Addis Ababa University
College Education and studies

Department of Curriculum and Instruction

Questionnaires' to be filled by stake holders/cooperative training enterprises.

The purpose of the questionnaires is to gather relevant information for the research design in assessing the implementation of competence based training program and its challenges in Addis Ababa city administration TVET colleges. It is blended to identify the problems that exist in the implementation of the program, solutions will be suggested. In this regard you are the right person to provide relevant information for the study therefore; your responses have a great contribution. You are kindly requested to respond to every item in the questionnaires''. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

General directions:

vii. No need to write your name
viii. Please put" ✓ " mark in the boxes provided corresponding to each alternatives.
ix. For the open ended item that should be filled by writing your opinion on the space provided.

Part one

Personal and general information

1. Name of cooperative training enterprise _____
2. Your field of specialization_____
3. Sex a) Male ☐ b) Female ☐

4. Age a) below 25 ☐ b)26-30 ☐ c)31-36 ☐ d) Above 36 ☐
5. Qualification a) diploma ☐ b) first degree ☐ c) masters ☐ d) others ☐
6. Service year in TVET in the enterprise a) below 2 years ☐ b) 2-5 years ☐
   c)6-10 years ☐ d) 11-15years ☐ e)16-20 years ☐

Part Two

Stake holders awareness and involvement in competence based training.

Read each statement carefully and respond each item by expressing your degree of agreement or disagreement Put a " ✓ " in the corresponding columns.

An interview response by stake holders/cooperative training enterprises.

1. Did the Enterprises voluntarily accept the trainees in cooperative training?
2. Did the Enterprises have the awareness of competence based training?

3. Did they have the capacity of Knowledge and skill to design appropriate occupational standards?
4. What was their participation in TVET policy development and involvement in the board?
5. Did you think the trainees acquire the necessary skills?

6. What was the level of existence of information gap between colleges and stake holders?

7. What was the level of financial support for trainees from stake holders?

Appendix V

Addis Ababa University

College of Education and Behavioral studies

Department of Curriculum and Instruction

Interview for Addis Ababa city administration occupational competency assessment certification center (OCACC).

The purpose of the interview is to gather relevant information for the research design in assessing the implementation of competence based training program and its challenges in Addis Ababa city administration TVET colleges. It is blended to identify the problems that exist in the implementation of the program, solutions will be suggested. In this regard you are the right person to provide relevant information for the study therefore; your responses have a great contribution. You are kindly requested to respond to every item in the interview. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

General directions:

i. No need to write your name
ii. Please put" ✓ " mark in the boxes provided corresponding to each alternatives.
iii. For the open ended item that should be filled by writing your opinion on the space provided.

Part one

Personal and general information

1. Name of COC_____
2. Your filled of specialization_____
3. Sex a) Male ☐ b) Femal☐
4. Age a) below 25 ☐ b)26-3☐ c)3☐ d) Above 3☐

5. Qualification a) Diploma ☐ b) First degree ☐ c) Maste ☐ d) ☐ Others
6. Service year in COC a) below 2 years ☐ b) 2-5 yea ☐ c)6-10 years ☐ d) 11-15years ☐ e)16-20 years ☐

Part Two

Interview for Addis Ababa city administration occupational competency assessment certification center (COC).

Part Two

1. Is the organization fully organized with necessary materials and facilities? If not, how do you assess?

_____

_____

_____

2. Do the assessors have enough knowledge, skill to assess candidates according to the occupational standard?

_____

_____

_____

3. Do you have good communication with TVET colleges to achieve the National TVET strategy?

_____

_____

_____

4. According to your opinion trainees get enough orientation about national assessment and objective of the center of competency?

_____

_____

_____

5. Do you have any controlling systems? To what extent the systems are transparent ?_____

_____

_____

_

6. What is the contribution of the COC center to the achievement of competence based training?

_____

_____

_____

7. Do you assess trainees according to the scheduled timetable?_____

_____

_____

Appendix VI

Addis Ababa University

College of Education and Behavioral studies

Department of Curriculum and Instruction

An Interview Response from Addis Ababa city administration occupational competency assessment certification center (OCACC)

1. What are the preconditions required in competence based training program from your organization side?

Answer: prepare plan of action, provide supervision, and continuous support for TVET Institutions and colleges.

2. Have industries enough knowledge and skill to design appropriate occupational standard?

Answer: They have knowledge and skill on particular occupational standards related to their enterprise.

3. How do you evaluate contributions competence based training program is successful as expected?

Answer: from school assessment, OCACC assessment and cooperative training evaluation.

4. How do you evaluate in assessing the top management in TVET colleges?

Answer: Evaluation is based on their current achievement in implementing TVET training.

5. Is the procuring policy appropriate for government TVET colleges?

Answer: The purchasing schedule did not go in line properly with the training program.

6. As a TVET expert how do you take a problem faced in competence based training program?

Answer: First of all identify the problem, put in order and bring solutions.

Appendix VII

Addis Ababa University

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An Interview Response from Addis Ababa city administration occupational competency assessment certification center (OCACC1. Is the organization fully organized with necessary materials and facilities? If not, how do you assess?

Answer: No, because equipment's and materials were provided by TVET colleges and institutes. 2. Do the assessors have enough knowledge, skill to assess candidates according to the occupational standard?

Answer: Well, most assessors have enough knowledge and skill. In other words some assessors have short comings. 3. Do you have good communication with TVET colleges to achieve the National TVET strategy?

Answer: there was lack of collaboration with TVET Institutes and colleges.

4. According to your opinion trainees get enough orientation about national assessment and objective of the center of competency?

Answer: No, because of low transparency with colleges.

5. Do you have any controlling systems? To what extent the systems are transparent?

Answer: Controlling systems were not transparent due to unplanned schedule.

6. What is the contribution of the COC center to the achievement of competence based training?

Answer: the COC center conduct assessments form level one to level five.

7. Do you assess trainees according to the scheduled timetable?
Answer: In practical assessments sometimes there were materials shortage.

Appendix IX

Addis Ababa University

College of Education and Behavioral studies

Department of Curriculum and Instruction

Addis Ababa TVET Bureau nine months 2010 E.C Budget

No.	Department	Approved Budget	Nine Months plan	Nine months Implementation	Implemented
1	Supportive staff	18,287,100.00	13,153,789.27	6,134,683.22	46.60
2	Institutions training quality approvment core process	3,076,929.00	2,388,272.50	1,474,295.24	61.70
3	Outcome based core process	4,709,364.00	4,030,666.30	2,190,026.90	54.30
4	Research and Technology Transfer core process	4,591,482.00	3,323,856.26	1,692,666.72	50.90
5	Trainers and Training coordinators core process	2,497,765.00	2,717,669.27	1,116,883.69	41.10
6	Total	33,162,640.00	25,614,283.00	12,608,557.77	49.20

Appendix X

Addis Ababa University

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Distribution of Government TVET Institution Addis Ababa Sub cities 2010 E.C

No	Sub City	No.of Colleges	No.of Institution	Total
1	AddisKetema	2	2	4
2	Arada	1	1	2
3	Gulele	1	2	3
4	Kirkos	1	-	1
5	Yeka	2	4	6
6	Ledeta	2	1	3
7	Nefas silk Lafto	2	2	4
8	Bole	1	1	2
9	KolfeKeranyo	1	1	2
10	Akakaikalti	1	2	3
	Total	14	16	30

Source. Addis Ababa TVET Bureau

Appendix XI

Addis Ababa University

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Addis Ababa TVET Bureau Data Institutions capacity building Addis Ababa TVET Bureau Institutions and colleges year 2010 E.C

No	Ownership	Training Rank	Quantity	Total
1	Government	College	14	30
		Institutions	16	
2	Private	College	71	316
		Institutions	245	
3	NGO	College	5	25
		Institutions	20	
	Total	----------	371	371

Source Addis Ababa TVET Bureau

Appendix XII

Addis Ababa University

College of Education and Behavioral studies

Department of Curriculum and Instruction

Addis Ababa city TVET Trainers academic ranks

Year (in E.C)	Sex	No. of Trainees and Ranks			Total
		C Level	B Level	Masters	
2006	M	689	348	44	1,081
	F	167	200	8	375
2007	M	867	341	70	1,278
	F	175	173	24	372
2008	M	847	334	86	1,267
	F	201	167	36	404
2009	M	828	408	80	1,316
	F	223	176	29	428
2010	M	1,112	788	94	1,994
	F	356	379	35	770
Total		5,465	3,314	506	9,285

Appendix XIII

Addis Ababa University

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Department of Curriculum and Instruction

General Wingate polytechnic college Budget allocation

Recurrent and capital project Budget

S/NO	Budget Code	Description	Allocated Budget
1	6100	Humanitarian service	28,493,549.00
2	6200	Materials Service	13,676,404.00
3	6300	Fixed asset purchase	1,500,000.00
4	6300	Capital project/for construction	4,300,386.00
Total			47,970,339.00