

**ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF BUSINESS EDUCATION AND MANAGEMENT
OF VOCATIONAL EDUCATION**



**THE STATUS OF TRAINING IN INDUSTRIAL TECHNOL FIELDS
IN ENTOTO TVET COLLEGE**

**BY
ZEWDIE ASSEFA**

JUNE 2010

**THE STATUS OF TRAINING IN INDUSTRIAL TECHNOLOGY FIELDS
IN ENTOTO TVET COLLEGE**

BY

Zewdie Assefa

**A THESIS SUBMITTED TO DEPARTMENT OF BUSINESS AND MANAGEMNT OF
VOCATIONAL EDUCATION IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS
FOR M.A DEGREE IN MANAGEMENT OF VOCATIONAL EDUCATION**

June, 2010

Acknowledgements

First and for most I would like to thank my Lord Jesus Christ for His unreserved mercy that He bestowed on me by opening the opportunity to join the post graduate program ,and enable me to arrive at this point.

I am very much grateful to my advisor Dr. Woubaie Kassaye for his diligent proficiency and critical advice and comments from the beginning to the end of this study. I found his advice, constrictive comments, and the discussion I had with him, to be very significant to the successful completion of my study. Moreover, his continuous encouragement also helped me to taste the fruits of my academic effort.

I avail this opportunity to express my sincere thanks and appreciations to all my families especially my respected wife Thesitu Daniel, and my children for continuous encouragement during my study.

I am indebted to Ato Teferri Gebrat from Addis Ababa University Accounting depart for his support with different reference books

Furthermore, I would like to express my deepest thanks to Entoto TVET College Academic and Administrative staffs for their cooperation in providing the relevant documents. My special thanks also go to all of my research respondents specially trainers and trainees in Entoto TVET college. Finally, I would like to thank school of Graduate studies at AAU for financing my research study.

Abstract

The major purpose of this study was to investigate the problems and possible solution with regards to quality of training in Technological Department of Entoto TVET College. Training for high-quality skill requires sufficient financial resources, appropriate training equipment and tools, adequate supply of training materials, and practice by the learners. Other requirements include relevant textbooks, training manuals, and well-qualified instructors with industry-based experience in enterprises. Qualified managers and counseling departments a descriptive survey study was employed for the purpose of this study on the assumption that this method is relevant to describe both the currently existing situation and events of the past 66 trainees' and 21 trainers were selected by stratified and purposive random sampling techniques. Dean, financial head and TVET agency representative were included by using availability sampling technique. Questionnaires; interviews were used as data collection instruments. The collected data were analyzed and the result of the study indicates that, the training center are not equipped with some physical facilities, shortage of necessary materials resources, poor purchasing system, lack of maintenance skill, shortage of heavy duty machines .The skill gaps of the trainers and the administrative bodies are critical issue to the quality of training in industrial technology department which has to be given attestation by concerned bodies .Based on the findings of the study, conclusions were drawn and recommendations were made.

Table of content

Title	Page
Acknowledgements.....	i
Abstract	II
Table of content	III
List of tables	VI
Abbreviations and Acronym	VII
CHAPTER ONE	
1 INTRODUCTION.....	1
1.1. Background of the study.....	1
1.2 Statement of the problem	2
1.3 The objective of the study.....	2
1.3.1 General objectives	3
1.3.2 Specific objective	3
1.4 Significance of the study.....	3
1.5 Delimitation of the study	4
1.6 Limitation of the study.....	4
1.7 Organization of the study.....	5
1.8 Definition of terms.....	5
CHAPTER TWO	
2. REVIEW OF RELATED LITERATURE.....	7
2.1 Introduction	7
2.2 The conceptual frame work	8

2.3 Vocational education.....	9
2.4 The concept of quality	11
2.5 The purpose of qualifications	13
2.6 The scopes of qualities training in TVET	16
2.7 Guiding principles as good quality indicator.....	16
2.8 Educational materials, technologies, and facilities as factors for quality.....	17
2.9 Quality regarding TVET curricula	19
2.10 The role of qualified teachers in brining quality training	20
2.11 The role of quality management	21
2.12 The contributions of finance towards quality training	24
2.13 Stake holder's contribution towards the quality of TVET	25
2.14 The trainee's selection of training filed as quality indictors	26
2.15 Outcome-based approach and quality	27

CHAPTER THREE

3 RESERCH DESIGN AND METHODOLOGY	29
3.1 The Research Design.....	29
3.2 Source of data	29
3.3 Population and Sampling Techniques	29
3.4 Instruments of data gathering.....	30
3.5. Methods of Data Analyses	31
3.6 Procedures of data collection	32

CHAPTER FOUR

4 Presentation, Analysis, and Discussions of findings.....	33
4.1 Characteristic of respondents.....	34
4.2 Space requirement.....	34
4.3 Shop organization and its outlay.....	35

CHAPTER FIVE

5 Summery, conclusions and recommendations.....	61
5.1 Summary of major findings.....	61
5.2 Conclusions.....	63
5.3 Recommendations.....	64
Bibliography.....	66

APPENDICES

- Appendix A: Questionnaires prepared in Amharic and English [to trainees]
- Appendix B: Questionnaire prepared for trainers
- Appendix C: Interview Guides to academic Dean of Entoto TVET College
- Appendix D: Interview Guides to official in Addis Ababa TVET agency
- Appendix E: Interview Guides to financial head of Entoto TVET College
- Appendix F: Inventories of Machines shops, tools and numbers of trainees

List of Tables

	Page
Table 1: Personal information of both trainers and trainees	33
Table 2: Qualifications and number of service of years	36
Table 3: The suitability of physical location of the college	37
Table 4: The extent of financial resources and support.....	40
Table 5: The extent of counseling service... ..	42
Table 6: The extent of human resource.....	45
Table 7: Facilitating quality training by administrative bodies	47
Table 8: Extent of quality training	50
Table 9: The availability of training materials and its resources.....	51
Table 10: The extent of conducting training with in the college	54
Table 11: Available of instructional materials	57
Table 12: The extent of co-operative trainings	59

APPENDEX

Table 13: Functional and non functional Machinerries	
Table 14: Numbers and sections of machines department trainees	
Table 15: Auto machine shop in machine shop department	
Table 16: Numbers and sections of Auto department trainees	
Table 17: Wood work machines and equipments	
Table 18: Wood work department trainees	
Table 19: General metal fabrication section	
Table 20: Numbers and sections of machines department trainees	

ACRONYMS AND ABBREVIATIONS

BPR	Business process reengineering
CBT	Competency Based Training
Cum. Av	Cumulative Average
DN	Diameter Nominal –Value standard
DIN	Deutsches Institut für Normung
ECBP	Engineering capacity Building program
ESDP	Education Sector Development Program
GTZ	German Technical Corporation.
IEP	International Institute for Educational planning
ILO	International labor organization
ISO	International Standard organization
MoFED	Ministry of Finance and Economic Development
MSE	Micro and small Enterprise
NQF	National Qualifications Framework
NVTI	National Vocational Training Institute
SDPRP	Sustainable Development and poverty reduction program
TEVET	Technical Education, Vocational and Entrepreneurship Training
TVET	Technical and Vocational Education and Training
UNDP	United Nation Development program
UNESCO	United Nations Educational Science and Cultural Organization

CHAPTER ONE

I. INTRODUCTION

1.1. Background of the study

Entoto TVET College, the previous Tefri Mekonen School, was established in the year 1915 E.C. in Addis Ababa by Emperor H/Selassie the first. With an objective of conducting modern education. The school served for 85 years as a school and training center. The school was first constructed and built on 25 hectares of land with the total expenditure of Birr 300,000.00. It started an official class in 1917 Ethiopian calendar. Later, an expansion was made with Birr 130,000.00 and started class with total number of 80 students out of which 30 students were boarding and 50 students were non boarding. Currently the college trains 4178 trainees in 42 special fields.

In the year 1942 E.C. new buildings were constructed; technical training was introduced in the field of Business and Home Economics. In 1955 and 1956 served as comprehensive secondary school. In 1996, Technical and business fields were emphasized with an introduction of new policy and curriculum. Trainers were upgraded with courses to conduct different training. Entoto Technical and Vocational Training College were giving diploma courses of 10+3, 10+2 and 10+1 and later the college upgraded on a special training fields and introduces a training levels that is [the level one up to level four respectively]

Currently the College is under the Administration of Addis Ababa City TVET Agency and conducts the training with co-ordination of this TVET agency. The college provides all forms and levels of Vocational education, the study of technologies and related sciences, the acquisition of practical skills, know how. On top of this the College makes a relation with the five other TVET training colleges in Addis Ababa to have a common way of training and shares ideas on how to promote the quality of training.

1.2. Statement of the problem

The purpose of this study was to investigate the status of quality training in industrial technology department of Entoto TVET College

Many researchers had given different ideas on quality of education on primary, secondary schools and senior secondary schools but my research paper focuses on quality of training in terms of input, process and outcome of the collage. The coordination of these seems the major problem in Entoto TVET College.

According Hallak (1990) and Mosha(1998) the academic environment infrastructure instructional technologies and equipment and quality of management affects the quality that is the quality of input affects the quality of out puts. In this context the study attempts to answer the following basic questions.

- 1) Does the physical location of Entoto TVET College suitable to run technical training?
- 2) What does the adequacy of budget for training look like in the College?
- 3) How sufficient are machineries and tools for conducting practical training in the College?
- 4) What does the availability of educational materials look like in Entototo YVET College
- 5) What factors affecting the quality of training?

1.3 The objectives of the study

1.3.1 General objectives.

The general objective of this study is to investigate factors that affect the quality of training in Entoto TVET College.

1.3.2 Specific objective

The key issues that the proposed research required are to address the following: To identify how the inputs (trainers, trainees, supplies and teaching materials), the process and outcomes are used

1. To explore the adequacy and the qualification of the instructors and how they conduct the training
2. To investigate the factors that contribute to the improvement of quality training in the institute
3. To examine the perceptions of trainers, deans, trainees and the total management with regards to quality training.
4. To identify ways of raising funds for practical implementations of training
5. To identify if the training center has a linkage with labor market and industries to give additional training in the companies.

1.4. Significance of the study

The researcher believes that this study would have the following significance.

- It would create awareness among stakeholders (trainees, trainers, employers, parents and governments etc)
- It would enable policy makers at all levels to see what is actually going on in the TVET institutions in relation to their expectations; and awake them in making the necessary adjustments.
- It would help to acquire some practical hints to improve the quality of the training.
- It encourages others to undertake further research on related areas in-depth.

1.5. Delimitation of the study

The study was delimited to the issues of quality training in Entoto TVET College Addis Ababa.

The first reason for selecting this College is, because it has relatively more experience of conducting technical education.

The second reason for delimiting the study in public TVET institution is that the researcher of this paper has a profound experience in TVET operation and is well aware of the training conducted in the College .Thus, by identifying the potential causes and decline of quality training, it is possible to suggest and established quality training.

The third reason is to make the study more manageable the researcher has selected the Industrial technology department. Hence, the urge to bring compatibility with the time available the researcher used this single institution. Further more it was easy for me to gather reliable data from the respondents.

The fourth, public TVET institutes are bound with immense structural problems that could exacerbate the quality .So; the study helps to identify influential factors that could give rise to quality and under take remedies.

1.6. Limitation of the study

Though the study for quality of TVET training needs detail study at national level, it seems it is very difficult to an individual to perform such activities due to financial problems, time constraint, and large sample size. In other respects the respondents are tiresome in responding different researcher questioners from different researchers and lack of interest for they are not getting money as incentives to co-operate for reply.

Deans, teachers, and concerned officials in the TVET institute are busy with the BPR implementations; therefore they are not interested in giving the reply for the given questioners.

The absence of sufficient literature in the area of technical and vocational education and training in the libraries are one of the major short comings that the researcher encountered during the execution of the study. Besides getting the right people at the right time with fresh perspectives was another major challenge that was faced during data collection in the field.

Despite all the problems, the researcher managed to bring his study to completion.

1.7 Organization of the study

This study is organized in to five chapters. The first chapter deals with background of the study, statement of problems, objective of the study, significance of the study, delimitation of the study examination, and organization of the study. The second chapter presents the review of related literature and factors associated with quality of training. The third chapter deals with research methodology and design, and chapter four focus on presentations, analysis and interpretations of data .The last chapter deals with summary, conclusion and recommendations.

1.8 Definition of terms

Accreditation	Formal recognition to training providers to be authorize fit to act in a certain system [to be official TVET institution] Accredited usually involves the proof that defined quality criteria are met..
Attitude	Part of competence that describe the appropriate way of behaving at a work place in relation a certain occupation at a certain level.
Certificate	Document showing the award of a qualification.
Competence	Sum of the interrelated abilities position and application of knowledge, behavior patterns and skills, and ability combine these elements at any given time .The capacity to perform a certain task in

wage labor and self employment .Competence is the outcome of TVET.

Cooperative TVET	TVET provided by and in cooperation with more than one TVET provider .Often referring to TVET that is provided in cooperation between employer and a TVET institution.
Modular TVET	TVET programs that are broken down into individual units or modules. Modules are self- contained learning units which can be Ta ught and tested separately.
Technical – Education	refers to all types of engineering education but can also include Information Technology, Design, and Media & Communications.
Quality	fulfillment of requirements it can mean excellence, zero defects, uniform quality, satisfying customer needs or operational improvement. Quality is always bound to Satisfying customer needs.
Vocational Education	includes all trades training from mechanics to carpet makers to cooks. Also all handicrafts and other artisan courses like tailoring
Permeability	The possibility to move from one qualification to another, from one level to the next level, and most importantly ,from TVET in to general and higher education and vice versa.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 Introduction

This section reviews the related documents on quality of education, and trainings. It explains the major issues of quality and VET, and how quality of education comes into existence. Quality interventions mention of educational quality often generates a philosophical debate about the definition of quality. This debate has its value, but in pragmatic terms, quality in education is best reflected in learning achievements of students. A useful analytical approach often used to look at educational quality is to apply a system approach of input, process and outcome interacting to produce the quality outcome intended from the education program.

In the educational system, the major physical facilities inputs are students, teachers, curricula and learning materials. These inputs brought together in the right manner and the right combination via appropriate processes make teaching-learning happen. The outcome of this transaction is the learning achievement - knowledge, skills, behavior, and attitudes intended to be acquired by learners. In the context of fighting poverty as the national development imperative, the relevant quality question is how the poor perform in terms of learning achievement and how pertinent is that learning for human and economic development of the poor. Standard-based qualifications will be identified in vocational or occupational education. (ADB, Vocational Technical Training...”1995, p.110).They are specified in a way that skills to be assessed against a defined set of pre-determined national standards.

Educational materials and stakeholders have a greater contribution towards the quality of education. There is a generally accepted view that education is a means of promoting scientific and technological development. It is a process by which man transmits his experiences, new findings, and values accumulated over the years, in his struggle for survival and development through generations. Education enables individuals and society

for development; it is of a high priority in the overall development endeavor of the government. Hence, it requires an appropriate direction to set a new process in motion and change the alarming situation. For this, a comprehensive education and training policy is formulated. The policy encompasses overall and specific objectives, implementation strategies, including formal and non-formal education from kindergarten to technology, materials, environment, organization and management so as to strengthen the teaching-learning process, and the expansion of education.

The evolution of a decentralized, efficient, and professionally coordinated participatory system is indicated in respect of administration and management of the education system. It is also stated that the financing of education be just, efficient, and appropriate to promote equity and quality of education. Overall, the education and training policy envisage bringing-up citizens endowed with human outlook, countrywide responsibility and democratic values having developed the necessary productive, creative and appreciative capacity in order to participate fruitfully in development and the utilization of resources and the environment at large

2.2 The conceptual frame work

Few studies have been made concerning quality of education, however many observers and researchers in Addis Ababa university have commented the quality of general Education in elementary, junior and senior secondary schools, but quality of TVET training is not mentioned by researchers therefore, my research study focuses on how quality of training in Entoto TVET College is conducted and how to improve the quality of training.

Training for high-quality skills requires training funds, utility of workplace, institutional training in developing suitable skills, knowledge and attitudes are needed to conduct quality training (Herschback, 1997; ILO, 2002; Jean Searle, Irena Yashin – Shaw, & Dick Roebuck, 2003; and UNESCO, 1999). Mostly for qualitative training appropriate training school environments, equipments and tools, adequate supply of training

materials, to practice by the learners are very important. Other requirements include relevant textbooks, training manuals, and qualified instructors with reach experience in enterprises. The trainers' contribution and dedication in this respect is essential to make well developed and effective means of administrating quality management which will continuously monitor the relevance of its programs and will provide support and guidance to TVET institutions to achieve defined quality standards.

It is through the effective implementation of the curriculum that the overall training objectives are achieved. Therefore, conducting such study helps Entoto TVET College to know its training performance level, and to design training strategies that help to move in parallel with the world of work.

Though the government is increasing, the enrollment and tries to increase quality of education from time to time still some people complaining about the effectiveness of the programs in preparing the trainees with the right skills that the labor market requires. To this end they are also heard of criticizing the TVET institutions, both of the government and the private for providing poor quality training. In this regard the researcher believe enough research has not yet been conducted in this area, and therefore, the effectiveness of any TVET program should only be judged on the bases of appropriate critical researches conducted in relation to the various factors related to the issue of its implementation therefore it is my great intention that initiated me to conduct this study.

2.3. VOCATIONAL EDUCATION

Vocational Education is defined as an educational program which is directly related to the preparation of individual for paid or unpaid employment; or additional preparation for a career requiring other than baccalaureates or advanced degree (Smith, 1990; 272). It used to develop skills , attitudes, understanding work habits and appreciations needed workers to enter and make progress in employment on a useful and productive basis Vocational Education serves dual purposes .On one hand ,it aims at preparing an individuals for entry into crafts and trade not requiring a college degree for the entry

level position ;and on the other hand ,it serves as a means for the students' educational career advancement (Brooking ;1971).The vocational educational programs which are organized at the secondary level ,especially those organized in the institutions like the general polytechnic high schools are mainly used to orient students for future occupational careers(Smith,1990:273).

The continuous changing and growing needs of the modern economy, currently vocational education programs are rapidly expanding in scope and variety to include different new training areas such as: Health education, Information Technology, Marketing and Distribution and many others in the area of the service sector. In this regard different countries have identified various important skills that demand the organization of vocational training programs, depending on their economic socio-political and historical backgrounds. King (1994:6245), indicated that some attach their vocational educational programs with their business and industries. In Ethiopia, like many other developing countries, vocational training programs are organized both in the non formal and formal educational establishment (Paulos, 1998:384-385).

“Since education is considered the key to effective development strategies, technical and vocational education and training (TVET) must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all, and help achieve sustainable development” (Work, Citizenship and Sustainability, Bonn, 2004).

Every diversifying market forces have serious implications for education, not least for the TVET sector, which represents a Key contribution to the future direction, and sustainability of economic growth. As a result, we have the country developed many new educational programs including a range of vocational education training programs. Not least for these reasons, the Ministry of Education welcomes the joint efforts of stakeholders, parents, students, teachers, and the ministry of education and Capacity Building (**Education Sector Development Program**, Action Plan Ministry of Education September 1998, p, 1).

According to UNESCO and ILO, the term Technical and Vocational Education and Training (TVET) is described as a comprehensive term referring to those aspects of the educational system 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 occupants in various sectors of economic and social life

The primary concern in employee selection has been with finding those applicants who have the skills and abilities necessary to do the job ,traditionally person job fit is assessed by determining the demand of the job through the job analysis which identifies the essential job tasks that an incumbent performs ,and the request skill knowledge and abilities .

The functions involved in the running of a system of vocational qualifications are:

- Involving stakeholders
- Developing standards, units and qualifications
- Managing learning
- Assessment
- Quality assurance and control
- Data processing and certification
- National monitoring.

2.4 THE CONCEPT OF QUALITY

The term quality is defined as a multitude of concepts by different scholars in terms of its standard and functions. A general definition from DIN, EN, and ISO: Quality can be defined in many different ways. For instance, it can mean excellence, zero defects, uniform quality, satisfying customer needs or operational improvement. Instead of creating a pervasive and unequivocal definition of VET quality; it is more relevant to examine it as a relative and contextual concept. Quality is always bound to Satisfying customer needs. Defining quality is ultimately a common task for VET providers and their key customer and stakeholder groups.

Quality concerns the processes and the results achieved by an educational institution [Danish Ministry of Education, 1999]. In order to establish the basis for “good quality”, it is necessary to define what is valuable to attain, i.e., what does the institution strive for. Only in this way, is it possible to decide whether the institution is close to what has been formulated as “good quality” within an area. From such a point of departure, the crucial issue is to formulate objectives and consider methods to attain these objectives. That is why quality is all about deliberate change and development.

Quality in education is best reflected and analyzed in learning achievements of students. A useful analytical approach often used to look at educational quality is to apply a system approach of input, process, and outcome interacting to produce the quality outcome intended from the education programs. In the educational system. The major inputs are students, teachers, curricula and learning materials, and the physical facilities. These inputs brought together in coordination in the right manner and the right combination via appropriate processes make teaching -learning happen. The outcome of this transaction is the learning achievement-knowledge skills, behavior, and attitude intended to be acquired by learners. Therefore quality in VET is defined as a measure of the training received in meeting the knowledge and skills objectives, which is at the heart of effective vocational training. It is generally expressed in terms of the availability, sufficient, and quality inputs (teachers equipments, instructors, etc (TGE, 1994, 12).

The training institutions must be fully equipped with qualified instructors, adequate facilities, text books, and supplies for training. The budget for the training institutions must be well to conduct the training and other sources of income from internal source is also to be designed.

It is necessary to have a clear understanding of various meanings of quality. Quality in everyday conversation is mainly used as an absolute. The relative definition views quality not as an attribute of a product or service, but as something which is ascribed to it. Quality in this respect at TVET or schools and colleges should decide in providing a quality service. Quality in this respect can therefore, be defined as that which satisfied customers service. Grisay and Mahlik (1999:3-4).

In VET, quality is usually conceived in broadest terms, to encompass the emotional, social, and physical development requisite for the job placement. It is measured in part by the success that programs completers have in attaining employment. The new trend moreover, is to focus on organizational, school and instructional functions and process as well as on specific inputs, and teacher's behaviors functions and process. Functions and processes are relatively independent of a specific teaching style or of social, cultural, and local circumstances. (Fullan 1989, Verspoor 1989).

2.5 THE PURPOSE OF QUALIFICATIONS

Much learning does not lead to the achievement of formal qualifications. Such learning may take place in the workplace, in the community, and even at home, and it may be planned or unplanned. Qualifications require the learner to be assessed in some way; qualification can be achieved through both formal and informal learning. Some may be wholly or partly achieved through non-formal learning. Qualifications can add value to learning. Most qualifications in the kind of system being described here can be achieved through both formal and informal learning. Some may be wholly or partly achieved through non-formal learning. Qualifications can add value to learning in a number of ways, and in return to produce a product which is demanded by the consumers and give qualitative service to those who need

The qualifications of the trainees in TVET are necessary to satisfy the demand of the world of work. As input countries wealth is measured in its trained qualified manpower in the country. One of the measurements for developed country is its trained and qualified human power which uses resources wisely produces quality product and give qualitative services to its citizen.

The world of work needs trained and qualified workers to produce quality products to fit consumers demand. A country which has qualified trained man power will send to those

countries which demand the services of those qualified persons. Therefore, the country which conducts a qualified training program in its education policies will be benefited from these people. A country like India, Japan and the like export their trained manpower to different countries accompanying their products and get money for their economic development

A training fund must be established to qualify technical and education trainees, because the training is expensive and quality comes at a price. There is no substitute for adequate funding when it comes to delivering quality vocational support to qualified trainees. The cooperation of employers is necessary for the successful implementation of such a scheme.

The word by 'quality' refers to attributes bearing the capacity to satisfy wants, needs, and meeting certain standards (Jianrong Zhang, 2003). In education and training the capacity refers to effectiveness and efficiency in the process of learning. The learning should lead to satisfactory outcomes for learners, employers, and sponsors. The phrase 'education and training' is taken to mean vocational education and training, be the pre-employment courses or post-employment courses

Training for high-quality skills requires appropriate training equipment and tools, adequate supply of training materials, and practice by the learners. Other requirements include: relevant text books, training manuals, and qualified instructors with experience in enterprises. Well-qualified instructors with industry-based experience are hard to come by, since such categories of workers are also in high demand in the labor market. However, they could be suitably motivated to offer part-time instruction in technical and vocational schools.

Competency Based Training (CBT) can also enhance quality to the trainees. In regards to: Blewitt, John In: Adults learning, December 2001, p. 15-16

Competence is defined as a broad concept comprising a set of an aggregate of knowledge, skills, and attitudes. It is the ability to perform a prescribed professional task which are necessary to successfully compete for jobs in the labor market, to be a productive and adaptable entrepreneur, employee, and thus, to contribute to personal empowerment and economic and social development.

CBT is actually learning by doing and by coaching. It is necessary to incorporate the principles and methodology of CBT into the formal technical and vocational education system. However, since the development and implementation of competency-based qualifications (involving standards, levels, skills recognition and institutional arrangements) are very costly in terms of training infrastructure and staff capacity, piloting of the CBT approach in a few economic and employment growth areas is recommended, rather than a wholesale reform strategy. Students should be encouraged to build a portfolio of projects undertaken or items produced as evidence of proficiency and proof of ability to perform prescribed professional tasks.

As such, the national occupational standards define the outcome of all training and learning as expected in the labor market, and will form the benchmark of all quality management within the TVET system. Quality of TVET delivery will be measured through a process of verification of a learner's achieved competence. This is done through occupational testing, which is based on the occupational standards. In the outcome-based TVET system, the goal of TVET providers is to create the necessary skills, knowledge and attitudes of trainees, so that they become able to perform according to occupational standards, hence be certified. TVET providers have to develop curricula that are based on the national occupational standards and that are appropriate to facilitate the relevant learning process. Curricula will have to consider specific requirements of the target groups and specific local labor market requirements. Each TVET providers may find their own best curricular solutions to provide high quality TVET to their specific target group. The TVET system will ensure that all necessary support is giving to providers to develop appropriate curricula and to develop capacities for high quality TVET delivery. This may be facilitated through developing curriculum development

guides, model curricula, and the like to serve as orientation and assistance to TVET providers.

2.6 The Scopes of Quality training in TVET

- ❖ The inputs in TVET which helps to bring quality trainings
 - Guiding principles as quality indicator
 - Input like resources such as Educational material,
 - Technologies and facilities increase the quality of trainees & trainers.
 - Curricula development facilitates qualitative training.

- ❖ Processes:

The Core process of TVET is how qualitative training is conducted in the in the TVET schools[Colleges]

- ❖ Output/Outcome:

- The final results of training is to come up with qualitative workers through effective training

2.7 Guiding principles as good quality indicators.

The quality of the public services must be improved by setting standards and setting objectives, measuring performance against target, and taking remedy actions wherever necessary. The guiding principles that are considered the major drivers of a VET strategy for Ethiopia are access and equity, quality, proficiency, and relevance. The others are employability, entrepreneurship, efficiency, and sustainability. The strategy should also promote linkages and partnerships, responsible citizenship, conservation of resources and respect for the environment, and articulation pathways throughout the system. According to- Blanket cited in Moran & Rumble, 2004

That learning is for life; that we can renew our skills; that leaning gives us grater security in employment; but it also equips to be able to take on the scourge of unemployment; to be able to equip ourselves for competitiveness.

To respond to the changing occupational requirements and to accommodate the different circumstances and preconditions of the various target groups that the TVET system will allow for and encourage flexibility and dynamic development of the training offers.

2.8 Educational materials, technologies, and facilities as factors for quality

The availabilities of educational materials, technologies, and facilities are the determinant factors of quality of education in TVET institution. Scholars agree the role and function of education materials, technologies and facilities in enhancing the quality of education. In light of this, Hyneman and Jamison, asserted that the quality of education and the learning achievement depends on the availability of instructional materials Desta Berehanu (2005: p, 41) in Heyneman and Jamison, 1980:209; Ayalew 1995 .In Ethiopian TVET system, the expansion has not been accompanied by corresponding provision of up to date technical equipment and materials, and inadequacy of instructional equipment and materials is noted in many public institutions .Some institutions are supplemented by government funding with the income generating activity, and this helps institutions where the budget is insufficient for purchasing the equipment and materials required for practical work. Inadequate facilities, insufficient training and unqualified teachers, shortage of books and other teaching materials, all indicate the low quality of education provided.

A useful analytical approach often used to look at educational quality is to apply a system approach of input, process and outcome interacting to produce the quality outcome intended from the education program, in the educational system. The major inputs are students, teachers, curricula and learning materials, and the physical facilities. These inputs brought together in the right manner and the right combination via appropriate processes make teaching-learning happen. The outcome of this transaction is the learning achievement - knowledge, skills, behavior and attitudes in tended to be acquired by learners, and how pertinent is that learning for human and economic development (Education Watch 2000).

In many developing countries, including Ethiopia, education systems are mainly dependent on a single source of funding that is the government source. According to the education sector strategy, (1994:18) it is stated that: Cost-sharing concept of financing TVET which assumes a contribution from all beneficiaries, usually government, employers and trainees. Cost sharing may be pursued by various methods including training fees, training levies/taxes,

A quality assurance system which does approve centers and do check the quality of assessment judgments against the national standards may have enough safeguards to mean that vetting of learning material by an external agency adds little value. If such vetting does take place, the criteria applied would deal with issues such as:

- The match between the learning materials and the standards to which they are intended to lead
- The quality and clarity of the materials and their freedom from discriminatory wording
- The involvement of stakeholders in the development and refinement of the materials.

The quality of education will be improved by providing a textbook and an internet facility to each trainee in core subjects, in improving educational facilities, and improving teachers training in the class. To come-up with quality training and teaching the contributions of materials are the basic resources for TVET training. Therefore, the acquisitions of materials and supplies must be very important. To fulfill this, purchasing department has to give quick response to supply with the necessary teaching materials to conduct training on the given time period. Therefore Preparation of a bid document which specifies the goods or services required, notices given in the media specifying the availability of bid documents are announced. A tender committee must be formed and bids are opened in the presence of the bidders. The urgent formation of this committee can facilitate the purchase of the required training materials to be available for training.

2.9 Quality regarding TVET curricula

Curricula for quality TVET programs are developed on the bases of a careful analysis of the occupation in different employment areas by systematically studying what a successful worker does and needs to know in the practice of his / here job (Coe, 1997; Wine rich, 1958). While analyzing a particular occupation family of occupation to which a need has been identified, different social, economic, technological changes, and the effect they bring upon occupation should be considered. In order to adapt the curricula to those changes, a strong feedback mechanism between the curriculum developers and other people such as the former graduates, employer, and the public at large should be established. It is not enough to make an occupational analysis once; rather it must be constantly updated to adjust the curricula to the above changes, and the requirement of the labor market.

Besides, raising the degree of teacher's freedom of decision and choices (e.g. more flexibility of curricula in terms of prescribing teaching objectives and content in a rough format instead of detailed regulations are needed).

Providing flexible and reversible relations between learning and working for teachers by joining modular curricula for pre-service and in-service teacher training, is usually based on Standards.

The design of quality TVET curricula involves modularization that emphasizes the specification of particular knowledge and skills, and their application to the standards of performance required in the work place .King (1994:6250), retreated that the curricula developed by the specification of learning objectives in a modular structure makes learning easier in a TVET program. The modular training should be usually broad enough to cover as many occupations as possible in order to minimize the danger of training individuals for only few specific jobs, which might become obsolete through time and

technological advancements (Chung, 1994, Jallade, 1894). In addition to the preparation of individuals for specific defined occupation, the curricula should also target providing educational experience in various areas of knowledge, work habits communication skill, and attitude needed for living in an area of globalization. To this end, Larsen (1973; 74) wrote quality of vocational education results from a balanced curriculum of vocational and general education courses.

2.10 The role of qualified teachers in bringing quality training.

The role of qualified teachers in technical and vocational trainings is the major part for the contribution of qualification to the trainees. As input, a technical and vocational education trainers have to play diversified roles and responsibilities such as: a subject specialist, an experienced practitioner, an effective communicator, a curriculum and instructional material developer, a manager, a counsellor, an evaluator and a motivator for entrepreneurship (Haider 2004, pp. 2). Through a proper designed framework of Teachers Qualification and Professional Standards, TVET teachers (Che Kum 2005, p. 4) could achieve all these desired skills.

Internationally, a growing body of research confirms teacher's quality as one of the most school factors influencing student achievement (Darling-Hammond, 2002, 2003, Santiago, 2002). Based on reviews of studies of student achievement in the United States, Darling-Hammond, Loafers, & Snyder (2001) concluded that 'teachers' qualifications-based on measures of knowledge and expertise, education, and experience-account for a larger share of the variance in students' achievement than any other single factor, including poverty, race, and parent education (p.10). The training system must be flexible, demand-driven and respond to the needs of the trainee, the community, and the local industry.

The teachers must conduct the training of trainees for the preparation of acquisition of employable and entrepreneurial skills, because it is one of the major objectives of a credible vocational training system. Therefore, technical vocational educations and

higher institutions must train their youth according to the demand of the labor market to get employment and career opportunities after graduations (Arcelo.A (1987).

The trainers must organize specific peer learning activities to the trainees in the area with the aim of exchanging good practice, support the reform process in national system, life long learning-policy and to satisfy the demand of middle level skilled work force training must be provided in various skills at different levels, and make education a supportive tool for developing traditional technology, and for utilizing modern technology. (Education policy, 1904, p, 9).

For the above reasons, the government must facilitate training to qualify trainers to contribute to the qualification of trainees therefore, teachers gap of skills must be fulfilled at the first hand.

The training institutions must be fully equipped with qualified instructors, adequate facilities, text books and supplies for training. The work remuneration for qualified trainers must attract the qualified teachers so as to produce qualified trainees.

2.11 The role of quality management

Quality management is an organizational strategy and a method of management, which involves all employees and seeks to improve continuously the efficacy of an organization regarding customer satisfaction.

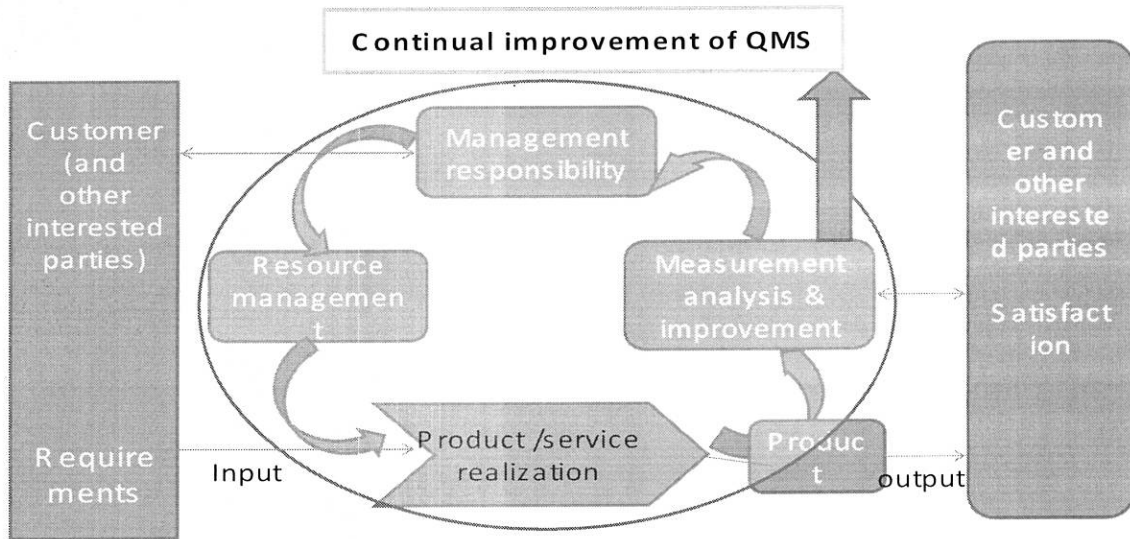
The delivery of quality TVET is also closely linked to the building of strong, professional management and leadership capacity to drive the entire system. Quality in this document should be defined as “fit for purpose conformance with requirements, and the degree to which a set of inherent characteristics fulfill requirements (ISO 9000:2000), rather than as measuring upto an ill-defined standard. (QUSAE, p, 2). A decentralized and diverse system as recommended in the strategic policy framework (school-based training, enterprise-based training, co-operative training, non-formal and informal training)

requires a strong regulatory framework for training curricula, standards, qualifications, and funding. Suitable qualifications framework and inspection system will provide the necessary quality assurance and control mechanism within a diverse system; therefore according to Helsinki (2008 page 7):

- Management has the responsibility to develop, implement and maintain policies, and procedures to achieve a quality education service to its customers which includes students, staff, as well as external clients.
- Management must support personnel with responsibility for quality assurance by providing adequate resources.
- Management must review its quality system at appropriate intervals.
- Quality management aims to facilitate continuous improvement and development of operations and results. Quality management is an integral part of a VET provider's operational system and is thus, linked to all functions and levels within the organization.

As users of these industrial products and service giver, we all value their price, quality, and delivery. We require products of the given quality to be delivered by or be available by a given time and to be of a price that reflects value for money. To produce quality product and service efficiently, trained producers are required and those efficient and effective workers must be trained in TVET institutions, so the deans and other administrative staffs must facilitate for the smooth running of qualitative training in TVET.

Conceptual model for ISO 9000:2000 QMS



Source ISO 9000:2000 QMS

According to the given conceptual model TVET managers, /Deans must be qualified and must have knowledge of good internal control to facilitate qualitative training.

A variety of groups, namely governments, sponsors, learners, employers, and practitioners want satisfactory results from technical vocational education and training intuitions. They want satisfying results for different reasons, most of which boil down to wealth generation.

To conduct qualitative training in TVET, the management must have to facilitate a good administration procedure, qualify the trainees, and train the trainers in a way that the world of work demands by establishing the quality policy.

2.12 The contribution of finance towards quality training

Inadequate facilities, insufficient training and quality of teachers, shortage of books and other teaching materials, all indicate the low quality of education provided. In many developing countries, like Ethiopia education systems are mainly dependent on a single source of funding that is the government source. According the MOE strategy (1994:18) regarding financing it states:-

The financing of educational system shall be improved by increasing the government budget allocation particularly for infrastructure, building and provision of educational materials. The focus will be on elementary and secondary education .Financing for higher education will be prioritized and essential areas.

Recently the Ministry of Education has introduced a cost sharing system for the TVET, preparatory, and higher education areas specially this amount of money contributed to the TVET are insignificant as far as the demand of the material and supplies are concerned.

Training should give value for money because quality comes with sufficient budget. To conduct quality training, it demands to acquire latest machines for training, materials, supplies, and to employ qualified teachers, in that finance plays the greatest role. Therefore the government and the training institutions must give emphasis towards generating income. Because we are now living in an interdependent world, where dynamic and rapidly advancing technology demands flexibility together with facility to operate in newly evolving knowledge communities. The success of such knowledge communities depends largely on the ability of qualified workers and qualifications come at the expense of sufficient finance allocated for training programs. Therefore, the government and the training institutions must identify:

- The relationship between inputs (mainly time and money) and graduates output.
- The expenditure per student per year
- Can the same type of training be delivered at cheaper cost?

The concern is about the internal efficiency of the training process with regard to terms of education, sufficient budget for TVET to conduct a qualitative training and competent work force that can create their own jobs and becomes productive.

Sufficient budgets or source of income must be used. Inadequate financing, poor management and ill-adapted organizational structures cannot produce qualitative trainee.

2.13 Stakeholders contribution towards the quality of TVET

The status of qualifications and organizations of TVET curricula always considered the need of all stake holders .Because the Stakeholders are the major employer in the labor market. Since the objectives of stakeholders are to maximize profit on the product they produce. Therefore they need to produce and satisfy the need and wants of their clientele .To get these products and services, they have to employ trainees who are qualified to fit the needs and wants of their customers. Therefore, the stakeholders have to participate and incorporate their needs in designing the curriculum, and in the development of school syllabus. The role of standards and assessments in linking schools and the world of work can become clear only when one has figured out how to go about linking the two, how to make the transition from one to other by the smoothing the education to meet the world of work. (Industrial development Strategy, 2003, page 73.)

We have to lay out the elements of a system that link schools and work. The work study program leads students to spend one half of their time taking courses in schools and the remaining in the work place, so it has to be integrated and the course in school relates directly to his experience on the job. The curricula must be developed in the bases of a careful analysis of the occupation in different employment areas by systematically studying what a successful work does and needs to know in the practice of his or her job (Coe, 1973; Wenrich, 1958).

It is difficult to be precise about the mechanism for involving stakeholders because it depends on the way an individual country encourages or obliges stakeholders to take a role in the vocational qualifications system. The purpose; however, is clear. Such

involvement is important to enable stakeholders to influence all aspects of the vocational qualifications system, at strategy, policy and operational level, and ensure that the qualifications are meeting their needs. This involvement should go beyond specific functions such as standard-setting or assessment. It can be achieved through stakeholder networks which bring in the full range of people and groups with a stake in the vocational qualifications system.

2.14 Trainees selections and admission

The youth must get sufficient career guidance and counseling at a school level and outside schools at kebele community entertainment program level at their youngest stage ,and inspire to be competent and good working force in the country and contributes to the countries productions and the training insinuations interplay towards the economic contributions. According to this principle, in any quality program, students who join at different occupational training area should be selected and placed in accordance with their interest, aptitude, and capabilities for the requirements of the particular participation (Austin, French & Hull, 1962, Venn, 1964; Wenrich, 1958) Individuals who join TVET programs in accordance with their interest, aptitude, and capabilities are more motivated to learn different skills than those who are with out, and hence ,for most effective learning of occupational skills ,an optimal level of motivation should be established and maintained (Ammons and Ammons,1958).

Appropriate vocational counseling helps students make wise choice for their future careers (Coe, 1973: Locan, 1994).

Seyoum and Tirsaw (1981:9) have also put as career guidance will enable all individuals to continuously and systematically explore from an instructional frame of reference, their values aptitudes and interest in relation to the wide array of educational and occupational opportunity, which may be able to visualize their life career.

Lack of interest to TVET training and lack of qualification of the youth to qualify for the kinds of the jobs is lack of available career guidance at earlier age of the youth. A life

long learning must be conducted for each citizen specifically to the productive force that it is the youth. Cummings, in Derbessa (2002:175) has further noted that education is the basis for developing the capability to cope up with rapidly evolving and changing society in the information technology age .Its universal availability and quality are central to the building of the human resource capacity of any society.

2.15 Outcome-based approach and quality

The goal of the TVET system , as formulated in its vision and objectives , is to create a competent, capable and adaptable workforce (both male and female) to be the backbone of economic and social development in Ethiopia, and to enable an increasing number of Ethiopians to find gainful employment and self-employment in the different economic sectors of the country. To this end, the Ethiopian TVET system, in line with many modern TVET systems worldwide, will be re-organized into an outcome-based system. This means that, identified competencies needed in the labor market will become the final benchmark of training and learning, and that all institutions, rules and regulations of the TVET system will be (re-)defined in a way that they support.

Education and training policies and practices imbued with notions of ‘demand-driven’, ‘employable skills’, ‘outcome based training’, ‘qualification frameworks’, ‘technical and vocational education commissions or councils’, and ‘training to industry standards’ (Jean Searle, et al, (2003); and Stefan Ziehm (eds.) 2000). Importantly, the adoptive actions are indications of dissatisfaction with the performance of education and training institutions.

Competence is defined as a broad concept comprising a set of skills, knowledge, attitudes, etc. which are necessary to successfully compete for jobs in the labor market, to be a productive and adaptable entrepreneur, employee or worker, and thus to contribute to personal empowerment and economic and social development.

Competencies will be described in national occupational standards to be developed by people that are knowledgeable about and experienced in the world of work. As such, the national occupational standards define the outcome of all training and learning as expected in the labor market, and will form the benchmark of all quality management within the TVET system.

Quality of TVET delivery will be measured through a process of verification of a Learner's achieved competence. This is done through occupational testing, which is based on the occupational standards. A candidate who has proven through testing (which may be one test or a series of tests) that she/he is competent will be awarded a National TVET Certificate, which is the official proof of a person's competence in a TVET relevant occupational area. Occupational testing, and hence certification, is open to everybody who has developed the required competence through any means of formal, non-formal or informal training and learning. As such, the outcome-based system is a major tool to accord equal importance to all kinds of formal, non-formal and informal TVET.

In the outcome-based TVET system, the goal of TVET providers is to create the necessary skills, knowledge and attitudes of trainees, so that they become able to perform according to occupational standards, hence, be certified. TVET providers have to develop curricula that are based on the national occupational standards and that are appropriate to facilitate the relevant learning process. Curricula will have to consider specific requirements of the target groups and specific local labor market requirements. As a consequence, the previous practice of prescribing binding national curricula will not be implemented any more once the outcome-based quality management system is fully established. Rather, each TVET provider - or each provider system - may find their own best curricular solutions to provide high quality TVET to their specific target group. However, considering the weak state of development of TVET institutions in Ethiopia, the TVET system will ensure that all necessary support is giving to providers to develop appropriate curricula and to develop capacities for high quality TVET delivery. This may be facilitated through developing curriculum development guides (formerly named OTS), model curricula and the like to serve as orientation.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1. The Research Design

A descriptive survey study was employed for the purpose of this study on the assumption that this method is relevant to describe both the currently existing situation and events of the past. (Best and Kahan 2003. According to Seyoum and Ayalew. (1989), a descriptive survey method is more effective to investigate the phenomena and assess the status in their specific natural setting. In addition, the method is also more appropriate to describe the trends that are progressing.

3.2. Source of data

Both primary and secondary sources of data were used for the research. Since the research were conducted at institution level on teachers, trainees, deans and department heads. Agency was taken as a source of the study. Those who are responsible in financial management of the institutions and those who take part in decision –making regarding budget and purchasing are included. Furthermore other relevant documents and reports will be referred. Books, journals and internet sources that are prepared by different scholars will be used as sources of information.

3.3. Population and Sampling Techniques

The target populations' sizes of the study were based on the technology department of Entoto TVET College; that the study is mainly based on Inputs, process, and the outcome. The school environments, trainers, administrative staffs and the educational materials, the existing equipments and tools and the school environment facilitate qualitative trainings.

The sampling techniques employed to select the sample respondents were purposive sampling for trainers and trainees. As to the research, large, sample size is more

representative of the universe, and according to Knight (1973:127), encourages to "use as large sample as possible "to take accurate representatives of the study.

The deans, the department heads, the financial officer of the college, and the TVET agency heads, were taken by purposive sampling. In the case of the trainers and trainees stratified random sampling was preferred. The procedure for selecting the sample size for the descriptive survey research tends to be small than quantitative research. Therefore I took 55% of 38 the population for the trainers that is 21. They were selected from each levels as a stratified sampling that is 7 from level one , 7 from level two ,7 from level 3, as a representatives for the cases. 10% of 654 trainees that is 66 were taken as a representative of the trainee that is 22 trainees from each level. The above sample size will be sufficient to represent the actual study.

3.4. Instruments for data gathering

Interviews, observations, questioners and documentations were considered to be useful for this study. That is each information collection method gives broader and better results and the method reveals different aspect of empirical reality. This multi-method approach of collecting data maximizes the quality of data collection; (Brewer and Hunter 1989), Teshome, (1998:46) pointed out that there are strengths and weakness to any single data collection strategy. But these are the ways of the representation method that we collect data for the study of qualitative training. Therefore the study is conducted by using interviews at individual levels for the deans, department heads, and TVET agency higher officials. Questioners were prepared to the trainees and trainers independently.

Before developing the questionnaires related ideas from the books and internets were thoroughly examined.

Questionnaires were developed based on the basic questions raised on the background of the trainees and trainers. A separate interview guide questions for the deans, financial officers of the college and to higher officials of TVET agency of Addis Ababa city Administration were prepared separately.

3.5. Methods of Data Analyses and Interpretations

Before the main questionnaires were distributed to the selected respondent a pilot test for the simplicity of language and consistency of the questionnaires had been made.

It gives a feedback to identify ambiguities and difficult questions, establishing whether the sampling frame and technique are effective, Identifying logistical problems which might occur. Using proposed methods where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated. In relation to this ten sample questionnaires prepared in Amharic were distributed to technological department trainees of Misrak TVET College trainees and I gave the same questioners to, my colleagues and to my advisor both criticized the orders and modification had been done on numbers 17,18,and 21 to make it simple and clear. Finally with these constrictive ideas; I rearranged and improved the questionnaires.

The data collecting instruments were prepared both in English and Amharic languages. Amharic language was used to make communication easier and get valuable responses from the trainees.

Totally four interview guide questionnaires were developed to the deans, financial head of the training institution, to the department heads, including the TVET agency higher officials. Sixty six questioners were distributed to trainees, and twenty one questionnaires to trainers. Therefore the data gathering instruments are a combination of questionnaires and interviews. The questionnaires that I have prepared contain both close-ended and open ended items.

Primary data gathered from respondents were tallied, tabulated and expressed in percentiles. And it will be appropriate to use both qualitative and quantitative data analysis strategy to look at the assumptions and guide the research to the final findings. Thus, such methods believed to make the study objectively clear and explicit.

The collected data were organized using tables to make easy to analyze and interpret the data collected. Based on systematically organized and arranged data, descriptive and

exploratory analysis and the percentage statistical tool were used in order to analyze this data.

3.6. Procedures of data collection

In any qualitative study, the primary data collection instrument is the researcher; yet it is also standard procedures to use multiple methods of data collection (for triangulation) to increase the trustworthiness of the data. For this reason, in-depth interviews, focus group discussion and research questioners were distributed to the college concerned bodies i.e. trainers, trainees, deans, administrative bodies and financial heads. Those concerned persons were asked to answer closed and open ended questions. The distributed and replied questionnaires were collected and analyzed.

CHAPTER 4

4. Presentation, Analysis, and Interpretation

This part deals with the presentation and analysis of the data obtained through questionnaires, interviews, observation as well as document analysis regarding trainees' number in each technology department sections and inventories of machines. Twenty one questionnaires for trainers and sixty six questionnaires to trainees were respectively distributed. They were selected randomly from each level by using stratified sampling. [10% of 654] 66 trainees and [55% of 38] 21 questionnaires to trainers were taken as my sample size. Among the distributed questionnaires 100% of both the trainers and trainees were filled and returned respectively. In addition the College Academic Dean, the department heads, the financial head and the TVET agencies representative were interviewed. The response of the trainers and trainees to each of the questions given were analyzed and interpreted. Most of the data gathered were organized using tables. Presentation of data is followed by discussion and interpretation in line with the major research outline. To substantiate close ended response analysis, open ended responses were used.

Table: 1

Personal information of both trainers and trainees

	Sex	Trainers		Trainees	
		Number	Percentage	Number	Percentage
1	Male	20	95.2	50	75.76
	Female	1	4.8	16	24.24
	Total	21	100	60	100
2	Age				
	Below 16	–	–	8	12.12
	17_20 Years	–	–	45	68.18
	21_30 Years	11	52.38	10	15.15
	31_35 Years	5	23.81	3	4.55
	36_40 Years	1	4.76	–	–
	Above 41	4	19.05	–	–
	Total	<u>21</u>	<u>100.00</u>	<u>66</u>	<u>100.00</u>

4.1 Characteristics of respondents

Description of the characteristics of the subjects in the study shows basic information about the sample involved in the study. From the data collected and tabulated the following significant characteristics of the respondents have been obtained. According to the personal details shown on table 4; 95.2% are male trainers and 4.8% are female trainers and concerning trainees 75.76% are male; and 24.24% are female. In both trainers and trainees it seems that there is a gender stereotype in the fields of technological training department.

According to David P. Monyhan [2004] students of technical fields need a physical strength, for practical training. Concerning the age of the trainers 52.4% are between 21-30 years of age, 23.8% are in between 31-35 of years, 4 % are in between 36-40; and 19.05% are above 41 years. From these it is possible to conclude that most of the trainers are energetic to conduct training.

Concerning the age of the trainees 12% are below the age of 16; 68.2% are in the age between 17-20 years; 15.2% are in between 21-30 years; and 4.5% are in the age between 31-35 Years old. These shows that most of the trainees are with in the age of 17-20 years old and are matured to carry out practical training.

4.2 Space requirements

According to David P. Monyhan, and F. Ashraf [1963; and 2004] a shop should never be more than twice its width. Some times this ratio can be extended to as much as three to one.

The obvious difficulty of organization and supervision is increased the relation to length of the shop with the number of machines and trainees. On the other hand great width of shops adds to the illumination problem of natural light which has more space to reach in wide shops.

The machine shop of Entoto TVET College consists of 272 Square meters. This shop consists of 36 machines .Out of which twenty are functional and sixteen machines are non functional. The shop is too compact to hold these much heavy duty machines. The next three pages show the current picture of machine shop. With these limited resources the college cannot deliver quality training, and trainees cannot be competent.

Two hundred thirty six trainees are practicing on these machines. Appendix-F Table 17 and 24 shows this truth. The ratios of trainees to the number of machines are 12:1 this indicates that there is shortage of machines for practical training and the trainees are not sufficiently practicing training.

A shop requires ample space per pupil according to the activities involved, in the shop 7.52 meters per student is required. 30.5 meters to the foundry work machine shop auto mechanics and other areas where large pieces of equipment and materials are used. David P. Monyhan, and F.Ashraf (Engine Builder, 1963 and 2004).

4.3 SHOP ORGANIZATION AND ITS OUT LAY

The shop organization of technological department in TVET for the kinds and extents of trainings was assessed in terms of:-

- The number of students to be accommodated
- The amount of time devoted to shop work and
- The amount of space needed for specific activities must be identified

By doing these either under utilization of the shop facilities or over crowding can be eliminated .Consequently, wastage or mediocre training will be minimized.



Table: 2**Qualifications and number of service of years of the trainers**

No	SERVICES OF YEARS	Diploma		BA/BED/BSC		MA/MSC		Total	
		F	%	F	%	F	%	F	%
A	1-5			11	52.4			11	52.4
B	6-10								
C	11-15			2	9.5			2	9.5
D	16-20								
E	Above 20	2	9.5	6	28.6			8	38.1
	Total	2	9.5	19	90.5			21	100

One of the major contributing factors for quality training is the quality of trainers. Quality of training comes from qualified trainers. With regards to Educational Background of trainers, 90.5% of them are degree holders and 9.5% are diploma holders.

Table-2 indicates the experiences and qualifications of trainers, regarding these 9.5% of the trainers have more than 20 years of experience but with fewer qualifications. But more than 52.4% of the trainers are with BA/BED/BSC qualification but served for 1-5 years of experience; 9.5% served from 11-15 years; 28.6% served for 20 years and above. From the above table we can understand that the college has more qualified trainers but with less experience and the diploma holders are with less qualifications but more experience. From this we can infer that the majority of the trainers do not conduct quality training.

Table 3**The suitability of physical location to conduct training [trainee's response]**

	Items	Very high		High		Medium		Low		Very low		Total	
		F	%	F	%	F	%	F	%	F	%	F	%
A	The suitability of physical location of the college	6	9.1	18	27.3	31	46.9	6	9.1	5	7.58	66	100
B	The availability and sufficiency of toilet room	-	-	3	4.5	20	30.3	20	30.3	23	34.8	66	100
C	The availability of shower rooms to the trainee	-	-	-	-	-	-	46	69.7	20	30.3	66	100
D	The availability of training shop and theory rooms	14	21.2	15	22.7	21	31.8	11	16.7	5	7.57	66	100
E	The sufficient light and air in the shop	20	30.3	18	27.3	18	27.3	7	10.6	3	4.5	66	100
F	The availability of canteen for the trainee	8	12.1	9	13.6	12	18.2	17	25.8	20	30.3	66	100
G	The operational Status of all machines in the shops	-	-	11	16.7	23	34.8	22	33.3	10	15.2	66	100

One of the major factors that might influence the teaching and learning process is the suitability of the physical location and class size of the school. Every educational activity needs a good working environment and one of these working environments is the availability of adequate physical facilities and more importantly adequate class rooms.

For question raised in relation to the suitability of physical location of the college [table 6]:- Most of the trainees with more than 83% with [Cum. Av. of 3.2] responded that the college Physical location is suitable to conduct technological training but 17% with [Cum. Av. of 0.26] of the trainees respondents replied it is not suitable to conduct quality training. From this we can represent that the college is suitable to conduct training.

Sanitation is one of the basic human needs imposed by nature. Sufficient Water closet must be constructed in the schools to give service. On the same table from the respondents' point of view more than 65% with [Cum. Av. of 2.04] responded that there is no sufficient number of toilets to serve the trainees in the College. But 35% with [Cum. Av. of 0.05] of the trainees responded that there is sufficient number of toilet to serve the trainees. From the observation made, the college has only two blocks of water

closets to serve 4178 regular trainees. This shows that the physical condition of the College is not suitable to conduct quality training.

TVET training is associated with hard work, energy consumption; a lot of dirt with grease and sweat. To clean body and feel comfort, shower rooms must be available in the campus. With regards to this more than 65% with [Cum. Av. of 1.67] of the respondents replied that there are no shower rooms to give service to trainees. This indicates that trainees with discomforted bodies will not go behind training attentively. This leads to poor quality of training.

It is an accepted principle that a workshop and a theory room must be separated to conduct quality training; and class size in general has an impact on the teaching-learning process. Regarding this a question was raised if Entoto TVET College has shops for practical and theoretical training. Concerning this more than 56% with [Cum. Av. of 3.3] of the trainees responded that work shops and theory rooms are separately used to conduct trainings but 24%.with [Cum. Av. of 0.41] responded as the two shops are not in the College From this we can draw that the college has sufficient training and theoretical shops to conduct practical training.

Shops should be equipped with sufficient windows in four directions to get natural light and air. These will help trainees and trainers to make practical training, get fresh air, minimize risks and conduct training in the workshops. For question raised in relation to this issue more than 84% with [Cum. Av. of 3.68] of the trainees responded in consent, that there is sufficient light and air in the shop. But less than 16% with [Cum. Av. of 0.26] responded as there are no sufficient windows. From this we can infer that training can smoothly be conducted in the shops.

But the direct representation from the observed point of view and the picture before editing shows the shop windows are narrow to allow light and the shop is dim to make practical training.

Technical Vocational training centers need heavy duty machines to make practical training, in relation to this a question was raised if all machines are functional. With regard to this, 83% with [Cum. Av. of 2.5] of trainees responded that all machines are not functional and below the standards; as medium, low, and very low. While 17% with [Cum. Av. of 0.17] of trainees responded that all machines are functional .from this we can infer that quality of training could not be conducted in the College.

As per the inventory taken on Appendix-F Tables 13, 14, 15 and 16 non functional machines represents 44.6% while functional machines are represented by 55.4% . This proves that some are not functioning. From this we can observe that each trainee cannot practice on a given period of time or training would be in shift. Therefore, all trainees cannot practice practical training at a time with these we can say there is no quality of training conducted in this department.

Table 4

**The extent of financial resources and support in ENTOTO TVET College
[Responded by the trainers]**

N o	Items	Very high		High		Medium		Low		Very low		Total		Cu m.
		F	%	F	%	F	%	F.	%	F	%	F	%	Av.
A	Availability of sufficient recurrent budget to acquire raw materials on time	1	4.8	2	9.5	7	33	10	48	1	4.8	21	100	2.62
B	Adequacy of capital budget to buy machines & Equipment					7	33	5	24	9	43	21	100	1.9
C	The sources of budgets are used to facilitate training with out interruption			2	9.5	7	33	9	43	3	14	21	100	2.4
D	Funds are created by trainees and trainers to strengthen the financial source of the college			1	4.8	3	14	9	43	8	38	21	100	1.9
E	The products of the trainees are sold to generate an income			1	4.8	5	24	10	48	5	24	21	100	2.1

Finance is a powerful tool to shape the social and economic base of the TVET system, the way a country chooses to finance its TVET system has a significant impact on quality, efficiency and relevance. This will influence the potential of TVET to foster their social and economical development and ultimately –to reduce poverty (gtz p, 5, 2006)

TVET training is very costly to conduct quality training. It needs sufficient source of money to have training materials, and machines. Institutions need to have sufficient budget from the government or they have to create their own income.

Questions based on the availability of recurrent budget to acquire educational materials were asked. Regarding these; more than 85% with [Cum. Av. of 2.62] of the trainers responded that recurrent budget is less to be used to acquire educational materials while 15% with [Cum. Av. of 0.62] responded as recurrent budget is more to acquire educational materials. This implies that there is shortage of training materials. With shortage of educational materials there is less practical training or no practical training is conducted and the required quality training will not be expected.

An interview was conducted with both the Academic Dean and Financial head of Entoto TVET College if there is sufficient budget to acquire teaching materials. Both responded that the budget is available but educational materials are not acquired on a given time due to the long process of purchasing procedures. From this we can infer that quality of training couldn't be conducted with shortage of training materials.

Regarding the availability of the capital budget; all most 100% of the trainers responded as medium, low or very low to indicate for the availability of capital budget to acquire machines and equipment. Hence without heavy duty machines quality of training can not be effective.

Interviews were made with the Academic Dean and Financial Head of the College; they responded as there is no capital budget allocated to buy machines. Moreover questions were asked as to how training could be conducted in such condition. Both responded that with the current available machines the training is conducted. In relation to this the same question was raised to the TVET Agency representative. She responded there is no need of capital budget; because currently government TVET Agency introduces a co-operative training for practical training in industries.” This seems impractical and contradicting with the objectives of industry owners because their motto is to maximize profit with efficient performance row materials.

Questions were raised on table 4-D, with relation to income generating activities in the college; Based on this question more than 95% with [Cum. Av. of 1.2] of the trainers

responded that very low efforts has been made for income generating activities and 5% [Cum. Av. of 0 .05] of the trainers responded as more efforts has been made to generate an additional income. Additional income strengthens the income of the college and with these sufficient educational materials can be purchased to conduct practical training.

Interviews were made with financial head of the college concerning the income generating activities, she replied the college generates an additional income from project works, cost sharing fees, and rent income, but these sources are too few to support the training program.

Table 5
The extent of counseling service [1st box trainees and 2nd box trainers]

N o.	Items	Very high		High		Medium		Low		Very low		Total		Cu m.
		F	%	F	%	F	%	F.	%	F	%	F	%	Av.
A	The pre hand information given to trainees about the training field	7	11	5	7.6	25	38	15	23	14	21	66	100	2.6
				2	9.5	6	29	10	48	3	14	21	100	2.3
B	The chance of giving trainees to select the training field in the college:	6	9.1	6	9.1	17	26	20	30	17	26	66	100	2.5
				2	9.5	2	9.5	4	19	13	62	21	100	1.7
C	Motivating the trainees to be competent and create their own jobs	5	7.6	8	12	26	39	14	21	13	20	66	100	2.0
		5	24	10	48	6	29					21	100	3.95
D	The inclinations of the trainees towards the training field	7	11	11	17	27	41	11	17	10	15	66	100	2.9
		1	4.8	1	4.8	8	38	10	48	1	4.8	21	100	2.57
E	The availability of job to the field that you are training	5	7.6	9	14	30	46	15	23	7	11	66	100	1.78

Decision-making activities should be guided by accurate information. When students make curricular choices, they should be based on full and accurate information .If they were not given full detail information about curricular choices, their placement may not reflect their true preference (Rosenbaum, 2002).Many of the trainees and their curricular

preferences in Etoto TVET College were done with out appropriate information. . Selections and placements of trainees were random. They do not get proper orientation or career counseling services before or after they have been enrolled in to the program. The College had no experience of conducting formal career counseling for its newly accepted trainees.

Counseling is one of the essential ingredients required for processing quality training. Trainees need continuous follow ups to be competent, innovative, and efficient in their training. In relation to these a question were asked if the trainees gets pre- hand information about technical and vocational training. Regarding this information, more than 81% [Cum. Av of 2.6] of the trainees responded as they get pre hand information about the courses they took and more than 72% with [Cum. Av. of 2.3].of the trainers responded very low in getting pre-hand information about the courses they took. These might have a negative impact on quality of training.

The chances of the trainees to select their training fields were asked. The selection and placement procedures of new trainees into vocational streams are on the bases of state-level examination in Grade 10 (MOE, 2008:39). The exam helps to determine whether students join the preparatory stream or pursue a career in TVET track. Therefore from the respondent's point of view; more than 81% with [Cum. Av of 2.5] of the trainees responded that they are neutral and some responded as they don't get the chance of selecting their desired fields and 90% with [Cum. Av of 1.7] of the trainers also agreed with the trainees idea and supplemented that trainees were not given a chance to select their own fields. From this we can infer that it is impossible to get quality education due to the improper placement of the trainee.

Motivation is the determinant factor for realization of quality education .In connection with this Goddard, et.al [1992:5] states that teachers and students motivation is the basic factors that can influence the quality of teaching and learning process and ensure positive outcome.

A question was raised if trainees were inspired to be competent on the fields they study. Based on this question 80.1% with [Cum. Av of 2] of the trainees responded as they were not motivated to be competent, but more than 71.4% with [Cum. Av of 3.95] of the trainers indicates that trainees were motivated to be competent.

Form this we can infer that both the trainees and trainers couldn't understand each other and the extent of inspiration has to be changed beyond words by making relations with those successful traders and former graduates on the field . With this the quality and interest of training comes to inspire the trainees.

For any type of training, an inclination towards the subject matter is very important. Inclination creates an interest and talent towards the quality of trainees. Concerning this questions more than 81% with [Cum. Av of 2.9] and, 90% with [Cum. Av of 2.57] of both the trainees and trainers responded that the trainees have inclination towards the training fields. This implies that trainees do have an interest on the course they took.

On table 8 question 'E' Questions were raised if jobs are available in the field they study? According to Wanna Leka (1992:61) occupational information about job related to training must exist in the employment market. And immediate opportunities and development of human capital for continuous growth and security of social integration in the work organization are needed.

TVET training institutions must study the demand of the labor market. Based on this more than 78% with [Cum. Av of 1.78] of the trainees responded that there is no job opportunities on the field they studying. This may imply that there is lack of awareness creation on the availability of a job; therefore counseling department, trainers and entrepreneur department have to assist the trainees to enter in to business and create their jobs aggressively, and increase their competency on the field they study.

Table 6**The qualification of trainers and the extent of facilitating quality training**

No.	Items	Respondent	Very high		High		Medium		Low		Very low		Total		Cum.
			F	%	F	%	F	%	F	%	F	%	F	%	Av.
A	The number of trainers	Trainee	15	23	21	32	20	30	6	9.1	4	6.1	66	100	3.56
		Trainer	-	-	2	9.5	6	29	10	15	3	14	21	100	2.33
B	Trainers skill and ability in practical training	Trainee	6	9.1	17	26	23	35	13	20	7	11	66	100	3.03
		Trainer	-	-	2	9.5	2	9.5	4	19	13	62	21	100	1.67
C	The effort of the trainers to assist trainees to be trained in industries	Trainee	10	15	7	11	12	18	17	26	20	30	66	100	2.54
		Trainer	1	4.8	1	4.8	8	38	10	48	1	4.8	21	100	2.57
D	The trainers effort to introduce new technologies to trainees	Trainer	3	4.5	3	4.5	22	33	22	33	16	24	66	100	2.32

The role of teachers in overall educational system improves the quality and standard of education. The efforts so far made to increase the number of qualified teachers and improve their professional capacity are commendable. Teachers should possess adequate pedagogical skills to conduct training. It is one of the most important parts in technical training institutions. With regard to this both trainers and trainees were asked to respond a question for the sufficient number of qualified trainers. Skilled trainers bring quality training in TVET. Concerning these more than 80% with [Cum. Av of 3.56] of trainees responded that the numbers of trainers are sufficient in numbers while, more than 90% with [Cum. Av of 2.33] of the trainers responded the opposite as the numbers of trainers are less in numbers.

In relation to this an interview was made with department heads on the numbers of trainers and their teaching loads. They responded that there are different new special fields introduced to different sections with levels and these newly created fields need many trainers, due to these trainers are few in numbers. If one trainer is loaded with different training fields, the expected quality of training will not come to its effect.

Teachers must be both knowledgeable in the content areas of the subject matter and skilled in a wide range of teaching approaches to cater for the diverse learning needs of every student. All these desired skills should be achieved by TVET teachers concerning this, more than 69% with [Cum. Av of 3.03] of trainees responded as trainers are highly skilful in training, but more than 80% with [Cum. Av of 1.67] of the trainers responded the opposite. From this we can say that trainees might not have noticed the skill gaps but trainers are reflecting their skilled gaps; this implies that with the skill gaps no quality of training is conducted

Teachers are to come to terms with every rising expectations and constantly changing societal requirements. Both the teaching profession and the employers of teachers are faced with unprecedented challenges. Teachers' quality is as one of the most school factors influencing student achievement. Teachers' qualifications is-based on measures of knowledge and expertise, education, and experience account for a larger share of the variance in students' achievement than any other single factor, including poverty, and race.

On the same table question 'C' trainees and trainers were asked if trainers were assisting trainees to be trained in industries. On the issues raised, more than 73% with [Cum. Av of 2.54] and 90% with [Cum. Av of 2.57] of both trainees and trainers respectively responded that trainers were assisting trainees to learn in industries. From this we can say that trainees will be competent to fit the job.

A question was raised if the trainers made an effort to introduce new technology? More than 90% [Cum. Av of 2.57] of the trainees responded that trainers make an effort to

introduce new technology. This implies that there is a skill gap that does not fit the trainees to the world of work. Therefore an effort has to be made to adopt a new technology to relate with real training practise. Acquisition of “industrial” skills is, as important as the basic vocational and technical skills.

Table 7

Facilitating quality training by administrative bodies

	Items	Respondent	Very high		High		Medium		Low		Very low		Total		Cum. Av
			F	%	F	%	F	%	F	%	F	%	F	%	
A	The extent of bringing new technologies to facilitate quality training	Trainee	3	4.5	3	4.5	17	25.8	26	39.4	17	25.8	66	100	2.2
		Trainer	-	-	2	9.5	3	14.3	8	38.1	8	38.1	21	100	1.95
B	The quick decisions made to protect for quality training	Trainee	7	10.6	5	7.6	20	30.3	22	33.3	12	18.2	66	100	2.4
		Trainer	-	-	-	-	5	23.8	11	52.4	5	23.8	21	100	2.0
C	The decision made to acquire educational materials on time	Trainee	8	12.1	8	12.1	16	24.2	22	33.3	12	18.3	66	100	2.67
		Trainer	-	-	2	9.5	4	19	14	66.7	1	4.8	21	100	2.33
D	The extent of encouraging trainees and trainers to participate on how to develop and improve quality training	Trainee	6	9.1	6	9.1	11	16.7	18	27.3	25	37.8	66	100	2.24
		Trainer	-	-	-	-	6	28.6	15	71.4	-	-	21	100	2.29
E	The extent of the administrators to coordinate stake holders to improve and Criticize the quality of trainings	Trainee	3	4.5	4	6.2	16	24.2	16	24.2	27	40.9	66	100	2.1
		Trainer	-	-	1	4.8	4	19	8	38.1	8	38.1	21	100	2.1

On table 7 questions were raised if the administrative bodies had brought new technologies to facilitate quality training. Concerning this Leadership plays a key role in provision of high-quality TVET services and continuous improvement of operations. Systematic development of operational activities of training; management needs to define a clear direction for the organization and create conditions for functioning in line with its

vision. Management regularly exploits factual information collected on the operating environment and any change to it in support of decision-making. Setting relevant objectives requires active co-operation with the world of business and work to the other education and training providers, as well as other parties and stakeholders involved in vocational education and training. In order to meet the changing skills and development needs of students and the world of work TVET providers need to identify skill needs comprehensively and base their operational strategy on continuous learning. Regarding the extent of introducing quality training with a new technology more than 90% with [Cum. Av. of 2.2] of trainers and 90% with [Cum. Av. of 1.95] trainees responded negatively. This implies that the administrative bodies didn't keep the curriculum relevant to the world of work.

Administrating vocational education and training for young people and adults confers extensive decision-making powers. On the same table a question was raised if administrative bodies make quick decisions to protect the quality of training. More than 80% with [Cum. Av. of 2.4] of trainees and 100% with [Cum. Av. of 2] of the trainers responded that the management bodies do not make quick decision to protect the quality of training. This implies that the administrative bodies are incompetent to bring quality training.

Question regarding the decision made by the administrative bodies to acquire educational materials on time was asked. More than 75% with [Cum. Av. of 2.67] of trainees responded as the administrative body make a quick decision to acquire educational material on time but 90% with [Cum. Av. of 2.33] of the trainers responded that the administrative bodies do not make a quick decision to buy Educational materials on time. From the actual observation made the administrative body cannot make a quick decision to buy materials on time. From this we infer that the college does not conduct quality training due to shortage of Educational materials, and the out put [the graduated trainees] will be incompetent to fit the labor market.

Questions were raised, as to what extent trainees and trainers were encouraged to participate in improving the quality of training? More than 81% with [Cum. Av. of 2.29] of the trainees and 100% with [Cum. Av. of 2.24] of the trainers responded that they were not encouraged to participate in improving the quality of training. If the two main components of the training institutions are not encouraged quality of training will not be practiced.

Quality training will be accomplished if stake holders participate in curriculum development. Curricula and Curriculum Development play an important role with regard to quality driven TVET-Delivery. Curricula help to facilitate the learning process in a way, that learners acquire the set of occupational competencies (skills, knowledge and attitude) required at the working place. Stakeholders must be partners to the TVET programs; they are the employers of qualified and competent workers. They can give good guidelines to TVET institutions, and what type of training is to be conducted, the sort of quality training they deserve. Therefore TVET providers and their management bodies must create relations for the better quality of TVET training. Concerning this more than 89% with [Cum. Av. of 2.1] of the trainees and 76% with [Cum. Av. of 2.1] of the trainers responded that the administrative bodies do not create relations with stake holders .With this isolation from labor market the trainee will not get the required quality training.

Table 8
Extent of quality training

Items		Respon dent	Strongly agree		Agree		Undecide d		Disagree		Strongly Disagree		Total	
			No	%	No	%	No	%	No	%	No	%	No	%
A	These days there is a critique that says quality of education is declining, do you agree?	Trainee	15	22.8	20	30.3	16	24.2	15	28.8	-	-	66	100
		Trainer	10	47.6	6	28.6	2	9.5	1	4.8	2	9.5	21	100

A question was raised if currently the quality of education [training] is declining or not. Concerning the decline of the quality of training many people and government officials indicate their consent as quality of education is declining, from the respondents point of view more than 53% of the trainees and 76% of the trainers responded that educational quality is declining. From this we can infer that there are no quality of training conducted in Entoto TVET College, and the actual combinations of inputs [trainers, trainees, educational materials, and machines] and process of the training in the college out comes are not proportional to qualify trainees. In relation to the issue of quality education in Ethiopia vision for the 21st century Institute of Educational research Addis Ababa. University indicates that:-the quality of TVET has declined greatly because of the deteriorating quality of education at the primary and a secondary level. The two levels have their own contributions for this issue.

On top of that trainees and trainers listed the following reasons for the cases of quality decline.

- 1st. Incompetence of the management bodies to acquire materials on time
- 2nd. Shortage of instructional materials and facilities,
- 3rd. Lack of experience of trainers
- 4th. Non functional heavy duty machines
- 5th. Lack of budget
- 6th. unavailability of up-to-date machines

Table 9

Availability of training materials and resources

No.	Items	Respondent	Very high		High		Medium		Low		Very low		Total		Cum.
			F	%	F	%	F	%	F	%	F	%	F	%	Av
A	Adequacy of machine shops for training	Trainee	10	15	12	18	22	33	14	21	8	12	66	100	3.03
		Trainee	-	-	-	-	6	29	10	48	5	24	21	100	2.05
B	The sufficiency of the size of the class room to accommodate trainees	Trainee	16	24	16	24	18	27	12	18	4	6.1	66	100	2.97
		Trainee	-	-	-	-	14	67	7	33	-	-	21	100	2.67
C	The existence of modern industrial machines in the college	Trainee	4	6.1	2	3	17	26	22	33	21	32	66	100	2.18
		Trainee	-	-	6	29	9	43	6	29	-	-	21	100	3
D	Adequacy of tools and equipments for each trainees	Trainee	6	9.1	6	9.1	13	20	23	35	18	27	66	100	2.38
		Trainee	-	-	-	-	8	38	10	48	3	9.5	21	100	2.24
E	Availability of maintenance of machines and spare parts	Trainee	4	6.1	8	12	13	20	25	38	16	24	66	100	2.38
		Trainee	-	-	-	-	7	33	8	38	6	29	21	100	2.05
F	Disposing of old machines and substitute with new ones	Trainee	2	3	4	6.1	14	21	22	33	24	36	66	100	2.06
		Trainee	-	-	-	-	8	38	9	43	4	19	21	100	2.19

Training for high-quality skills requires appropriate training equipment and tools, adequate supplies for training materials, and practice by the learners. Other requirements

include relevant text books, training manuals, and qualified instructors with experience in enterprises .Well qualified instructors with industry- based experience are hard to come by, since such categories of works are also in high demand in the labor market. However, they could be suitably motivated to offer par-time instruction in technical and vocational schools. Educational materials and facilities are necessary to conduct quality training. Without these training cannot be conducted and the expected quality will not come.

On Table 9 question was raised if modern machine shops are available in the college? More than 66% with [Cum. Av. of 3.03]of the trainees responded that modern machine shops are adequate in the college, while more than 71.4% with[Cum. Av. of 2.05]of the trainers responded that there is no modern machine shops. But from actual observation made in Entoto TVET College; it does not have modern machine shops. From these we conclude that trainees cannot get sufficient practical training with new technological machines.

From the same table question 'B' a question were raised if the size of the class room is sufficient or not, from the respondents point of view more than 51% with[Cum. Av. of 2.97]of the trainee and 100% with[Cum. Av. of 2.67] of the trainers responded as the size of the class room is sufficient to serve as a training shop for the trainees, According David P. Monyhan, 1978 a standard size of the class room for the shop is required to conduct quality training in the school.

On Table 9 a question were asked if modern industrial machines are available or not? Both trainees and trainers with more than 90% with [Cum. Av. of 2.18] and 71% with [Cum.Av.of 2.43.] responded as there are no modern industrial machines. From these we can infer that industrial technology department of Etoto TVET College does not have modern technological machines and with this quality of training will not come to its desired level.

One of the measuring tools for quality of training is the availability of adequate tools and equipments to each trainee. 81% with [Cum Av. of 2.38] of the trainees and 61% with

[Cum. Av. of 2.24] of the trainers express that tools and equipments are not adequate in Entoto TVET College. With shortages of machines, tools and equipments the required quality of training will not be practiced. From these we can infer that there is no quality of training conducted in the college.

To get ample practical training old machines must be substituted with new ones or renewed, serviced for training, and spare parts must be available to make machines ready for training. Concerning these more than 81% with [Cum. Av. of 2.38] of the trainees and 66% with [Cum. Av. of 2.24] of the trainers indicates that there is no maintenance department to give service to the machines in the shop. This signifies that there will be Shortage of training machines. With the shortage machines trainees do not make sufficient practice at a required standard therefore the expected quality training will not exist.

On Table 9 question were raised if old machines are disposed-off and substituted with new ones. From the respondent's point of view more than 61.9% with [Cum. Av. of 2.06] of the trainees and 69.9% with [Cum. Av. of 2.19] of the trainer's shows that old and out dated machines are not removed. This indicates that old machines which are to be removed are still in the place they were and are taking the place of the new machines and this indicates that the shop served as store room, and the trainee can not get quality training for the shop does not have enough space for training.

Table 10

The extent of conducting training with in the college

No	Items	Respondent	Very high		High		Medium		Low		Very low		Total		Cum
			F	%	F	%	F	%	F	%	F	%	F	%	Av
A	Trainers cover the course in the allotted time	Trainee	15	23	22	33	14	21	8	12	7	11	66	100	3.45
		Trainer	4	19	7	33	7	33	2	9.5	1	4.8	21	100	3.7
B	Emphasis on 70% practical and 30% theoretical training	Trainee	14	21	18	27	19	29	10	15	5	7.6	66	100	3.39
		Trainer	1	4.8	6	29	8	38	6	29	-	-	22	100	2.71
C	The result of the practical and knowledge exam will be disclosed immediately	Trainee	9	14	9	14	15	23	20	30	13	20	66	100	2.71
		Trainer	8	38	12	57	1	4.8	-	-	-	-	19	100	3.39
D	Continuous Assessments evaluates exactly the training objective	Trainee	14	21	18	27	20	30	8	12	6	9.1	66	100	4.05
		Trainer	3	14	16	76	2	9.5	-	-	-	-	21	100	2.95
E	The extent of transparency of trainers and the freedom of trainees to ask questions	Trainee	14	21	9	14	15	23	16	24	12	18	66	100	3.67
		Trainer	8	38	3	14	5	24	5	24	-	-	21	100	2.67

Every training program is Measurable in terms of allotted time for each Unit of competencies, duties and jobs for practical and theoretical training. As can be seen in the above table attempts were made to examine whether the proper allotted time was used in training program. Concerning this more than 77.2% with [Cum. Av. of 3.45] and 85% with [Cum. Av. of 3.7] of both the trainees and trainers consented that the proper time is used as per the program, but from the actual observation made, there was shortage of educational material, electric power and staff meetings on working days that due to these reasons the allotted times were not used for trainings therefore the quality training highly affected.

The current TVET program implementation strategy requires teachers to deliver practice-laden instructions in the subject they teach. Based on these principle skills come through practice. However, as observed in the college, the TVET curricula are not implemented as they have been designed in the implementation strategy, because mostly the trainers pass their lessons using lecture method, where the trainees mostly become passive to their teachers theory-laden instructions .Regarding the 70 % practical, and 30 % theoretical training policy were asked if it is implemented. Concerning this question; more than 77% with [Cum. Av. of 3.39] of the trainees and 71% with [Cum. Av. of 2.71] of the trainers responded as 70% practical and 30% theory were practically exercised in the college ,but from Interviews made with the department heads they Responded that due to shortage of raw materials , lack of electric power Concerning the existence of such discrepancies between the planned strategy and the actual implementation on the ground are different, and the practical training will be insufficient and there will not exist quality training.

A question was raised if exam results had been disclosed after practical and knowledge exam had been conducted? Exam is conducted for betterment of the trainees and creates awareness to correct their errors immediately and to up-date trainees with the skill works. Concerning the disclosing of the result both trainees and trainers with more than 72% with [Cum. Av. of 2.71] of the trainees and 95 % with [Cum. of 3.39] of the trainers responded that the exam result is disclosed immediately. From these we infer that the expected quality of training will come if errors are corrected on time.

A question was asked if Continuous Assessments evaluates exactly the training objective: the objectives of “continuous assessments on the teaching and learning process, including formative assessment, it should be undertaken with the participation of teachers, supervisors, learners and representatives from the occupational fields concerned to ensure that the program is effective and that the knowledge and skills imparted meet the needs of the workplace, and include recent developments in the field of study. Based on this, more than 78% with [Cum.Av.4.05] of the trainees and 90% with [Cum.Av.2.95] of the trainers replied that a continuous assessment exactly evaluates the training objectives. Therefore this indicates that there exists quality of training in the college.

Good quality of training encourages trainees interaction in teaching and learning , trainers must be transparent and trainees must be free to ask questions, it must be student centered .with regards to the extent of transparency of the trainers, and their freedom of trainees : More than 65% with [Cum .Av. 2.95] and 76% with [Cum. Av. of 3.65] of trainees and trainers responded as they are transparent and encouraging trainees. From this we infers that the target groups are encouraged to make an interaction these leads to attract trainees and learn interestedly and it has a good impact on quality of training .

Table 11
Availability of instructional materials as responded by trainees

N O	Items	Very high		High		Medium		Low		Very Low		Total		Cu m. Av
		F	%	F	%	F	%	F	%	F	%	F	%	
1	Library with modern Reference books	3	4.5	10	15.2	10	15.2	20	30.3	23	34.8	66	100	2.2
2	Sufficient text book to each trainees	5	7.5	10	15	10	15.2	12	18.2	29	43.9	66	100	2.2
3	The numbers of Current journals in the library	4	6.1	8	12.1	14	21.1	14	21.1	26	39.4	66	100	2.1
4	The internet access For the trainees	3	4.5	4	6.1	8	12.1	13	19.7	38	57.6	66	100	1.8
5	The accesses of overhead projectors, laptops, and LCDs to promote quality training	6	9.1	6	9.1	10	18.2	15	22.7	29	43.9	66	100	2.8

The availability of educational materials; reference books, internets and soft copies on the subject matters are very important to bring qualitative training awareness of the new findings and innovation on the same technology areas concerning theses; a question had been raised if the library is equipped with modern reference books; for this issues more than 65% with [Cum. Av. 2.2] of the trainees responded as the library have less reference books.

This implies that quality of training will be affected and the trainee will not be innovative.

On the same Table question 2 the availability of sufficient numbers of text books to trainees were asked. More than 69% with [Cum. AV. 2.2] of the trainees reflected that there is no text book on the major areas to reach the trainees. These implies that there are

no text books to guide trainees. With out text books quality of training cannot be expected.

Journals with new findings must be available in the library. Concerning this, more than 81% with [Cum. AV. 2.19] of the trainees responded as that current Journals with new findings and innovations are not available in the library. This implies that there is no new findings and innovation introduced in the college.

One of the most important knowledge center of education is an internet program which is a source of information for training; a question were raised, if the trainees have the access of this program; more than 89% with [Cum. AV. 1.8] of the trainees responded that there is no internet access. Concerning this an interview was made with the department heads. They replied that there is no access of internet to trainee's .This implies that there is no information and new findings about the quality training.

The availability of overhead projectors; Laptops and LCDs are very important to facilitate training. More than 81% with [Cum. AV. 2.8] of the trainees responded as there is an access of these educational materials to facilitate quick training.

Table 12

Trainers' responses on the availability of cooperative training

No	Items	Respondent	Very high		High		Medium		low		Very low		Total		Cum..
			F	%	F	%	F	%	F	%	F	%	F	%	Av.
A	The effect of additional training in industries increases the efficiency of the trainees and the trainers	Trainer	15	71.4	6	28.6	-	-	-	-	-	-	21	100	4.7
B	The extent of the availabilities of co-operative training in different organization	Trainer	-	-	2	9.5	9	42.9	10	47.6	-	-	21	100	2.6
C	The co-operation of industrial sectors to give practical training	Trainee	3	4.55	11	16.7	15	22.7	27	40.9	10	15.2	66	100	2.55
		Trainer	-	-	3	14.3	8	38.1	10	47.6	-	-	21	100	2.67
D	The plan of the college to follow up the graduated trainees	Trainer	-	-	1	4.8	5	23.8	10	47.6	5	23.8	21	100	2.09

Currently TVET agency tries to introduce a change of program for practical training. Trainees will be trained in industries and service giving organizations with a system of co-operative training. It is one of the most important methods to minimize the cost of training materials, and helps practical training in the work areas. It is almost similar to that of dual education system of Germany, It is a system of training where trainees practice on the work areas, and theoretical learning is conducted in the institutions, to bring related training with labor market and solve unemployment problems.

Questions were raised “if additional training in industries increases the efficiency of the trainees and trainers?” For this question almost more than 90% with [Cu with 4.7] of the trainers responded their agreement that practical training is the perfect method for a trainee to fit the job and the environment

Regarding co-operative training to trainees, More than 90% with [Cum. AV. 2.6] of the trainers responded that the availability of cooperative training is medium. Therefore with limited numbers of organizations practical training couldn't be simple in industrial technology areas. These imply that there is quality of training with limited co-operative trainings

With regards to the cooperativeness of industries to the College of trainees; more than 78% with [Cum. AV. 2.55] of the trainees and 85% with [Cum. AV. 2.67] of trainers respondent indicates that there exist a cooperation's of industries with the College but limited that is medium. From these we can say that practical trainings are insufficient and the desired quality of training will not come to its objectives.

The main objectives of training institutions are to train trainees to be competent and fit the labor market. The method of teaching motivates the trainees to be competent. This competency will help trainees to be employed in the labor market, a good and extended relationship has to be created with local labor market, because it gives information what to train and what not to train. Therefore the college can facilitate training in relation with the requirements of the demand of the labor market.

A link in between the previous Graduate [trainees] and the college must be existed and the experience of them and model graduates must tell their experience to the new trainees From the trainers points of view more than 95% with [Cum. AV. 2.09] of the trainers respondents replied that there is no follow ups and no relation created with the college. Oral questions were made with some of graduated trainees if they have relation with the college. Ten of them responded as even they don't have communication with their classmates and in addition. They replied as we are running to work here and there to generate an income and learn to improve our educational stand; we don't have relations with the college.

Chapter five

5. Summary, Conclusion and Recommendations of the Research

This study is conducted with the intention of identifying the nature and cause of the problems of quality training in Entoto TVET College. This part of the paper sum up the research findings and to draw some implications from the whole activities

5.1 Summary of major findings

The main purpose of this study is to assess, investigate, and examine how the quality of trainings is conducted in Entoto TVET College. In order to achieve the purpose of this study, the following basic questions were raised.

1. Does the physical location of Entoto TVET College suitable to run technical training?
2. What does the adequacy of budget for training look like in the College?
3. How sufficient are machineries and tools for conducting practical training in the College?
4. What does the availability of educational materials look like in Entototo TVET College?
5. What factors affecting the quality of training?

The study was conducted on technological department of Entot TVET college on 66 trainees and 21 trainers; Interviews were made to academic and technology transfer Deans of the college, the financial head, department heads, former graduates and the TVET agency representative, in relation to the quality of training

5.1. Summary of major findings:

1. Entoto TVET College was assessed for the suitability of conducting technical training. Its respondents gave their consent as it is suitable to conduct technical training but there is a shortage of toilet, unavailability of canteen, and showers.
2. Finance has a significant impact on quality of training because all training materials and supplies could be available with the presence of sufficient source of money. Quality of TVET training is based on the financial strength of the institution which should come first. Concerning this powerful tool more than 52% of the trainers responded that there is less recurrent budget allocated to buy educational materials. And 100% of the trainers responded that there no capital budget allocated to buy heavy duty machines,
3. Trainers [teachers] are one of the major important inputs to the TVET training centers. It is their qualifications and rich experience in the industrial areas that affects the quality of training. Concerning this, Annual abstract of Educational statistics (MOE, 2008:45) indicates that more than 49.8% of TVET college teachers were below the desired level, Moreover on Table 2 it was indicated that, more than 90.5% of the trainers are qualified but with lack of rich experience and industrial knowledge
4. The college had no experience of conducting formal career counseling for its newly allocated students. They were not given full detail information about curricular choices. Their placement may not reflect their true preference. Selections of trainees were random, they do not get proper orientation or career counseling services before or after they have been enrolled in to the program.
5. Machine shops were not adequate to conduct practical training due to compact numbers of dead and functional machines; old and out dated machines were not

disposed off, and modern machines were not introduced to the trainees, these has a negative impact on quality of training.

6. Current journals, reference, text books and internet access were not available in the library.
7. The training course could not be fully covered with in the allotted time due to shortage of materials, scarcity of machineries, and insufficient time consumption. The policy of 70% practical training and 30% theoretical training is not implemented in the college.

5.2 Conclusions

Based on the major findings presented above, the major factors (constraints) that were militating against effective quality training are concluded as follows.

- Though the physical location of Entoto TEVT College is suitable to conduct technological training; there exists a problem of shower rooms and water closet which affects the quality of training.
- TVET training needs sufficient financial resources to conduct quality training Entoto TVET College has sufficient recurrent budge but no capital budget is allocated. Cost sharing and other sources of income are also very insignificant to conduct quality training.
- There exists a shortage of training machines, tools and equipments. Shops are not well equipped and material resources are not sufficient to run the program.
- Most of the trainers in Entotot TVET College have good qualifications but less experience and this negatively affects the quality of training.

- Entoto TVET College does not practice proper career guidance or counseling to trainees in giving pre hand information about the training fields, trainees do not get the chance of selecting their own training fields rather they are assigned by the MoE. Trainees are not encouraged to be competent. These have a greater impact on the quality of training.
- Regarding the degree of the unavailability and inappropriateness of the training facilities (libraries, shops, and classrooms) the teaching process (teaching method, assessments techniques) they largely affect the quality of training.

5.3 Recommendations

Based on the major findings of the study and the conclusions drawn, the following recommendations were forwarded.

1. Though the physical location of Entoto TEVT College is suitable to conduct technological training; the problem of shower rooms, water closet and canteen must be sufficiently constructed to give services to the trainees.
2. To strengthen practical training and bring qualitative outcome; trainees and staff members have to generate additional income. A key policy issue in this strategy is the need to empower TVET institutions to manufacture their own small training tools and equipment. This is possible and should be encouraged. Necessary training must be acquired with the budget allocated.
3. To ensure the high quality of technical and vocational education, priority should be given to the recruitment and initial preparation of adequate numbers of well-qualified trainers, administrators, guidance and counseling, and the provision of continuous professional upgrading throughout their career, and other facilities to enable them to function effectively.

4. Particular attention should be given to the material resources required for technical and vocational education. It is the essential input to run training activities. The effectiveness and efficiency of training program to a great extent depends on the amount and quality of training materials available, hence to attain the objectives of the training.
5. The college must expand rooms for training machines, dispose off old machines and replace them with new ones. Sufficient spare parts must be acquired for maintenance of machines by creating sufficient money sources.
6. Proper counseling has to be conducted in favor of the trainees to help them select their desired field and have an interest and become competent trainees.
7. The college administrative bodies must encourage participative form of administration and must have a good relation with industries and labor market to facilitate quality training , promote expressions of trainers' and trainees' views by creating opportunities to participate in planning and implementation of education and training and supporting their co-operation; these brings quality training.
8. The skills gap of trainers must be filled by giving upgrading courses, and improve the competitiveness of the trainers and by raising the skill levels.
9. Libraries must be fully equipped with internet access, reference books, Journals; and laptops, LCDs and projectors should be used to get knowledge and promote quality training, Departments must be facilitated with these educational materials.
10. TVET institutions are encouraged to cooperate with the self employment promotion network in their local areas, such as micro finance schemes, chambers, MSE offices, and to develop joint programs .TVET institutions' management boards are expected to facilitate this cooperation.

BIBLIOGRAPHY

- Addis Ababa City Administration, (2005) E.C. **Technical and Vocational Education Training (TVET) strategy.**
- ADB, Vocational Training for the Peoples Republic of Bangladesh, Utah University, Final report, September 25, 1995
- Arcelo,A. (1987) **Employment and Career opportunities after Graduation:** A Case Bonn. 2004. Extract from the declaration of the participants in the UNESCO meeting of TVET experts on Learning for ork, Citizenship and Sustainability study on **The Transition from College to Work** in the Philippines. Paris: Delacroix.
- Aschroft, Kate (2003) "Emerging Modules of Quality, Relevance and standards in Ethiopian 's Higher Education " **Ethiopian Journal of Higher Education.** volume 23(2)
- Blew it, John.2001 **Adults learning** Vol.13 (4)11, 11Bloom,
- Benjamin, S (May, 1968), **Learning for Mastery** "Evaluation comment, 1(2)1-3
- Brooking, W.J. (1971).**Technical Education** .In Deighton, L.C. (eds.),
- Chapman, J, D, et al. (1996). Introduction and Overview. In **The Reconstruction of Education. Quality, equality and control** J. Chapman, D., et al., Editors. Cass ell: London. p. 1-17.
- Chambers, R. (1997). Who's Reality Counts? Putting the Last First. London: Intermediate Technology Publications.
- Coe. B., (1973, P.77-80) what is Quality in Vocational Education? In H.C.Kazanas,J.N. Harris,C.D Lwmons et.al.(eds.).**The Philosophy And Foundations of Vocational Education** .New York: Mss Information Corporation
- David P.Monyhan [2004] Machine shop organization, and the physical strength of the trainees in technical school P,56
- Durbessa Duferra, (1997) "**Education and Labor market crisis in Ethiopia**"I.E.R Flambé 41(1)
- ETF, (1998, 1999, 2000). **Key Indicators on vocational education and training** in central and Eastern Europe, Turin.
- Federal Democratic Republic Government of Ethiopia Addis Ababa, (1994) **Education and training policy**
- Federal Democratic Republic of Ethiopia. (ESDP III, 2005/2006) **Education sector Development Program III.**
- Federal Democratic Republic of Ethiopia , (2003). **Industrial Development Strategy,**

- Finch CR Greg son A. Faulkner SL, (1991) **Leadership Behaviors of Successful Vocational Educators Administrators** .The Journal of Vocational Education Research 16(1):1-35
- Fullan ,MG, (1989) **implementing Educational change**: What we know World bank Washington DC)
- Fuller, B. [1972].**Raising School Quality in Developing Countries**: What Investments Boost Learning .World Bank No. EDT 7.
- Gerds, P., (2004). **Strategy for Implementing a Standard-based TVET- Teacher-Training program in Ethiopia**. Ethio-German Technical and Vocational Education and Training Program
- Gerhard Kohn, Joseph Rutzel, Hans-Gunter Schroeder and Stefan Ziehm (eds.) (GTZ , 2000). **Compatibility of Vocational Qualifications Systems, Strategies for a_Future Demand** – oriented Development Co-operation in Vocational Education and Training,
- Haider, S. Z., (2004). **Framework for a Degree Level Course for Vocational Teachers Pre-service Training Program**. Paper presented at an International Conference on Innovation and Excellence in TVET Teacher/Trainer Education;
- Herschback, Dennis R., (1997) **Improving Training Quality in Developing Countries, towards Greater Instructional Efficiency**. In Adrian Ziderman and John Middleton, (Eds.). In International Journal of Manpower, 18(1.2).
- Hulya, Kosar A (2007). "TVET and Publliic Polliicy: Reviisiitiing TVET's Rolle in Four Polliicy Domaiins iin sub-Saharan Afriica". ADEA
- King .K., (1994).**Technical and Vocational Education and Training** .In Husen,T. and postlethwaite'T.N.(eds), International Encyclopedia of Education , 2nd edition. Oxford: Pergamon Press
- Ministry of Education 1998; Federal Democratic Republic of Ethiopia, Education Sector Development Program Action Plan -en, him/.
- MoE. (1998) Educational Sector Development program Addis Ababa
- MoE. (1998) Educational Sector Implementation on Manual Addis Ababa
- MoE .(2002) Educational Sector Development program Addis Ababa

Moran, L. & Rumble, G. (2004). **Vocational Education and Training** through Open and Distance, learning (vol.5) London: Roudgledfalmer National Technical and Vocational Education and Training TVET strategy,

Standards Authority of Ethiopia A.A 2004 Quality, standard, and ISO 9001:2000, **Quality management's system** development and implementation..

Teshome Mulat, (1981) **“Educational unemployment in Africa: Directions_ of research**
“The Ethiopian Journal of Education: 9(1)

Quality, Standard, and Standards Authority of Ethiopia A.A, 2004, **Quality Management's System Development and Implementation** on ISO 9001:2000

UNESCO. And ILO (2002). Technical and **Vocational Education and Training for the Twenty first centuries**, UNESCO and ILO

UNESCO, (1997). **Training of Teachers/Trainers in Technical and Vocational Education**. Paris (UNEVOC).

Wanna Leka”1996 policies and practice and problems of vocational Technical Education and Training in Ethiopia, in Habtamu Wondimu Research **Paper on the situation of children and Adolescents in Ethiopia**” AAU Printing press.

World Bank, (1991): **“Vocational and technical education and training”** World Bank Policy paper. Washington, DC.

Yliopistopaino Helsinki, (2008). **The National Quality Management system**, in Vocational Education and training.

Appendix A
 በአዲስ አበባ ዩንቨርሲቲ
 የቢዝነስ ኤዲዩኬሽን የቮኪሽናል ማኅጀምነት
 የድህረ ምረቃ ፕሮግራም

በእንጦጦ ቴክ/ሙያ ኮሌጅ በኢንዱስትሪያል ቴክኖሎጂ የስልጠና ዘርፍ የትምህርትና ስልጠና ጥራትን በተመለከተ በሰልጣኞች የሚሞላ መጠይቅ።

የዚህ መጠይቅ ዋና አላማ ከላይ በተጠቀሰው ዲፓርትመንት ያለውን የሥልጠና አሰጣጥ ጥረት፣ የማሰልጠኛ ሾፖች አደረጃጀት፣ የሥልጠና ግብአቶችና አቅርቦት ብቃትን ለመፈተሽ እና ለችግሮችም መፍትሄ ለመጠቀም ጠንካራ አሰራሮችን ለማበረታታት ነው። በመሆኑም በእርሶ በኩል የሚሰጠው አስተያየት ለጥናቱ ውጤታማነት ከፍተኛ አስተዋጾ ስለሚኖረው መጠይቁን በጥንቃቄ ለመሙላት እንዲተባበሩን እጠይቃለሁ።

ስለትብብርዎ አስቀድሚኑ አመሰግናለሁ።

- ማሳሰቢያ 1. ስሞዎን መጻፍ አያስፈልግም
 2. ለምርጫ ጥያቄዎች በባዶ ሳጥን ውስጥ 'x' ይሙሉ። እንዲሁም በባዶ ቦታው መልስ ነው ብለው የሚያምኑትን ይጻፉ

ክፍል 1 የግል ሁኔታ

1. ጾታ ሀ. ወንድ ለ. ሴት
 2. እድሜ ሀ. 16 አመት በታች ለ. ከ 17-20 ዓመት
 ሐ. ከ 21-30 ዓመት መ. ከ31ዓመት በላይ
 3. አሁን የሚሰለጥኑበት የስልጠና መስክ _____

ክፍል 2 መመሪያ ለሚከተሉት አማራጭ ጥያቄዎች ትክክለኛ ነው ብለው በሚያምኑት ሆሄያት ሳጥን ውስጥ 'x' ምልክት ያኑሩ

1. የማሰልጠኛ ተቋሙ ላሉበት የስልጠና መስክ አመቺ መሆን
 ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
 ለ. ከፍተኛ መ. ዝቅተኛ
2. የአዳዲስ ሰልጣኞች አቀባበልን በተመለከተ
 ሀ. በትምህርት ቢሮ ሕግና ሥርዓት መሠረት
 ለ. በኮሌጁ በሚሰጡ ፈተናዎች
 ሐ. መሠልጠን የሚፈልግ ሁሉ ተቀብሎ ማሰልጠን
3. ስለሚሰለጥኑበት ሙያ አስቀድመው የማወቅ ሁኔታ
 ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
 ለ. ከፍተኛ መ. ዝቅተኛ
4. ሰልጣኙ የስልጠናውን መስክ የመምረጥ እድል ማግኘት
 ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
 ለ. ከፍተኛ መ. ዝቅተኛ
5. የሚሰለጥኑበትን የሙያ ዘርፍ ዝንባሌ መኖር
 ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
 ለ. ከፍተኛ መ. ዝቅተኛ

6. የኮሌጁ ስልጠና ከገበያ ጥናት ጋር ያለው ዝምድና

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

7. ሾፖች በቂ ብርሃንና አየር የማግኘት ሁኔታ

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

8. የመሰልጠኛ ሾፖችና የስነ ሀሳብ (Theory) መማሪያ ክፍሎች የተለያዩ መሆን

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

9. የማሰልጠኛ ማሽኖች በተገቢው እርቀትና ቦታ መተከል

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

10. በሾፖች ውስጥ የሚገኙ ሁሉም ማሽኖች የመሰራት አቅም

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

11. እያንዳንዱ ማሽን በበቂ ሁኔታ ለሰልጣኙ መዳረስ

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

12. ለሚሰለጥኑበት የሙያ መስክ በቂ የሆነ የስልጠና ጥሬ እቃ መኖር

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

13. ጥሬ እቃዎቹ ለስልጠናው ሂደት ተስማሚ መሆን

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

14. ከኢንዱስትሪዎች ጋር ጥምረታ በመፍጠር (Cooperative training) ስልጠና

የመውሰድ ሁኔታ

ሀ. በጣም ከፍተኛ ሐ. መካከለኛ ሠ. በጣም ዝቅተኛ
ለ. ከፍተኛ መ. ዝቅተኛ

15. በአሁኑ ወቅት የትምህርትና ስልጠና ብቃትና ጥራት ቀንሷል የሚል

አመለካከት በተለያዩ አካላት ይነገራል በዚህ ሀሳብ ይስማማሉ

ሀ. እስማማለሁ ለ. አልስማማም መ. መውሰን አልችልም

16. ለ15 ጥያቄ እስማማለሁ የሚል ከሆነ ለስልጠናው መቀነስ የበለጠ አስተዋጽኦ አለው ከሚለው እስከ ዝቅተኛው በቁጥር 1,2,3,4, በሚለው ቅደም ተከተል ይግለጹ

- _____ ሀ. የአሰልጣኙ የስልጠና ብቃት ማነስ
- _____ ለ. የማሰልጠኛ ጥሬ እቃዎች አቅርቦት ማነስ
- _____ ሐ. የማሰልጠኛ ማሽኖች በሙሉ አለመሰራት
- _____ መ. የማሰልጠኛ መሳሪያና መጻፍት አለመኖር
- _____ ሠ. ከዘመናዊ ቴክኖሎጂ ጋር አለመተዋወቅ

ክፍል 3 መመሪያ ሦስት

የሚከተሉት ሀሳቦች የስልጠናን ጥራት በቀጥታውም ሆነ በተዘዋዋሪ ጠቆሚ ናቸው። ስለሆነም እርሶ በማሰልጠኛ ታቋሙ የሰው ኃይል፣ የማሰልጠኛ ቁሳቁሶች የጋይዳንስና ካውንስሊንግ ምን ያህል በቂ እንደሆነ በመምረጥ ቁጥሮቹን የሚያመለክቱ በታዎች ላይ የ'x' ምልክት ያድርጉ።

5= እጅግ በጣም በቂ

3= በቂ

1=በጣም በቂ አይደለም

4= በጣም በቂ

2= በቂ አይደለም

17	አሰልጣኞች ከስልጠናው ጥራት ጋር ያላቸው ዝምድና	5	4	3	2	1
ሀ	የአሰልጣኞች ብዛት					
ለ	የአሰልጣኞች በተገባር የማሰልጠን ብቃት					
ሐ	በተመሳሳይ የስልጠና ዘርፍ ሰልጣኞችን ወደ ኢንዱስትሪ ሄደው እንዲሰለጥኑ ጥረት ማድረግ					
መ.	አዳዲስ ቴክኖሎጂዎችን የማስታወቅ ሥራ					
ሠ	የረዳት ቴክኒሻኖች ብቃትና ለስልጠናው መተባበር					
18	የአስተዳደር አካላቱ ለስልጠናው ጥራት ያላቸው አስተዋጽኦ					
ሀ	የስልጠና ጥራት እንዲኖር አዳዲስ ቴክኖሎጂዎችን ለማስገባት የሚደረግ ጥረት					
ለ	የሥልጠና ጥራት መጓደል እንዳይኖር ፈጣን ውሳኔ መስጠት					
ሐ	የሥልጠና ቁሳቁሶችን በወቅቱ እንዲቀርብ ጥረት ማድረግ					
መ	ከአሰልጣኞችና ከሰልጣኞች ጋር ስለ ሥልጠና ጥራት ማወያየትና መፍትሔ መስጠት					
ሠ	ቀጣሪ መስሪያ ቤቶችን ሥልጠናውን እንዲተቹ፣ እንዲያሸሽሉ ማወያየት					
19	የጋይዳንስ ካውንስሊንግ ለሞያው ጥራትና ስልጠና የሚያደርገው የማማከር በቃት					
ሀ	ለአዳዲስ ሰልጣኞች ስለተለያዩ የሥልጠና መስኮች በቅድሚያ እንዲያውቁ መድረግ					
ለ	ሰልጣኞች ስለሚፈልጉት የሙያ ዘርፍ ቅድሚያ እንዲያገኙ ማድረግ					
ሐ	ሰልጣኙ በሙያው ተወዳዳሪ እንዲሆን ማማከር					
መ	ሰልጣኙ የራሱን ስራ ፈጣሪ እንዲሆን በሽርክና ማደራጀት					
ሠ	የተለያዩ አሠሪ መሥሪያ ቤቶችን በመጋበዝ የሥልጠና ትምህርት እንዲጠናከርና ጥራትን እንዲጠብቅ መገፋፋት					
20	የማሰልጠኛ መሳሪያዎች እና ቁሳቁሶች ለስልጠናው ጥራት ያላቸው አስተዋጽኦ					
ሀ	የማሽን ሾፖች ለስልጠናው ያላቸው በቂ ሥፍራ					
ለ	የክፍል ስፋት ከሰልጣኙ ጋር ያለው ጥምርታ					
ሐ	ከኢንዱስትሪው ጋር ዝምድና ያላቸው የአዳዲስ ማሽኖች መኖር					
መ	የማሽኖች ጥራት መኖር					
ሠ	ለያንዳንዱ ሰልጣኝ የእጅ መሣሪያና ማሽኖች መዳረስ					
ረ	ማሽኖችን የመጠገንና ለስራው ዝግጁ ማድረግ እንዲሁም የመለዋወጫ እቃዎች መኖር					
ሰ	የማልሠጠኛ ጥሪ እቃዎች በመጋዘን የመኖር ብቃት					
ሸ	በቂ የማጣቀሻ መፅሀፍቶች መኖር					
ቀ	የአረጁ ማሽኖችን የማስወገድና በአዳዲስ የመተካት ሁኔታ					

21	የሥልጠናው ሂደት በተመለከተ	5	4	3	2	1
ሀ	አስልጣኙ በተመደበለት ጊዜ ስልጠናውን የማጠናቀቅ ሁኔታ					
ለ	70% የተግባር እና 30% የሥነሀሳብ ስልጠና በአግባቡ ማግኘት					
ሐ	ተከታታይ የተግባር እና የስነሀሳብ ሥልጠና በአግባቡ መሠልጠን					
መ	የሰልጣኙን የፈተና ውጤት በሰዓቱ ማሳወቅ					
ሠ	ተከታታይ ምዘናው የስልጠናውን ግብ መምታል					
ረ	የደከሙ ሰልጣኞችን በትርፍ ጊዜ መርዳት እና ጠንካራ ሰልጣኞችን የማበረታታት ሥራ					
ሰ	የአስልጣኙ ግልፅነት እና የሰልጣኙን የመጠየቅ ነገነት መኖር					

22. የሥልጠና ጥራት ላይ ተጽኖ ያደርሳሉ የተባሉትን በ 5 የመመዘኛ ገላጮች የተገለጹ በመሆኑም እርሶም ትክክል ነው ብለው የሚያምኑትን በባዶ ሳጥን ውስጥ የ'x' ምልክት በማኖር ይግለጹ

5= በጣም እስማማለሁ

3= መወሰን አልቻልኩም

1=በጣም አልስማማም

4= እስማማለሁ

2= አልስማማም

22	ችግሮች	ደረጃዎች				
		5	4	3	2	1
ሀ	ዘመናዊ የዋቢ መጽሐፍ (reference books) መኖር					
ለ	ለሰልጣኙ የሚደርስ በቂ የስልጠና መጽሐፍ መኖር					
ሐ	ለስልጠናው የሚረዱ መጽሔቶችና ጆርናሎች መኖር					
መ	ሰልጣኙ በኮሌጁ የኢንተርኔት የመጠቀም እድል					
ሠ	ለስልጠና የሚያገለግሉ ኮምፒውተሮችና ለፕቶፖችን ማቅረብ					

23. የኢንዱስትሪ ባለቤቶች የተግባር ስልጠና መስጠት

ሀ. በጣም ከፍተኛ ለ. ከፍተኛ ሐ. መካከለኛ መ. ዝቅተኛ

ሠ. በጣም ዝቅተኛ

24. የማሰልጠኛ ተቋሙ የስራ ጥናት ፕሮግራም መፍጠር

ሀ. በጣም ከፍተኛ ለ. ከፍተኛ ሐ. መካከለኛ መ. ዝቅተኛ

ሠ. በጣም ዝቅተኛ

25. በሥልጠና ተቋምዎ የሥልጠና ብቃት እንዳይኖር የሚያደርጉ ችግሮችን ይግለጹ

ሀ. _____

ለ. _____

ሐ. _____

26. የስልጠና ብቃት (Quality tiring) እንዲመጣ ምን መደረግ አለበት

ሀ. _____

ለ. _____

ሐ. _____

Appendix A

ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES DEPARTMENT OF BUSINESS EDUCATION AND MANAGEMENT OF VOCATIONAL EDUCATION POST GRADUATE PROGRAM (Questionnaires to be filled by Trainees of Entoto TVET College)

A) THE OBJECTIVE

The objective of this questionnaire is to collect necessary information for the study on "quality of training in industrial technology department of Entoto TVET collage" and to identify the major problems affecting the quality of TVET training and come up with some solutions. For better quality training, therefore, your genuine responses will help the study very much for academic purposes. Your response will be kept confidential.

I thank you in advance for your cooperation.

B) INSTRUCTION

- 1) No need of writing your name
- 2) Put an "X" mark for an alternative answer.
- 3) For any additional opinion write short answers in the space provided.

PART ONE

Personal Information

1. Sex :Male Female
2. Age: A) below 20 b) 21-25 c) 26-30 d) 31 and above
3. Department or section _____

PART TWO.

Back ground Information

Please read the items carefully and give your response by putting an (X) in the box provided in front of the word or phrase.

1. The suitability of physical location of the college
A. very high B. High C. Medium
D. Low E. Very Low

2. The selection procedure for accepting new trainees to the college select one
- A. As per the regulation of the Education bureau
 B. Internal examinations will be given to select trainees
 C. Trainee will select their field and can join at any time
3. The pre hand information about the training field
- A. very high B. High C. Medium
 D. Low E. Very Low
4. The chance of selecting the training field in the college:
- A. Very high B. High C. Medium D. Low E. very Low
5. Your inclination towards the training field
- A. Very high B. High C. Medium D. Low E. Very low
6. The availability of job to the field that you are training;-
- A. Very high B. High C. Medium D. Low E. Very low
7. The sufficient light and air in the shop
- A. Very high B. High C. Medium D. Low E. Very low
8. The availability of training shop and theory rooms
- A. very high B. High C. Medium
 D. Low E. Very Low
9. The Installation of the training machines in its proper place
- A. very high B. High C. Medium
 D. Low E. Very low
10. The operational Status of all machines in the shops
- A. very high B. High C. Medium
 D. Low E. Very Low
11. The number of Machines that each trainee practices on
- A. very high B. High C. Medium
 D. Low E. Very Low
12. The adequacy of materials for teaching and learning process
- A. very high B. High C. Medium
 D. Low E. Very Low
13. The quality of the raw materials to fit the training
- A. very high B. High C. Medium
 D. Low E. Very Low
14. The chance of training in industries with co-operative training program
- A. Very high B. High C. Medium D. Low E. Very lo
15. These days there is a critique that says quality of education is declining, do you agree?

- A. Strongly agree B. Agrees C. Undecided
 D. disagree E. Strongly disagree

16. If your response to the above item is agree rank order on the most possible reasons with numbers as 1, 2, 3 and the like. For the reasons why quality of education declines?

- ___ a. poor quality of the trainers
- ___ b. Shortage of training materials
- ___ c. Non functional of some machines and shortage of hand tools
- ___ d. Shortage of instructional materials and facilities
- ___ f. none awareness with modern technology

PART III

The following table mentions about the extent of Human, Career guidance and counseling, material resources and training provisions to deliver quality training, Rate these items in to 5 points of scales according to your view of their appropriateness.

5 = Very high 4 = High 3 = Medium 2 = Low 1 = very Low

		The extent of Human Resources				
		5	4	3	2	1
17						
A	The number of trainers					
B	Trainers skill and ability in practical training					
C	The effort of the trainers to assist trainees to be trained in industries					
D	The trainers effort to introduce new technologies to trainees					
E	The number of qualified shop technicians to assist trainees and trainers					
18						
	The contributions of the administrative bodies to facilitate quality training					
A	The extent of bringing new technologies to facilitate quality training					
B	The quick decisions made to protect for quality training					
C	The decision made to acquire educational materials on time					
D	The extent of encouraging trainees and trainers to participate on how to develop and improve quality training					
E	The extent of the administrators to coordinate stake holders to improve and Criticize the quality of trainings					
19						
	The extent of counseling department in guiding trainees					
A	The pre hand information given to a new trainees about different fields	5	4	3	2	1

B	The extent of giving a chance to select the desired fields						
C	Motivating trainees to be competent on their field						
D	Encouragement of trainees to create their own jobs						
E	Invite employers to participate in training ,setting curriculum to bringing quality training						
F	Continuous follow up in training sections and give a piece of advice						
20	Availability of training materials and resources						
A	Adequacy of machine shops for training						
B	Size of class room as compared to number of trainees						
C	The existence of modern industrial machines in the college						
D	The existence of latest machines						
E	Adequacy of tools and equipments for each trainees						
F	Availability of maintenance of machines and spare parts						
G	Adequacy of raw materials, and supplies in the store rooms.						
H	The availability of reference materials						
I	Disposing of old machines and substitute with new ones						
21	Training provision						
A	Trainers cover the course in the allotted time						
B	Emphasis on 70% practical and 30% theoretical training						
C	Conducting proper practical and theoretical training						
D	The result of the practical and knowledge exam ill be disclosed immediately						
E	Continuous Assessments evaluates exactly the training objective						
F	The extent of trainers to assist the weaker ones and encourages the brilliants						
G	The extent of transparency of trainers and the freedom of trainees to ask questions						

22. Rate the degree of available of the following instructional materials and technologies in you field

5=strongly agree 4.=Agree 3=undecided 2=disagree 1.=Strongly disagree

22	Item	5	4	3	2	1
A	Library with modern reference books					
B	Sufficient text book to each trainees					
C	The numbers of current journals in the library					
D	The internet accesses for the trainees					
E	The accesses of overhead projectors , laptops ,and LCDs to promote quality training					

23. The co-operation of stake holder's to give practical training

A. very high B. High C. Medium D. Low E. very low

24. The extent of the college to create work study program

A. Very high B. High C. Medium D. Low E. very low

25. What are the major problems that hinder practical training?

- a) _____
- b) _____

26. What do you suggest to improve the quality of training?

- A.) _____
- B.) _____

Appendix B
ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIORAL STUDIES
DEPARTMENT OF BUSINESS EDUCATION AND MANAGEMENT
OF VOCATIONAL EDUCATION POST GRADUATE PROGRAM

Questionnaire 1: To be filled by the college trainers

Dear Respondents:

The qualifications of TVET training is the hottest issue of the government, company owners (stake holders), and other concerned bodies.

Current TVET general qualifications must deliver underpinning knowledge and skills. It must be designed to recognize where learners have achieved qualifications to be fully competent for employment. Training for quality skills requires appropriate training equipment and tools, adequate supplies of training materials, and intensive practice by the learners. Other requirements include relevant text books, training manuals, and qualified instructors with experience in enterprises, and administrative staffs to facilitate training.

Your genuine, frank and timely responses are quite vital to determine the success of the study. So I kindly request your contributions in filling the questionnaire honestly.

I thank you in advance for your cooperation

A) INSTRUCTION

1. No need of writing your name
2. For alternative answers, fill the box using an "X" mark
3. For any additional opinion or explanation write short answer in the space provided.

PART ONE

Personal Information

1. Sex: Male Female
- 2.. Age in years:
 - a) 21-24 years
 - b) 25-29 years
 - c) 30-34 year's
 - d) 35-39 years
 - e) 40-44 years
 - e) 45 years and above
3. Major Field of study _____

4. What are your Educational status and your respective years of services?

No	Qualification	Years of services				
		1-5	6-10	11-15	16-20	Above 20
A	Diploma(10+3)					
B	BA/BED /BSC					
C.	MA/M.SC					

PART TWO

Back ground Information

1. Teaching experience has a direct relationship with quality of trainings?
 - A. strongly agree
 - B. agree
 - C. undecided
 - D. disagree
 - E. strongly disagree
2. How experienced are the trainers in your section?
 - A. Well experienced
 - B. Experienced
 - C. Fresh
3. Do trainers in your section discuss on how to solve the problems of training, and come up with quality of training?
 - A. Yes
 - B. No
4. Have you attended any refresher courses recently?
 - A. Yes
 - B. No
5. If your answer for question number 4 is "Yes", for how long have you attended?
 - A) For less than 30 days
 - B) For 31_ 60 days
 - C) More than 60days

Section II Training profile

6. A) How would you rate the qualifications, of the top managers?
 - A Highly
 - B. Less
 - C. Not at all
 B) How would you rate the experience, of the top managers?
 - A Highly
 - B. Less
 - C. Not at all
7. To what extent is the management of the collage encourages participatory form of administrations in academic matters?
 - A Highly
 - B. Less
 - C. Not at all
8. These days there is a critique that says quality of education is declining, do you agree?
 - A. Strongly agree
 - B. Agrees
 - C. Undecided
 - D. disagree
 - E. Strongly disagree
9. If your response to the above item is agree rank order on numbers as the most possible four reasons why quality of education declines with numbers 1,2...
 - ___ a. Lack of trainers reach experience in training areas
 - ___ b. lack of sufficient current and capital budge
 - ___ c. lack of reasonable standard for quality measures set by MoE
 - ___ d. Incompetence's of the management bodies to acquire materials on time
 - ___ e. Shortage of instructional materials and facilities, mainly high shortage of text books and supplies for training and machineries

10. Given below a number of points indicating about extent of human, material and financial resource to deliver quality training, rate these items in 5 points scale according to your view of their appropriateness.

5 =Very high 4 = High 3 =Medium 2 = Low 1 = very Low

11	The extent of Financial resources and support	5	4	3	2	1
A	Availability recurrent budget to acquire raw materials on time					
B	Adequacy of capital budget to buy machines & Equipment					
C	The sources of budgets are used to facilitate training with out interruption					
D	Funds are created by trainees and trainers to strengthen the financial source of the college					
E	The products of the trainees are sold to generate an income					
F	Most financial sources used for training program					
12	The extent of Human Resources					
A	Number of Trainers in your section					
B	Trainers skill and abilities in practical training					
C	Trainers effort to assist trainees to be trained in industries					
D	The effort made to introduce a new technology					
E	Numbers of qualified shop technicians e to assist trainers and trainees					
13	The extent of the management in the training college					
A	The management body is cooperative to facilitate training					
B	The management intention to follow the participatory form of administration to facilitate the quality of training					
C	A quick decision is made by the deans to facilitate quality training					
D	Deans make a good relation with investors(stake holders)					
14	Concerning career guidance					
A	The awareness created about different field					
B	The trainee get the chance of selecting their training field					
C	The trainees have an interest on the field they attending					
D	Motivating the trainees to be competent on their field					
E	The inclinations of the trainees towards the training field					
F	Encouragement of trainees to create their own jobs					

15	Availability of training materials and resources	5	4	3	2	1
A	Adequacy of modern work shop and its lay out					
B	Availability of good natural light in the shop					
C	Size of class room as compared to number of trainees					
D	Availability of modern machines for training					
E	Adequacy of tools and equipments for each trainees					
F	The existence of latest machines					
G	Availability of maintenance shop					
H	Library with modern books and reference					
I	Text book relation with the world of work					
J	The availability of toile let rooms, water and other sanitation areas					
16	Appropriateness of tools and equipment for training					
A	Adequacy of raw materials for training					
B	Adequacy of modules and manuals					
C	Adequacy of store rooms for materials and tool					
D	The quality of materials equipments to use for trainers					
17	Training Provision					
A	Cover the course in the allotted time					
B	Emphasis on 70% practical and 30% theoretical training					
C	Conducting proper practical and theoretical training					
D	The result of the practical and knowledge exam ill be disclosed immediately					
E	Continuous Assessments evaluates exactly the training objective					
F	The extent of assisting the weaker ones and encourages the brilliants					
G	The extent of transparency of trainers and the freedom of trainees to ask questions					

18. The effect of additional training in industries increases the efficiency of the trainees and the trainers.

A. very high B. High C. Medium D. Low D. Very Low

19. The extent of co-operative training in different organization

A. very high B. High C. Medium D. Low D. Very Low

20. The co-operation of industrial world to give practical training

A. very high B. High C. medium D. Lo E. very low

21. The intention of the institution to make a good relation with stake holder's s

A. very high B. High C. medium D. Low E. very low

22. The management of the college facilitates a relation with local labor market:-

A. very high B. High C. medium

D. Low E. very low

23. The plan of the college to follow up the graduated trainees

A. very high B. High C. Medium

D. low E. very low

24. In your institution what are the major problems that hinder practical training?

a) _____

b) _____

c) _____

25. What is the major source of finance in your college?

26. What is your suggestion on how to get sufficient fund for training program?

27. What do you suggest to improve the quality of training?

A). _____

B.) _____

Appendix C

Interview Guides (to academic Dean of Entot TVET College)

1. Training materials such as machines, tools, and different supplies needs a good source of finance to conduct quality training. What is the major source of finance for this training program?
2. Does your organization get sufficient recurrent and capital budgets from the government?
3. As a training institution, do different departments in your college creates an income to facilitate its training? If not what is your suggestion to create an additional income to fund the college?
4. Is there a purchasing department to acquire educational material to the training program?
5. How do you express the readiness of the purchasing department to facilitate purchases of Educational materials and supplies before training begins?
6. Does the purchasing department have a clear working plan to acquire educational materials? And protect wastage of materials by over stocking or under stocking educational materials?
7. What is your view regarding the quality of training in your institution?
8. Are there sufficient numbers of trainers in industrial technology department?
9. What are the major qualifications of trainers in the industrial technology department?

Thank you for your co-operation

Appendix D

Interview Guides (to official in Addis Ababa TVET agency)

1. Do your agencies facilitate on the job training to trainers?
2. How does your organization facilitate quality training in the TVET institutions?
3. Finance is one of the most important sources to facilitate quality training because all educational materials and equipment come with financial sources therefore what is your guidance to TVET institutions to create their own source of income?
4. What is the source of Capital budget to acquire fixed assets for TVET training?
5. Do TVET institutions get sufficient teaching materials on time?
6. Trainees must select their field of studies because it is with the interest of the trainees that good perception of training comes, how strong are the Counselors to create awareness to the trainees in different TVET institutions?
7. Recently Government offices, stakeholders and many people say that the quality of trainings is declining do you agree? Why?

Thank you

Appendix E

Interview Guides (to financial head officers)

1. Finance is one of the most important back-bones to facilitate quality training because all educational materials and equipment are based on it. What are the financial sources of the institutions and the effort made to create source of income?
2. Do the institution have sufficient capital budget to acquire training machines?
3. Do TVET institutions get sufficient teaching materials on time?
4. As the financial head of the college have you advised the college administrator to create other sources of income to facilitate quality training?
5. Recently Government offices, stake holders and many people say that the quality of trainings is declining, and quality comes with sufficient money sources do you agree? Why?

Thank you

Appendix .F

MACHINES AND NUMBERS OF TRAINEESA
TECHNOLOGY DEPARTMENT
IN ENTOTO TVET COLLEGE

Table 13

Functional and non functional Machineries –
In machine shop department March 29, 2010

Number	Explanations	Quantity	Functional	Nonfunctional
1	Lath machine	12	8	4
2	Milling machine	5	4	1
3	Surface grinding machines	2	2	-
4	Cutting grinding machine	1	-	1
5	Floor grinding machines	3	2	1
6	Shaping machine	2	1	1
7	Drilling machine	4	3	1
8	Boring machines	1	-	1
9	Non identified machines	6	-	6
	Grand total	<u>36</u>	<u>20</u>	<u>16</u>

Table 14

Numbers and sections of machines department trainees March 29, 2010

	Sections	Trainees	Number
Major	Mach3-1A	Regular	31
Basic	Gmf3-3A	Regular	24
	Gmf3-3B	Regular	30
	Gmf2-2a	Regular	15
Total number of trainees			100

Table 15

Table for machineries and equipments available in –Auto machine shop in machine shop department March 29, 2010

Number	Items	Quantity	Functional	Nonfunctional
1	Hydraulic press	5	4	1
2	Tire changer	1	-	1
3	Drilling machine	1	-	1
4	Wheel balancer	1	-	1
5	Parts cleaners	3	3	-
6	Diesel engine simulator	2	2	-
7	Petrol engine simulator	2	2	-
8	Injection pump tester	1	-	1
9	Injection nozzle tester	1	-	1
10	Starter and generator tester	1	-	1
11	Vehicles	10	-	10
	Total	28	11	17

In auto shop department there are 11 functional 17 nonfunctional machines and 202 trainees the ratio of trainees to machine is 18:1.

Table 16

Numbers and sections of Auto department trainees March 29, 2010

Auto Departments	Sections	Trainees	Number of trainees
Auto mechanics	Auto body- 3A	Regular	18
	Auto body- 3B		45
Auto Electric	Auto Electric-3A	Regular	27
	Auto Electric- 2A	Regular	33
	Auto Electric- 1A	Regular	18
Auto Engine Service	Auto Engine -2A	Regular	22
	Auto Engine- 1A	Regular	33
	Auto Engine- 1B	Regular	26
Total number of trainees			<u>202</u>

Table 17

Table for wood work machines and equipments available in –
Wood work shop department March 29, 2010

Number	Items	Quantity	Functional	Nonfunctional
1	Circular saw	2	1	1
2	Ripping saw	1	-	1
3	Jointer	3	-	3
4	Thickness or	2	-	2
5	Hydraulic press	1	1	-
6	Mechanical press	2	2	-
7	Disc sander	1	-	1
8	Wood lathe	4	1	3
9	Shaper	2	1	1
10	Drill press	5	2	3
11	Belt sander	4	2	2
	Total	<u>27</u>	<u>10</u>	<u>17</u>

Table 18

Numbers and sections of Wood work department trainees March 29, 2010

Auto Departments	Sections	Trainees	Number of trainees
Furniture making	First year	Regular	13
	Second year		9
Carpentry and joinery	First year	Regular	9
	Second year	Regular	6
Total number of trainees			<u>37</u>

Table 19

Table of general metal fabrication (GMF)

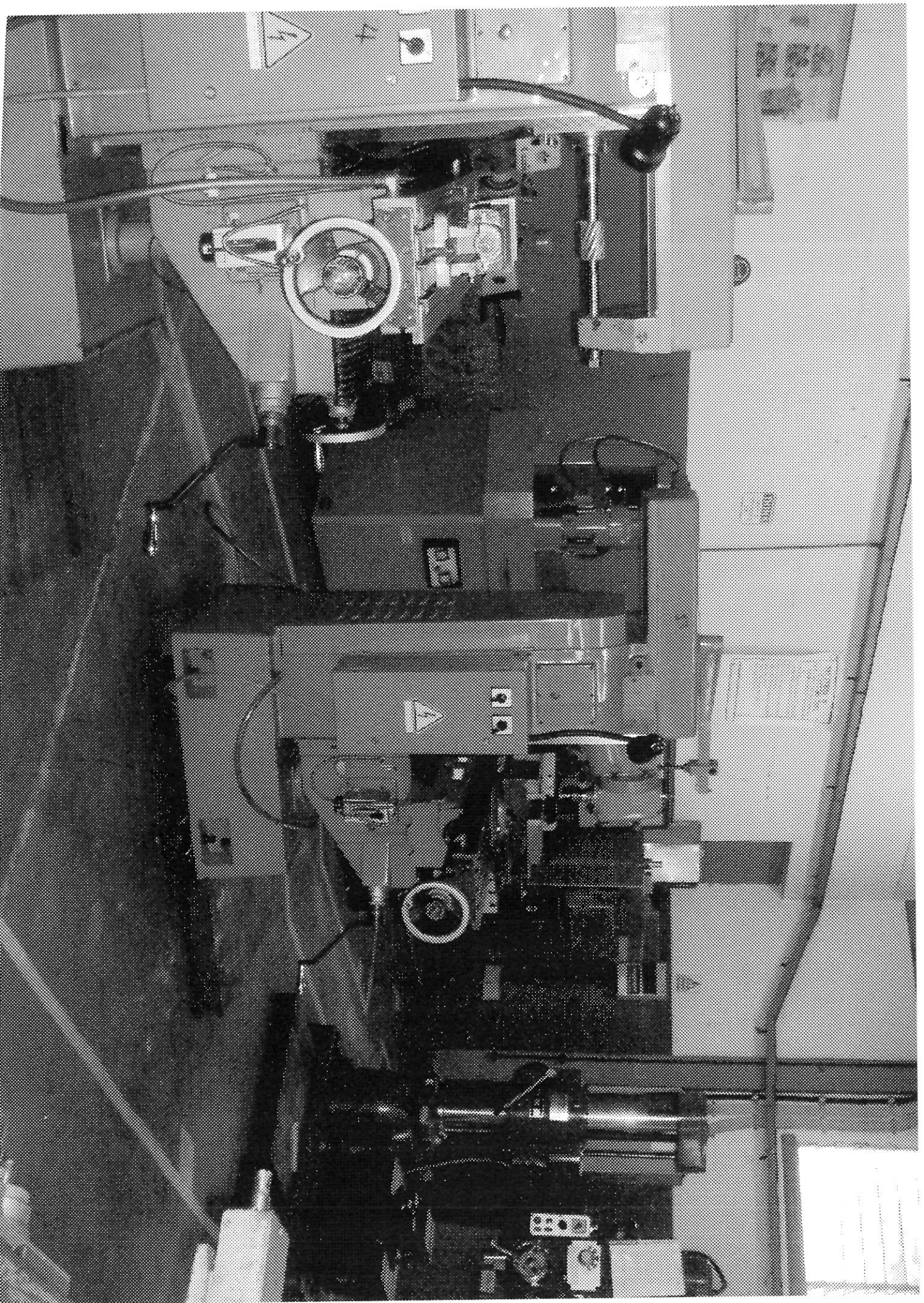
Number	Explanations	Quantity	Functional	Nonfunctional
1	Drilling machine	4	1	3
2	Grinding machine	8	1	7
3	MIG welding machine	3	3	-
4	Sheet metal shearing machine	3	3	-
5	Circular shearing saw	2	1	1
6	Welding machine	18	12	6
7	Rolling machine	2	2	-
8	Power hacksaw	3	1	2
9	Gas welding machine	4	2	2
10	Heat treating furnace	1	-	1
	Total	<u>48</u>	<u>26</u>	<u>22</u>

Table 20

Numbers and sections of machines department trainees March 29, 2010

GMF	Section	Trainees	Number of trainees
	GMF3-1A	Regular	31
	GMF3-2A	Regular	25
	GMF3-3A	Regular	25
	GMF3-3B	Regular	32
	BMW3-2A	Regular	23
Total number of trainees of general metal fabrication (GMF)			<u>136</u>





DECLARATION

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

Name Zewdie Assefa


Signature 

Place Addis Ababa

Date 02/07/2010

This thesis has been submitted for the examination with my approval as University advisor.

Doctor Woube Kassaye

Signature 

Date of approval 02/07/2010

ADDIS ABABA UNIVERSITY
LIBRARIES
P.O. BOX 1175
ADDIS ABABA ETHIOPIA