

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

**MAJOR FACTORS AFFECTING THE IMPLEMENTATION
OF APPRENTICESHIP TRAINING PROGRAMS
IN SELECTED GOVERNMENT TVET
INSTITUTIONS IN ADDIS ABABA**

BY

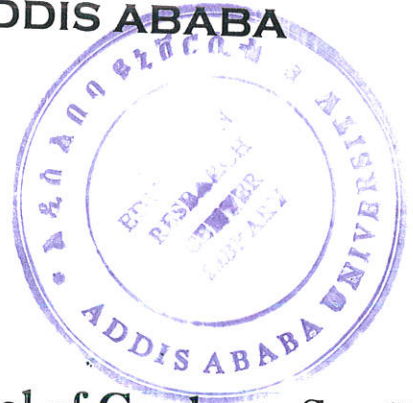
ENGIDA ASFAW



JULY 2007

ADDIS ABABA

**MAJOR FACTORS AFFECTING THE IMPLEMENTATION
OF APPRENTICESHIP TRAINING PROGRAMS
IN SELECTED GOVERNMENT TVET
INSTITUTIONS IN ADDIS ABABA**



A Thesis Presented to the School of Graduate Studies

Addis Ababa University

**In Partial Fulfillment of the Requirements for the Degree of
Master of Arts in Management of Vocational Education.**

By

Engida Asfaw

July 2007

Addis Ababa

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

MAJOR FACTORS AFFECTING THE IMPLEMENTATION OF APPRENTICESHIP TRAINING PROGRAMS IN SELECTED GOVERNMENT TVET INSTITUTIONS IN

ADDIS ABABA


BY

ENGIDA ASFAW

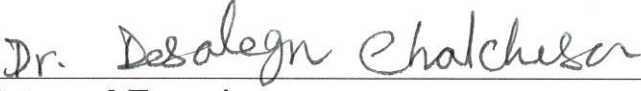
Approved by Board of Examiners


Chairman, Department Graduate Committee


Signature


Advisor


Signature


Internal Examiner


Signature


External Examiner


Signature

ACKNOWLEDGEMENTS

I would like to express my heart felt and sincere thanks to Ato Worku Mekonnen, my advisor, for his highly professional and technical assistance and attractive advisor approach. With out his provident and unreserved guidance, this paper would not have been completed successfully

My sincere appreciation and thanks goes to GTZ who financially supported and encouraged me through out my study. My sincere thanks equally go to Ato Solomon Getachew and Ato Seifu Teffera for their material and moral support during my study.

My deepest appreciation and thanks also goes to all principals, vocational counselors and trainees in TVET institutions, all supervisors in organizations offering apprenticeship training and Amakelech Hailu for their sincere provision of pertinent data for the study.

Finally I would like to extend my thanks to my wife Woseneyelesh Kasahun for her continuous support and sacrifices she paid is shouldering the whole Burdon of life challenges through the end of this study

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	i
TABLE OF CONTENTS	ii
LIST OF TABLES	vi
ACRONYMS	vii
ABSTRACT	viii
 CHAPTER ONE	
1. INTRODUCTION	1
1.1. Background of the study	1
1.2. Statement of the problem	5
1.3. Objective of the study	8
1.3.1 General objectives	8
1.3.2 Specific objectives	8
1.4. Significance of the study	8
1.5. Limitation and delimitation of the study	9
1.6. Definition of Terms	10
1.8 . Organization of the study	11
 CHAPTER TWO	
2. REVIEW OF RELATED LITERATURE	12
2.1 Conceptual Framework of Apprenticeship Training	12

2.1.1	Modern and traditional apprenticeship	12
2.1.2	TVET and economic development.....	13
2.2.	Assessment and evaluation in apprenticeship training.....	16
2.3.	Apprenticeship and the rapidly changing world of work	17
2.4.	Certificates of completion	23
2.5.	Joint apprenticeship committees	24
2.6.	Basic standards for apprenticeship.....	24
2.7	Vocational Guidance and Job placements System.....	25
2.8	Requirements of apprentice training.....	26
2.9	Legislation in TVET as a basis for apprenticeship training	27
2.10.	Contract of apprenticeship training	28
2.11.	Apprenticeship: sharing training responsibilities and costs	29
2.12.	Constraints in conducting apprenticeship training as a component of TVET	32
2.13.	Apprenticeship training programs in TVET institutions in some selected country	34
2.13.1	Apprenticeship in Germany.....	34
2.13.2	Apprenticeship in South Africa	36
2.14.	An overview of the current TVET system in Ethiopia.....	37
2.15.	Future strategies to promote apprenticeship training	39
2.15.1	Incentives for co-operation.....	40
2.15.2	The need for enterprise training association	41
2.15.3	Improving links with employers	41
2.15.4	Strengthening national training authority (NTA)	42

2.15.5 The need for effective industrial attachment mechanisms	42
2.15.6 Encouraging TVET institutions to increase income generating activities (IGAs)	42
2.15.7 The introduction of training levy (or training tax)	43
2.15.8. Strengthening private training sectors	44

CHAPTER THREE

3. METHOD OF THE STUDY	46
3.1. Source of the Data	46
3.2. Sample	46
3.2.1. TVET institutions	46
3.2.2. Trainees	47
3.2.3. Trainers	47
3.2.4. Vocational counselor	47
3.2.5. Principals	47
3.2.3. Supervisors at work place	48
3.3. Instrument	48
3.3.1 Questionnaires	48
3.3.2 Interviews	49
3.3.3 Observations	49
3.3.4. Focus group discussions	49
3.4. Pilot study	49
3.5. Procedures of Data Collection	50
3.6. Methods of Data Analysis	51

CHAPTER FOUR

4. PRESENTATION, ANALYSIS AND INTERPRETATION

OF THE DATA	52
-------------------	----

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary	82
---------------	----

Conclusion	86
------------------	----

Recommendations	91
-----------------------	----

BIBLIOGRAPHY	100
---------------------------	-----

APPENDICES

Appendix 1: Questionnaires to be filled by vocational counselors, principal, and trainers	
--	--

Appendix 2: Questionnaires to be filled by apprentices	
--	--

Appendix 3: Questionnaires to be filled by supervisors of the organizations offering apprenticeship training	
---	--

Appendix 4: Interview made with the AAEBs TVET representatives	
--	--

LIST OF TABLES

Page

ACRONYMS

AAEB	Addis Ababa Education Bureau
ETP	Education and Training policy
GTZ	German Technical Organization
IGAs	In come Generating Activities
IIEP	International Institute of Educational planning
ILO	International Labor Organization
MOE	Ministry of Education
NAPVET	National Policy of Vocational Education and Training
NGOs	Non Government Organizations
NQF	National Qualification Frame work
NTB	National Training Board
OECD	Organization for Economic Cooperation and Development
PAC	Program Advisors Committee
REBs	Regional Education Bureaus
SDC	Skill Development Center
SETAs	Sector Education and Training Authorities
TGE	Transitional Government of Ethiopia
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VTC	Vocational Training Center

ABSTRACT

The main purpose of this study was to investigate the major factors that affecting the implementations of apprenticeship training program in selected government TVET institutions of Addis Ababa. To this end an attempt was made to look in to the link between TVET institutions and the world of work and the major factors affecting this link, such as the legal frame work, work place learning environments, roles of each participating party and the state of resources devoted to the training.

A descriptive survey method of study was employed to identify the major factors affecting the implementations of apprenticeship training in Entoto, Miserak, and Nifassilk TVET Colleges and Higher 12 training institution. These sample TVET institutions were selected from Addis Ababa on the basis of purposive sampling. The participants of the study were 7 principals, 9 vocational counselors, 240 trainees, 30 trainers and 32 work place supervisors. Accordingly, the respondent sampling was carried out through stratified and availability sampling techniques. Information was obtained using questionnaires, interviews, observation and focus group discussion. Various statistical techniques both qualitative and quantitative such as reliability coefficient, percentage, mean, coefficient of variation and chi-square test were used to analyze the data. The results indicated that the preparedness of the organizations to cooperate and an attempt made to enhance further cooperation, for instance by offering incentives, were inadequate. Thus, trainees were excluded from the training due to inadequacy of organizations, inconvenience of the training period, and financial difficulties. Both the institutions and the organizations have no guidelines and joint plans in common to conduct the apprenticeship training that help to improve the quality of training. More over, apprenticeship providing organizations are lacking awareness on the program.

Therefore, it is recommended to enact apprenticeship regulation and create stronger awareness through information campaign so that organizing bodies such as Chambers of Commerce and industry could share the responsibilities of facilitating apprenticeship training.

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

A country that has a strong desire and determination for a sustainable economic development never hesitate making huge investments in education. It is education which provides trained manpower whose knowledge and skills are required to interact with other resources to bring about significant changes in the economy. A well developed economy of a country, on the other hand, creates fertile grounds where education can show growth both in quality and in quantity by giving unwavering financial support to the sector. Without education, economic development remains a dream. As they get the necessary knowledge and skill, people become more productive and start playing decisive roles in the economic development of a country. (Lee, 1998) states that education enables citizens to be more productive both at work place and at their homes.

To see a promising development in the economy, a country has to improve the quality of its human resources, which could be possible through education. A reliable economic change, however, cannot take place by producing only elites of academic education. The realization of this fact made many countries introduce technical and vocational education and training into their system of education, which enabled them to produce skilled and semi-skilled man- power. Some of these countries like USA, Germany, France, Russia and the like have wisely used their technical and vocational education and training institutions which helped them in registering rapid and continuous social and economic changes.

Many developing countries, however, have been very reluctant in providing this kind of training program. In developing countries, particularly in Africa, vocational education is a recent phenomenon.

Even after they started the program, many African countries including Ethiopia, did not give a serious attention to the materials and manpower needs of the various fields of training in this program.

But currently, different trades designed to be focused on by TVET centers in their trainings are more or less the reflection of the attention given to produce the kind of skills in which the world of work has been in a serious shortage of skilled manpower. To make the trainees readily absorbable in the labor market, apprenticeship training is included in the TVET program with the intention of promoting a work-based training method.

“Apprentices today often have more formal schooling than their master. It is also common for people who took formal vocational training to pass through apprenticeship before setting up shop for themselves” (Johnson/Adams, 2004:p.131). In developing countries like Ethiopia, first, the link between training programs and industries was not strong. Therefore, with the absence of such linkage the demand of the changing labour market cannot attain equilibrium.

Even if various efforts have been made to provide technical and vocational training in some institutions, the issue of coordinated training programs in terms of quality and coverage has not been tackled. As a result, the training systems do not effectively generate a workforce initiated for creativity and capability of supporting the economic development for the country.

Secondly, the TVET centers are not properly equipped with the necessary training facilities. Thus, the training merely in the confined class room with the existing “workshop” can not be sufficient to acquire the required skills and knowledge by the trainees. In addition to the training conducted in the classroom/workshop in school compound, apprenticeship training program has been designed for the trainees to practice the world of work. And trainees have been assigned for apprenticeship program from 2-3 months over the last few years in various business centers /institutions such as manufacturing, industries, construction, and service giving sectors. The purpose of offering apprenticeship training in different enterprises is believed to familiarize trainees with real work life who eventually qualify as self or wage employees in their specialized areas.

“Apprenticeship is said work-based training combined with post-secondary education. An apprentice spends approximately 80% of his/her time learning skills on the job (under the direction of a highly skilled journeyperson) and approximately 20% of their time learning in a classroom setting” (<http://www.iw.ilo.org/index29.asp>).

Apprenticeship training is a work-based method for learning and gaining qualification. It is in-company training based on an agreement between a training institution (public or non public TVET institution) and an employer for the purpose of training of trainees in any commercial, industrial or service giving organization.

In different countries apprenticeships are regulated by many labor agreements as well as by law. The U.S system of apprenticeships, established in 1937, was modeled on a 1911 Wisconsin law that named 200 occupations that benefited from apprenticeship programs. The first law on apprenticeships came into France in 1851. From 1919 onwards young people had to take 150

hours of theory and general lessons in their subject a year. This minimum training time rose to 360 hours a Year in 1961, then 400 in 1986 ([http://www. Answer.com/topic /apprentices](http://www.Answer.com/topic/apprentices))

In Ethiopia also the law of apprenticeship is stated on proclamation No.391/2004 (19-24) on the Technical and Vocational Education and Training. The proclamation further supported by apprenticeship guideline developed by MOE TVET sub sector for the program implementation.

Both documents state that apprenticeship is a process where three parties mainly the training centers, the trainees and apprenticeship providing organizations in which all benefit from the program. Since both documents explain that the trainees get practice through the apprenticeship program to enrich what they have learner at school and to integrate them in the actual world of work.

Moreover, as Atechorena (1996:5) indicated, compared to other training modes, apprenticeship training is characterized by its capacity not only to train but also to organize the process of transition of the young labour force to the labour market. Generally, experiences show that linkage of technical and vocational training programs with business and industry will inevitably yield a number of improvements in the preparation of relevant and well-qualified graduates.

Coming back to the condition of apprenticeship program in Addis Ababa, ten government TEVT Colleges and Institutes have started their training in 25 fields of training in both the 10+1, 10+2 and 10+3 programs. It has a trend of sending its trainees for the 312 hours of apprenticeship training during the summer vacation after the trainings in the institutions have been fully covered. The study on the major factor affecting the implementation of apprenticeship program is made to assess problems of trainees of these institutions have encountered so far in their

apprenticeship training, and to find ways in which the trainees, the institutions, and companies can utilize apprenticeship training in a way that each stakeholder can appreciate its mutual benefit, there by making the program more effective.

1.2. Statement of the Problem

Apprenticeship has a long history of serving traditional trade areas in Ethiopia. Its merit in serving the skill needs of different sectors is today fully recognized. However, the extent to which the education system of the country considered that the TVET system has a role to play in expanding and consolidating skill development in these sectors is varied. Put differently, the endeavor made through policy intervention for improvement of traditional apprenticeship, through introducing school based components, and establishing or expanding modern forms of apprenticeship training in view of serving the needs of the economy would be reflected by the value attached to the TVET system.

With a clear understanding of the fact that this tide of change cannot leave us aside, Ethiopia has made a remarkable change in her educational system in a way that can help the young generation to develop the skill required to face the challenges of the technological changes in the working environment. Efforts underway to strengthen the integration of our TVET training programs with the production activities in various industries of the country through apprenticeship training is a good sign of determination made to become an active member of the contemporary global society.

Based on the Educational and Training Policy of Ethiopia, the curriculum development for middle level technical and vocational education and training program, provided for a new scheme of apprenticeship training program that become functional through out the country. According to

Logsam and Mankend (1995:6), in developing countries, like Ethiopia, due to the weak and nature of industrial base, there are normally not enough places to absorb all the students during apprenticeship training. The large number of students compared to the available opportunities and reluctance of enterprise to cooperate is the prominent problems in conducting apprenticeship training in these countries.

As the integration of apprenticeship training into the Ethiopia education and training system is a very recent phenomenon, Addis Ababa TVET Colleges and Institute started in-company training in 2002 in the city. Appreciating the importance of the integration made between the training and the working environments through apprenticeship training in boosting the acceptance of the young generation in the world of work, the administration of the institute has developed the habit of working with a full participation of the teaching staff in the efforts made to get the willingness of different companies and organizations to provide this work-based training to the trainees of the institute every year. But the efforts underway from year to year to convince businesses and make them commit themselves to this training program, has so far been under a great challenge.

Getting the right kind of training that corresponds to the jobs and duties covered in the school-based training, has not been an easy task. There are fields of trainings in which trainees have to spend more than a year without getting apprenticeship training after completing their normal school based training.

Considering these and other related problems from the point of view of the key role that apprenticeship plays in teaching the young generation, the skills values and attitudes applicable to working life, in that the researcher has come to realize that apprenticeship is the right subject worth studying thoroughly.

The purpose of this study is, therefore, to identify the major factor affecting the implementations of apprenticeship training programs in manufacturing and service giving organizations in Addis Ababa.

Hence, the following basic questions were addressed as a guide for treating the problem:

1. What are the conditions of the legal frameworks and supporting guidelines within the organization to participate in apprenticeship training?
2. What are the states of resources and readiness of the organizations to provide apprenticeship training adequately?
3. What roles of personnel in organizations, TVET institutions and trainees are not prevalent to ensure the quality of the apprenticeship training program?
4. What are the duties and responsibilities of organizations, training institutions and an apprentice?
5. What are the financial materials and human factors related guidelines for conducting apprenticeship training?
6. What are the prominent administrative, social and economic problems encountered in implementing apprenticeship training?
7. What planning, organizing, and controlling mechanisms help effective apprenticeship training program?
8. Is the program properly implemented according to the specifications stated in the legal documents?

1.3. Objectives of the study

1.3.1 General Objectives

The main purpose of the survey study was to investigate the major factors affecting the implementations of apprenticeship training programs in Addis Ababa

1.3.2 Specific objectives

The study included the following detail objectives:-

1. Verify whether the condition of the legal frameworks and supporting guidelines within the organizations participate in apprenticeship training or not.
2. Analyze if the resources and readiness of the organizations provide apprenticeship training adequately or not.
3. Investigate whether the personnel in organizations, TVET institutions and trainees are prevalent to ensure the quality of the apprenticeship training program or not.
- 4 Analyze if the share of actual financial, material and human factors and related guidelines for conducting apprenticeship exit or not.
- 5 Assessing whether the apprentice, training institutions and employers' organizations achieve their duties and responsibilities or not.
- 6 Indicate the importance and applicability of apprenticeship contract.
- 7 Examine the extent to which the guidelines set in the planning, organizing and controlling mechanisms help effective apprenticeship training program.

1.4. Significance of the Study

Successful implementation of apprenticeship training program helps to come up with the intended profile of middle level technicians in various trades. However, some problems may hinder the successful implementation of the program, which in turn affect the overall quality of

the training. Hence, conducting a study to identify the major factors affecting the implementation of apprenticeship training programs could have the following contributions:

1. The study helps to examine the state of factors affecting the implementations of apprenticeship training programs in Addis Ababa.
2. Bringing the major problems observed in this training program to the attention of leaders of the training institute, the education office of the sub-city and the education bureau of the city as well.
3. As apprenticeship-training program is the emerging program, the researcher hopes that the study will enrich the existing literature in the field of technical and vocational education and training.
4. It may also help as stepping- stone for other who intends to carry out in-depth study on the problem.

1.5. Limitation and Delimitation of the study

Taking time and financial constraint into account, this study is delimited to four governmental TVET institutions in Addis Ababa City Administrations. In the selection of the institutes, accessibility of TVET institutions with apprenticeship training programs and joint plan of TVET institutions with companies have been in to considerations. The researcher has found its difficult to conduct the study the way he wanted because of:

- The technology used to secured and sort out the data for this study.
- The unavailability and unwillingness of the partners to participate in the focus group discussion.

1.6. Definition of Terms

- Apprenticeship training:** - special type of structured and recognized cooperative TVET based on a training contract between a company and trainees (Apprentice) (MOE, TVET Strategy, 2006:46)
- Certification:** - The process by which an awarding body confirms that a candidate has met the requirements for the award of a qualification, and the process of issuing the certificate to the candidate.
- Cooperative TVET:**-TVET provided by and in cooperation with more than one TVET provider. Often referring to TVET that is provided in cooperation between employers and a TVET institution (e.g. formal apprenticeship training)
- Internships:-** Attachment of a trainee to a company or work place in the course of the TVET programme in order practical experience and exposure to real work - life
- Occupation:** - Broad term denoting a group of inter-related activities or any distinct type of manual or non -manual work which can provide a means of livelihood, whether undertaken in employment or in self - employment. An occupation represents a set of jobs whose main tasks and duties are characterized by a high degree of similarity. (MOE, TVET Strategy, 2006:48)
- Stakeholders:-** All role players in the TVET system, including TVET providers and institutions, teachers and instructors, employers (trade unions). Trainees, parents, policy-makers (Government).NGOs and other institutions involved in training and human resource development, educational institutions, donors, etc.
- Skill:** - Ability in such an, art, craft or science (Good, 1973).

Traditional Apprenticeship:- On-the job training to young labour market entrants provided by master craft (wo) men in the micro and small enterprise sector.

Technical and vocational Education: All forms and levels of educational process involving, in addition to general knowledge, the study of technologies and related sciences and the acquisition of practical skills, know-how, attitudes and understanding relating to occupations in the various sectors of economic and social life (UNESCO, 1989:2)

TVET delivery system:- Describes a specific and identifiable type of TVET delivery including their structures, actors and rules, for example apprenticeship training formal 10+ program's, etc **Vocation:-** A calling as to particular occupation, business or profession (Good, 1973)

Vocational Guidance:-Consists of assisting individuals through orientation to learn about relevant opportunities for education, training, and work and facilitating through counseling their career planning (UNESCO, 1978:34)

1.7. Organization of the Study

The study was organized into five chapters. The first chapter deals with the introduction and chapter two treats the review of related literature. The third chapter deals with the method of the study. The fourth chapter was used for the presentation, analysis and interpretation of the data. The last chapter contains the summary of the findings, conclusions and recommendations. In addition to these, bibliography and appendices are attached to the last part of the study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework of Apprenticeship Training

2.1.1 Modern and traditional apprenticeship

It is now widely accepted that training must have relevance to the existing world of work and that quality must be determined in outcomes. No matter the cost or rigor of training, it cannot be considered high quality if it does not enhance the work and income opportunities of the trainee. However, there is a need to be clear about what outcomes and objectives are intended. These include being clear where there is a social function or equity dimension to skills development. Linking work and skills requires a detailed understanding of the major change in the world of work in recent years. This must take account of the nature of changes at the global, national and local levels and the opportunities that at each level for skills intervention can support successfully economic activities (UNESCO, 2000).

Apprenticeship training, during the middle age, was served under the guilds association, which was intended to protect the interest of members in the same craft. Since the transmission of family heritage and unconscious learning was not satisfactory, apprenticeship training became a reality. This consists of youth learning any trade under the supervision of master craftsmen according to the pre-established specifications. Training and production are integrated towards the development of the apprentice into adult life during the operation of the system (Harris and Bone 2000:24 and Brubacher, 1987:6).

The rapid development of power machinery and the increased demands for goods led to a greater demand for mass production. Hence, industrial revolution was considered as the main reason for the decline of the then form of apprenticeship training and emergence of new type of formal

schools. At this time too, industries that offer apprenticeship training usually supplemented by trade theory. After completion of the course, trade test is administered and certificates of accomplishment will be awarded .Whenever there is vacancy the employer prefers to employ the apprentice in his company rather than recruiting individuals who are not familiar with the nature of the work of the company (Laugo, 1993:31-32).

Modern apprenticeship training is considered as one of the most efficient cost effective mechanism of training. It saves the cost of the government that was supposed to be expending on training, for it allows employers to share most of the training cost. Moreover, as it provides for the combination of the same resources, such as instructors, equipment, materials and time, together the total cost pertaining to the national economy will also be minimized (Laugo, 1993:34). As it has already been stated in chapter one, beyond serving the needs of the micro-enterprises of the crafts industry, apprenticeship schemes, defined as the combination of school-based training, managed through partnership, can also be seen as way to transform a rigid, inward-looking, public TVET system. This avenue has not yet been much explored. Yet in most places around the world, getting businesses to commit themselves to training young people represents a key challenge. In fact, employers are increasingly considered to be the best placed to provide the right kind of training and also to teach the values and attitudes applicable to working life (Atechorena and 2002:272).

2.1.2 TVET and Economic Development

The major objective of TVET today is to meet the challenges of preparing the workforce that plays effective role in economic development of a country. Its direct link to the world of work makes this field of education different from other educational and developmental endeavors. No other discipline has, as its core mission, the application of learning and planned development for

work effectiveness. There are different fields of education that certainly focus on learning and other disciplines such as human resource management that focus on work effectiveness which they try to promote through directives passed through their chains of command and raising as important issues on different meetings without embracing the power of learning and developing human potential. It is the technical and vocational education field or discipline that is showing its devotion in preparing a kind of personality that the world of work readily absorbs, with a clear vision on how to link the largely humanistic disciplines of learning and development to work performance and economic competitiveness. Evans and Herr (1978:4) mention the three basic objectives of any public school vocational education program as:

1. Meeting the man power needs of a society.
2. Increasing the options available to each student.
3. Serving as a motivating force to enhance all types of learning.

They further noted that education is the only social institution which has a mission of increasing individual options as a major goal. They also clearly stated that content of vocational education ranges from that which is specific to a particular employer, to that which is useful in almost any enterprise. As efficiency in every enterprise increases, economic development of a country can undoubtedly be realized. As one of the major tenant of vocational education from its earliest times has been a focus on increasing individual options in relation to work, individual's with various options have by far better chance of securing jobs of their own choice in addition to making a skillful contribution to a steady progress in economic development of nation.

Throughout its history technical and vocational education has been called on to increase its emphasis on certain economic or political societal goals for which Russia could be one of the best examples. According to Bossing (1959:100), in 1940 Russia replaced the "factory apprentice

schools” by new vocational divisions to prepare against the possibilities of war. These divisions comprised three types of schools, namely trade schools, railway schools and Industrial schools. These vocational divisions had played a great role in helping Russia remain strong both during and after the First World War.

In Ethiopia, TVET has been called on at the time the country has launched a campaign to realize fast economic development. Policies on both poverty reduction and fast economic development require skillful man power engagement in various economic sectors. To this effect, TVET makes a great contribution by preparing the required man power with middle level technical and vocational skills that can carryout variety of work activities from simple equipment operation and maintenance to production work operations and maintenance of relatively complex equipment system.

In this respect, vocational education in Ethiopia is similar to that of USA in its scope and classification level, while at the same time; it is under a strong influence of the German dual system. As Brickman stated in Microsoft Encarta online Encyclopedia (Microsoft Encarta 2005), in USA, the scope of vocational education is broad, ranging from occupations requiring little skills, to those requiring high degree of skill and scientific knowledge. The program includes numerous occupational areas such as office skills, agriculture, various trades, health services and technical training.

This similarity of vocational education programs has not come about by a mere chance. It is a clear reflection of the country’s intentional move and aspiration to follow the footsteps of countries that control a huge global economy at present. From this, one can get a clear view of the direct line of connection between TVET and economic development of a country.

2.2. Assessment and Evaluation in Apprenticeship Training

Evaluation involves making judgment by teachers, which can be based on the information provided by the process of assessment. Evaluation is always present in the work of teachers. Teachers may make their judgments based on impression, which is a much less systematic way of getting information about pupils (Nitko, 1996).

In Evaluation, you measure your students based on your assessment. In measurement, you assign a numerical quantity to the event or object concerned to indicate the degree to which they possess the characteristic measured (Gronlund and Linn, 1990). For a person to make proper evaluation and measurement, he has to pass through educational process that equips him with the required ability that makes him capable to do so. Supervisors assigned to apprentices by apprenticeship offering organizations have to be the ones who passed through such an educational process. Assessment process and information gathered through it should enable the teacher to evaluate capability and accomplishments of the learner, measure outcome of instruction, provide special study and remedial instruction, and discover educationally and socially maladjusted students. The quality of assessment techniques employed in schools determines, largely, the quality of student learning (Gage and Gerliner, 1998). Assessment is an integral part of the instructional process. It starts with learning and ends along with it. Is this what we observe in our apprenticeship training at present?

One of the modern methods that can help teachers to assess an overall picture of students' performance is a continuous assessment. Continuous assessment is a highly recommended system of student assessment or appraisal that should be conducted as an ongoing process on daily basis. It employs variety of integrated techniques such as written tests, self-report, observation, rating scales, project works, assignments, performance assessments etc to come up

with an all round evaluation results and properly discriminate students. Do apprenticeship offering organizations have or assign supervisors that can properly employ these important techniques to show clear image of their apprentices?

Placement assessment is an assessment made to determine a level of performance of a student (trainee) at the time of entry to a given course or level. By making such an assessment one determines whether the student (trainee) has the knowledge and skills needed to begin the planned instruction. It also helps one to find out the level of readiness of the students to master the objectives of the planned instruction. Such assessment can be made as readiness tests, aptitude tests, pre-tests etc on the course objectives. Placement assessment mostly takes place earlier to the presentation of instruction and it provides information useful to plan learning activities (Capper, 1996).

2.3 Apprenticeship and the Rapidly Changing World of Work

The system of apprenticeship first developed in the later middle ages. The master craftsman was entitled to employ young people as inexpensive form of labor in exchange for providing formal training in the craft. In its early stage, apprenticeship was almost always a family arrangement. Before the industrial revolution, most manufacturing work was done on a fairly small scale in private shops or even in homes. People who made clothing, shoes, jewelry, glassware, carts, wagons and the like specialized only in their own craft. Conditions in the building trade and other occupations that require special skills were also the same. It was therefore, very common for a craft or a trade to remain in one family for generations. A craft man's chief apprentice was his son. Boys living in the village or town can get a chance of becoming apprentices of a craft man only if he had no son. If a craft man had no son, he might find boys from his town that would be willing to learn his specific trade (Compton's Interactive Encyclopedia). The apprentice that

came from a neighbor totally moves in to the master's home to serve his master for the duration of his training which could extend up to six or seven years. Skill development took place through trial and error and the apprentice occasionally received direct instruction. The apprentice had no guarantee for learning everything about a given occupation. This depends on the good will of the master.

Through time, significant changes took place in the way apprenticeship was practiced. Evans (1971:10) states: " The principal changes have been that apprentice ship begins later in life, lasts for a shorter period (often three to six years), and instruction is guaranteed by a group of employers or employees, rather than by a single craftsman."

In United States, Wisconsin was the first state to pass legislation (1915) for organized apprenticeship. The Smith-Hughes act of 1917 forced the federal government to allocate funds to the states for vocational education in agriculture, trade, and industry. There was a close collaboration between the schools, labor and management in implementing the program. As stated by the New Encyclopedia Britannica (15th edition), the bureau of apprenticeship was set up in USA in 1937.

Russia on the other hand introduced her industrial training act in 1964. Based on this act, government role in industrial training (apprentice- ship) was increased. As a result, following the implementation of the 1964 act, more than one-third of secondary boys took apprenticeship. The amount and quality of this training, however, varied considerably from one firm to another. Today in Russia, there are firms that have their own training schools, providing comprehensive courses which cover the whole range of skill ensuring that the youth who completes his apprenticeship is a highly skilled worker (Carter, 1966:180).

In Japan, apprenticeship and employee training often have personal orientation rarely found in other industrial nations. The Japanese concept of apprenticeship significantly differs from the practice of many other nations as a result of the difference in the relationship between employer and employee. Employments in Japanese firms tend to be a life time relationship. In Japan, there are strong social obligations that require the employer to provide work for his employee and force the employee to continue with the same employer until death or retirement in any capacity to which he may be assigned. The new encyclopedia Britannica (15th edition) briefly states that apprenticeship in Japan is oriented towards employment with a particular company, in which the employee is likely to spend his whole working life expecting permanent employment even if his specific assignment may vary from time to time.

With time passing by, the traditional method of apprenticeship was gradually replaced by modern concept. As a result, subsequent governmental regulations and the licensing of polytechnics and vocational education formalized and bureaucratized the details of apprenticeship. In its modern concept, apprenticeship in England for example, is defined as a mixture of work-based training and education with its frame works being designed by sector skills councils or sector skill bodies.

The aims of this training are to give young people the opportunity to:

- 1) Achieve vocational, work-based qualifications.
- 2) Learn on the job.
- 3) Build up knowledge and skills.
- 4) Gain qualifications. ([http:// WWW. apprenticeship.org.UK](http://WWW.apprenticeship.org.UK))

Apprenticeship has a long tradition in the United Kingdom's Education system; with its traditional form reaching its lowest point in 1970s. In 1994, the government introduced modern apprenticeship to try to improve the image of work-based learning and to encourage the young

people and employers to participate. Unlike the traditional apprenticeship the current scheme of apprenticeship in U.K extends beyond "craft" and skilled trades to areas of service sector with no apprenticeship tradition. Employers who participate in the scheme have an employment contract with their apprentices, but off-the -job training and assessment is wholly funded by the state through various agencies like the learning and skills council. There is no minimum time requirement for apprenticeship, but the average time spent to complete a framework is roughly 21 months. In the year 2000, the government of UK established the modern apprenticeship advisory committee (MAAC) to recommend on how to ensure that the quality of modern apprenticeship in UK fully matches the standard set by leading nations, world wide. In spite of all these efforts, the report completed by this committee in 2001, however, noted that England currently does not have a strong apprenticeship system. The factors identified as "critical weaknesses" in this report include: declining participation by young people, low completion rates, with only 1/3 of apprentices completing their frameworks, and weaknesses in training, assessment and data collection ([http://en.wikipedia.org/wiki/ Apprenticeship](http://en.wikipedia.org/wiki/Apprenticeship))

In France, the first law on apprenticeship came into force in 1851 but a tangible progress in the training started to take place after 1919. The first centers for apprentices got their appearance in 1961. In 1971, apprenticeship was legally made part of professional training. The French government pledged to further develop apprenticeship as a path to success at school and to employment. Based on its success in 2005, 80% of young French people who had completed an apprenticeship entered employment. In French, the term apprenticeship denotes manual labor only. In order to achieve its aim of increasing the number of apprentices from year to year, the French Government has designed a plan of granting tax relief for companies when they take on apprentices (since 1925, a tax has been levied to pay for apprenticeship). The major problem of

apprenticeship in France is that apprenticeship is often connected with academic failure at school and ability to grasp only practical skills and not theory. To improve this image the French government launched a campaign led by a minister to help the public get the right information on the aims and applications of apprenticeship.

As already seen above, in modern Europe over all situations regarding apprenticeship training has been changed with considerable variations between different countries after World War II. Perhaps the most radical change on apprenticeship training in Europe is the one that took place in West Germany. The country's vocational training Act of 1969 created a special system of co-operation between companies and vocational schools. In German's dual system of vocational training, trainees get vocational skills through combination of learning and working. The term "Dual system" is there to reflect that the training takes place in two sites- the vocational school and the company. Activities that take place in these two training sites are not sharply divided. There is a possibility, for the trainee, to get both practice and theoretical knowledge in vocational schools and in companies as well. Because companies and vocational schools have joint educational responsibilities in dual system, there is a strong spirit of partnership between the two, with trainees spending one-to-two days in vocational schools and three or four days in companies. This has been part of the educational system of Germany since 19th century. The 1969 law has regulated and unified the vocational training system and codified the shared responsibility of the state, the unions, associations and chambers of trade and industry, which made apprenticeship part of Germany's successful dual education system; in both parts of divided Germany.

In the GDR alone which had a relatively more rigid training system, 3/4th of the working population at present are those who have passed through apprenticeship training. After

reunification, the system remained popular in modern Germany. In 2001, 2/3rd of young people under 22 began apprenticeship, and 78% of them completed their respective programs. In 2003 one in three companies offered apprenticeship. In 2004, the government signed a pledge with industrial unions that all companies except very small ones must take on apprentices. The Employer is responsible for the entire program; and apprentices are not allowed to be employed; they have only an apprenticeship contract. Trainees can learn one of 356 apprenticeship occupation (in 2005). The time taken by apprenticeship training is regulated. Though each occupation learnt takes a different time, the average time taken for the training is 35 months or roughly three years (<http://en.wikipedia.org/wiki/Apprenticeship>)

Even though the central aim of the dual system is to prepare trainees for specific occupation broadening the chances for employment in the changing work place, trainees are also encouraged, as reflected in MOE, science and culture, 1996, for further learning. Opportunities for further learning and training are, therefore, wide open in this system, with the basic understanding that workplaces can make improvement from time to time through technical innovations and skill development of individuals involved. There is no doubt that apprenticeship in this system is change oriented, and as a result, it is capable of producing individuals that can easily be absorbed by the rapidly changing world of work.

Changes in technology are quite fast today; this change has direct affect on both training institutions and industries. Change in technology may force training institutions to revise their curricula. Industries that could not adjust themselves to changes in technology may risk the danger of going out of market as they can't remain competent otherwise.

If trainings given in the training institution remain rigid and can't adjust to the changing technology in the work place, trainees have rare chance of getting acceptance in the world of

work. The changing technology has to create new jobs and training institutions have to prepare the young generation for the skill required in the continuously changing technology in various trades. If this cooperative move is not properly set, it will definitely lead to a high unemployment rate which eventually puts the country in a highly destructive crisis. Jones, (1982:248) expresses the damaging effect of the crisis that originate from unemployment as follows:

Being out of work for six months or more is extra ordinarily destructive to the self confidence of young people, confirms their low self-assessment, and leads to major social traumas including apathy, drug abuse alcoholism, crime and suicide.

The destructive consequences of unemployment are not new to us. Addis Ababa and the major towns of our country are currently suffering from these social traumas. Is there any way out? Do we have any means of curbing these problems? The answer in short is "Yes". For most of our problems, most of the solutions are also in our hands. One of the best means of curbing these problems is making effective use of our technical and vocational education and training system. Our young generation can develop employable skills if we make our apprenticeship training program flexible and change oriented.

2.4 Certificates of completion

When apprentices finish their training, they receive certificates of completion of apprenticeship. These are issued by the state apprenticeship agencies or, in those states not having such an agency, by the Bureau of Apprenticeship and Training in accordance with its recommended standards (<http://www.Ini.wa.gov / Trades Licensing /Apprenticeship /About/History/default.Asp>).

2.5 Joint apprenticeship committees

Joint apprenticeship committees, composed of representatives of management and Labor, work together to develop and administer local apprenticeship training programs. In addition to local groups, national trade committees represent national organizations. With the help of the Bureau of Apprenticeship and Training, the national committees formulate policies on apprenticeship in the various trades and issue basic standards to be used by affiliated organizations

(<http://www.Ini.wa.gov / Trades Licensing /Apprenticeship /About/History/default. Asp>).

2.6. Basic standards for apprenticeship

Programs registered by the Bureau of Apprenticeship and Training must provide that:

- The starting age of an apprentice is not less 16;
- There is full and fair opportunity to apply for apprenticeship;
- There is a schedule of work processes in which an apprentice is to receive training and experience on the job;
- The program includes organized instruction designed to provide apprentices with knowledge and technical subjects related to their trade (a minimum of 144 hours per year is normally considered necessary);
- There is a progressively increasing schedule of wages;
- Proper supervision of on-the-job training with adequate facilities to train apprentices is insured;
- The apprentice's progress, both in job performance and related instruction, is evaluated periodically and appropriate records are maintained;
- There is employee-employer cooperation;
- Successful completions are recognized; and

There is no discrimination in any phase of selection, employment, or training (<http://www.Ini.wa.gov/TradesLicensing/Apprenticeship/About/History/default.Asp>).

2.7. Vocational Guidance and Job Placement System

Vocational guidance is assistance given by institutions to match ones abilities or skills, knowledge and interest to the demand of the market and community. Vocational guidance should help people whether they are learners/trainees to plan their education, training and careers, or adults to plant their career or further training as well as to prepare to become more employable. Vocational guidance is more than providing information, it is a blend of self development to adapt a changing cultural and economical situation and learning and assimilation of career, providing educational, labor market and economic opportunities information (Ipaye, 1986:94-95). In the first stage, it should assist graduates of secondary schools to plan their education as well as to adapt to the values need to cope with the life work (employment and self-employment). From the catalogue of the benefits of vocational guidance and job placement system presented above, this, no doubt, would seem to justify its implementation. Yet the preparation and implementation of vocational guidance and job placement necessitates enacting legislation that defines goals of vocational guidance and job placement system. It should describe the range of services to be provided and stipulate the level of resource. The legislation should apply to the service to be provided to learners/trainees in vocational training institutions as well to adults (Ipaye, 1986:1998).

In require given by the curricula. When the students are placed to have actual work experience such opportunities enable them to develop specific attitudes, occupational and skill training on the job. But it also helps them to know the world of work and in particular to know what one could do that employer would pay for it. Even more basic is it enable to fee the integrity involved

in doing a job and exercising a talent to comprehend the integrity of work and the discover how vocation can a route to employment (Ipaye, 1986:110).

2.8. Requirements of Apprentice Training

Apprenticeship training is in –company training based on an agreement made between a training institution, the apprentices and enterprise/company. To realize the overall advantages, the organization of apprenticeship requires careful preparation and a common effort from all concerned. Each partner has to be aware of his share and his certain tasks. The MOE has established certain basic requirements under which apprenticeship training can function. These include the following (MOE, 2002:/Federal Negarit Gazeta, No 391/2004).

➤ Duties and Responsibilities of the Employers

- Liaise with relevant training institutions;
 - Develop together with TVET institutions systematic apprenticeship plan;
 - Ensure that the appropriate training is provided;
 - Assign an in-company supervisor;
 - Supply necessary working and training materials;
 - Assign the apprentice in the agreed area of work;
 - Evaluate, mark and certify the achievements and performance of the trainee;
 - Take all necessary safety and precaution measures
- ### ▪ Duty and Responsibilities of the TVET Training Centers
- Provide theoretical and practical lesson as specific in the school's training plan;
 - Assign and apprenticeship coordinator;
 - Evaluate apprentices;
 - Liaise with employers;
 - Develop together with Enterprise/workshop systematic apprenticeship plan

➤ Duties and responsibilities of the Trainees

- Work according to the rules and regulations of the employer;
- Keep secrets of the employer;
- Use the machinery, materials and other properties of the employer carefully;
- Be punctual and disciplined and perform the tasks in an appropriate manner;
- Report the daily activities to the supervisor/instructor of the employer for evaluation.

2.9. Legislation in TVET as a basis for Apprenticeship Training

A legal document, which contains by laws, rules, regulation, etc is central to implement TVET in all national education system because the importance attached to TVET in a given country is reflected in the existing legislation establishing it. It can be observed that legislation dealing with TVET in most countries comes in to effect much later after the promulgation of education Acts. Technical and vocational education may have been mentioned as the case in the Kenya Education Act in 1988 but effective policy implementation was to come much later on. Vocational training, however, was well recognized as proven by the establishment of vocational Training Act in Ghana (1970), Uganda (1979), and Swaziland (1982). There was a clear demarcation between vocational education and vocational training then (UNESCO, 1996:17).

In Ethiopia, in regards to TVET there were different mandates given to different ministries. Previously, there was no mandate for national body that could control and manage the system. For example, in labor proclamation No. 42/85 and proclamation No. 41/87 mandates and responsibilities were given to the ministry of Labor and Social Affairs and the MOE respectively. There were also responsibilities of the Ministry of Trade and Industry and others regarding

technical and vocational education and training (ILO, 1997:9). It was only on the 1st march 2004 that TVET law was promulgated for the first time in Ethiopia.

This proclamation No. 391/2004 through article 3 revised the importance of establishing a system under trainees under go apprenticeship training in the productive and service rendering organizations in order to ensure that a TVET program produces capable man power. To this end, the duties and responsibilities of TVET institutions, employers and trainees are clearly defined in the legal document. Moreover, the main elements that should be included in the memorandum of agreement/apprenticeship contract are spelled-out in this TVET Act (Federal Negarit Gazeta, No. 391/2004).

2.10. Contract of Apprenticeship Training

A self-employed person is not a worker within the labor law; however, an apprentice is brought within purview of the labor law, even if only on probation. A labor law may be defined as (Ipaye, 1986:187).

that branch of law which create a construct of employment between one person and the other for the purpose of learning a trade or working for wages, either or not the contract is to be executed independent of control and regulators all rights and duties incidental to that relationship both under the common law and the statute.

Employment is based on contract. A contract is an agreement concluded between one or more person based upon a “promise or a set of promises which the law will enforce”. Parties to a contract of employment are free to decide the terms or conditions of their agreement: that is, the terms of contract depends largely on the intention of the parties. Every party gets what he bargains for, even if the terms turn out to be unreasonable or harsh (Ipaye, 186:188).

Apprenticeship training is in-company training based on an agreement between a training institution, the apprentices and Enterprise/ Company. In principle, the participation will be voluntarily and be promoting by program of mutual benefits, incentives and in mutual respect. Apprenticeship is a win-win situation because it is a partnership between the employers the TVET centers and apprentices for mutual advantage. Since the interests of industry and TVET institutions are complementary, they call for partnership and increased awareness of their interdependence (Petter, 1987:34).

In this context, apprenticeship contract is an agreement concluded among a training institutions, apprentice and employer based on mutual interest. All concerned partners should sign a memorandum of agreement about apprenticeship training so that the tripartite partnership can become more mutually influential. Such an agreement determines the content of apprenticeship training as well as the duties and responsibilities of the parties.

2.11. Apprenticeship: Sharing Training Responsibilities and costs

Apprenticeship schemes vary widely throughout the world. And thus the operational features or forms of apprenticeship training provide the basis for its surrounding financial arrangements. For instance, in Germany, business/industry prepares nearly 70 percent of young people of Secondary school age employment (Gasskov, 1994:132). This dominant business industry role is accomplished within the “dual system” which provides for a division of responsibilities between the employers and the government. The system reaches the majority of youth and enjoys high status. It exemplifies the adaptation of traditional apprenticeship system to the requirements of contemporary economy. The high level of employer commitment to the organization and to financing of initial training is a distinctive feature of the German dual system. Under this model, all the costs of in-company training are borne by the employers, while the state bears the cost of

in-school education. It has been estimated that costs vocational training (including in company and in-school training) are shared in the ratio of approximately 40 percent (state) and 60 percent (employer) (Lauglo and Lillis, 1988:61).

German employers voluntarily bear the greatest share of overall vocational training costs. This contrast with many other countries where the costs are mainly borne by governments. Some considerations encourage employer to sustain their high training investment through dual system. First, appreciation of apprentices' productive work brings certain saving. Secondly, firms' training expenditures are made eligible by the government for deduction from their taxable profits. Thirdly, training enterprises save money on administration and by introduction of employees into the work process, as well as reducing the risk and costs of recruiting employees in the labor market. Fourthly, in the dual system employers have a strong influence over training content, methods, and quality (Gasskov, 1994:136). It is widespread opinion that the dual system is highly efficient because of its built-in flexibility and because it is essentially demand-led. Employers consider their deep involvement in training as an important prerequisite for sustaining their competitiveness in international market.

In both Pakistan and India, Unlike the German and dual system, it is compulsory for employers to recruit apprentices as a certain percentage of the workforce in apprentice able trades. Apprenticeship is, therefore not a matter of employer preference. Employer involvement and expenditure are based not on a need for apprentices, but on formal considerations. The compulsory nature of these models seems to be the major reason for the lack of employers' interest in recruiting apprentices because employers are required to recruit more apprentices than they need, they are unable to utilize trainees' productivity. They may not have enough machines, or even work areas. Being involuntary, apprenticeship tends to raise the employers reluctant

involvement. The most discouraging factor is the fixed high apprentice wages, the cost of which essentially exceeds possible employers benefit (Dougherty and Tan, 1991:144).

In Sri Lanka, unlike in India and Pakistan, employers are free to decide whether to engage apprentices. Furthermore employers are not responsible for direct training (or other) costs. The government covers capital and current expenditures, including apprentice allowances, which have been steadily increasing. Apprentices receive their allowance directly from the government. In most other countries, however, employers themselves are responsible for allowances; the only way to benefit is by making good use of the apprentices work time (Dougherty, 1989:64).

Currently, many governments are considering setting up national training funds to address the training needs of industries. This fund is intended to provide financing of apprenticeship allowances among other benefits. The money will be raised for levy imposed on enterprises. The new trend is to elicit active participation of the private sector in co-financing apprentices. With this arrangement, the private sector is expected to wield more influence on training policies than at present. This seems to be logical. As the total output of publicly subsidized apprenticeship is absorbed by the private sector. Government intervention in training would be limited to the role of regulator (Gasskov, 1994:148).

Finally, the dual system works because employers have made a voluntary commitment to providing the lion's share of national apprenticeship expenditures. Moreover, the training investment is long-term; structured apprenticeship lasts about three years. A commitment of such intensity and duration is sustainable only in a dynamic economic environment, one that remunerates skill-intensive technologies and long-term investment in human resources. In the absence of a favorable environment, the remaining options are compulsory apprenticeship, as in Pakistan and India, or a government-dominated, financially limited system, as in Sri Lanka. The

Compulsory system, as we have seen, is likely to produce unsatisfactory results. A Sir-Lankan style system can work better, provided that employers are allowed to determine which qualifications receive subsidized training.

2.12. Constraints in Conducting Apprenticeship Training as a Component of TVET

It is now generally accepted that for TVET programs to be of good quality and relevant, they must reflect the state-of-the-art in the world of work. To do so more effectively, it is inevitable that they co-operate with the existing enterprises, which have the latest techniques, and production process that most TVET graduates will aspire to work with. Enterprises are the final consumers of the TVET products yet they are reluctant in contribution toward their preparation. Most enterprises will avoid it if possible on the ground that the training is expensive. However, there are also other important reasons for the reluctance (UNESCO: 1996:31).

- Under the present of economic downturn most enterprises operate below capacity and fear that taking inexperienced trainees would further marginalize their production and profits as well;
- Trainees on attachments are risk factors for enterprises because they are often uninsured against accidents;
- Larger enterprises have wider international interest besides training. A majority of local enterprises are still small and weak. They do not have sufficient capacity to co-operate with TVET institutions to conduct training programs.

In most countries there are no policy and regulatory mechanisms that should address these problems and thus considerably contribute to promoting cooperation links between TVET institutions and enterprises. Inappropriate methods of assessment and inadequate incentives for trainees are other major problems. Although industrial attachments are considered to be an

integral and important part of the pupils training, they are often not counted in the overall evaluation of the trainees, which leads to a lack of assiduity on part of both parties involved (trainees and enterprise) (Atchoarena and Andere, 2002:61). Students on attachment often require some allowance to cover their traveling and subsistence costs. These are in most cases too meager for students to value concentrate on these attachment.

To contribute to weak cooperation, information is lacking to enterprises to know that they can benefit from cooperation with institutions. In many countries, vocational guidance services are constrained by lack of national data bank and knowledge on available occupation and, often the vocational guidance system is not well established to arrange industrial visit for students as well as industrial attachment for both teachers and trainees (UNESCO; 1996:378).

Numerous constraints on implementation of apprenticeship have been identified over the past in sub Saharan African countries (Atchoarena and Andere, 2002:286). They may be summarized as follows:

- Insufficient number of training places;
- Lack of appropriate workplace and qualified supervision;
- Lack of coordination between the employer and TVET centers;
- Reluctance of employers to take on large share of the training burden;
- Lack of regulation and contracts that protect the interest of all parties-enterprises, apprentices, and TVET centers;
- Lack of national apprenticeship scheme;
- Problems of assessment (there are no common competence-based assessment procedure, etc)
- Lack of mutual understanding

integral and important part of the pupils training, they are often not counted in the overall evaluation of the trainees, which leads to a lack of assiduity on part of both parties involved (trainees and enterprise) (Atchoarena and Andere, 2002:61). Students on attachment often require some allowance to cover their traveling and subsistence costs. These are in most cases too meager for students to value concentrate on these attachment.

To contribute to weak cooperation, information is lacking to enterprises to know that they can benefit from cooperation with institutions. In many countries, vocational guidance services are constrained by lack of national data bank and knowledge on available occupation and, often the vocational guidance system is not well established to arrange industrial visit for students as well as industrial attachment for both teachers and trainees (UNESCO; 1996:378).

Numerous constraints on implementation of apprenticeship have been identified over the past in sub Saharan African countries (Atchoarena and Andere, 2002:286). They may be summarized as follows:

- Insufficient number of training places;
- Lack of appropriate workplace and qualified supervision;
- Lack of coordination between the employer and TVET centers;
- Reluctance of employers to take on large share of the training burden;
- Lack of regulation and contracts that protect the interest of all parties-enterprises, apprentices, and TVET centers;
- Lack of national apprenticeship scheme;
- Problems of assessment (there are no common competence-based assessment procedure, etc)
- Lack of mutual understanding

In spite of lack of robust evidence, the youth employment situations seems to indicate that dual training schemes, although most useful, are not sufficient to improve linkages between TVET delivery and employers and ensures the relevance of training content in a context of depressed a labor markets.

2.13. Apprenticeship Training Program in TVET Institutions in some Selected Countries

Apprenticeship Schemes vary widely through out the world. For example, the well-structured and highly expensive German system presents a sharp contrast to the so-called regulates apprenticeship models that offer less formal training. The various models differ in terms of training content, relationship between firms/craft person and trainee, the regulatory role of the state, the financing sources and the cost structure (Gasskov, 1998:125). The following discussion considers the basic elements of the German dual system and the apprenticeship scheme in the South Africa delivered by the TVET system.

2.13.1. Apprenticeship Germany

The German “dual system” of apprenticeship supplemented by part-time vocational school, as it has developed in the post-war period, is internationally acclaimed as an advanced version of apprenticeship training. Apprenticeship in firm is combined with part time attendance at the vocational school. Together the two components are known as the ‘dual system’. The dual system is training and education path for approximately 70 percent of school leavers who have obtained an intermediate certificate covering nine to ten classes of the Main school, Intermediate school, or Grammar school. This system is considered as a part of the German General Education system (Lauglo, 1993:37).

The major strength of the German dual system is the leading role of the employers in determining the qualifications for which training places will be provided. School based training is

correspondingly adjusted to meet employer-determined requirements. Training therefore reflects actual market demands. Among the basic elements of the dual system: (Atechorena and Andare, 20002:287).

- It is first of all an alternating training structure, which means that training takes place in a company providing the apprenticeship and in compulsory vocational part-time school.
- The German system is rooted in an “Occupation-oriented” or genuinely vocational training culture: vocationalism in the Germany meaning of the term stands for integral Qualification based uniform training schemes and highly standardized examination procedures. This implies the training is indeed work place led and predominantly practiced by stressing the importance of work experience during the training period.
- The dual system is determined by the involvement of the federal and state administration, which makes occupational standards and conditions of skilled apprenticeship legally enforceable as well as marketable. At the same time the German ‘training culture’ is based on the notion that vocational training should not only be interpreted as a contractual duty but also as educational process.
- The fact that the state’s function is actually restricted to securing quality standards a predominantly formal manner makes the principle of consensus perceptively one of the long-standing parameter of dual training in Germany. This means that public and private as well as semiprivate institutions have established various forms of cooperation within the system and, even more importantly, the social partners normally take the initiative when it comes to defining a training ordinance.

2.13.2. Apprenticeship in South Africa

For the first time in South African history the manpower training Act of 1981 allowed all South Africans to embark upon apprenticeships and the system has governed by a single Act. It also introduced a number of other innovations including “learner ships” scheme.

Learner ships are a more flexible form of apprenticeship. They have in common with apprenticeship the requirement that a work place experiential component be added to learning and that a practical assessment of competence be undertaken. This new scheme was designed to meet the following criteria:

- Structured learning combining theory and workplace experience;
- Demand-led learning;
- Flexible and less costly;
- Integrates theory and practice;
- Leads to a recognized qualification under the national qualification frame work (Atechorena and Andare, 2002:281).

Learn ships are not restricted to the blue-collar trades. They can be any of the 12 National qualification Frameworks (NQF) learning area and any of the NQF levels (in general, further, or higher education). They can, in other words, respond flexibly to the changing needs of the labor market.

Under the skill development Act, sector Education and training Authorities (SETAs) must submit learner ships to both South African Qualification authorities (SAQA) and to the Department of Labor for registration. The latter registration is required to ensure that the work experience component is included and the necessary grants for employer cost-offset as well as learner allowances are defined. The skills development Act further requires a tripartite agreement

2.13.2. Apprenticeship in South Africa

For the first time in South African history the manpower training Act of 1981 allowed all South Africans to embark upon apprenticeships and the system has governed by a single Act. It also introduced a number of other innovations including “learner ships” scheme.

Learner ships are a more flexible form of apprenticeship. They have in common with apprenticeship the requirement that a work place experiential component be added to learning and that a practical assessment of competence be undertaken. This new scheme was designed to meet the following criteria:

- Structured learning combining theory and workplace experience;
- Demand-led learning;
- Flexible and less costly;
- Integrates theory and practice;
- Leads to a recognized qualification under the national qualification framework (Atechorena and Andare, 2002:281).

Learner ships are not restricted to the blue-collar trades. They can be any of the 12 National Qualification Frameworks (NQF) learning area and any of the NQF levels (in general, further, or higher education). They can, in other words, respond flexibly to the changing needs of the labor market.

Under the skill development Act, sector Education and training Authorities (SETAs) must submit learner ships to both South African Qualification authorities (SAQA) and to the Department of Labor for registration. The latter registration is required to ensure that the work experience component is included and the necessary grants for employer cost-offset as well as learner allowances are defined. The skills development Act further requires a tripartite agreement

between the learner, a training provider (accredited by SAQA) and an employer (Atchoarena and Andare, 2002:283-284).

2.14. An Overview of the Current TVET System in Ethiopia

It was after the expulsion of the Italians the Ethiopian government paid some attention to the establishment of vocational technical schools in Ethiopia as a part of its education system. Wanna (1998:56) identified three time periods with regard to the TVET development in Ethiopia. During the first era (1940s-1960s) Ethiopia was rebuilding its educational institutions and very few schools served students from all over the country. However, graduates from high schools that could not join tertiary level of education, lacked skills to be employed in different sectors of the economy. To mitigate the problem of unemployment among secondary school graduates the government in 1962 converted the existing high school into 'comprehensive high schools'. The second era (1960s-1980s) mainly characterizes the attempts to vocationalize high school education with the mission of reducing unemployment among young high school completers. However because of lack of materials and human resources, shortage of qualified teachers and limited budget, the quality of graduates was not as expected and the problem of unemployment among high school completers did not improve much. It was during the 3rd era (1980s-1994) that the government decided to strengthen a number of selected comprehensive as well as other vocational technical schools in order to give effective skill training. Seventeen TVET schools were consolidated to give 3 years of training to students who completed grade ten academic stream.

According to the MOE (2002a:4), in the past, the TVET schools and skill development centers (SDCs) were working under capacity due to lack of promotion and inadequate funding. Little attention was given to work-related, practical training. The quality of training was highly affected by the ineffectiveness of the curriculum, under qualified trainers (only about 93% diploma

between the learner, a training provider (accredited by SAQA) and an employer (Atchoarena and Andare, 2002:283-284).

2.14. An Overview of the Current TVET System in Ethiopia

It was after the expulsion of the Italians the Ethiopian government paid some attention to the establishment of vocational technical schools in Ethiopia as a part of its education system. Wanna (1998:56) identified three time periods with regard to the TVET development in Ethiopia. During the first era (1940s-1960s) Ethiopia was rebuilding its educational institutions and very few schools served students from all over the country. However, graduates from high schools that could not join tertiary level of education, lacked skills to be employed in different sectors of the economy. To mitigate the problem of unemployment among secondary school graduates the government in 1962 converted the existing high school into 'comprehensive high schools'. The second era (1960s-1980s) mainly characterizes the attempts to vocationalize high school education with the mission of reducing unemployment among young high school completers. However because of lack of materials and human resources, shortage of qualified teachers and limited budget, the quality of graduates was not as expected and the problem of unemployment among high school completers did not improve much. It was during the 3rd era (1980s-1994) that the government decided to strengthen a number of selected comprehensive as well as other vocational technical schools in order to give effective skill training. Seventeen TVET schools were consolidated to give 3 years of training to students who completed grade ten academic stream.

According to the MOE (2002a:4), in the past, the TVET schools and skill development centers (SDCs) were working under capacity due to lack of promotion and inadequate funding. Little attention was given to work-related, practical training. The quality of training was highly affected by the ineffectiveness of the curriculum, under qualified trainers (only about 93% diploma

holders) and inefficient funding. Moreover, the needs of the world of work were not defined through participation of stakeholders. Hence, the skill gained from the existing situations could not help the working force to join the real world of work. This situation finally led the trainees to high rate of unemployment after graduation.

On the other hand, there was a lack of appropriate skills that the economy requires for its development. The skill profile of the manufacturing sector was biased heavily toward the unskilled and limited skilled workers. For instance, only 14 percent of the productive workers have received vocational training and almost 40 percent were barely literate. The situation in private sector was even worse, with a lower educational profile (ILO, 1997:3).

Presently, the TVET system in Ethiopia is in a reform process. According to the new education and training policy, the new organization of TVET has a broad base and multi-level foundations. It bases itself on analysis of the training needs of the country's economic and social development. Thus, it is assumed that, it is sufficiently flexible.

Moreover, in current TVET system, a number of TVET programs at different levels are defined which lead to different certificate levels. These comprise post-grade 10 middle level trainings post-grade 8 junior level training , as well as basic level trainings accessible to school drop-outs after completion of grade 4 (MOE, 2003c:3). The aim of all these programs is not only to train manpower for the development program that the country is in process of implementing but is also intended to encourage the trainees to create jobs themselves and contribute to the national development effort (/MOE 2002b:94).

Middle level technical and vocational education and training (MLTVET) program comprises three levels- MLTVET certificate level I, MLTVET certificate level II and MLTVET diploma (MOE, 2003c:5). Middle level technical and vocational education and training level I is a

performance of basic vocational/entrepreneurial competence in a selected occupation to carry out a variety of work activities such as production work, operation and maintenance of relatively complex equipment system and workshop organization within a non-routine work process required considerable autonomy. The last form of Middle level education and training leads to award of diploma and it has a training length of three years. It is performance of advanced techniques and vocational/entrepreneurial competencies in a selected occupation to carry out advanced skilled work activities, for example, analysis, evaluation, operation and maintenance of complex equipment systems and workshop organization within a non-routine work process require autonomy and particular guidance of others.

The aim of middle level technical and vocational education and training is to produce adequately trained middle-level skilled manpower in various trades that can also launch private enterprise. The trainees are expected to be capable enough to establish plan, and manage their own enterprises. As the training programs are designed in a modular way, flexible entry and exit within different programs may be possible (MOE, 2003c:5).

The training planned to be 70 percent practical based and 30 percent theory oriented and this has to be maintained through out the training programs in all training areas (MOE, 2001:2). Besides, in-company apprenticeship training is compulsory at this level (Federal Nigarit Gazeta, No. 391/2004:2558).

2.15. Future Strategies to promote Apprenticeship Training

Despite the challenges facing most countries today, some bold measures have been undertaken to improve the provision of TVET. This is being carried out through a wide range of educational reforms and innovations; with the aim of making TVET more flexible, a higher quality and capable of responding better and more rapidly to the needs of the labor market. Another

important concern is lowering costs for government. This is often translated by initiatives to bring TVET closer to the workplace. Based on experience of different countries, the aim of this section is to review some strategies that may help to promote apprenticeship training through effective partnership system.

2.15.1. Incentives for co-operation

Many countries have policies that subsidize enterprise training through financial incentives (such as apprenticeship wages, industrial levy-grant rebates) to companies to increase their participation in training. But, a part of financial incentives alone may be insufficiently strong to achieve the desired increase in enterprise training; the addition of more positive measures may be required.

Indeed, financial incentives may be prove to be a weak tool for generating more and better training, particularly over the long term because they emphasize financial rewards and not the value to the firm of the greater training investments themselves. Here then lies an important role for the state (or specialized agency) in promoting enterprise training through creating an informed climate of opinion conducive to company training (Zideman, 2003).

Major points that include the dissemination of information on the benefits to the company of training, the provision of training advisory services, productivity consulting, training assistance, and know-how. Experience suggest that these activities are more likely to achieve success where provided by a central specialize training agencies or training fund (World Bank, 1991, Ziderman, 2003).

In addition to the above specified incentives to promote enterprise training, provision of free charge pedagogical training priority to recruit future employees, acknowledgement and

recognition, and award of honorary certificate can be useful tools; positively influencing employers' participation in apprenticeship training (Kerre, 1996:46).

2.15.2. The need for Enterprise Training Association

The formation of enterprise training associations is one option for strengthening training in small and medium firms. Government can assist in the establishment of these associations and training operations through technical assistance. Good examples of enterprise training associations are found in Latin America. At the large end of the scale is the National Industrial Apprenticeship Service, which is owned by the Brazilian confederation of Industries and which serves the nation's manufacturing sector. Elsewhere sub-sectors of industry share the cost of specialized training institutions (Middleton, Ziderman and Adams, 1993:171).

2.15.3. Improving Links with Employers

Vocational guidance and placement services in training centers are a first element in building links with employers (Ipaye, 1986:94). Vocational guidance officers can play key roles in assisting trainees to find apprenticeship places, advice the local enterprises in organizing in-plant training activities, monitoring the practical training activities and providing guidance and counseling services to trainees. In most cases these need not to be elaborate to be effective.

Advisory and curriculum committee with adequate representation of industrial interests are critical to the institution's ability to provide the nation with qualified and technologically relevant manpower. Such committee may also work where the dual training system exists because employers and training institution must jointly design and implement training programs. Experiences in the World Bank Projects suggest that links are more effective when several mechanisms are used together. For example, placement services linked to advisory committees and instructors visits to enterprises have been more effective than any one of the approaches on

its own. Creative school managers, given sufficient autonomy, can be adapting at setting up a network of supportive relations with employers (Middleton and Demsky 1989: 207).

2.15.4. Strengthening National Training Authority (NTA)

A competent NTA can play key roles in developing training policy, supervising national skills testing and certification, as well as providing necessary information services and developing appropriate labor market signals. Independence from close ministerial control and strong representation of employers on NTA management boards can provide the condition for forging strong industrial links, flexibility and responsiveness, and for fostering private training institutions development (Middleton, Ziderman and Adams, 1993:205). Indeed, the participation of relevant stakeholders in management of training can contribute to the enhancement of the quality, relevance and flexibility of training.

2.15.5. The need for Effective Industrial Attachment Mechanisms

Industrial attachment has been one of the most widely used and effective methods in attempting to pass on the latest experience from industry to trainees. Co-ordination to ensure that the employers and training centers are working towards the same goal requires strong management, however.

Among the factors leading to success are instituting a well-planned national system for industrial attachment in TVET system, and clearly defined duties and responsibilities of enterprises, training centers and trainees (Kerre, 1996). In addition, mutual incentives to employers and training institution to make the program work and strong government support are central to institutionalize effective industrial attachment.

2.15.6. Encouraging TVET Institutions to Increase Income Generating Activities (IGAs)

In many training programs, income is generated from the sale of production and service activities of trainees. Such income generation may take many forms. Income may be derived from training process itself. This could be in the form of provision of services, which also offers trainees' valuable practical experience gained from working with real clients or, items produced as a part of training may be sold. Through likely to be marginal, income generation from these sources offer additional revenue to training institutions (World Bank, 1991:129).

But it is also possible by available skills and facilities to produce output for sale in the local market. While the concept of combining learning with practical experience is maintained, the issues become one of the balances between these two activities. A balance must be struck between training and production for sale, lest the centers pursue revenues at the expense of training (Herschbach 1985:71).

Furthermore, training institutions may generate income from sales of services including the renting out of underused facilities and providing consulting services to local enterprises. Introduction of small business centers where entrepreneurs come for help in acquiring skills in preparing business plans, record keeping or management skills at an affordable fee can also be exploited as alternative ways to raising funds (UNESCO, 1996:37).

2.15.7. The Introduction of Training levy (or Training Tax)

Earmarked levies on enterprises payrolls have become the most widely adopted funding mechanism for financing training (usually under the aegis of NTA) and in enterprises. In many cases, the declared intention underlying the introduction of payroll levy is to lighten public sector financing burdens (Atechorena, 1996:8).

Developing countries use two basic types of payroll training taxes each of which reflects a rather different objective, although in practice there are mixed models. The revenue-raising plan-the so

called the Latin America model-is essentially used to support public sector training provision, with the emphasis on initial training at formal public training institutions. The alternative levy grant, or rebate, scheme encourages firms themselves to provide in plant training (Middleton, Zidman, and Adams 1993/Ziderman, 2003:91).

Additionally, it is assumed that a significant share of public and private employers in Ethiopia have started to appreciate and develop ownership for TVET and have become full partners of the governance in the TVET system. Therefore, it is planned that during this phase, the introduction of a levy (Levy-grant) system will be considered for introduction that would compel all employers to contribute.

2.15.8. Strengthening Private Training Sectors

The growth of private training institutions, with trainees paying full costs, offers a pathway for expanding the national training system without heavy commitment of public funds. Indeed, 'reduced' public training provision could be possible with the reduction in public training supply may up by compensation of expansion of private training institutions. Aiming at the same quantity of training to be facilitated, the public sector spends less if substantial private investments form part of the training supply, leaving public TVET resources for other important tasks, such as creating and maintaining conducive environment through the facilitation of teacher training development of standards and curricula, trade testing, etc (Ziderman, 2003/MOE, 2003:27).

It is arguable that private training institutions constitute a market finance response to a growing social demand. A part from reducing reliance on the stage budget, it is hoped that the private sector can promote fair competition, eventually leading to cost reduction (Atechorena, 1996:6).

There are a variety of legal, financial, and administrative and policy instruments to strengthen the private training sector, including a conducive licensing, and accreditation policy, conducive legislation concerning the operation of private providers, various instruments to ease access to the market, recognition of certificates, and public subsidies to private training providers, an instrument which has been in one way or the other introduced in many other countries (Middleton, Ziderman and Adams 1993/Ziderman, 2003/MOE, 2003:27).

CHAPTER THREE

3. METHOD OF THE STUDY

In order to delineate the problems apprenticeship training programs in selected government TVET Institutions in Addis Ababa city Administration descriptive survey method was employed.

3.1 Source of the Data

The data for study was obtained from both primary and secondary sources. Besides, trainers, trainees, principals, vocational counselors, the experts of Education Bureau and supervisors in organizations offering apprenticeship training, of the sample TVET institutions were also the source of the data to supplement the study.

3.2 Sample

3.2.1 TVET Institutions

From the total number of ten governmental TVET institutions found in Addis Ababa city Administration, four (40%) TVET Institutions were selected for the study. From the selected TVET institutions, one was assigned for the pilot study. And four were selected for the main study. The choice of the TVET institutions was purposive sampling method because the total number and the diversity of training areas in these institutions are higher than that of others. The second intention for doing is that this technique is appropriate to avoid the probable focus in a certain geographic area and field of training so that the conditions in different areas were reflected and the study becomes representative. Therefore, while selecting sample TVET institutions, the number of trainees, geographic area and diversity of technical and vocational training programs offered were considered.

3.2.2 Trainees

In the four selected TVET institutions had a total of 1127, TVET trainees who took apprenticeship training in deferent organization. Out of these 285 (25%) were included in the sample. The trainees were stratified according to their field of the study with an attempt to incorporate ideas of trainees from all areas of training in the study.

Out of the trainee's total population:

- From Business Education, 90 (37.5%) trainees,
- From Industrial Technology 58 (24.1%) trainees,
- From Construction, 60 (25%) trainees,
- From Hotel service, and Beautification, 16 (6.8%) trainees,
- From Textile and Garment Technology 8 (3.3%) trainees and 8 (3.3%) others

The total 285 (25%) of trainees were randomly selected. The random sampling technique was employed to draw a sample respondent from each field of study.

3.2.3 Trainers

There were 150 major field trainers in the four selected TVET institutions. Out of this population 30 (20%) trainers were in corporate in the sample by using availability - sampling technique for the manageability of their number.

3.2.4 Vocational counselor

There were eleven vocational counselors working in the four selected TVET institutions. Out of this population, nine were selected by using availability – sampling technique.

3.2.5 Principals

Seven principals of the four selected TVET institutions were also taken for the study by using availability – sampling technique for the manageability of their number.

3.2.6 Supervisors

The total number of the organization that offered apprenticeship training in the city was 128. Out of this 32 (25%) was included in the study using purposive sampling technique. The reason for employing purposive sampling technique here was mainly aimed at including organizations from different sectors (service, production and trade) and different sizes of operation (micro and small, medium and large) so that the situations in various areas of the economy could be incorporated.

3.3 Instrument of Data

In order to gather first hand information pertaining to the subjects of the study, questionnaire, focus group discussion, observation and interview questions were prepared and administered. Questionnaire was used for its appropriateness to secure data from many people at a time and for its natural characteristics that allow informants express their ideas and opinions freely and confidentially. Thus questionnaires composed of both open ended and close-ended items. All the items of the instruments were made as relevant as possible to the study problem.

3.3.1 Questionnaire

Three separate questionnaires were prepared:

- a) Twenty Five close – ended question items and two open-ended questions on major factors affecting implementation of apprenticeship training programs were prepared and distributed to the trainees. Out of the total 285 randomly selected trainees, 240 (84.21 %) trainees properly completed the questionnaire.
- b) Thirty one close – ended question items and two open-ended questions on major factors affecting implementation of apprenticeship training programs were prepared and distributed to the 30 major filed Trainers, 9 Vocational counselors and 7 principals and all of them were filled and returned.

c) Twenty three close – ended question items and two open-ended questions on major factors affecting implementation of apprenticeship training programs were prepared and distributed to supervisors in organizations offering apprenticeship training. Out of the total 40 randomly selected supervisors, 32 (80%) supervisors properly completed the questionnaire.

3.3.2 Interview

Fifteen unstructured interview items on problems of apprenticeship training programs were designed for the AAEBS TVET representatives.

3.3.3 Observations

Observations were made in all select TVET institutions and by observing work place of apprentice (Shop organization and crowdedness), Staff room, first aid and relevance materials and permanent supervisors.

3.3.4 Focus Group Discussion

Six unstructured items of the focus group discussion containing items on current problems of apprenticeship training programs were prepared for group comprising of counselors, trainees and trainers. The focus group discussion was carried out in Higher 12 TVET institutions and 20 members participated in the focus group discussion.

3.4 Pilot Study

The purpose of the pilot study was to assess the relevance of the instruments designed to collect data for the study. The aim was also to find out ambiguities, omissions and misunderstandings of each item. Given to the study/thesis advisor and they were asked to give their reaction on each item of the instruments. Using the relevant comments and suggestions from the instruments,. Using the relevant comments and suggestions from the instruments the pilot study was conducted. The pilot study was conducted in Tegbareid Technical collage. Two vocational

counselor's one principal's trainees and five trainers a total of 18 subjects had participated in the pilot study.

Questionnaires were distributed to trainer's vocational counselor's principles and trainees. After the pilot study was conducted; both reliability and validity were established. For example in investigating the overall feature of the questionnaires, Cronbach alpha reliability was calculated using the SPSS computer program.

The reliability coefficients for the problems of apprenticeship training program were found to be for:

- Trainees = 0. 71
- Trainers = 0. 83
- Vocational counselor's = 0. 82

In order to improve the reliability, all the items of the instruments were made as pertinent as possible to the study problem.

Based on the pilot study's results and the professionals' feedback the content validity of the instrument was checked as follows:

- The items were thoroughly inspected.
- The content validity of the instruments, the order of the questions, omissions, vague items and terminologies were improved and made the items measure what they purported to measure.

3.5 Procedure of Data collection

The data gathering instruments used in the study was drafted on the basis of the reviewed literature and the intended data to be collected. To maximize the quality of the responses and the rate of return the time convenient for the respondent was arranged. The researcher was made the objectives of the study clear to all of the sample respondents at the verge of questionnaire

administration in order to avoid confusion and facilitate ease of administration. A close follow-up was also made to immediately correct problems that arose during the filling in of the questionnaires:

3.6 Methods of Data Analysis

The data secured from different sources were analyzed and interpreted using both quantitative and qualitative research methodologies. The chi-square test of significance at 0.05 level was also used in order to see relative differences among responses on given variable and real occurrence of the data in the analysis of the trainees' vocational principals, supervisors' and trainers' responses..

Responses to the level items were given a scale value ranging from three "high" to one indicating "low". Frequencies and percentages were used for the proportion of responses on problems on the apprenticeship training programs. The views, options, observation and relating opinions to facts were used in the open ended questions and interviews made with respondents. In the results section, responses of all subjects were analyzed on each research question.

CHAPTER FOUR

4. PRESENTATIONS, ANALYSIS AND INTERRETATION OF THE DATA

In this chapter, the results of the study are analyzed and discussed based on major factors affecting the implementation of apprenticeship training programs. Hence this section of the paper deals with the presentation and analysis of the data gathered through:

- a) questionnaires distributed to trainees, trainers, vocational counselors, principals and supervisors
- b) The interview guide line designed for the AAEB TVET representatives.
- c) The focus group discussion guide designed for trainee's trainers and voc. Counselors.

Of the total questionnaires distributed to:

- Out of 285 questionnaires distributed to trainers 240 (84.21%)
- Trainers 30 (100%)
- Principals 7 (100%)
- Vocational counselors. 9 (100%) and. out of 40 questionnaires distributed to supervisors us organization offering apprenticeship training 32 (80%) were completed and returned.

The data secured through interview from AAEB TVET representatives, and the results of focus group discussion were included in the analysis of the findings.

Characteristics of the study population

Table-1: Description of trainees by age sex, training program, field of study and occupation of parents.

No	Item	Frequency of Response (N=240)	
		Number	Percentage (%)
1	Age:		
	a. 15-20	116	48.3
	b. 21-25	102	42.5
	c. 26-30	20	8.3
	d. More than 30	2	0.9
	Total	240	100
2	Sex:		
	a. Male	140	58.3
	b. Female	100	41.7
	Total	240	100
3	Training program you are/were enrolled in :		
	a. 10 + 1	94	39.17
	b. 10 + 2	88	36.67
	c. 10+3	58	24.16
	Total	240	100
4	Field of study:		
	a. Business education	90	37.5
	b. Industrial Technology	58	24.1
	c. Construction Technology	60	25.0
	d. Hotel service & Beautification	16	6.8
	e. Textile and Garment	8	3.3
	f. Others	8	3.3
	Total	240	100
5	Occupation of trainees' parents:		
	a. employee (Gov't/PVT/Ngo)	106	44.2
	b. Trade	20	8.3
	c. Other	114	47.5
	Total	240	100
6	Financial status of your family:		
	a. High	12	5.0
	b. Medium	140	58.3
	c. Low	88	36.7
	Total	240	100

As can be seen from Table 1 item 2, 100(41.67%) of respondents in the sample of trainees was a female. This figure is consistent with the data released by Addis Ababa Education Bureau and the MOE indicating the participation rate of females (46.7%) in TVET in Addis Ababa (MOE; 2005/06:105). Thus it is possible to rightly deduce that the representation of each sex in the study

was proportional to the rate of enrollments and the data provided by the sample trainees reflects ideas and opinion of both female and male. Hence, the information gathered from the sample respondents reflects the idea and opinion of both female and male.

As indicated in item 3 of table 1, the training programs in which sample trainees were enrolled in, 94 (39.7%) were attending 10+1 program and the rest 146 (60.83%) were enrolled in 10+2 and 10+3 programs. Since apprenticeship training, according to the curriculum, is mandatory after completing TVET program that offered within a year, it sounds logical to infer that the majority of the sample trainees have undergone apprenticeship training at least for two consecutive year programs and can provide complete and reliable data in relation to the implementation of the apprenticeship training program.

Regarding the occupation of parents of trainees, 114(47.50%) of them were engaged in different types of occupational activities while 106(44.17%) and 20 (8.33%) of them earn their living from employment in different organizations and trade respectively. Therefore, this finding indicates that the great majority of the trainees' were concerning the occupational training area of the sample trainees' majority of them 90 (37.50%) were enrolled in Business Education and the share of Textile and Garment 8(3.33%) is low. The representation of the sample respondents was consistent to the proportionate rate of TVET trainees in each major field of study.

Table-2: Description of principals, vocational counselors, trainers and

supervisors by qualification, field of study and experience in years

S/No	Items	Frequency of Respondents (N=78)							
		Principals		Vocational counselors		Trainers		Supervisors	
1	Qualification	No	%	No	%	No	%	No	%
	- MA/AC/AED and Above	1	14.3	1	11.1				
	- BA/BSC/BED	6	85.7	8	88.9	10	33.3	3	9.4
	- College Diploma					20	66.7	12	37.5
	- Bellow Diploma							17	53.1
	Total	7	100	9	100	30	100	32	100
2	Field of study	No	%	No	%	No	%	No	%
	Business Education					7	23.3	12	37.5
	Industrial technology	1	14.3			10	33.3	8	25
	Construction Technology	1	14.3			8	26.7	8	25
	Hotel service and Beautification					4	13.4	3	9.4
	Edpm/Edad	1	14.3						
	Psychology			5	55.6				
	Other	4	57.1	4	44.4	1	3.3	1	3.1
		Total	7	100	9	100	30	100	32
3	Years of services in current position	No	%	No	%	No	%	No	%
	1-5 years			1	11.1	2	6.7	1	3.1
	6-10 years			2	22.2	8	26.7	3	9.4
	11-15 years	1	14.3			9	30	8	25.0
	16-20 years	2	28.6	2	22.2	5	16.7	12	37.5
	>20 years	4	57.1	4	44.5	6	20	8	25.0
	Total	7	100	9	100	30	100	32	100

It can be seen from the item 1 of table 2 that all the samples principals had first-degree and above. Regarding the vocational counselor in the sample TVET institution 9(100%) all of them were degree holders. Hence, it is possible to deduce that the vocational counselors did fully qualify to undertake activities pertaining to vocational guidance, and job placement services. Although a university degree was set as minimum requirement to undertake activities directly pertaining to the training offered at this level, the vocational counselors did fully attain the desirable level.

Regarding the supervisors who took the responsibility of guiding and following up the day-to-day activities of trainees while they are in apprenticeship training offering organizations, as indicated in item 1 of table 2 only, 3(9.4%) degree and 12 (37.5%) had college diploma and above while the great majority 17 (53.1%) were below college diploma. Therefore from the qualification of the supervisors, it can be safely inferred that the substantial number of the supervisors did not attain the academic qualification that allow them proper implementation of apprenticeship training by sharing experiences that were developed both through education and extended years of services.

As indicated in item 1 table 2, the qualification of the trainers in the sample 10(33.3%) of them degree holders while 20(66.7%) had college diploma in the areas of TVET. From the interview held with the Addis Ababa city Administration Education Bureau TVET representatives it was further discovered that the qualification of trainers in the sample TVET institutions, out of the total trainers recorded in 2005/2006. Only 27.2 percent of them had university education and the rest 72.8 percent had college diploma and for further education following up in service-training in different universities. Yet the education and training policy suggests that trainers at this level ought to have a minimum of first degree. Although a university degree was set as a minimum requirement to undertake activities directly pertaining to the training offered at this level, the TVET trainers did not fully attain the desirable level. Thus, from this it can be rightly deduced that these under qualified trainers were not in a position to provide the required level of quality training to their trainees.

As indicated in item 2 of table 2, all 9 of the vocational counselor were graduates of both at degree and diploma levels, Yet, none of them were trained in the area which allows them to provide vocational guidance services as a profession. In so far as the specializations of principals

were concerned, 2 of them were trained in vocational area. On the other hand, the significant number 4 of the principals had neither the managerial training nor TVET background. The rest one was graduated in Educational planning and management.

Regarding the service years of principals, vocational counselors and supervisors table II item 3 shows that majority of the principals served for more than 20 years in their current position. The majority of the supervisors in the apprenticeship offering organizations 20 (62.5%) too served for more than 15 years having their current title. The service year of supervisors in the organization also indicates that they acquired the required level of practical skills that would be obtained through an extended years of services. Therefore, from this it is possible to infer that supervisors shared their rich practical experiences to trainees during the apprenticeship training.

Table-3: Profile of the organizations participated in the provision of Apprenticeship training programs.

No	Items	F of Response (N=320)	
		NO	%
1	To which the following categories does your organization belong?		
	A) Small, sector enterprise		
	B) Medium size enterprise	13	40.6
	C) Large modern enterprise	10	31.3
2	Type of Business:	9	28.1
	A) Manufacturing		
	B) Trade	8	25.0
	C) Service	12	37.5
3	Type of ownership	12	37.5
	A) Government		
	B) Private	18	56.3
	C) NGO	12	37.5
		2	6.2

Item 1 of Table 3 was constructed to distinguish among different categories of the sample organization participated in the provision of apprenticeship training. Accordingly, 10(31.3%) of the supervisors indicated that their organizations belong to the intermediate sector while the rest 9(28.1%) and 13(40.6%) of the supervisors categorized their organizations under small informal

and modern sectors respectively. This finding indicates that apprenticeship training was insufficient capacity and resources to support such a training made to any significant level.

The open-ended questions was constructed to identify the maximum number of the apprenticed that the organization received and trained during the apprenticeship program. According, the majority 20(62.5%) of the supervisors indicated that each organization took on a maximum of four apprentices during the previous apprenticeship training period. This indicates the wide gap between the demands for apprenticeship training and the supply of the organization.

Presentation and analysis of the Data

Table-4: Condition of legal framework for Apprenticeship Training

No	Items	Respondents (N=318)										df	Table value of X ²	Calculated X ²	
		Principals		Vocational counselor		Trainers		Supervisors		Trainees					
		No	%	No	%	No	%	No	%	No	%				
1	Were there any laws supporting the implementation of apprentices training?														
	A) yes	2	28.	1	11.1	7	23.3	5	14.3						
	B) No	5	71.	8	88.9	23	76.7	30	85.7						
	Total	7	100	9	100	30	100	35	100			3	7.82	1.7	
2	If yes, which of the following laws were applied?														
	A) TVET law														
	B) Apprenticeship guide line	2	100			4	57.1								
	C) Apprenticeship training act			1	100	3	42.9								
	D) Labour proclamation							5	100						
	Total	2	100	1	100	7	100	5	100						
3	Did all concerned parties sign memorandum of agreement during apprenticeship training?														
	A) Yes					4	11.4			38	15.8				
	B) No	7	100	9	100	31	88.6	30		202	84.2				
	Total	7	100	9	100	35	100	30		240	100	3	7.82	1.4	

*p< 0.05

Apprenticeship training is a particular instrument of co-operation between enterprises and TVET institutions. It aims at increasing the quality of training, by exposing trainees to real world of

work. Hence, this crucial aspect of training needs to be supported by close communication and clear rules and regulations. In light of the above discussion, under item 1 of table IV, the sample respondents were asked to indicate the existence of laws for implementation of apprenticeship training. The majority of the total respondents, five of the principals, eight of vocational counselors, 23(76.7%) of trainers and 30(85.7%) supervisors in organization offering apprenticeship training replied negatively, showing the non-existence of legal frameworks on which apprenticeship training was based.

The degree of freedom for item2 is 3. The chi-square critical value of each item at 0.05 level of significance is 7.81, Chi-Square of observed of item exceeds the Chi-Square critical value of item. Therefore, conditions of legal frame work for apprenticeship training are significant. Even there were misconceptions among those respondents which replied positively. This was manifested by their responses to item 2 for all of them thought that labor proclamation was a binding law for apprenticeship training undertaken by TVET trainees. In actual sense this law applies to the traditional type of apprenticeships contract to be signed between the employer and the unskilled worker on voluntary basis. Thus, based on the responses of the majority, it is safe to infer that there were no general laws allowing the provision of apprenticeship training.

As already indicated, Item 3 in the same table was intended to examine whether or not apprenticeship contract was signed among the three parties- trainee, TVET institution and organizations. Accordingly, no single respondent from each group indicated the existence of such contract. From the findings in table IV one can easily infer that the apprenticeship training undertaken so far had no legal foundation from which duties and responsibilities of each participating party were to be developed.

Table-5: Criteria used to Select Organizations and Assign trainees

No	Items	Respondents (N=286)								df	Table X ²	Calculated x ²
		Trainers		Principal		Trainees		Voc.Coun				
		No	%	No	%	No	%	No	%			
1	Were there criteria set to select organization that could offer apprenticeship training?											
	A) Yes	12	40	3	42.9			2	22.2			
	B) No	18	60	4	57.1			7	77.8			
	Total	30	100	7	100			9	100	1	3.84	1.4
2	If yes, what were the major factors to be considered in the process of selection?											
	A) Size of the organization	3	25					1	50			
	B) Type of Business.	9	75	3	100			1	50			
	C) The number of employees											
	D) Relevance of the activities the organizations engaged in to occupational area of training											
	Total	12	100	3	100			2	100			
3	Who assigns trainees to each selected organization?											
	A) The vocational counselor	18	60	7	100	144	60	9	100			
	B) The vocational counselor					18	7.5					
	C) Through trainees personal contact	8	27			51	21.5					
	D) Committee headed by the guidance officer	4	13			27	11.2					
	Total	30	100	7	100	240	100	9	100	3	7.82	3.6
4	How was the total number of trainees assigned to each organization determined											
	A) By the agreement made between TVET institution and organization	25	83.3	5	71.4	213	88.7	4	44.6			
	B) By the TVET institution of the bases of present criteria					4	1.7	2	22.2			
	C) By the organization unilaterally	5	16.7	2	28.6	17	7.1	3	33.3			
	D) By the statement of the law/guideline of Co-operation					6	2.5					
	Total	30	100	7	100	240	100	9	100	3	7.82	3.49

*p< 0.05

As it has already been stated in the literature of this thesis a body empowered by the state, based on guidelines and criteria determined before hand, is expected to select organization that shall participate in the provision of apprenticeship training. On the basis of this, item 1 of table 5 was constructed to identify whether or not criteria were set to select apprenticeship training offering organizations. The majority of the respondents, four of principals and seven of vocational counselors reveal the non-existence of criteria on which the selection of appropriate

organizations for apprenticeship training is to be based. The chi-square test result revealed that, for 1 degree of freedom at a 0.05 level of significance, the critical value of χ^2 is greater than the calculated χ^2 implying that there was no statistically significant difference between the perception of the principals, trainers, and vocational counselors. This finding indicates that the process of selection of the organizations had no uniformity, and obligatory conditions concerning the minimum requirements needed of organizations to be selected for provision of apprenticeship training.

In the interview held with the TVET representatives AA Education Bureau, reflected the same idea. In the interview, it has become clear that the training institute simply send its trainees to any organization that has shown its willingness to give the training.

On item no. 2 of Table V respondents who answered positively regarding the presence of preset criteria for the selection of organizations were asked to enumerate the major elements in the criteria. According, all of the respondents asserted that the mere criterion used was the relevance of the activities organizations engaged in to the training area in which apprenticeship training was demanded. Thus, even were criteria were set, important factors such as the availability of human and material resources in the organization were not given due attention or missing.

On item 3 of the same table respondent were asked to indicate an authority in charge of assigning trainees to apprenticeship training offering organizations. Therefore, all of the principals and vocational counselors and 144(60%) of trainees indicated that the task of assigning trainees to each organization was done by vocational counselors. A reasonable proportion of trainees in the sample respondents 96(40%) indicated that the assignment of trainees to respective organization was the responsibility of other personnel such as trainers, principals and even trainees themselves could choose their own organization. A chi-square test was calculated to detect perceptual

difference among the three study groups. The result revealed that there was not statistically significant variation among the response of the principals, trainees and vocational counselors. From the responses given to this question, a lesson can be derived that those in charge of assignment of trainees to apprenticeship offering organizations vary from institution to institution. The same holds true regarding the criteria used during the assignment process, as reflected by responses given to item 4. That is since the responses given for field of training, chance and interest trainees were proportional it shows disparity in criteria used.

Item 4 was constructed to identify the mechanisms used to determine the total number of trainees to be sent to apprenticeship training offering organization. To this end, the great majority of the respondent five of principals, four of vocational counselor, 213(88.7%) of trainees and 25(83.3%) of Trainers confirmed that had on absolute authority to agree or disagree to determine the total number of trainees that could be attached to its organizations.

Table-6: Assignment of Supervisors

Item	Responses(N=240)		Total	
	No	%	No	%
Did an organization assign supervisors to guide and follow-up your work during apprenticeship training				
A) Yes	108	45	108	45
B) No	132	55	132	55
Total	240	100	240	100

To realize the overall advantages of apprenticeship training, enterprises are expected to assign a supervisor or an in-company trainer to follow-up and support trainees at the workplace or training venue. Based on this, Table VI was constructed to investigate the availability of the supervisors in the organizations offering apprenticeship training. Thus, the significant majority

132(55%) of the trainees confirmed that workplace supervisors/trainers were not assigned to guide and support the apprentices during apprenticeship training. Thus, the finding reveals that the majority of the apprentices were left completely to work independently within training programs without any form of supervision, feedback and motivation that could help to breed productivity and good work ethics.

Table-7: Supervisors' Capabilities and Willingness in Supporting Apprentices

Item	Alternatives								Mean value	Rank
	High		Medium		Low		Total			
	No	%	No	%	No	%	No	%		
How do you rate the following qualities supervisors should possess?										
A) Knowledge of the subject matter (theoretical knowledge)	50	20.8	80	33.3	110	45.8	240	100	1.75	3
B) Skills on give practical training	120	50	70	29.2	50	20.8	240	100	2.29	1
C) Skills on presentation	40	16.7	80	33.3	120	50	240	100	1.66	5
D) Willingness to shape their skills to apprentice.	70	29.2	80	33.3	90	27.5	240	100	1.91	2
E) Capability to evaluate and provide feedback	50	20.8	75	31.3	115	47.9	240	100	1.72	4

A workplace supervisor/trainer assumes an increasingly critical position in the implementation of apprenticeship training. By providing training opportunities, the supervisor/trainer, can play an essential role in maintaining the integrity of his trade as building the work force of tomorrow. Yet, the critical issue is to what extent workplace trainers are ready, willing and able to meet these enhanced and committed to fulfill this important role.

In light of the above discussion, in Table 7 the trainees who replied positively regarding the assignment of the supervisors were asked to rate the extent that the competence of the supervisors aids transfer of skills to trainees in the framework of appropriate learning principles. Accordingly, the majority for the respondents ascertained that their supervisors' skills in doing practical activities and their willingness to share their experience according to the apprentices need were rated high, conversely, the majority of the respondents rated the theoretical

background, skills on presentation and their capability in evaluating apprentices and providing feedback as low. Therefore, these findings reveal that the supervisors did not have the necessary theoretical background and methodological knowledge to deliver training to apprentices and finally to evaluate their performance.

They further indicated in their reply to open ended questions the absence of a number of conditions from their workplaces. A range of the following complaints were common.

- The evaluation criteria and process were not early communicated between the supervisors and apprentices, as indicated by (65%) of the trainees.
- The evaluation was undertaken by the head of the departments, not by the immediate supervisors, as indicated by (36%) if the trainees.
- Lack of fair and objective competency-based practical assessment procedures, (71%) of the trainees.
- Lack of fair and equal treatment of apprentices, as indicated by (58%) of the apprentices.

Table-8: Performance of Trainees during Apprenticeship Training

Items	Respondents (N=41)								df	Table value of X ²	Calculated X ²	
	High		Medium		Low		Total					
	No	%	No	%	No	%	No	%				
A) The trainees diligently perform the apprenticeship training												
Supervisors	24	68.6	6	17.1	5	14.3	32	100				
Vocational Counselors	6	66.7	2	22.2	1	11.1	9	100				
Total	30	68.2	8	18.2	6	13.6	44	100	2	5.91	1.2	
B) To work according to the work methods of the organizations.												
Supervisors	19	54.3	4	11.4	12	34.3	35	100				
Vocational Counselors	7	77.8	0	0	2	22.2	9	100				
Total	26	59.1	4	9.1	14	31.8	44	100	2	5.991	1.1	
C) To utilize machine/equipment with care												
Supervisors	2	5.7	9	25.7	24	68.6	35	100				
Vocational Counselors	0	0	3	33.3	6	66.7	9	100				
Total	2	4.5	12	27.3	30	68.2	44	100	2	5.991	7.1	
D) to perform practical activities												
Supervisors	6	17.1	10	28.6	19	54.3	35	100				
Vocational Counselors	1	11.1	1	11.1	7	77.8	9	100				
Total	7	15.9	11	25.0	26	59.1	44	100	2	5.991	0.9	
E) To cooperate with other employees												
Supervisors	21	60.0	13	37.1	1	2.9	35	100				
Vocational Counselors	7	77.8	2	22.2	0	0	9	100				
Total	28	63.6	15	34.1	1	2.9	44	100	2	5.991	1.1	
F) To utilize input efficiently												
Supervisors	9	25.7	0	0	26	74.3	35	100				
Vocational Counselors	3	33.3	0	0	6	66.7	9	100				
Total	12	27.3	0	0	32	72.7	44	100	1	3.841	1	
G) To produce quality products												
Supervisors	1	2.9	12	34.3	22	62.9	35	100				
Vocational Counselors	1	11.1	3	33.3	5	55.6	9	100				
Total	2	4.5	15	34.1	27	61.4	44	100	2	5.991	1.0	

*p< 0.05

The items in Table 8 were designed to investigate the state of trainees' readiness and ability to accomplish apprenticeship training effectively. Thus, among the given indicators of trainees' performance while doing apprenticeship training, majority of the total respondents 68.2%, 63.6% and 59.1% rated apprentices diligence cooperate and willingness to work according to the work methods of the organizations as high on the other hand, apprentice' abilities to perform practical activities, to utilize inputs efficiently and to produce quality products were rated low by the majority of the total respondent. The chi-square test result revealed that for 2 degree of freedom at 0.05 level of significance the critical values of χ^2 were greater than the calculated χ^2 implying that there was no statistically significant difference regarding all these measuring elements among the perceptions of the supervisors and vocational counselors.

Trainees' capacity to utilize machine equipment carefully and cooperate with the employed in the organizations were rated Low. But the chi-square test result revealed that 2 degree of freedom at 0.05 level of significance the critical values of χ^2 were less than the calculated χ^2 implying that there was statistically significant different between the perception of supervisors and vocational counselors regarding trainees' efficiency to utilize machines and to cooperate with other employees. This significant difference emanates from the level of closeness of the two study groups to the performance of trainees. Thus, sine supervisors have more opportunity to view the activities of trainees while they were doing practical work it is wise to ignore this difference and to depend on the responses of the majority. Therefore, from these findings it is possible to deduce that trainees sent for apprenticeship training were psychologically ready enough to engage in practical activities in the world of work. But, sadly enough, the status of their acquaintance with practical skills to come up with quality products was below the level of compromise. This has further negative implications on the quality of the training trainees received from their respective

TVET institutions, which is of course the cumulative result of quality of trainers, inputs for practical training and the condition of the leaning environment.

Table-9: Roles of TVET Institution in Promoting Apprenticeship Training

Items	Respondents (N=78)										d f	Table value of X ²	Calcul ated X ²	
	High		Medium		Low		Undecided		Total					
	No	%	No	%	No	%	No	%	No	%				
A) Consider grades given for apprenticeship training as a component of criteria for certification														
Supervisors	32	100								32	100			
Vocational Counselors	9	100								9	100			
Principals	7	100								7	100			
Trainers	30	100								30	100			
Total	81	100								81	100	4	9.488	3.21
B) To assign personnel that follow-up the apprenticeship training.														
Supervisors										35	100			
Vocational Counselors			2	22.2	35	100				9	100			
Principals			2	28.6	5	77.8				7	100			
Trainers					30	100				30	100			
Total			4	49.	77	95.15				81	100	4	9.488	3.11
C) To prepare guidelines and schedules that help proper implementation of apprenticeship training														
Supervisors					32	100				32	100			
Vocational Counselors					9	100				9	100			
Principals					7	100				7	100			
Trainers					30	100				30	100			
Total					81	100				81	100	4	9.488	5.13
D) To work in coordination with the organization														
Supervisors					32	100				32	100			
Vocational Counselors	4	44.4	5	55.6						9	100			
Principals	4	57.1	3	42.8						7	100			
Trainers					30	100				30	100			
Total	8	9.9	8	9.9	65	80.2				81	100	4	9.488	5.13

*p< 0.05

The items in Table IX were designed to examine the state of the efforts made by TVET institutions to help effective implementation of apprenticeship training in each organization. To this end, all respondents (100%) ascertained that the TVET institution recognizes results of apprenticeship training by using it as a major component of criteria for certification that is used as a testimony for the successful completion of middle level TVET program.

On the other hand, the great majority of the respondents (95.1%) unravel that TVET institutions did not assign coordinators who follow up the progress of apprentices at workplaces of the apprenticeship training. Again, all of the respondents (100%) ascertained that no guidelines and schedules were prepared by the TVET institutions to help proper implementation of apprenticeship training in each organization. More over the majority (80.2%) of the total respondents asserted that the TVET institutions status to work in coordination with the organizations to allow desirable performance and accomplishments during apprenticeship training was below the required level.

A chi-square test was calculated to check whether or not perceptual difference exists among the four study groups. Accordingly, the result revealed that for 4 degree of freedom at 0.5 level of significance the critical value of χ^2 was for greater than the calculated χ^2 was that there was no statistically significant difference in perception.

Therefore, from the above finding it can be safely inferred that the roles played by TVET institutions were not encouraging enough for the fact that they did not exert the maximum efforts required of them to materialize effective implementation of apprenticeship training by working in close touch with organization and preparing documents that help smooth handling of apprenticeship training.

Table-10: Preparedness of Organizations Offering Apprenticeship Training

Items	Alternatives (N=256)								df	Table x2	Calcul ated x2
	High		Medium		Low		Total				
	N	%	N	%	N	%	N	%			
A) Accept trainees for apprenticeship training											
Trainees	50	20.8	80	33.3	110	45.8	240	100			
Vocational counselor			3	33.3	6	66.7	9	100			
Principals			2	28.6	5	7.14	7	100			
Total	50	19.5	85	33.2	121	47.3	256	100	4	9.49	3.27
B) To assign the apprentice in the place appropriate to his filed of training.								100			
Trainees	20	8.33	90	37.5	130	54.2	240	100			
Vocational counselor					9	100	9	100			
Principals			1	14.3	6	85.70	7	100			
Total	20	7.8	91	35.5	145	56.6	256	100	4	9.49	1.99
C) To assign a capable supervisor who would enhance the skills of the apprentice											
Trainees	15	6.3	92	38.3	133	54.4	240	100			
Vocational counselor					9	100	9	100			
Principals			2	28.6	5	7.4	7	100			
Total	15	5.9	94	36.7	147	57.4	256	100	4	9.49	3.59
D) To consider the apprentices as a regular employee and to provide him/her the necessary inputs.											
Trainees	16	6.67	90	37.5	134	55.8	240	100			
Vocational counselor			1	11.1	8	88.9	9	100			
Principals			3	42.9	4	57.1	7	100			
Total	16	6.25	94	36.7	146	57.03	256	100	-	-	-

*p< 0.05

The proper implementation of apprenticeship training requires careful preparation and a common effort from all concerned stakeholders. Each partner has to be aware of his share and his certain tasks. Considering training as on going investment in the future of the workforce, it is the responsibility of the employers to provide an opportunity for apprentices to learn his/her trade by offering a well round, practical trade training experiences. Yet, the main challenge is to ensure that the employer organizations are committed to principles of investing in human capital formation and acknowledge its importance for development.

Based on this, the items in Table 10 were designed to investigate the extent to which apprenticeship training offering organizations meet the crucial factors necessary to realize the

apprenticeship training. According quite a great majority of the total respondents, (47.3%), (56.6 %) and (57.7%) ascertained that the necessary inputs by assigning them in the place appropriate to their field of training, to accept trainees and to assign supervisors were rated low respectively. The chi-square test result revealed that for 4 degree of freedom at 0.05 level of significance the critical values of χ^2 were greater than the calculated χ^2 implying that there were no statistically significant differences in opinions regarding the preparedness among the four study groups. Therefore, the finding reveals that the organizations were little prepared for collaboration and of few of them had the appreciation of the value of apprenticeship training to play essential roles in the apprenticeship schemes.

Table-11: Financing Apprenticeship Training

No.	Items	Respondents(N=309)									
		Principals		Supervisors		Trainees		Trainers		Total	
		No	%	No	%	No	%	No	%	No	%
1	Were apprentices paid wages for their labor during apprenticeship training?										
	A) Yes	0	0	3	9.4	0	0	3	10	6	1.9
	B) NO	7	100	29	90.6	240	100	27	70	303	99.1
	Total	7	2.2	32	10.2	240	77.9	30	9.7	309	100
2	Covers expenditures of trainees during apprenticeship training?										
	A) Organizations			2	6.25	5	2.1			7	2.2
	B) Apprentices/ families	7	100	30	93.7	235	97.9	30	100	302	97.7
	C) The TVET institutions										
	D) Public fund										
	E) Sponsorship Agencies										
	Total	7	2.2	32	10.4	240	77.7	30	9.7	309	100
3	Which of the following mechanism was used to subsidize the direct cost of the organization for apprenticeship training?										
	A) Public fund			7	21.9	23	9.6	8	26.7	38	12.3
	B) The organization budget	4	57.1	20	62.5	162	67.5	12	40	198	64.1
	C) The money raised from a levy imposed on enterprises	2	28.6	3	9.4	15	6.3	4	13.3	24	7.7
	D) Income generated from sales of production and service activities of trainees.	1	14.3	2	6.25	40	16.7	6	20	49	15.9
	Total	7	2.2	32	10.4	240	77.7	30	9.7	309	100

*p< 0.05

Traditionally, apprenticeship is a type of on the job training. The apprentices, in return for the training received, contribute to the production. Conversely, contemporary apprenticeship combines both market financing and public intervention. Hence, the direct and indirect expenditure of a apprentices training need to be shared among the beneficiaries of the training, namely the employers the trainees and the public. Sharing the training cost capture some of the benefits, avoids insufficient separation decisions by all parties. Through cost sharing, apprentices pay for their skills formation by accepting a wage that is lower than marginal productivity during the training period. Similarly, the government has a responsibility to subsidize the current and capital expenditures including apprenticeship allowance, through levy-grant schemes or out general taxation. Employers could be responsible for the employment costs of the scheme. In light of the above discussion, items in table 11 were designed to examine the mechanisms being put in place to finance apprenticeship training schemes. Accordingly, the great majority 303 (98.1%) of the total respondent affirmed that the apprentices were not paid wages or modest allowances by the organizations in return to their productivity during the training period. In line with this, quite the great majority of the respondents 302(97.7%) ascertained that the remunerations required to attend the apprenticeship training were fully borne by the apprentices and/or their respective families.

Item 3 of Table was constructed to investigate the mechanisms used to subsidize the direct cost of the organizations offering apprenticeship training. To this end, the majority 198(64.1%) of the respondents affirmed that the organization themselves were responsible for the recurrent expenditure of the training which essentially exceed their possible benefits.

Thus, from the findings it is possible to deduce that no funds were borne by the government to support the proper implementation of apprenticeship training scheme. This sharply contrasts with the experiences of many other countries, where the government encourage firms to train though provision of a regime of incentives in the form of direct subsidy of enterprise training, training cost reimbursement as apart of levy-grant system, apprenticeship wage subsidies and indirectly, through concessions on company tax obligations for organization that involved in apprenticeship training scheme.

Table-12: Reasons for Exclusion of Trainees from Apprenticeship Training

No	Item	Respondents(N=286)									
		Trainers		Trainees		Voc. Coun.		Principal		Total	
		No	%	No	%	No	%	No	%	No	%
1	Were some trainees completely excluded from apprenticeship training?										
	A) Yes	18	60	130	54.2	6	66.7	4	57.1	158	55.2
	B) No	12	40	110	45.8	3	33.3	3	42.9	128	44.8
	Total	30	10.5	240	83.9	9	3.1	7	2.4	286	100
2	If yes, which of the following were the main reasons? (you may choose more than one answer)										
	A) In adequacy of organizations to absorb all trainees	6	20	68	28.3					74	25.9
	B) Inconvenience of the session for apprenticeship training	4	13.3	20	8.3					24	8.4
	C) Reluctance of the trainees										
	D) Shortage of man power to coordinate			30	12.5	2	22.2	2	28.6	34	11.9
	E) Organizations were not volunteer	20	66.7	122	50.8	7	77.8	5	71.4	154	53.8
	Total	30	10.5	240		9	83.9	7	2.4	286	100

On the item no 1 of Table 12 respondents were asked to verify whether or not some legible trainees were completely excluded from apprenticeship training due to the factor beyond their control. Accordingly, quite the great majority of the total respondents 158(55.2%) ascertained that some trainees were forced not to attend apprenticeship training completely. Item No. 2 of the same table was purposefully constructed to investigate the main reasons that compelled trainees from engaging in apprenticeship training. To this end, the majority of the Respondents (53.8%) asserted that the organizations were not volunteer to attain trainees for apprenticeship training and this was the core problem of some trainees' complete exclusion from apprenticeship training. Shortage of manpower to coordinate and Inadequacy of organizations, available in the area where the TVET institutions were located to absorb trainees comes second and third on the list in relation to the major areas of the problems. Thus, from this it can be safely deduced that trainees were forced to attend apprenticeship training.

Table-13: Factors Affecting Retention and Completion of Apprenticeship Training

Items	Alternatives							
	High		Medium		Low		Total	
	No	%	No	%	No	%	No	%
A) Assignment other than occupational field of training								
Trainees	220	91.7	17	7.1	3	1.25	240	100
Vocational Counselor	6	66.7	2	22.2	1	11.1	9	100
Supervisors	25	78.1	5	15.6	2	6.25	32	100
Principals	3	42.9	2	28.6	2	28.6	7	100
Trainers	20	66.7	5	16.7	5	16.7	30	100
Total	274	86.2	31	9.7	13	4.1	318	10
B) In appropriateness of period/Session/ of apprenticeship training								
Trainees	208	86.7	12	5.0	20	8.3	240	75.5
Vocational Counselors	9	100					9	2.8
Supervisors	23	71.8	3	9.4	6	18.8	32	10.1
Principals	4	57.1	2	28.6	1	14.3	7	2.2
Trainers	18	60	8	26.7	4	13.3	30	9.4
Total	262	82.4	25	7.9	31	9.7	318	100
C) Financial problem								
Trainees	221	92.0	17	7.1	2	0.8	240	75.5
Vocational Counselors	66	66.7	3	33.3			9	2.8
Supervisors	20	62.5	8	25	4	12.5	32	10.1
Principals	6	85.7	1	14.3			7	2.2
Trainers	21	70	7	23.3	2	6.7	30	9.4
Total	27.4	86.2	36	11.3	8	2.5	318	100
D) Lack of reliable transport								
Trainees	180	75	60	25			240	75.5
Vocational Counselors			6	66.7	3	33.3	9	2.8
Supervisors			15	46.9	17	53.1	32	10.1
Principals	5	71.4	2	28.6			7	2.2
Trainers	19	63.3	11	36.7			30	9.4
Total	204	64.2	94	29.6	20	6.3	318	100
E) In appropriate treatment by supportive workplace supervisors								
Trainees	12	5	40	16.7	188	78.3	240	75.5
Vocational Counselors					9	100	9	2.8
Supervisors					32	100	32	10.1
Principals					7	100	7	2.2
Trainers					30	100	30	9.4
Total	12	3.8	40	12.6	266	84.6	318	10

*p<0.05

As discussed in the literature review of this thesis, apprentice's readiness to cope with the demands of work and learning and support from family, friends and peer to young trainees are considered to be prerequisites, without which it is unlikely that a contrast of apprenticeship training would be commenced. It is more than being motivated and induces the ability to develop and maintain effective interpersonal relationship as well as demonstrating that they have the personal attributes and aptitudes that are required for the job. Where apprentices are young, support of the family often provides, money, transport and other basic necessities without which apprenticeship training would not be possible. Thus, the absence of these and related factors discussed earlier will undoubtedly force the apprentice to quite the apprenticeship training.

The item in Table 13 designed to identify factors that contributed negatively for the completion of apprenticeship training. Many of the factors that impact negatively or retention were cumulative. Many trainees spoke of having to bear two or more negative aspects over their apprenticeship training. Out of the factors impeding retention and completion of apprenticeship training, assignment of trainees to places where their occupational field of training was non-existent (86.2%), inconvenience of the period when apprenticeship training was conducted (82.4%) and financial problem (86.2%) come at the top list according to the responses of the great majority of the total respondents. From the findings it can be inferred that factors that negatively affected successful completion of apprenticeship training. therefore, during organizing and planning apprentice ship Training emanated from both social and administrative factors. Put differently inappropriate scheduling of apprenticeship training and lack of financial support and cooperation from stakeholders were the main factors that affect retention and completion of apprenticeship training. Therefore, during organizing and planning apprenticeship

training the need for involving all stakeholder, so as to minimize problems to be encountered and guarantee ease of implementation, in the process were not given due consideration.

Table-14: Follow-up Activities during Apprenticeship Training

No	Item	Respondents										Total	
		Trainers		Trainees		Voc. Coun.		Principal		Supervisor s		No	%
		No	%	No	%	No	%	No	%	No	%		
1	Did professionals from TVET institution follow up the progress of apprentices?												
	A) Yes	12	40	52	21.7	3	33.3	2	28.6		-	69	21.7
	B) No	18	60	188	78.3	6	66.7	5	71.4	32	100	249	78.3
	Total	30	9.4	240	75.5	9	2.8	7	2.2	32	10.1	318	100
2	If yes how frequently was the follow-up activity?												
	A) Daily	-	-	-	-	-	-	-	-	-	-	-	-
	B) Once week	-	-	-	-	-	-	-	-	-	-	-	-
	C) Once in a while	12	100	52	100	2	66.7	1	50	32	100	99	98
	D) Once in two weeks	-	-	-	-	1	33.3	1	50			2	2
	Total	12	11.9	52	51.5	3	3	2	2	32	31.6	101	100
3	If no which of the following was the major problem?												
	A) Lack of finance	16	88.9	162	86.2	6	100	5	100	32	100	221	88.8
	B) Trainers attend in Service course	18	100	170	90.4	6	100	5	100	32	100	231	92.8
	C) Trainers were on Annual leave	18	100	164	87.2	5	83.3	5	100	30	93.7	222	89.2
	D) Trainers were not adequate in number	12	66.7	120	63.8	4	66.7	3	60	24	75	163	65.5
	Total												

*p< 0.05

In item one of Table 14, respondents was asked whether there was any follow-up activity is were undertaken by professionals or trainers in TVET institution during the apprenticeship training.

Thus, most of the respondents, (66.7%) of vocational counselors, (100%) supervisions, (60%) Trainers and (78.3%) of trainee's replied that there was no follow-up activity undertaken by personnel from TVET institution during apprenticeship training, Likewise, (71.4%) of principals

assured that the TVET institution did not professionals who would follow-up the progress of trainees of apprenticeship training.

Item 2 of Table XIV was constructed to assess the intensity of the level of follow-up activities during apprenticeship training, if any. Accordingly, few respondents who indicated in item number 1 that the follow-up activities were undergone by TVET institution asserted that these activities were carried out once in a while. Again this finding indicates that the follow-up activity undertaken in some areas was nominal and can be said no more than nothing. Thus, from this it can be inferred that the apprenticeship training undertaken by TVET institutions were simply aimed at meeting the instructions in the curriculum guide but not to get the maximum out of it.

On item 3 of the same table, respondents were asked to enlist the major bottlenecks to undertake the follow-up activities. To this end out of the respondents who confirmed in their responses to item no. 1 that the follow-up activities were not carried out, the great majority, all (100%) of vocational counselors, Trainers, work place supervisors, principals and 170 (90.4%) of trainees asserted that the period of apprenticeship training overlaps with the summer in service training program which most of TVET teachers attend. The root cause for this is that 84% (MOE, 2003, 106) of TVET teachers were diploma holders though the Education and Training policy envisages that the minimum qualification required at this level is university degree. The Representative of Addis Ababa Education Bureau with whom an interview was held share the views of the above respondents and emphasized that financial constraint is always there to hinder these activities even where the above mentioned problems were non-existent. The interview further revealed that the administration of the institute has been facing a problem of getting

sufficient number of trainers every summer to conduct this program, for many trainers are on summer course, and the rest are on their summer vacation at this time of the year.

Table-15: Promotion of Apprenticeship training

No	Items	Respondents								d f	Table Value of X ²	Calc ulate d X ²
		Principals		Voc. Coun.		Supervisor		Total				
		No	%	No	%	No	%	No	%			
1	Which of the following authorities took part in facilitating and selecting organizations for the Apprenticeship training?											
	A) the TVET institution	7	100	9	100	24	75	40	83.3			
	B) Initiative from the organization themselves					8	25	8	167			
	C) Local/state/Administration											
	D) Employer's Association											
	E) Trade union											
	Total											
2	Were any promotional activities undertaken regarding apprenticeship training program?											
	A) Yes	1	14.3			2	6.3	3	6.3			
	B) No	6	85.7	9	100	30	93.7	45	93.7			
	Total	7	100	9	100	32	100	48	100	2	5.99	1.71
3	If your response to question no. 2 is 'yes' what the mechanism employed?											
	A) Provision of apprenticeship guidelines to organizations											
	B) Sensitization meeting with stake holders	1	100			2	100	3	100			
	C) Training of work place trainers (supervisor)											
	D) Through broad cast (media)											
	Total											

*p< 0.05

In table 15 respondents were asked questions that help to depict the state of promotional activities undertaken in relation to apprenticeship training. Thus item one was constructed to identify the experiences so far passed to make organization offer apprenticeship training. Accordingly, the great majority of respondents, all of the principals, and vocational counselors and 24(75%) of supervisors in apprenticeship offering organizations contend that TVET

sufficient number of trainers every summer to conduct this program, for many trainers are on summer course, and the rest are on their summer vacation at this time of the year.

Table-15: Promotion of Apprenticeship training

No	Items	Respondents								d f	Table Value of X ²	Calc ulate d X ²
		Principals		Voc. Coun.		Supervisor		Total				
		No	%	No	%	No	%	No	%			
1	Which of the following authorities took part in facilitating and selecting organizations for the Apprenticeship training?											
	A) the TVET institution	7	100	9	100	24	75	40	83.3			
	B) Initiative from the organization themselves					8	25	8	167			
	C) Local/state/Administration											
	D) Employer's Association											
	E) Trade union											
	Total											
2	Were any promotional activities undertaken regarding apprenticeship training program?											
	A) Yes	1	14.3			2	6.3	3	6.3			
	B) No	6	85.7	9	100	30	93.7	45	93.7			
	Total	7	100	9	100	32	100	48	100	2	5.99	1.71
3	If your response to question no. 2 is 'yes' what the mechanism employed?											
	A) Provision of apprenticeship guidelines to organizations											
	B) Sensitization meeting with stake holders	1	100			2	100	3	100			
	C) Training of work place trainers (supervisor)											
	D) Through broad cast (media)											
	Total											

*p< 0.05

In table 15 respondents were asked questions that help to depict the state of promotional activities undertaken in relation to apprenticeship training. Thus item one was constructed to identify the experiences so far passed to make organization offer apprenticeship training. Accordingly, the great majority of respondents, all of the principals, and vocational counselors and 24(75%) of supervisors in apprenticeship offering organizations contend that TVET

institutions took over the responsibility of inducing organizations provide apprenticeship training.

The data reveals that the involvement (contribution) of other responsible bodies such as regional state, unions and associations was not brought to the surface.

The second item in the same table was designed to assess the commencement of the sensitization program to encourage cooperation of all the concerned bodies. Unfortunately, as can be seen from the table, all of vocational counselors, 30(93.7%) of the supervisors in apprenticeship training offering organizations and 6(85.7%) of principals ascertained that no sensitization activity had been undergone.

A chi-square test was calculated to check whether or not perceptual different exists among the three study groups. Accordingly, the result revealed that for 2 degree of freedom at 0.05 level of significance the critical value of χ^2 was by far greater than the calculated χ^2 implying that there was no statistically significant difference among the perception of the principals, vocational counselors and supervisors in organization offering apprenticeship training. As can also be seen from the reply of respondents in the table even where some such promotional activities were undertaken, its adequacy to meet the purpose was very remote for all the respondents in this group confirmed that it had been undergone through incidental arrangement of meeting with stakeholders.

In sum, the finding in the above table reveals that the responsibility to create awareness and organize apprenticeship training was solely levied on TVET institutions whose voice is too remote, how ever near, to be heard by organization to react accordingly. Put differently the authorities in the different hierarchy of state, associations and trade union contribution to the fulfillment of apprenticeship training was not more than not at all.

Table-16: Appropriate of Workshop facilities

Items	Alternatives								df	Table Value of X ²	Calculate d X ²
	High		Medium		Low		Total				
	No	%	No	%	No	%	No	%			
How do you rate the equipment/machines available in your workshop											
A) Relevance to the situation in the world of work											
Trainees	20	8.3	60	25	160	66.7	240	83.9	4	9.49	1.72
Vocational Counselor	1	11.1	3	33.3	5	55.6	9	3.1			
Principals			3	42.9	4	57.1	7	2.4			
Trainers	4	13.3	10	33.3	16	53.3	30	10.5			
Total	25	8.7	76	26.6	185	64.9	286	100			
B) Appropriateness to the content of the curriculum	30	12.5	130	54.2	80	33.3	240	83.9	4	9.49	10.01
Vocational Counselor	9	100					9	3.1			
Principals	7	100					7	2.4			
Trainers	28	93.7	2	6.7			30	10.5			
Total	74	25.9	132	46.2	80	27.9	286	100			
C) Appropriateness to capacity of the trainees	10	4.2	60	25	170	70.8	240	83.9	4	9.49	1.47
Vocational Counselor	1	11.1	3	33.3	5	55.6	9	3.1			
Principals	4		3	42.9	4	57.1	7	2.4			
Trainers	15	13.3	6	20	20	66.1	30	10.5			
Total	20	5.2	72	25.2	199	69.6	286	100			
D) Up-to-dated ness	1	8.3	40	16.7	180	75	240	83.9	4	9.49	7.92
Vocational Counselor	1	11.1	3	33.3	5	55.6	9	3.1			
Principals	4	14.3	2	28.6	4	57.1	7	2.4			
Trainers	26	13.3	8	26.7	8	60	30	10.5			
Total		9.1	53	18.5	207	72.4	286	100			

*p< 0.05

An examination of Table 16 illuminates about the relevance of the items in the workshops to the situation in the world of work, curriculum and capacity of the trainees and up to datedness of workshop equipment in the TVET institutions. To this end the great proportion of trainees (70.8%) and (75%) ascertained that its appropriateness to the capacity of trainees and up-to-datedness respectively, were rated below the desirable level. The chi-square test result revealed that for 4 degree of freedom at 0.05 level of significance the critical value of x^2 was greater than the calculated X^2 implying that there was no statistically significant difference among the

perception of the trainees, principals and vocational counselors in relation to the elements listed in the table to measure the appropriateness of the facilities in TVET institution except appropriateness to the contents of the curriculum. It is advisable to ignore the significant difference regarding the appropriateness of these facilities to the contents of the curriculum for principal and vocational counselors have little opportunity to read and evaluate all curriculums. Hence the response of the majority would be used as a basis of the finding. All of the supervisors preferred not to react completely to all questions relating to the facilities in the workshop of TVET institutions. From this one can easily deduce that no favorable conditions was create to allow supervisors to visit the work shop facilities in TVET institutions and the curriculum designed for the level. This implies that workshop equipment with particular emphasis on relevance to the situations in the world of work, appropriateness to the contents of the curriculum, appropriateness to the capacity of the trainees and up-to datedness were found to be less than the minimum desirable level.

Table-17: Relevance of Apprenticeship Training to Occupational Areas of Training

No	Item	No	%
1	How do you rate the relevance of the activity you have under gone during apprenticeship training to your occupational training?		
	A) High	40	16.7
	B) Medium	95	39.6
	C) Low	102	42.5
	D) Very low	3	1.2
	Total	240	100
2	If your response for question No. 1 is low or very low which of the following could be adequate reason? You may choose more than one answer.		
	A) The organization was not engaged in activities relating to your occupational area of training		
	B) Reluctance of organization to assign you according to you respective occupational area of training	60	57.1
	C) Inadequacy of training in the TVET institution	15	14.3
	D) Your failure to regularly attend the apprenticeship training		
	E) The job you assigned to was routine and remained unchanged through out apprenticeship training period in the organization	30	28.6
	Total		

In item No. 1 of Table 17 trainees were asked to rate the state of relevance between the workplace practical training and the training given in TVET institutions. Accordingly, 105(43.7%) of the respondents' rating reveal that is relevant was below the desirable level. The main reasons that the majority of respondents 60(57.1%) forwarded in their reply to item 2, were the reluctance organization to assign them according to assign them according to the area of occupational training and the inappropriateness of the job they were placed in, to allow flexibility for exercising the various skills according to the contents prepared for the apprenticeship training in the curriculum. Thus, from the findings it can be inferred that the time spend by apprentice to gain a meaningful work experience from organization was not worthwhile.

Table-18: Incentive Given to Organization

No	Items	Respondents							
		Principals		Voc.coun.		Supervisors		Total	
		No	%	No	%	No	%	No	%
1	Where there incentives given to organizations offering apprenticeship training?								
	A) Yes	3	42.8	3	33.3			6	12.5
	B) No	4	57.2	6	66.7	32	100	42	87.5
	Total	7	100	9	100	32	100	48	100
2	If yes, which of the following were among the forms of incentives given?								
	A) Tax exemption on imported machine/equipment								
	B) Productivity consulting								
	C) Charge free training for employees in the organization								
	D) Recognizing their contributions on graduation days	3	100	3	100			5	100

The first item in Table XVIII was designed to assess whether some kind of incentives were given to encourage further participation of organization in apprenticeship training. In reply to this questions, majority of the respondents all (100%) of supervisors in organization 6(66.7%) of vocational counselors and 4 (57.2%) of principals ascertained that no incentives were given to

In item No. 1 of Table 17 trainees were asked to rate the state of relevance between the workplace practical training and the training given in TVET institutions. Accordingly, 105(43.7%) of the respondents' rating reveal that is relevant was below the desirable level. The main reasons that the majority of respondents 60(57.1%) forwarded in their reply to item 2, were the reluctance organization to assign them according to assign them according to the area of occupational training and the inappropriateness of the job they were placed in, to allow flexibility for exercising the various skills according to the contents prepared for the apprenticeship training in the curriculum. Thus, from the findings it can be inferred that the time spend by apprentice to gain a meaningful work experience from organization was not worthwhile.

Table-18: Incentive Given to Organization

No	Items	Respondents							
		Principals		Voc.coun.		Supervisors		Total	
		No	%	No	%	No	%	No	%
1	Where there incentives given to organizations offering apprenticeship training?								
	A) Yes	3	42.8	3	33.3			6	12.5
	B) No	4	57.2	6	66.7	32	100	42	87.5
	Total	7	100	9	100	32	100	48	100
2	If yes, which of the following were among the forms of incentives given?								
	A) Tax exemption on imported machine/equipment								
	B) Productivity consulting								
	C) Charge free training for employees in the organization								
	D) Recognizing their contributions on graduation days	3	100	3	100			5	100

The first item in Table XVIII was designed to assess whether some kind of incentives were given to encourage further participation of organization in apprenticeship training. In reply to this questions, majority of the respondents all (100%) of supervisors in organization 6(66.7%) of vocational counselors and 4 (57.2%) of principals ascertained that no incentives were given to

organization who participated in the provision of apprenticeship training. In item two of the same table respondents who reacted positively to item one were asked to unravel the kind of incentive given to organizations. To this end all of these respondents confirmed that the incentive given were no more than recognizing organizations' contribution on the graduation days.

From these findings it can be deduced that no ground was laid by concerned bodies to guarantee further cooperation of organizations in the implementation of apprenticeship training.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

4.1. Summary of the Findings

The purpose of this study was to investigate the major factors affecting the implementation of apprenticeship training program in some select government TVET institutions in Addis Ababa.

To this end, basic questions addressing the fundamental factors that determine successful implementation and quality of apprenticeship training such as the existing legal frame works, incentive measures and mechanisms, organization and management practices, roles and responsibilities of the major actors, financial, material and human factors and range of co-operations areas and the level of partnership were raised.

The data for the study was obtained through questionnaires, interviews and documentary analysis. The data obtained through the administration of data gathering tools were analyzed using percentages and chi-square test methods. Based on the results of the data analysis, the following major findings were identified.

1. Female's participation rate in TVET has currently shown a significant increase, making up 51 percent of the total enrollments in TVET in 2004/2005. The large proportion of girls was enrolled in specialties typically occupied by women while boys dominated specialties, which geared more towards the industrial sectors.
2. Regarding the academic profile of the TVET instructors and vocational counselors, although a university degree was set as a minimum requirement at middle level TVET programs, the finding revealed that the qualification level was far from attainment for the

majority 20 (66.7%) of the TVET trainers. According to the finding, none of the vocational counselors were trained in the area which allows them to provide vocational guidance services as a profession. In so far as the academic qualification of supervisors was concerned the majority of them were below college diploma levels.

3. According to the findings, quite a high proportion of the trainees attended their training in medium and small/informal-sector enterprises. Regarding the sector of activities of the organizations offering apprenticeship training, the finding depicted that the majority of them 18(56.3%) were governmental service rendering organizations while the enterprises engaged in manufacturing activities were found to be small in proportion.
4. According to the finding 66 (67.3%), duties and responsibilities of the main three actors i.e. the organizations, legal frameworks did not back TVET institutions and trainees during the implementation of apprenticeship training. This was further manifested in the finding related to the absence of memorandum of agreement signed among the parties involved in the apprenticeship training.
5. According to the finding 29 (63.4%), the selection of the organizations that could offer apprenticeship training and assignment of trainees to these organizations were not based on some measuring criteria. Furthermore, the finding revealed that the personnel in charge of organizing apprenticeship training varies from place to place, in most cases (86.6%), the assignment of trainees was undertaken through informal discussions between the organizations and the trainees and/or their relatives.
6. According to the finding, the involvement (contribution) of supportive institutions such as local state authorities, trade unions, employer associations and TVET boards to promote

apprenticeship training were found to be inadequate. Due to this, as it was revealed in the finding, the tasks of facilitating and organizing apprenticeship training remained the sole responsibility of the TVET centers.

7. Regarding the supervision of in firm practical training activities the finding revealed that, in quite high proportion of workplace 132 (55 %), supervisors were not assigned to guide and support apprentices. On the other hand, where these trainers assigned the finding depicted that, the supervisor's trade proficiency as well as administrative and pedagogic competence were found to be inadequate.
8. According to the finding, 62 (79.5%) the institutional roles of TVET Institutions to foster the success of apprenticeship training such as establishing a continuous working relationships with local organizations to develop the necessary co-operation and support by enterprises, deploying co-coordinators to organize and monitor in-plant training activities and preparing systematic training plan and schedule were missing.
9. Majority of the respondents ascertained that the preparedness of the enterprises to receive apprentices and provide them training of some defined contents by assigning qualified supervisors who able to plan, follow-up and evaluate in company training; and further that to recognize apprentices as co-workers and provide them with the necessary training inputs were not taken as serious tasks.
10. Regarding the job performance of trainees at workplace, the findings depicted that the preparedness of trainees in the intended technical skills that allows them to produce quality products and utilize resource efficiently were found to be very low. On the other

hand, the trainee's motivation to perform task assignments and their orientation to the rules and work-methods of the organization were rated by the majority of the respondents high.

11. Quite high proportion of the TVET institutions 249 (78.3%), there were not personnel assigned to undertake follow-up activities while apprentices were at workplaces. On the other hand, where these practices exist, the finding depicted that the follow-up activities were carried out once in a while. So many problems were mentioned as a cause for this failure among which shortage of financial and technical staff were indicated as the major bottlenecks.
12. According to the great majority 45 (93.7%) of the total respondents, sensitization activities to promote the theme of the partnership and the culture of apprenticeship training were non-existent. On the other hand where these activities exist, the finding depicted that the mechanisms employed to create awareness and to increase stockholder's participation in apprenticeship training were found to be inadequate.
13. For the majority of trainee's respondents 102 (42.5%) the relevance between the content of workplace practical training and the skills acquired from TVET institutions was found to be very low. The root causes for this mismatch were many among which the assignment of trainees in routine jobs, the non-existence of the tasks in the organizations and inadequacy of the skills acquired from TVET institutions to perform the tasks concerned were mentioned as major factors that breeds this mismatch.

14. Regarding the financial aspects of apprenticeship training the finding 303 (98.1%) depicted that the apprentices were not paid wages or modest allowances by the organizations in return to their contribution to production. On the other hand, the direct expenditures that the apprenticeship training requires were financed by both the trainees and the apprenticeship training offering organizations; trainee's personal expenses (subsistence and traveling costs) were fully borne by the apprentices and/or their respective families and work related expenses (time, human and material resources) were covered by the organizations.
15. The finding 42 (87.5 %) revealed that no incentives measures and mechanism (both monetary and non-monetary forms) were implemented to elicit active participation of employers in apprenticeship training programs.
16. According to findings 266 (84.6%) the vocational guidance and job placement services given to trainees in the TVET institutions were found to be inadequate.

4.2. Conclusions

In light of the findings of the study the following conclusions are drawn

1. From the rapid increase in the number of female trainees participation in TVET it can be concluded that the change has been occurred towards the former wrong perception of the society where TVET was considered as a profession devoted to males only.
2. The work based approach of TVET and its subsequent qualification serves both the individual and the employers. Work-based learning and qualification are a quest for increasing individual's employability: for better articulation between the content of

schooling and subsequent application of acquired skills in the world of work, both in obtaining a livelihood and becoming more productive in the obtained work. The employers and the state have also a vested interest in ensuring the success of work based learning and qualifications, albeit for different reasons. Since one party is the trainer, while the other employer, the former objective is to prepare trainees with the right skills that meet the labor market demand and the latter is interested in the performance of the employee to the desired level and efficiency. Apprenticeship is therefore a win-win situation because it is partnership between trainees, employers and the state for mutual advantage. Contrary to this it was reflected in the findings that there was no evident cooperation between local organizations and TVET institutions in implementing apprenticeship training. This was partly due to deficient implementation but also to disappointing responses from the stakeholders. In particular, lack of information and incentives to increase the concept of partnership contributed to shorten the strategic horizon of this program. Hence, it can be concluded that developing a practice of partnership and a culture of apprenticeship training seems to take more time than initially anticipated in the city.

3. Apprenticeship training is determined by a contractual agreement made between an employer and a trainee based on a set of promises that the law will enforce. This contract further determines the content of apprenticeship training, duties and responsibilities of the parties as well as an agreement on the conditions of the termination of the contract and payment rates. Contrary to this, as the finding reveal, there happened to be a lack of written partnership doing in different organizations ambiguous. As a result, trainees run

the risks of not being insured against accidents and the enterprises react with a kind of autonomy and self-interest towards engaging apprentices for practical training.

4. The search for work-based learning is characterized by the view that work is better setting for certain forms of TVET than school-like setting can be. The finding in this thesis also supports the important contribution that work place made and can potentially make to young people learning particularly in relation to aspects such as: chance to learn and practice some new skills that are not being learnt in TVET institution, opportunity to be acquainted with the activities, rules and work methods of the organizations, opportunity to have their competence practically assessed and chance to understand the integrity involved in their trades.
5. Employers are increasingly considered to be best placed and also to teach the values and attitudes applicable to working life. As the finding in this study revealed majority of the enterprises are far from considering training as a long-term investment in human resource development. Lack of endeavors made to elicit active participation of employers in apprenticeship training through different initiatives, absence of public subsidy and market imperfections are the main causes of the problem. Generally, the main actors involved in the productive sectors have no long-term concept of education and training so are reluctant to invest in it.
6. It was revealed in the finding that the educational potential of the work-place training was only inadequately fulfilled. The obstacles were daunting. The poor integration between TVET training and the sub-sequent work-place component and lack of an intricate, multi-level network of social partnership for effective implementation of apprenticeship training were the major ones. Thus, from this it can be concluded that a true immersion experience

that trainees get from workplace is constrained by both the content and the context of their training.

7. In principle, at enterprise level, only firms that fulfill the obligatory conditions concerning the content of training, qualification of supervisors and other necessary training inputs can be recognized and selected as training enterprises. Contrary to these accepted principles, as the findings reveal, trainees were sent where their occupational areas were not performed and where competent and qualified supervisors, adequate training inputs such as machine/equipment and raw materials were in acute shortage. Therefore it is logical to conclude that such unorganized and incompatible action emanates from absence of clearly defined standards and criteria that establishes a basis for selection of organizations for apprenticeship training.
8. The organizations that participated in the provision of apprenticeship training differ enormously in terms of size, structure, resources and technology. Likewise, real difference exists among the enterprises in organizing structure, demand-led learning, and in providing appropriate supervision and assessment. Thus, there is within workplace environments tensions between the demand for quality learning and the supply of organizations in terms of resources to support learning and supervision.
9. It is widely felt that investing in education and training contributes to economic growth. At the same time, increasing this investment can only be fostered if the main actors- the government, individual and employers-responsible for the training are committed to the principles of human capital formation and acknowledge its importance for development. Government must always assume the responsibility for investing in initial training. Besides this it is government's role to encourage both the enterprises and individuals to

invest in education and training. In particular, it is logical to argue the enterprises should contribute towards the direct financing of work-related education and training. Likewise, the investment in general training should be made by the individuals I they receive transferable skills. Expanding these role of private sectors in training provision and financing can be best accomplished through close partnership among the stakeholders. Contrary to this development, there were happened to be, a lack of awareness toward investment in human capital formation and lack of partnership and legal instrument for encouragements. Thus, the absence of efforts made to create an informed climate of opinion, economic environment and legitimate incentives to encourage enterprises to co-operate in apprenticeship training are the causes for malfunctioning of the scheme which finally tends to raise their reluctant involvement in the programs.

10. It was revealed in the findings that the enterprises were reluctant to take trainees from the TVET institution for practical training. Further more, the skills acquired by trainees in the TVET institutions were found to be inadequate to allow trainees to serve employers productivity needs and profits as well. From this it can be concluded that the lack of employer's interest to co-operate in apprenticeship training is a result of conditions relating to internal effectiveness of school-based training which in turn determined by the extent of training facilities, quality of teachers and adequate recruitment of suitable trainees. Moreover, non-profit maximizing behaviors such as managerial lethargy and non-competitive production environment may lead the enterprises to under-train.
11. It was revealed in the finding that the unit in charge of TVET institution-enterprises relation for organizing and monitoring the apprenticeship training was found to be inexistent. The absence of this trend leaves many individual trainees struggling to seek

apprenticeship placements for practical training and eventually leads to conflicts and mismanagement of this important aspect of training.

12. It was revealed in the finding that organizations were inadequate for providing a sufficiently well round, practical trade training experiences to TVET trainees. There was even a lack of opportunity for practical training in high-level trades demanding new technologies, due to the wide-gap between the demand for the trade activity concerned and the supply capacity of local organizations. Thus, it can be concluded that the current state of the organizations is not compatible with the demand of TVET institutions for successful implementation of apprenticeship training.

4.3. Recommendations

On the bases of the findings and conclusions reached at, the following suggestions are forwarded to improve the culture of apprenticeship-training program in general and to develop the practice of partnership system in particular.

1. The necessity of finding new ways of making training more vocational and the desire to have close contacts to the TVET provider to negotiate and develop relationships with individual employers, groups of employers or business/sector associations about the organization of cooperative delivery schemes. TVET providers should also be encouraged to venture into more agreements with small companies and the micro-enterprises sector as these companies represent the target labour market for a large group of trainees. The TVET Authorities should also be explore possibilities to encourage large companies and small and micro enterprise to cooperate with TVET institutions and to introduce apprenticeships, e.g. through advertising, awarding participating companies or financial incentives. Similarly, the

duties and responsibilities of all parties and responsibilities of all parties should be clearly defined and embodied in the statute governing the training system and be implemented through the allocation of resource to the process of co-operation. Moreover, the employers and other social partners should take the initiative and plays central role in apprenticeship training based on sharing mutual benefits and costs of the scheme. Employer participation, however, does not come without costs. Stakeholders or employers who were previously mere to invest time, thoughts, ideas and finances towards the improvement of apprenticeship training. In order to encourage employers (stakeholders) to undertake such investments, the government must be prepared to share responsibility and entertain different interest and opinions.

2. It was discovered that there is no evident-co-operation between the TVET Institutions and the enterprises in the apprenticeship training programs. The lack of effective co-operation is partly the cause of maladjustment between the TVET training provided and the needs of the industry and the commercial world. Therefore, to reduce the gap between technical and vocational education offered by institutes and the realities of employment it is important that the representation of professionals at all training levels should be reinforced in order to bring improvements linked to the evaluation of techniques. Their mission should be pedagogic improvements and management of TVET centers. In order to do so, a system of partnership among the training structures and enterprises, well-orchestrated by the government, need to be set up. Thus, they all fight for the same cause; more dynamic training schools for a more efficient professional world.
3. The efforts that are necessary to strengthen the linkages between TVET centers and enterprises need highly targeted support, particularly at the local level, where these

relationships are easier to promote. It was found that, a great majority of the training centers do not have a unit in charge of relations with enterprises. Therefore, instructions at a national level should encourage establishing such a units. Within the establishments, such a mechanism should have as a function the registering of data concerning the local enterprises, their activities, and if possible, their needs. Targeted continuing training activities, the organization and monitoring of apprenticeship programs, the provision of labor market assistances to graduates and, later on, their follow-up should also come under its responsibility.

4. The TVET proclamation 2004, by giving due consideration to the apprenticeship training was promulgated. After the adoption of TVET strategy of 2002 and the TVET proclamation of 2004, due to broadened structural problems, the establishment of a National TVET council has been introduced. The formulation of this law is not an end by itself towards enhancing the implementation of apprenticeship training establishment of TVET council. The TVET council was an advisory body without steering functions. Therefore, it needs the development of more specific and detailed other legal documents such TVET Regulations and Apprenticeship Training Guidelines that complement the main law by addressing issues of operational level. Thus it is recommended that the decision-maker in TVET should developed and implement procedures and rules of apprenticeship training for this responsibility falls under its Jurisdiction. It is further recommended that the decision makers in TVET were pushed to continuously reconfirm their policies and activities in light of the different interests and needs of the Ethiopian societies and economy. Among the apprenticeship training is the issues of insurance for

accident during apprenticeship Training should be a priority issue to be treated in the legal documents.

5. There is no universal model for investing in apprenticeship training. But it needs as pre-request a general economic environment and incentives to encourage individual and organization to invest in the training. Here it should be noted that employers have a critical role to play in human capital formulation through investing in apprenticeship training. Therefore, the social partners should strengthen social dialogue on training, share responsibility in formulating policies, forge multi-level network of social partnership with the government in provision and financing of training. This necessary change may not be realized in one step but through an ongoing process of learning and development. Thus, regular and open communications, tight co-operation and agreement between the partners in mutual respect and understanding of their specific situations should govern the process of co-operation.
6. It is apparent that when supervisors are found to be inadequate in knowledge and experience for certain specialized parts of the curriculum, the TVET trainees do not get sufficient experience in the industrial settings to make their time there worthwhile. Therefore, tailor-made further trainings that fill this gap should be organized and continuously undertaken in the TVET institutions. It is also recommended that the Production unit where trainees could be engaged in producing goods and services in real-life situations for customers on a semi-commercial basis should be established in TVET institutions. This gives the trainees the opportunity to acquire practical experiences at the

shop-floor level and also enable the TVET institutes to generate some income to supplement government grants for their operations.

7. A continuing and enhanced government role in skills development should form an integral part of a package of measures to assist disadvantaged groups for whom training is regarded as important tools for improving their incomes and employability. There exists a broad consensus, matched by practice in many countries, that it is the government's tasks to ensure that these needs are met. Therefore, to grant financial assistance for trainees from low-income group, targeted subsidies need to be developed. The money intended to provide financing of subsistence allowance for these groups may be drawn from general tax revenues. This seems to be logical as the whole society benefits from the additional skills generated. Apart from direct subsistence allowances, TVET institutions should assume a major responsibility to job sponsorship and special funds for these trainees. The acquisition and organization of such sponsorship will be best done within decentralized frameworks.
8. It was discovered that TVET institutions are unable to establish a network of supportive relationship with existing enterprises. Two fundamental problems-lacks of incentives and lack of capability-lie at the heart of the issue. Thus, the implementation of an efficient partnership need to include the reinforcement of the capacity of TVET institutions to undertake cooperative actions. These may include enhancing the development of vocational guidance and job placement services in the training centers, granting greater autonomy for training centers so that they are adapting at setting up a network of supportive relations with enterprises and to the diversity of the services that they offer and additional support for good performances such as effectiveness in placing trainees on the

job or apprenticeship training places. Furthermore, regulations that encourage entrepreneurship in revenue generation for complementing in sufficient operating budgets for work-place training need to be set up.

9. The quality of apprenticeship depends in part on the efforts made by the government to obtain well-trained trainers and vocational counselors. Thus, it is important that priority should be given by the MOE to recruitment and initial preparation of well-trained teaching staff. To this end, training integrated into the degree-level programs should be conducted in synergy with business/industry via the inclusion of work-related, practical skills training in firms. In addition, there should be arrangements of continuous professional upgrading at TVET centers throughout instructor's career to enable them to function effectively. A demand oriented training programs should also be set up for vocational counselors, workshop assistance and tool-men to improve the performance of apprenticeship programs. Furthermore, effort should be made to set up training, counseling and research activities in TVET system in order to respond to current problems involving skills and the labor market so that it serves as a regional center of excellence in the field of human resource management; and to take part in the development, adaptation, dissemination and delivery of methods and tools for identifying the specific requirements inherent in different work situations, and the construction of specific, multi-faceted training programs to meet these requirements.
10. It was found that the responsibility for matters of apprenticeship training is merely vested of TVET institution authority that leaves no legal scope for organizing systematic apprenticeship training programs. Thus, the state authorities must also take part in organizing apprenticeship training and play an essential role in the implementation of

apprenticeship training. Other social partners such as trade unions and NGOs should also be encouraged to contribute their share in the implementation of apprenticeship training. It is important to note that in countries where large programs for the training of apprentices have been set up in partnership with employer associations, the latter have helped in the formulation of needs and organization of adequate training.

11. The full exploitation of the potential benefits that trainees could drive from work place training is jeopardized by inadequate and obsolete facilities for practical training in the TVET institutions. Many existing facilities, equipment and materials should be up graded and improved on the basis of thorough need analysis. A part from upgrading and improvement of the physical infrastructure, training and further retraining on use maintenance and repair of machinery and equipment must be oared. As the government budget alone does not meet these demands, voluntary contribution of the industry as a whole, in the form of donations of equipment and machinery, opening workshops for practical modules and common and complementary use of these physical facilities should also deemed as immediate, viable possibility.
12. The potential of TVET institution to generate income is not fully exploited. Strengthening the income-generating capacities of TVET institutions is another way to supplement resources available to the TVET system. Therefore it demands the development of correct mechanism to enlarge their revenue generating capacities and enable them to recover par of the training cost and to mitigate the financial bottlenecks of the TVET institutions for effective implementations of apprenticeship training through commercial activities. These may include the sale products produced by students, selling of evening course, commercial activities. These may include the sale products produced by students, selling

of evening course, commercial activities or renting out of facilities and other assets. Here it should be noted that any income generating activity undertaken at the expense of the quality of training is of no compromise. Therefore, TVET institution should be granted full responsibility for the planning, development and implementation of these activities. The TVET authorities should devise budgetary procedures TVET and/or incentive schemes to encouraged institutions to increase their income generating effort. Planning and implementation of TVET institutions income generating strategies solved there fore be monitored by the institutions management boards.

13. The task of organizing apprenticeship training should be given to the autonomous body, such as Apprenticeship Training and Entrepreneurship panel, to be organized at both federal and regional levels. The development of the organizational structure of this body at all levels should be centered on organized and flexible interchange between the TVET institutions and the world of work.

15. It was found that in some cases organizations selected to offer apprenticeship training were to small to take on just one trainee and to provide him apprenticeship training effectively. Thus, to alleviate this problem, the MOE must set criteria elating to the selection of legible organizations to provide apprenticeship training, by giving emphasis man power in the organization.

.16. A) The trainees should:

- Report an accurate summary of previous work history to his employer (upon his/her request).
- Establish a work schedule that does not interfere at the highest level of your ability.
- Treat your appropriately for the job location (some work sites have dress code requirements).

- Report to work on time
- Notify his supervisor in advance of any foreseen delays in reporting to work.
- Refrain from conducting personal business on the job
- Report accurately the hours he worked
- Exercise responsible & ethical behavior
- Maintain confidentiality at all times for business purpose.
- Notify his supervisor of any change in his work-study award
- Notify his supervisor in advance of any changes in work schedule and/or other

B. *The government should:*

- Registering apprenticeship programs that meet Regional and national standards.
- Protecting the safety of trainees
- Issuing nationally recognized and portable certificates of completion to Trainees.
- Promoting the development of new programs through marketing and technical associations.
- Assuring that all programs provide high quality high quality training and produce skilled, competent workers.
- Appointing members to the governmental on-the-training and work study programs advisory council.

C. *Advisory council's should:*

- Develop and promote on-the-training and work study programs in all sector of the economy
- Safeguard the economic security of Trainees
- Identify and select research and demonstration projects
- Expand participation of all segments of the workforce
- Meet future skills needed in expanding areas of the economy.

Bibliography

A. Books

- Atechorena, D.(1996). **Financing Vocational Education: Concepts, Examples and Tendencies.** Paris:UNECO/IIEP.
- Atechorena, David and Andare Delluc(2002). **Revisiting Technical and Vocational Education in sub-Saharan challenges.** Paris: UNECO/IIEP.
- Capper, J. (1996) **Testing to Learn, Learning to Testing,** Washington D.C: Academy for Educational Development
- Carter, Michael (1966) **Into work,** The Chaucer Press Ltd, Great Britain.
- Carton, M.(1984). **Education and the world of work.** Geneva: ATARS.A/UNESCO.
- Dennis,G.(2000). **Competence-based Training in Scotland, England, Australia and New Zealand.**Darmstadt; GTZ Sector project.
- Dougherty,C. and Jee-Tan(1991). **Financing Training: Issues and Options.** Washington ,D.C.: The world Bank.
- Dougherty,C.(1989). **The cost Effectiveness of National Training Systems. In Developing Countries.** Washington, D.C; The world Bank.
- Evans, N.R (1971) **Foundation of Vocational Education** Ohio: Charter E.Merrier Publishing Company
- Federa Nigarit Gazeta.**TVET Proclamation.No.391/2004.**Addis Ababa. Brehanena Selam Printing Enterprise.
- Fluitman,F.(1989). **Training for work in the Informal Sector.** Geneva: ILO publications.
- Foster, Phillip (1965). "The Vocational school Fallacy in Development planning". In C. Anderson and M.Bowman,(eds.) **Education and Economic Development.** Chicago: Aldine Publishing Company.
- Gage, N.L. and Gerliner, D.C. (1998)_**Educational Psychology (6th ed),** New York: Houghton Mifflin Company.
- Gaskov, V.(1997). **Managing Vocational Training Systems.** Geneva: ILO.

- Gasskov, V. (1994). **Alternative Schemes of Financing Training**. Geneva: The ILO Publication.
- Good, C.V., (1973) **Dictionary of Education, Third Edition**; New York: McGraw-Hill Book Company
- Greiner, W.D. (1992). **The Dual System of Vocational Training in Germany: Structure and Functions**. Eschborn: GTZ
- Gronlund, N.E. and Linn, R.L (1990), **Measurement and Evaluation in Teaching**. New York: Macmillan Publishing C.D. Inc.
- Harris, R. and J. Bone (2000). **More than Meets the Eye? Rethinking the Role Of the Workplace Trainer**. Adelaide: National Centre for Education Research.
- Herschbach, D. (1985). **Linking Training and Employment: An International Perspective**. Washington, D.C.: USAID.
- International Labor Office/ILO (1997). **Training Policy and Employability: Towards a new Recommendation of Human Resources Training and Development**. Geneva: ILO
- International Review of Education (1993). **Education and Development: The Issues and the Evidence**. Education Research paper No.6; Technical and Vocational Education htm
- Ipaye, T. (1986). **Educational and Vocational Guidance: Concepts and Approaches**. Ibadan: University of Ife Press Ltd.
- Jones, Barry, (1982) **Sleepers, Wake, Technology and the Future of Work**, Melbourne: Oxford University Press
- Kerre, B.W. (1996). "Co-operation in Technical and Vocational Education" **Establishing partnership in Technical and Vocational Education**. Berlin: UNECOC/International project on Technical and Vocational Education.
- Lauglo, J. and Kevin Lillis (1988). **Vocationalization in International Perspective**. London: A Wheaton and Co. Ltd, Exeter.
- Lee, Calvin B.T (1998) **Whose Goals for American Education?** Washington: American Council on Education
- Metcalfe, D. (1985). **The Economics of Vocational Training: past Evidence and Future consideration**. Washington, D.C.: The World Bank.

- Middleton, J. and Terry Demsky (1989). *Vocational Education and Training: A Review of World Bank Investment*. Washington, D.C; The World Bank.
- Middleton, J. (1988). **World Bank Investment in Vocational Education and Training. A World Bank working paper**. Washington, Dc: World Bank.
- Middleton, John, Adrian Ziderman and Arvil V. Adams (1993). **Skills for Productivity: Vocational education and Training in Developing Countries**. New York: Oxford University press.
- MOE (1994). *Education and Training Policy*. Addis Ababa: St. George Printing press.
- Moura, Castro (1999). "Vocational and Technical Training: Setting the Record Straight." **In prospects**, Vol. XXIX. No. 1.
- Munch, F. (1991). **Vocational Education and Training for Youth: Towards Coherent Policy and Practice**. Paris: OECD.
- Napier, W. R. (1992). *School Guidance Services: Focus on the Developing Nations*. London: Evans brother Ltd.
- Nitko, J. A. (1996), **Educational Assessment of Students** Engle wood Cliffs: Prentice-Hall, Inc.
- Norton, W. and Paul Ryan (1999). **The Role of Evaluation of Vocational Education and Training**. Geneva: ILO Publications.
- Petter, L. (1987). *Education and the World of work: Positive Partnership*. London: Open University Press.
- Psacharopoulos, G. and William Loxey (1985). **Diversified Secondary Education and Development: Evidences from Colombia and Tanzania** U.S.A: The World Bank
- Tasng, Mun (1989). **The cost of Vocational Training**. Washington, D.C.: The World Bank.
- Timmermann, D. (1993). **Cost and Financing Dual Training in Germany: Is there any Lesson for Other Countries?** Oxford: Oxford University Press.
- UNESCO (1983). **The Transition from Technical and Vocational Schools to Work**. Paris: UNESCO.

- UNESCO, (1978) **Terminology of Technical and Vocational Education**, Paris.
- UNESCO, (1989) **Innovative Methods of Technical and Vocational Education**, Report of UNESCO International Symposium Hamburg
- UNEVOC (2000). **Leaning for Life and Future: Stimulating Reform in Southern Africa through Sub-regional Co-operation**. Botswana:UNESCO/UNECOV.
- Wanna Leqa and Beyene Bekele (1995) **Assessment of three Technical and Vocational Education and Training Schools in Regions 3**, Addis Ababa
- Wanna, Lekka(1988). "The Current Status of Vocational and Technical Education in Ethiopia: Problems and Prospects." **Proceedings of the conference on Quality Education in Ethiopia: Vision for 21st Century**. Awasa College of Teachers Education 12-18 July 1998: Addis Abba: Institute of Educational Research.
- World Bank (1991). **Vocational Technical Education and Training: A World Bank Policy Paper**. Washington, D.C.: The World Bank.
- Ziderman, A.(1988).**Man power Training: Theory and Policy**. London Macmillan.
- Ziderman, Adrian (2003). **Financing Vocational Training in Sub-Saharan Africa**. Washington, D.C.: The World Bank.
- Ziderman, Adrian and Douglas Albrecht(1995). **Financing Universities In Developing Countries**. London: The Flamer Press.
- B. Unpublished Materials.**
- GTZ/Ethio-German TVET Program(2000). **Co-operative Dual Training Systems, Acts, Frame Works from Philippines, Malaysia, SouthAfrica, Pakistan and Germany**.(Unpublished) Addis Ababa.
- (2002). Apprenticeship Guide line: Introduction and Examples. (Unpublished) Addis Ababa
- MOE(2002). Apprenticeship Training Information Guide.(Unpublished) Addis Ababa.
- (2001). **Technical and Vocational Education and Training Development Program (TVETDP)**. (Unpublished) Addis Ababa.
- (2005/9). **Education statistic Annual Abstract**.

- Capper. (1996) **Testing to learn, Learning to Testing**. Washington D.C: Academy for Education Development.
- Carter, Michael (1966) **Into work**, The chaucher Press Ltd, Great Britain.
- Evans, N.R (1971) **Foundation of Vocational Education** Ohio: Charter E. Merrier Publishing Company.
- Garge, N.L. and Berliner, D.C. (1998) **Educational Psychology (6th ed)**, New York: Houghton Mifflin Company.
- Good, C.V., (1973) **Dictionary of Education, Third Edition**; New York: Mc Graw-Hill Book Company.
- Gronlund, N.E. and Linn, R.L (1990), **Measurement and Evaluation in Teaching**. New York: Macmillan Publishing C.D.Inc.
- Jones, Barry, (1982) **Sleepers, Wake, Technology and the future of work**, Melbourne: Oxford University Press.
- Lee, Calvin B.T (1998) **Whose Goals for American Education?** Washington: American Council on Education.
- Nitko, J.A (196), **Educational Assessment of Student**_ Engle wood Cliffs: Prentice-Hall, Inc.
- UNESCO, (1978) **Terminology of Technical and Vocational Education**, Paris.
- UNESCO, (1989) **Innovative Methods of Technical and Vocational Education**, Report of UNESCO International Symposium Hamburg.
- Wanna Leqa and Beyene Bekele (1995) **Assessment of three Technical and Vocational Education and Trading School in Regions 3**, Addis Ababa.
- (2001). **Middle Level technical Vocational Training Program: Curriculum Guide**. Addis Ababa: EMPDE.
- (2002b). **Education and Training Policy Implementation**. Addis Ababa: Mega Printing Enterprise.
- (2003b). **Financing Technical and Vocational Education and Training: National Strategy to Raise Resources**. Addis Ababa: Brehanena Selam. Printing Enterprises.
- (2003c). **Ethiopian Technical and Vocational Education Qualification System**. Addis Ababa: Brehanena Selam printing Enterprises.

APPENDICS

APPENDIX -1

ADDIS ABABA UNIVERSITY POST GRADUATE STUDIES

MANAGEMENT OF VOCATIONAL EDUCATION

A Questionnaire to be Filled by Vocational Counsloer, Principal and trainer's of TVET Inistitutions

I would like to express my heart felt appreciation and regard for your time and sincere cooperation, in advance, to fill these questionnaire. The questionnaire is designed to collect data for a research thesis entitled as "A survey study on apprenticeship training program in some selected government TVET institution city administration."

The purpose of this questionnaire is to gather information on how apprenticeship training is currently going on in different organizations offering the training in government TVET institutions in Addis Ababa. The researcher hopes to get your sincere response to each item in the questionnaire and your opinion as well, where ever it is requested. The researcher believes that your cooperation can make significant contribution to the effective use of apprenticeship in our technical and vocational education and training system.

Direction

- ❖ No need of writing your name;
- ❖ Please put 'X' mark in the box provided where alternatives are given
- ❖ If you have additional or different opinion from the given alternatives, please
- ❖ Write it on the space provided for the option "if other, please specify"
- ❖ Your urgent response will contribute to the value of the research

Part One: General background

1. Name of the TVET institution _____
2. Age _____
3. Sex: Male Female
4. Current position: _____
1. Qualification: _____
2. Field of specialization: _____
3. year of service as a vocational counselor/ principal/trainer: _____

9. How do you rate the performance of Trainees during apprenticeship training?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
A. The trainees diligently perform the apprenticeship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. To work according to the work methods of the organizations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. To utilize machine/ equipment with care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. To perform practical activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. To cooperate with other employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. To utilize input efficiently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. To produce quality products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. How do you rate the role of TVET institution in promoting apprenticeship training?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
a. Consider grades given for apprenticeship training as a component of criteria for certification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. To assign personnel that follow – up the apprenticeship training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. To prepare guidelines and schedules that help proper implementation of apprenticeship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Were apprentices paid wages for their labor during apprenticeship training?

A. Yes

B. No

12. Covers expenditures of trainees during apprenticeship training?

A. Organizations

B. Apprentices/families

C. The TVET institutions

D. Public fund

E. Sponsorship Agencies

13. Which of the following mechanism was used to subsidize the direct cost of the organization for apprenticeship training?

- A. Public fund
- B. The organization budget
- C. The money raised from a levy imposed on enterprises
- D. Income generated from sales of production and service activities of trainees.

14. How do you rate the preparedness of organization offering apprenticeship training?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
a. Accept trainees for apprenticeship Training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. To assign the apprentice in the place appropriate to his filed of training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. To assign a capable supervisor who would enhance the skills of the apprentice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. To consider the apprentices as a regular employee and to provide him/her the necessary inputs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Were some trainees completely excluded from apprenticeship training?

- A. Yes
- B. No

16. If yes, which of the following were the main reasons? (you may choose more than one answer)

- A. In adequacy of organizations to absorb all trainees
- B. Inconvenience of the session for apprenticeship training
- C. Reluctance of the trainees
- D. Shortage of man power to coordinate
- E. Organizations were not volunteer

23. If your response to question no. 2 is 'yes' what the mechanism employed?

- A. Provision of apprenticeship guidelines to organizations
- B. Sensitization meeting with stake holders
- C. Training or work place trainers (supervisor)
- D. Through broad cast (media)

24. How do you rate the equipment/ machines available in your workshop.

	<u>High</u>	<u>Medium</u>	<u>Low</u>
A. Relevance to the situation in the world of work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Appropriateness to the content of the curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Appropriateness to capacity of the trainees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Up – to – dated ness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. How do you rate the relevance of the activity you have under gone during apprenticeship training to your occupational training?

- A. High
- B. Medium
- C. Low
- D. Very low

26. If your response for question No. 26 is low or very low which of the following could be adequate reason? You may choose more than one answer.

- A. The organization was not engaged in activities relating to your occupational area of training
- B. Reluctance of organization to assign you according to you respective occupational area of training
- C. Inadequacy of training in the TVET institution
- D. Your failure to regularly attend the apprenticeship training
- E. The job you assigned to was routine and remained unchanged through out apprenticeship training period in the organization

27. Where there incentives given to organizations offering apprenticeship training?

- A. Yes
- B. No

28. If yes, which of the following were among the forms of incentives given?

- A. Tax exemption on imported machine/equipment
- B. Productivity consulting
- C. Charge free training for employees in the organization
- D. Recognizing their contributions on graduation days

29. Would you please specify major problems you faced during the implementation of apprenticeship training?

- a) _____
- b) _____
- c) _____
- d) _____

30. What solution would you suggest to mitigate the problem you listed above?

- a) _____
- b) _____
- c) _____
- d) _____

APPENDIX -2

ADDIS ABABA UNIVERSITY POST GRADUATE STUDIES MANAGEMENT OF VOCATIONAL EDUCATION A Questionnaire to be Filled by Apprentices

I would like to express my heart felt appreciation and regard for your time and sincere cooperation, in advance, to fill these questionnaire. The questionnaire is designed to collect data for a research thesis entitled as “A survey study on apprenticeship training program in some selected government TVET institution city administration.”

The purpose of this questionnaire is to gather information on how apprenticeship training is currently going on in different organizations offering the training in government TVET institutions in Addis Ababa. The researcher hopes to get your sincere response to each item in the questionnaire and your opinion as well, where ever it is requested. The researcher believes that your cooperation can make significant contribution to the effective use of apprenticeship in our technical and vocational education and training system.

Direction

- ❖ No need of writing your name;
- ❖ Please put ‘X’ mark in the box provided where alternatives are given
- ❖ If you have additional or different opinion from the given alternatives, please
- ❖ Write it on the space provided for the option “if other, please specify”
- ❖ Your urgent response will contribute to the value of the research

Part One: General background

1. Name of the TVET institution _____
2. Age _____
3. Sex: Male Female
4. The training program enrolled in: _____
5. Your field of training _____
5. Parents occupation _____
6. Parent Income A. High B. Medium C. Low

Part Two: General Question

1. Where there any laws supporting the implementation of apprentices training?
 A. Yes B. No
2. If yes, which of the following laws were applied?
 A. TVET law B. Apprenticeship guide line
 C. Apprenticeship training act
 D. Labour proclamation
3. Did all concerned parties sign memorandum of agreement during apprenticeship training?
 A. Yes B. No
4. Were there criteria set to select organization that could offer apprenticeship training?
 A. Yes B. No
5. If yes, what were the major factors considered in the process of selection?
 A. Size of the organization B. Type of Business
 C. The number of employees
 D. Relevance of the activities the organizations engaged in to occupational area of training
6. Who assigns trainees to each selected organization?
 A. The vocational counselor B. The trainers
 C. Through trainees' personal contact
 D. Committee headed by the guidance officer
7. How was the total number of trainees assigned to each organization determined
 A. By the agreement made between TVET institution and organization
 B. By the TVET institution of the based of present criteria
 C. By the organization unilaterally
 D. By the statement of the law/guideline of Co-operation
8. Did an organization assign supervisors to guide and follow – up your work during apprenticeship training?
 A. Yes B. No
9. How do you rate the following qualities supervisors should possess?

High Medium Low

A. Knowledge of the subject matter

- C. The money raised from a levy imposed on enterprises
- D. Income generated from sales of production and service activities of trainees.
14. Were some trainees completely excluded from apprenticeship training?
- A. Yes B. No
15. If yes, which of the following were the main reasons? (you may choose more than one answer)
- A. In adequacy of organizations to absorb all trainees
- B. Inconvenience of the session for apprenticeship training
- C. Reluctance of the trainees
- D. Shortage of man power to coordinate
- E. Organizations were not volunter
16. How do you rate factors that affecting retention and completion of apprenticeship training.
- | | <u>High</u> | <u>Medium</u> | <u>Low</u> |
|--|--------------------------|--------------------------|--------------------------|
| a. Assignment other than occupational field of training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. In appropriateness of period/Session/ of apprenticeship training | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Financial problem | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Lack of reliable transport | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. In appropriate treatment by supportive workplace supervisors and vocational counselor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
17. Did professionals from TVET institution follow – up the progress of apprentices?
- A. Yes B. No
18. If yes how frequently was the follow – up activity?
- A. Daily B. Once week
- C. Once in a while D. Once in two weeks
19. If “no” which of the following was the major problem?
- A. Lack of finance
- B. Trainers attend in service course
- C. Trainers were on annual leave
- D. Trainers were not adequate in number

25. Would you please specify major problems you faced during the implementation of apprenticeship training?

- a) _____
- b) _____
- c) _____
- d) _____

26. What solution would you suggest to mitigate the problem you listed above?

- a) _____
- b) _____
- c) _____
- d) _____

APPENDIX -3

ADDIS ABABA UNIVERSITY POST GRADUATE STUDIES

MANAGEMENT OF VOCATIONAL EDUCATION

A questionnaire to be filled by Supervisors of the organization offering apprenticeship training

I would like to express my heart felt appreciation and regard for your time and sincere cooperation, in advance, to fill these questionnaire. The questionnaire is designed to collect data for a research thesis entitled as "A survey study on apprenticeship training program in some selected government TVET institution city administration."

The purpose of this questionnaire is to gather information on how apprenticeship training is currently going on in different organizations offering the training in government TVET institutions in Addis Ababa. The researcher hopes to get your sincere response to each item in the questionnaire and your opinion as well, where ever it is requested. The researcher believes that your cooperation can make significant contribution to the effective use of apprenticeship in our technical and vocational education and training system.

Direction

- ❖ No need of writing your name;
- ❖ Please put 'X' mark in the box provided where alternatives are given
- ❖ If you have additional or different opinion from the given alternatives, please
- ❖ Write it on the space provided for the option "if other, please specify"
- ❖ Your urgent response will contribute to the value of the research

Part One: General background

2. Name of the organization _____
3. Age _____ 3. Sex: Male Female
4. Current position _____
5. Qualification _____
6. Field of specialization _____
7. Total years of service _____

Part Two: General Question

1. To which of the following categories does your organization belong?
 - A. Small sector enterprise
 - B. Medium size enterprise
 - C. large modern enterprise
2. Type of your Business:
 - A. Manufacturing
 - B. Trade
 - C. Service
3. Type of ownership
 - A. Government
 - B. Private
 - C. NGO
4. Where there any laws supporting the implementation of apprentices training?
 - A. Yes
 - B. No
5. If "yes", which of the following laws were applied?
 - A. TVET law
 - B. Apprenticeship guide line
 - C. Apprenticeship training act
 - D. Labour proclamation
6. Did all concerned parties sign memorandum of agreement during apprenticeship training?
 - A. Yes
 - B. No
7. Were there criteria set to select organization that could offer apprenticeship training?
 - A. Yes
 - B. No
8. If yes, what were the major factors to be considered ion the process of selection?
 - A. Size of the organization
 - B. Type of Business
 - C. The number of employees
 - D. Relevance of the activities the organizations engaged in to occupational area of training

9. How do you rate the performance of Trainees during apprenticeship training?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
a. The trainees diligently perform the apprenticeship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. To work according to the work methods of the organizations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. To utilize machine/ equipment with care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. To perform practical activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. To cooperate with other employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. To utilize input efficiently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. To produce quality products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. How do you rate the role of TVET institution in promoting apprenticeship training?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
a. Consider grades given for apprenticeship training as a component of criteria for certification	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. To assign personnel that follow – up the apprenticeship training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. To prepare guidelines and schedules that help proper implementation of apprenticeship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Were apprentices paid wages for their labor during apprenticeship training?

A. Yes

B. No

12. Covers expenditures of trainees during apprenticeship training?

A. Organizations

B. Apprentices/families

C. The TVET institutions

D. Public fund

E. Sponsorship Agencies

13. Which of the following mechanism was used to subsidize the direct cost of the organization for apprenticeship training?

- A. Public fund
- B. The organization budget
- C. The money raised from a levy imposed on enterprises
- D. Income generated from sales of production and service activities of trainees.

14. How do you rate factors that affecting retention and completion of apprenticeship training.

	<u>High</u>	<u>Medium</u>	<u>Low</u>
a. Assignment other than occupational field of training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. In appropriateness of period/Session/ of apprenticeship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Financial problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Lack of reliable transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. In appropriate treatment by supportive workplace supervisors and vocational counselor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Did professionals from TVET institution follow – up the progress of apprentices?

- A. Yes
- B. No

16. If “yes” how frequently was the follow – up activity?

- A. Daily
- B. Once week
- C. Once in a while
- D. Once in two weeks

17. If “no” which of the following was the major problem?

- A. Lack of finance
- B. Trainers attend in service course
- C. Trainers were on annual leave
- D. Trainers were not adequate in number

18. Which of the following authorities took part in facilitating and selecting organizations for the apprenticeship training?

- A. The TVET institution
- B. Initiative from the organization themselves
- C. Local/state/ administration
- D. Employer’s association

E. Trade union

19. Were any promotional activities undertaken regarding apprenticeship training program?

A. Yes

B. No

20. If your response to question no. 2 is 'yes' what the mechanism employed?

A. Provision of apprenticeship guidelines to organizations

B. Sensitization meeting with stake holders

C. Training or work place trainers (supervisor)

D. Through broad cast (media)

21. How do you rate the equipment/ machines available in your workshop.

	<u>High</u>	<u>Medium</u>	<u>Low</u>
a. Relevance to the situation in the world of work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Appropriateness to the content of the curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Appropriateness to capacity of the trainees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Up – to – dated ness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. Where there incentives given to organizations offering apprenticeship training?

A. Yes

B. No

23. If yes, which of the following were among the forms of incentives given?

A. Tax exemption on imported machine/equipment

B. Productivity consulting

C. Charge free training for employees in the organization

D. Recognizing their contributions on graduation days

24. The number of trainees attended apprenticeship training in your organization during the year 2005/2006

25. Would you please specify major problems you faced during the implementation of apprenticeship training?

- a) _____
- b) _____
- c) _____
- d) _____

26. What solution would you suggest to mitigate the problem you listed above?

- a) _____
- b) _____
- c) _____
- d) _____

APPENDIX – 4

ADDIS ABABA UNIVERSITY

POST GRADUATE SETUDIES

MANAGEMENT OF VOCATIONAL EDUCATION

Interview made with the AAEBs TVET representatives

The purpose of this interview is to get some basic information on how effectively we are using apprenticeship program in the process of our vocational and technical trainings. The researcher kindly requests you to give your genuine and sincere responses to the questions raised in the interview. By doing so, the researcher believes that you are making your share of contribution, which is highly valuable in making this training program more effective.

1. Qualification_____
2. Your major field of study _____
3. Years of service on your current position_____
4. Does the institutions have any criteria set for the selection of organizations offering apprenticeship training?
5. If the institution has no criteria set for selecting organizations that offer apprenticeship training, how do you assign trainees to organizations for the training of apprenticeship?
6. Do trainees sign apprenticeship contract with the organization that offer the training?
7. Does the institute have a scheduled program of visiting trainees while they are on the apprenticeship training?
8. Who make such a visit?
9. Can you say for certain, that supervisors assigned by apprenticeship providing organizations are professionally competent to properly evaluate apprentices?
10. If you think they are not professionally competent in general, what possible solution do you suggest to curb the problem of assessment and evaluation observed in apprenticeship training?
11. Does your institute have a vocational counselor who gives a career guidance service to the trainees?

This thesis has been submitted for examination with my approval as a

University advisor

Name :- Ato Worku Mekonnen

Signature:-  _____

Date of Approval July / 2007

This thesis is my original work and that all source of materials used for
the thesis have been acknowledged

Name:- Engida Asfaw

Signature 

Date July/2007