



ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF EDUCATION & BEHAVIORAL STUDIES
DEPARTMENT OF BUSINESS EDUCATION

THE CHALLENGES OF TECHNICAL, VOCATIONAL
EDUCATION AND TRAINING IN ENHANCING THE
TRANSITION FROM SCHOOL TO WORK:
THE CASE OF SELECTED VOCATIONAL COLLEGES OF
ADDIS ABABA OFFERING INDUSTRIAL TECHNOLOGY

BY:

DEMERE YINESU



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**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES
OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF
THE REQUERMENTS FOR MASTER OF ARTS DEGREE IN
MANAGEMENT OF VOCATIONAL EDUCATION**

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BY:

DEMERE YINESU
DEPARTMENT OF BUSINESS EDUCATION
COLLEGE OF EDUCATION & BEHAVIORAL STUDIES

APPROVED BY: BOARD OF EXAMINERS

Yurke Melkon
CHAIRMAN, DEPARTMENT
GRADUATE COMMITTEE

[Signature]
SIGNATURE

June 24/2010
DATE

Girma Zewdie
ADVISOR

[Signature]
SIGNATURE

June 24, 2010
DATE

Mesfin Sileshi
EXTERNAL EXAMINER

[Signature]
SIGNATURE

June 24, 2010
DATE

Wanna Ceka
INTERNAL EXAMINER

[Signature]
SIGNATURE

June 24/2010
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ACRONYMS

ADB	- Asian Development Bank
ADLI	- Agricultural Development Led Industrialization
CTE.	- Career and Technology Education
COTVET.	- Council for technical and vocational education and training
ECBP	-Engineering Capacity Building Program
FDRE	- Federal Democratic Republic of Ethiopia
ILO	- International Labor Organization
INWENT	- International Weiterbildung und Entwicklung gGmbH Capacity Building International, Germany
MOE	- Ministry of Education
MSDE.	Maryland State Department of Education.
NCVER	- National Centre for Vocational Education Research
NIER	- Nation Institute for Educational Policy Research
NVTI.	- The National Vocational Training Institute
OAYEC	- Ontario Association of Youth Employment Centers
OECD	- Organization for Economic Co-operation and Development
PASDEP	-Accelerated and sustained development to end poverty
SETA	-Sector Education and Training Authorities'
OICs	- The Opportunities Industrialisation Centres
TGE	-Transitional Government of Ethiopia
TVET	- Technical and Vocational Education and Training
UNESCO	- United Nations Educational Scientific and Cultural Organization
UNEVVOC	- International Centre for Technical and vocational Education and Training
VE	- Vocational Education

ABSTRACT

The purpose of this study was to investigate the general conditions encountered by students/trainees in their transition from school to work in selected industrial occupational fields of studies. The research technique used in this study was basically a descriptive survey method. To execute the study three TVETs colleges out of seven were selected on the basis of purposive sampling techniques found in Addis Ababa. The three deans, six vice deans, twelve section heads, three vocational guidance and counselors, 121 trainers and 306 of the trainees were included in the sample by using simple random sampling techniques. Using a mixed method of data gathering, questionnaires to collect quantitative data and qualitative data from the participants in the form of open-ended interview questions and findings were reviewed by using the chi-square test methods. The result of the study depicted that TVET program lacks adequately trained instructors, inadequate workshops and facilities. In addition, TVET colleges were unable to establish a network of co-operative relationships with stake holders, lack of confidence on trainees in getting a job lie at the heart of the issues. Similarly, TVET colleges were unable to conduct research-based preparation of TVET curriculum and hire qualified vocational guidance counselors. Thus, in general TVET program suffers from lack of capacity building of administrative staffs and financial constraint (budget) as well as provision of raw materials difficulties. On the other hand, majority of students have not hesitated to indicate the relevant knowledge and skills they have acquired from their respective trainings. Finally, the finding of the study also suggest a clear benefit to the sector of additional guide lines and strategies are jointly laid down by Federal Educational Organizations, in alliance with Regional, Zonal, Woreda level, and all other stake holders in the educational arena. Especially in establishing strong and consistent liaison between the trainees and the world of work, financial factors have gained a significant importance.

CHAPTER ONE

THE PROBLEM AND ITS APPROACH

1.1. Background of the Study

Educators define the term education as an all sided development, a lifelong process and a universal practice of human learning, resulting from the generations of interaction with social and natural environment. For example, Aggarwal (1996) describes it as a process and practice engaged in by different societies at all stages of development and geared towards shaping an all-round personality. According to this view, development is sought by harmonious and integrated spheres of the mental, physical, social, moral, spiritual aesthetic etc... powers of human beings. Many scholars insist also that education is the total process of human expedience by which and through which knowledge is acquired and imparted, skills developed, attitudes and values formed (Aggarwal, 1996, Burden, 2003).

In Similar manners, the teaching- learning process, as an integral part of education is as old as human beings on earth. More informally, it has been carried out not only by human beings but also by animals to teach their young ones to adjust themselves successfully to their environment. For Aggarwal (1996:46), it is this acquisition of knowledge, skill and attitudes which enables us to adjust ourselves in an effective manner to the environment that is said to be the aim of the teaching learning process. The development of technical, vocational education and training (TVET) has become one of the most important strategies of educational development in both developed and developing countries. As a result, TVET has become an essential element in the economic development plans of many countries, and its role in the economic development of countries has been increasingly recognized (Middleton, Ziderman and Adams, 1996).

The focus on TVET programmes in the educational process is the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area (Afeti, 2007). Based on this, TVET is strongly rooted in educational ideals and objectives, on the one hand, and is thoroughly permeated by labor market criteria and work standards on the other. To ensure the human and occupation aspects of TVET, two major dimensions should always guide the design of the relevant schemes and systems: education and work (Atchoarena and Dellcuc, 2002).

The delivery of TVET systems differ from country to country; and delivered at different levels in different types of institutions (Afeti, 2007) the predominant TVET delivery model found in most developing countries, including Ethiopia is school-based in offering pre-employment training for the formal sector. On top of this, Ethiopia developed TVET strategies and spent a lot of money for the massive expansion of government TVET institutions and encouraging private institutions to provide options for the increasing number of school leavers. According to Atchoarena and Delluc, (2002) the TVET systems, however, are everywhere facing challenges to prepare a sufficient number of people with the right skills to meet labour market demand.

The issues of TVET programmes in most developing countries, including Ethiopia are offering pre-employment training for the formal sector, since there are not enough jobs. Due to this, the rapid rise in the number of TVET graduates, coupled with a lack of jobs in the area for which these people trained (the formal sector) has led to the unemployment and underemployment of educated people (Kogore, 1990). This is the challenging issue that formal TVET programmes face in addressing the intended objectives. Recently, vocational training for the generation of self-employment possibilities is at the base of all strategies observed by different countries TVET system, including Ethiopia in fact the issues of TVET programmes for self-employment are not a simple task.

In addition, the changing nature of the world of work, especially due to globalization and technological changes, demands how these changes impact upon the quality of social, economic and environmental conditions. TVET can play an instrumental role in developing a new generation of individuals who will face the challenge of achieving sustainable socio-economic development. Unfortunately, TVET in many countries remain locked into the role of being a mere supplier of skilled labor to industry and is thereby unable to respond effectively to the needs of the sustainable development strategies (Majumdar, 2010). According to Ryan (2002), the concept of the school to work transition is a recent development, associated with change, waiting and uncertainty. The route from school to employment is often depicted nowadays as long and perilous, unlike the short and direct routes presumed available to previous generation. In addition to this, the school to work agenda embraces many long-standing issues concerning schooling, employment and training. Does unemployment damage young people? Do sub-minimum wages increase youth employment and training? Is vocational education economically beneficial?

To implement the TVET programmes, the participation of all concerned bodies, governments (federal and regional), deans, teachers, vocational guidance and counselors, students and community members in planning, organizing, managing and evaluating the program is crucial. To this effect, the researcher believes that the extent to which TVET colleges are capable in implementing school to work transition is a challenge worthy studying.

1.2. Statement of the Problem

TVET is relatively expensive, as it requires skilled and experienced trainers, a lot of practical and technical equipment and recurring investment in maintenance and innovation of equipment and materials. In addition, according to Wanna (2006), quality of TVET programmes could depend on the number of factors. Some of these are the educational level and work experience of teachers, availability of resources, facilities, administrative support, student background, school and industrial relations. In addition, vocational education programs suffer from marginalisation in that they exclude higher achieving students, but they also tend to exclude the most disadvantaged students, especially if employer cooperation is needed. Vocational education programs suffer also from being seen as alternatives to general education, not as integral to it. Of all challenges, the attitudinal and cultural are the hardest to crack. It is difficult to see how real headway can be made if present sectoral and institutional boundaries are maintained. There is a need to explore fundamental institutional change (Ryan, 2002).

According to Borgen and Hiebert (2002) TVET is often regarded as inferior, or as a second choice after professional education, regardless of the student's interest (indeed passions) or abilities. Many people therefore dismiss promising and meaningful career paths in areas where employment demand is greater, simply because of the stigma attached to technical and vocational occupations. In this connection Bills(2004) noted that, even the term “ vocational education” raises eyebrows, simultaneously connoting the lofty sense of vocation as a calling with the despised of “vocational” as unworthy and degraded labor. Similarly, Teklehaimanot (2002) points out the following basic misconceptions on TVET:

- Low achievers could join and succeed in the technical training and not in the academic education.
- Technical training requires less knowledge than academic studies.
- Those who once join TVET training may not or cannot join further academic studies in their life career.

In addition of the above mentioned misconceptions, challenges were tabled by the second international Congress on Technical and Vocational Education held in Seoul in 1999. The Congress stressed that all countries needed a coherent education policy and system of which TVET must be an essential element. It further emphasized that TVETs must develop intimate interface with all other education sector “particularly schools and universities to facilitate seamless pathways for learners”. According to Asian Development Bank (2008, cited in Young, 2005) the level of skills and knowledge of teachers and work-based instructors is a key determinant of the quality of any country’s system of education and training. As noted by Furlong (2009) during the last 20 years, governments of many nations around the world have paid increasing attention to the recruitment, preparation, and retention of teachers. Teachers supply and teacher quality have become significant policy issues, taken up by policy-makers at the highest levels.

According to UNESCO (1997), in many countries, quantitative expansion of TVET has put much pressure on quantity and quality of TVET teachers. Not only this, current TVE curricula are still too foreign oriented and in the majority of cases outdated because they are based on old trades most of which are now non-existent in the Western countries.

According to Mnse (2010) the Image and Status of TVET has consistently faced problems as it is perceived by some as second-class. These difficulties must be met with a renewed effort to raise the public perception of TVET. The Promotion of TVET for Girls and Women, this is essentially an issue of access to TVET and, once girls and women enter TVET institutions, how they are received and accommodated. Attracting more female instructors and administrators into TVET is a major challenge in the future. In many countries, the status of TVET is low in comparison to academic oriented education and suffers from a lack of social recognition. It is often considered as a “second class education” and a last resort for those students who have difficulties in the academic subjects. As a consequence, the role of TVET as an important vehicle to facilitate transition to the world of work and as a contribution to reduce unemployment is often not recognised or underestimated. There is thus a need to create a positive image of TVET and to stress its importance in order to attract not only students, but also investment from the government and the private sector (NIER, 2007).

Therefore, the prime objective of the study is to assess the challenges of TVET in enhancing the transition from school to work in selected vocational colleges in Addis Ababa. In this regard, the study tries to address the following basic questions.

1. What are the criteria for the selection and placement of trainees for TVET programmes in industrial occupational fields?
2. Does the college have adequately trained instructors to provide quality training?
3. Does the college provide appropriate guidance and counseling services?
4. Do TVET colleges have a profound link with enterprise (employers) to provide work based learning programmes (training)?
5. Do the college administrators have the necessary training and experience to handle such a program?

1.3. Objectives of the Study

1.3.1 General Objective

The general objective of the study is to assess the major challenges that TVET colleges face in enhancing the transition from school to work in selected industrial occupational fields of studies in vocational colleges found in Addis Ababa.

1.3.2 Specific Objectives

The study has also the following specific objectives:-

1. To assess the implementation of the selection and placement of trainees for the formal TVET programmes in industrial fields of study in preparing trainees for employment and self-employment.
2. To assess the extent and scope of professional development of vocational teachers (instructors) in providing quality training.
3. To assess whether vocational guidance and counselor are providing the required service for trainees;
4. To identify the linkage of TVET colleges with enterprise (employers) in providing work based training.
5. To assess the experience and educational qualification of TVET colleges administrators in handling TVET programs.

1.4 Significance of the Study

The overall objective of the National TVET strategy is to create a competent, motivated, adaptable and innovative workforce in Ethiopia contributing to poverty reduction and social and economic development through facilitating demand-driven ,high quality technical and vocational education and training, relevant to all sectors of the economy, at all levels and to all people(MoE,2005/06).Technical and Vocational Education and Training (TVET) was the most neglected area in the history of the Ethiopian Education System. However, since 2000/01 a massive expansion of this sub-sector has been operational. The strategic thinking behind the expansion of the TVET sub sector is to meet the middle-level human power demand of the industry, service sector and commercial agriculture, which have become very essential to the overall development of the country. The significance of this study was to identify and examine the challenges of TVET in enhancing the transition school to work in selected TVET colleges in industrial fields of study and it is hoped to serve the following purpose:

- The findings and recommendations will help the trainees, TVET providers/agencies, employers, NGOs and policy makers to develop guidelines to address the problem.
- Other researchers who have the interest in the study may use it as an additional resource to conduct future study, which will add new insight knowledge

1.5 Delimitation of the Study

To conduct a research work in all TVET institutions, which are available in the country, will be unrealistic. In order to accomplish such a research task successfully in terms of magnitude, geographical areas to be covered, time, financial and human resources required in doing the research, delimitation is compulsory. Therefore the researcher decides to conduct the research in three TVET colleges which were selected randomly from a total of seven TVET colleges found in Addis Ababa.

1.6. Limitations of the study

There are a few limitations that contribute to this study such as:

- a) The study was limited to industry fields of study and therefore it excluded students and teachers of business fields of study.
- b) The most critical part of this study is analyzing the responses because there is a lack of sufficient cooperation of respondents to fill and return questionnaires.

- c) The cost incurred during the research is relatively high. Thus, only sample colleges that can provide variety of information were selected for this study.

1.7. Research Methodology and procedures of the study

1.7.1 Study Design

The study design used to carry out this research is a descriptive survey method. Because descriptive research studies are designed to obtain pertinent precise information concerning the current phenomena and, whenever possible, to draw valid general conclusion from the facts discovered. Descriptive studies are more than just a collection of data; they involve measurement, classification, analysis, comparison, and interpretation (Koul, 2006) Therefore, the method helps to treat the current status of the challenges of TVET college in enhancing the transition from school to work and to explain the degree to which the problem has affected the quality of TVET. The study has considered both qualitative and quantitative approaches so that the results of the study shall be comprehensive enough to scientifically test certain vital observations.

1.7.2. Sampling Technique and Sample Size Determination

In Addis Ababa, currently there are seven TVET Colleges, namely: Entoto, General Winget, Misrak, Nefas Silk, Tegbareid, Ethio-China Polytechnic and Akaki. Among these seven TVET Colleges, Entoto, Tegbareid and General Winget are selected using purposive sampling technique. In order to make the size of the participants manageable, all the three deans, six vice deans, twelve section heads (managements staff), three vocational guidance and counselors, and one hundred twenty one trainers (36) were incorporated in the sample. The other group of participants constitutes year I, II and III students of Industrial Technology field of studies and teachers of the selected three governmental TVET Colleges. For descriptive research, it is common to sample 10 to 20% of the population, although this range will change with the size of the population studied. Table 4.2(Refer appendix V) represents an oversimplified approach to determine sampling size (Airasian and Gay,1996).Among the total number of 2043 trainees/students, a sample size of 306 (15(%) were selected . Finally sample units were selected from each industrial fields of study using simple random sampling technique.

1.7.3. Sources of the Data

The data for the study were obtained from primary and secondary sources. In order to get first hand information, primary data were collected from government TVET colleges' trainees, deans, trainers, section heads, vocational guidance and counselor through questionnaires and interviews. The secondary data sources include books, journals, and other research work prepared by different writers on the basis of the relevance of the problem. Moreover, through reports and documents, in-country experiences will be reviewed. The questionnaire and interview guides were developed by a synthesis of the reviewed literature. Questionnaires are prepared to secure information from many respondents.

1.7.4 Data Collection Tools and Methods Employed

A structured questionnaire was developed both for students and teachers as data collection tool and for vocational guidance and counselors, management staffs (deans, assistants and section heads), a structured and semi-structured questionnaires were utilized. Data from students and teachers were collected through self-administered questionnaire; while for guidance and counselors and the management staffs, self administered and interview (as key informants) were used to enrich the study, to triangulate responses provided by the students. To understand the overall characteristics of the study population, review of literatures was also considered as one method/input for data gathering.

To ensure the quality of the data, three supervisors per college were selected and provided a brief orientation on how to use the instruments, what type of data is needed to collect, and on overall research ethics. The supervisors have supervised the data collection throughout the process.

Before the launching the survey study, the instruments were pilot-tested on 30 students taken from Entoto to test the quality and understanding of the questions by the students. Because a pilot study is best thought of as a dress rehearsal. In a pilot study all or part of the plan is tried out to identify unanticipated problems or issues. However, whenever, feasible, conducting a pilot study-even a small one should be considered a very worthwhile use of your time (Airasian and Gay, 1996).Based on the feedback given by respondents the following corrections were made.

- Questions that were ambiguous to respondents were restated in clear terms.
- Questions that were skipped by all the pilot respondents were reconstructed and made convenient to respondents and some questions were revised as per the comments forwarded by respondent.

1.7.5. Methods of Data Analysis

To analyze the collected data, statistical software, SPSS was used. The data were initially encoded and entered to computer by trained data entry clerks. All the quantitative data points of the student and teachers and management staffs were fully managed to produce the necessary findings using the aforementioned software. Whereas the qualitative data collected from the key informants (guidance and counselors) was summarized manually and triangulated with the findings obtained from the quantitative data. Tabular and chi-square tests were used to present the findings. Finally, conclusions were drawn from the major findings, and possible solutions and recommendations to the identified problems were forwarded.

1.8. Operational Definition of Terms

- **Career guidance and counseling**:-the process of assisting and guiding people in their career choices and development(NCVER,2008)
- **Cooperative training**:-encompasses all forms of training conducted jointly by TVET institutions and enterprises. The training takes place alternatively in a school environment and in the real-life environment of the workplace. Most of the training occurs in the enterprise where practical skills and applications of theory take place. The trainee goes to TVET institutions for only a limited period of time, to acquire theoretical knowledge and basic skills in the specific training area (MOE, 2007).
- **School-to-work transition** (also called transition from school-to-work):-The processes of transferring from school to the workforce or further study (NCVER, 2008).
- **Technical and vocational education and training (TVET)**:-Programs designed mainly to prepare students for direct entry into a particular occupation or trade, or class of occupations or trades. Successful completion of such programmes normally leads to a labour market-relevant vocational qualification recognized by the relevant authorities (ministry of education, employers' associations) in the country in which it is obtained (UNESCO, 2008).
- **Tech-prep means**:- integrating academics and technical training for secondary, postsecondary, and apprenticeship students, plus curriculum development to meet the skills requirements of advanced technology jobs(Zunker,2002)

- **Vocational Guidance:** “vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon and progress in it. It is concerned primarily with helping individuals make decisions and choices involved in planning a future and building a career decisions and choices necessary in effecting satisfactory vocational adjustment” (National Vocational Guidance Association, U.S.A, in Bhatia, 2006, Mohan, 2008).

1.9. Organization of the study

The study is composed of four chapters. The first chapter deals with introduction, statement of the problem and significance of the study, delimitation, research methods and procedures used to carry out the study. The second chapter is concerned with review of related literature. The third chapter deals with analysis and interpretation of the findings of the study. The fourth and the final chapter contain summary, conclusions and recommendation. Finally, references, questionnaires and other applicable documents are attached to appendices.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter focuses on related concepts and studies of TVET in implementing school to work transition, which is considered to be important for the study. As such it will enable readers to have an over view about TVET.

2.1.1 The Origin and Development of TVET in General

The concept vocational education is a very ancient phenomenon. The origin and historical development of vocational education started by unconscious and conscious imitation moved to informal and formal apprenticeship and later to formal vocational training in schools. The use of tools, beginning with those made from stones, evolved as humans evolved. In the pre-historic hunting and gathering society, skills were passed from parent to child as members of small, usually related, migratory groups. The transition from this stage to the settled cultivation of crops marks the beginnings of civilization—and with it recorded history. The education and training that occurred is best embodied in the **Chinese** proverb: **‘Give a man a fish and he will eat for a day. Teach him how to fish and he will eat for a lifetime’** (cited in Mnse, 2010).

Furthermore, Middleton, Ziderman and Adms (1996) suggest that:

a popular adage holds that to give people a fish is to make them a meal, but to teach them to fish is to give them a living. But adages are often half-truths. To make a living at fishing, an individual needs a hook, line, and sinker, perhaps a boat, and access to individuals who can afford to buy the fish.

Shortly the same is true to TVET program. In order to teach vocational students to operate on machines, there should be proper machineries in the workshop, safety materials, enough teaching materials, hand tools, and other indispensable materials that are needed for running effective teaching and trainings that would benefit the trainees as well as the stakeholder. Otherwise without the availability of conducive atmosphere in the course of the training, it merely remains as the proverb points out that only giving training without completely supplying with the necessary materials needed does not enable the trainees to have full experience in their fields of study or they may not even properly maintain skill and render their service in the enterprises wherever they may be employed. According to Centre international d’études pédagogiques, (2004, cited in Mazeran), in the beginning, there was vocational training: learning to use tools

and trying to improve them was one of man's primary occupations at the dawn of human society. Thereafter, social organization and the development of techniques made the mastery, maintenance, and improvement of know-how necessary. The acquisition of skills therefore has a « social value » and is a vehicle for social integration. In addition, Craftsmanship remained the first source of technology and know-how for a long time. In those days, even medicine progressed by means of trial and error, as well as experimentation. To learn a trade was both a source of income and a way of finding a place in society. We can say that the fabric of vocational training was born from the relationship between a master and his assistant and between an assistant and his apprentice in the middle Ages.

Furthermore, vocational education in its form has its origin when man began to live together and started to produce for his basic needs. The primitive people probably, used the digging stick, stones, axes and fire to clear the vegetation for hunting and gathering their food supply. Knowledge continued to be passed from father to son verbally and was meager in quantity. At that period the process of learning was spontaneous imitations of skill (Abramso, Title and Cohen, 1979, Brembeck, 1970, cited in Yekunoamlak, 2006). Additionally, Basta (1997) explains that, human civilization is partially defined by the movement from Stone Age (stones are a type of ceramic) into a Bronze and Iron Age (both metals). Schools everywhere are being asked to prepare young people for the jobs of tomorrow, and technical and vocational education (TVE) has an important role to play in this process.

Technical and vocational education is therefore considered essential because a country cannot achieve economic and social development without a skilled, productive labour force that can meet the changing requirements of its environment. However, TVE systems are everywhere facing challenges to prepare a sufficient number of people with the right skills to meet labour market demands. Matching skills, knowledge and attitudes to the needs of employment is increasingly challenging in the current context of globalization and rapid technological change due to the constant transformation of occupations (Atchoarena and Delluc, 2002).

In addition to this, the transition from school to work is no longer a matter of simply acquiring the technical and vocational skills for a specific occupational field. As the world of work becomes more complex and more changeable under the influence of global trends, training and education for the world of work has to adapt accordingly. In order to be able to provide learners and trainees with adequate TVET, policy makers and practitioners need to be aware of what

these global trends are and what repercussions they will have on the world of work and consequently on TVET (NIER, 2007). Similarly, school to work transitions can be understood in a broad sense as the process a person, usually a youth, goes through when making the transition from the world of education to the world of work. Generally, school to work transitions can encompass any pathway a youth follows to employment, including pathways through college or university (Ontario Association of Youth Employment, 2005).

2.1.2 TVET in the Ethiopian Context

Ethiopia is one of the ancient civilizations in the world; some physical and social ubiquitous remains of history witness the fact. Even though much of its past needs to be researched, established and claimed, it can be said that Ethiopian civilization has contributed to the overall progress of human kind. After some period in history, however, practical and secular knowledge and skills seem to have been highly and "deliberately" neglected and discouraged in the society. This unfortunate phenomenon is undoubtedly one important factor that contributed to the backwardness of the country in general. The most important factor of development is the skill and knowledge of people. There was a time back in history when Ethiopians valued the skill of people and, as a result, the country was relatively an important centre of technology and arts of that time. The culture and architectural remains unequivocally witness this fact. Art, music, sculpture, agriculture, literary work and commerce in Ethiopia were superior to those in the now developed countries of the world during that time (Teklehaimanot, 2002).

Despite the negative attitudes of the society towards artisans and craftsmen, Ethiopia rulers such as Tewodros, Yohannes and Menelik II used to correspond with European powers namely, Britain, France, Italy and Switzerland requesting them to send craftsmen/technicians who could build mechanical devices in Ethiopia. They were specialist in ironwork, woodwork and other technical fields (Pankhurst, 1998, in Wanna, 1998). Thus, Ethiopian rulers such as Tewodros, Yohannes and Menelik II were very much interested in having foreign technicians who could build bridges, roads, firearms and mechanical devices of different kinds. History gives credit to Menelik II for introducing western education to Ethiopia in 1907. During the death of Menelik II in 1913, only four schools were in operation in Addis Ababa, Ankober, Dessie and Harar (Girma, 1982, in Wanna, 1998). The modernization process that was started by Menelik II continued to expand as Haile Selassie became king of Ethiopia. The expansion of schools and other institutions were built in large number up to the eve of Italian invasion in 1935. During the

Italian occupation from 1935-1940 schools were destroyed and those Ethiopians who had modern education were massacred.

According to Girma (1994:8) vocational education (VE) in Ethiopia is an outgrowth of education set up in the country over the years. Long before modern education was introduced, church education was prevalent and those who went through such schools used to serve as church officials and or government employees. Available sources indicate that there was no significant sign of vocational education at that time. Mention, however, was made that "in the time of Emperor Theowdros (1855 - 1868) there had been a demand for foreign craftsman. "Adding to this, Baharu (2002) also states that, when Tewodros later sought foreign assistance, it was not so much the arms that he sought as the skilled manpower to manufacture those arms and to impart those skills to Ethiopian. Based on this effort, at Gafat, a school was established where Ethiopian youths acquired **literacy** and some **technical skills**. In addition, Bahru (2005) also explains that, Emperor Tewodros set up what was an embryonic technical school at Gafat, near Dabra Tabor in Bagemder. Furthermore; Baharu confirmed that at Maqdala, the first well-documented arsenal in Ethiopia history was established, with **15 cannon of mortars, 11,063 rifles of different types, 850 pistols and 481 bayonets, as well as ammunition including 555 cannon-shells and mortar-shells and 83,563 bullets.**

According to Teklehaimant (2002:8), after the golden age of the arts and technology of the Axumitic kingdom, when skills must have ceased evolution in Ethiopia for a long span of time. In spite of the extensive history and ancient civilization of the country formal TVET is a recent phenomenon. As pointed out earlier this is because of TVET was not considered a crucial element and a substructure of the nation's economic, social, and cultural development. Additionally, Girma (1994) explains the history of vocational education starting from 1942. During the four decades, 1900-1940, Ethiopia underwent many significant moments some of which contributed to the socio-economic development of the country. These included the proclamation Emperor Menelik II Passed, in 1907, urging parents to send their children to school and the opening of a school in 1908 to offer modern education. In 1908 also the Emperor Menelik II founded a primary school (Ras Mekonnen) at Harar, the second city of Ethiopia and at the principal commercial centre (Panhurst 1955). In 1925 Tafari Makonnen the then regent to the throne founded a school in his name in Addis Ababa (Parkburst, S; 1955, cited in Girma, 1994). After his coronation as Emperor Haile Sellaseie in 1930 there were many schools

founded in the country (Pankhurst, S., 1955). This continued until Fascist Italy invaded the country in 1936. At this time there were at least twenty one government schools in the nation. Three of these were in Addis Ababa and had developed to a secondary level (Teshome, 1979, cited in Girma, 1994).

The years 1936-1941 were the time of the Italians in Ethiopia. The policy of the fascist government which occupied Ethiopia during 1936 to 1941 was clearly to wipe out the embryonic modern education system and destroy the intelligentsia" (Meaza, 1966, cited in Girma, 1994). As evidence, there were very many people massacred during this time many of those massacred were educated. There were also many school destroyed. It was because of this that when the Italians left the country in 1941, the Imperial Government began to lay down the educational foundations from scratch (Tekeste, 1990, cited in Girma, 1994). The urge for the establishment of technical and vocational schools was great soon after the Italian occupation. There were no skilled persons who would work in the then emerging modern sectors of industry and commerce (Mesfin, 1994). After the liberation the Imperial Ethiopian Government wasted no time to open schools where the immediately required personnel were to be trained. Thus the Technical school and the commercial school, both in Addis Ababa, were built in 1941/42 and 1942/43 academic years, respectively (Nieoff and Wilder, 1973, cited in Girma, 1994, Pankhurst, 1955). There were also other specialized schools which were established in the 1940's among these were: The Air Force Cadet training center, the Aba Dina Police officers training college, the Empress Mennen Handicraft school, the municipality technical school and the school of Building Technology (Teshome, 1979, in Girma, 1994 and Wanna, 1998). However, there are some misconception attached to TVET in Ethiopian context because, the country is a heterogeneous society with people having different cultures, attitudes and aspirations. The amalgamation of different cultures calls for diversified approaches to issues that affect people. Ethiopia had its own craftsmen and artisan for centuries. However, these men and women of talent were relegated to a lower status by the traditional Ethiopia for a long time. In our society, especially in rural areas, potters, blacksmiths, weavers, tanners are isolated and despised. They are labeled as sorcerers as having evil spirits (Pankhurst, 1990; Tsahalish, 1991, cited in Wanna, 1998). In some instances, these craftsmen were killed by fellow countrymen due to misguided beliefs. Some writers on Ethiopia hint that such negative attitude towards craftsmen and artisans probably affected the

development of indigenous crafts, thus weakening any technological advances that the country could have made (Wanna, 1998).

In addition to this, Teklehaimanot (2002), also forward the following valuable statements:

In the rural society of the country craftsmen, artisans and manually skilled people were despised, insulted and discriminated against. Similarly, other tradesman concerned with pottery, leatherworks, weaving, and metal works in general were looked down on. Even farming, on which the livelihood of almost all the people depended, was viewed as an inferior occupation by the ruling segment of the society.

2.1.3 The Objective of TVET

Technical and Vocational Education and Training (TVET) in Ethiopia seeks to create competent and self-reliant citizens to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty. The overall objective of the National TVET Strategy is to create a competent, motivated, adaptable and innovative workforce in Ethiopia contributing to poverty reduction and social and economic development through facilitating demand-driven, high quality technical and vocational education and training, relevant to all sectors of the economy, at all levels and to all people (MoE, 2008). In addition, Evans (1971) explains that there are three basic objectives in any public school vocational education curriculum and he listed them in chronological order of their acceptance as goals, they are:

- meeting the manpower of needs of the society and
- increasing the options available to each students; and
- serving as a motivating force to enhance all types of learning.

Atchoarena and Delluc (2002) states that, the primary objective of technical and vocational education is to train a skilled labour force that can adapt to the requirements of the labour market and the other major objectives must now be pursued:

- to train the workforce for self-employment;
- to raise the productivity of the informal sector (Caillods, 1994 in Athoarena and Delluc, 2002).

Additionally Africa Union (2007) outlined the following three main objectives of TVET:-

- The primary objective of all TVET programmes is the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area.

- The need to link training to employment (either self or paid employment) is at the base of all the best practices and strategies observed world-wide. In recent years, in view of the rapid technological advances taking place in the labour market, flexibility, adaptability, and life-long learning have become the second major objective.
- The third objective, which is particularly important for Africa, is to use TVET as a vehicle for economic empowerment and social mobility and for the promotion of good governance and regional integration.

In addition McArdle (2002) explain the purpose of vocational training as follows:

- Economic: Supply the labour market (firms) with needed workers
- Social: Enabling the transition from school to work for young people and a mechanism to enhance self reliance and the dignity of the “working class”
- Social/Political: Improve adjustment of workers to working life.

Additionally, Mesfin (1994) explains that,

technical and vocational education is mainly focuses to that type of education which leads to particular occupation. Seen from such point of view, schools that concerned with the provision of subjects that are technical and vocational nature have the responsibility of training people who would be able to work in the occupation available in the surrounding. This in turn tends to imply that one of the primary purposes of technical and vocational education is to meet the skilled manpower need of the specific area in which the schools have to operate.

2.1.4 The Current Policy issues of TVET in Ethiopia

Education is a process by which man transmits his experiences, new findings, and values accumulated over the years, in his struggle for survival and development, through generations. Education enables individuals and society to make all-rounded participation in the development process by acquiring knowledge, ability, skills and attitudes. Education enables man to identify harmful traditions and replace them by useful ones. It helps man to improve, change, as well as develop and conserve his environment for the purpose of an all-rounded development by diffusing science and technology into the society (TGE, 1994).

In addition, the new education policy set outs the major problems, implementation strategies (including formal and non-formal education), the structure, the curriculum, the administration and financing of education be just, efficient and appropriate to promote equity and quality of education.

Overall, the education and training policy:

envisages bringing-up citizens endowed with human outlook, country wide responsibility and democratic values having developed the necessary productive, creative and appreciative capacity in order to participate fruitfully in development and the utilization of resources and the environment at large (TGE,1994).

Similarly, various articles in the Education and Training Policy (TGE, 1994) confirm the commitment of the government to the provision of technical and vocational education which geared to TVET. Notable among these are the following:

- To satisfy the country's need for skilled human resources by providing training in various skills and at different levels, to make education, training and research appropriately integrated with development by focusing on research.
- Parallel to general education, diversified technical vocational training will be provided for those who leave school from any level of education. Training will be provided in agriculture, crafts, construction, industrial arts and basic bookkeeping in the form of apprenticeship for those of the appropriate age and leaving primary school.

According to Haileselassie, Emebet and Wanna (2002, Wanna, 2006, in Zeleke 1999) in the last century, Ethiopia experienced feudal rules, socialist military dictatorship and a federal system. These three types of governments had their own outlooks towards education. Some 13 education policies/declarations were made between 1906 and 2000: in 1906, 1925, 1926, 1929, 1944, 1956, 1964, 1966, 1969, 1970, 1972, 1986 and 1994 (Zeleke, 1999). According to Zeleke (1999), the two early policies—1906 and 1929 were more inclined towards the non-formal education. They emphasized literacy and basic skills such as handicrafts. Additionally, the government of Ethiopia also realizes that a well trained human resource is a vital force to achieve a sustainable economic growth of the country. Adding to this, according to FDRE (2004) report, Ethiopia needs skilled manpower for rapid development and growth. It is a clear fact that the presence of properly trained and skilled manpower is one of the most important assets and prerequisites of social and economic development. TVET programmes are critical in the development of a sustainable manpower resource, to supply the skilled workforce for the production and service section of the economy as well as an expansion of opportunity for self-employment. To this effect, one of the major steps that have been taken by the government was to issue TVET proclamation

No.391/2004. According to this proclamation, the following training programs were offered at three levels. These are:

- Basic Vocational training programs, which aims to provide citizens basic training which prepares them for gainful employment.
- Junior TVET: - aiming to train the youth who have completed primary education.
- Middle level TVET program:-to prepare middle level skilled manpower in various trades (Federal Negarti Gazeta, 2004).

According to (UNESCO-ILO, 2002) policy should be formulated and technical and vocational education administered in support of the general objectives adopted for the educational process as well as for national and, if possible, the regional social and economic requirements of the present and the future, and an appropriate legislative and financial framework adopted. Government and the private sector should recognize that technical and vocational education is an investment, not a cost, with significant returns, including the well-being of workers, enhanced productivity and international competitiveness. Therefore funding for technical and vocational education should be shared to the maximum extent possible between government, industry, the community and the learner, with government providing appropriate financial incentives

In support of the above explanation Ghazalah (1994), points out that, the relationship between education and work has long been recognized. The more you invest in your education, the more valuable you are to employers and, therefore, the more you will earn.

As early as 1776, Adm Smith, the founder of modern economics, had this to say about the value of vocational training in his classic work, *The Wealth of Nation*: "**though it costs a certain expense, [it] repays the expense with profit.**" Therefore, the government, private training providers, and donors should work hard to meet the basic objectives of TVET even if the investment of TVET was expensive. Because TVET fulfill the requirements of the labor market and it is important to produce skilled workers who could work in various modern establishments. According to InWent/UNESCO-UNEVOC (2008) TVET investments should be closely linked to economic and employment growth strategies and programmes. Responsibility should be shared between the government (primary responsibility), enterprises, the social partners, and the individual. Additionally, to make lifelong learning for all a reality, countries will need to make major reforms of their TVET systems. School-to-work schemes for young people should integrate education with workplace learning.

According to NIER(2007, School-to-work policies, for TVET to become an effective tool to facilitate transition, clear strategies and policies need to be put in place and supported at a high political level to ensure a consolidated approach by all stakeholders involved. In many countries, these policies are already in place, but their implementation is lagging behind. Furthermore, UNESCO (1999) explains all nations require a coherent education policy and coordinated education systems within which TVE must be a fundamental part .TVE should develop close interfaces with all other education sectors, particularly schools and universities, to facilitate seamless pathways for learners. The emphasis must be on articulation, accreditation and recognition of prior learning to enhance their opportunities. Girma (1994) further elaborates that:

the relevance of the economic development of a country to the skills needed and the standard required of the labour force depends on the type of the activities of the jobs existing in the institutions. "For example if the existing institutions are affiliated with agriculture, agricultural subjects or courses at the required level would be taught. On the other hand if the economy of the country is heavy on industries, subjects dealing with manufacturing, distribution and other services would be given. This aspect of vocational education of course needs a serious scrutiny on the part of planners so that the right type of curriculum is put to work thereby avoiding wastage of resources.

In support of the above explanation, various strategy documents shows that, the government of Ethiopia has adopted the Plan for Accelerated and Sustained Development to End Poverty (PASDEP), Industrial Development Strategy as well as Agricultural Development Led Industrialization (ADLI). Since agriculture is the backbone of the economy, ADLI has been taken as a starting point of initiating the structural transformation of the economy. Additionally, MoE (2009) as happens in many countries, specific ministries may take on specialty areas as part of TVET offerings. In Ethiopia, the Ministry of Agriculture, via approximately **25 centers**, is now enrolling **25,033** TVET trainees, of whom about 16.4% are female. Trainees can take training in Animal Science, Plant Science, Natural Resources, Animal Health, Cooperative Accounting and Auditing, and Cooperative Organization Management and Marketing.

2.1.5 The Contribution of TVET

TVET is particularly important in ensuring a seamless transition from the school to the workplace. To achieve this, it needs an holistic approach which captures the dichotomies of the academic and the vocational, the theory and the applied, knowing and doing, the use of the head and the hand. This requires effective partnerships with schools and with industry and other economic sectors which embrace shared values, shared curriculum, shared resources and shared

outcomes. Reflecting such imperatives, the Seoul Congress looked to an innovative paradigm of technical and vocational education based upon “a learning culture” that encourages and educates people “to be productive and competitive, and to care for the well-being of its people”. The Final Report of the Congress is replete with statements about the contribution of technical and vocational education to a sustainable future. **For example:**

- Technical and vocational education, as an integral component of lifelong learning, has a crucial role to play in this new era as an effective tool to realize the objectives of a culture of peace, environmentally sound sustainable development, social cohesion and international citizenship.
- The TVET of the future must not only prepare individuals for employment in the information society, but also make them responsible citizens who give due consideration to preserving the integrity of their environment and the welfare of others. TVET can play an instrumental role in developing a new generation of individuals who will face the challenge of achieving sustainable socioeconomic development. A number of new subjects (issues) therefore need to be incorporated into TVET teaching and learning or be further emphasised for the sake of the future of all of us as we struggle to learn throughout life. A well trained technical workforce is essential for any country’s efforts to achieve sustainable development.
- There is an urgent need to renew TVET. This should be the top priority for every country. This is a task that can only be accomplished if a country can succeed in articulating TVET with its system of education within a framework of an overall sustainable development strategy (UNESCO-UNEVOC, 2006)

According to, UNESCO-UNEVOC (2009) sustainable development depends also on values and social factors." The Planet has enough resources to meet people needs, but not their greeds"—Mahatma Gandhi. In short, “*Quality TVET* has a very important role in achieving education for sustainable development.” In addition, TVET will contribute to the fight against the spread of HIV/AIDS in Ethiopia by incorporating awareness creation and training about preventive measures in all its programmes.

Furthermore, TVET institutions will develop policies to ensure that HIV positive trainees and staff members are not discriminated against. In line to this, UNESCO (2004) states that, the HIV/AIDS pandemic is a development disaster. Not only is it decimating whole populations, it

also attacks the very institutions most needed to prevent the spread of the epidemic itself. HIV/AIDS is threatening to wipe out decades of investments in education and in human resource development. The high rate of disease and death among education personnel, health workers and other trained professionals will make replacements increasingly hard to find. Since there is no cure or vaccine yet, prevention is the most important way to combat HIV/AIDS. According to, UNESCO (2004) with regard to TVET, HIV/AIDS affects:

- The demand for TVET: reduced enrolments through death and illness of students, absenteeism related to care for infected relatives, the need to substitute for a deceased income generating family member that is having to work instead of going to school.
- The supply of TVET: impact on teaching and other education personnel and resources.
- The quality of TVET: by diverting resources and through absenteeism of staff and learners.

Additionally, HIV/AIDS also is a major threat to the world of work as it affects the most productive segment of the labour force. It leads to reduced earnings, increase of labour costs, decline of productivity, loss of skills, experience and Erosion of rights at work (discrimination and stigmatization of infected co-workers etc.).

2.2 Work Based Learning programs as School to Work Transition

2.2.1 Introduction

The 1994 School-to-Work Opportunities Act (STWOA) has stimulated educational initiatives that are intended to improve two important outcomes for youth: learning and successful career entry. Since the passage of the STWOA, states and localities have been piecing together initiatives that adhere to broad school-to-work (STW) concepts for learning and career development and are tailored to local strengths, resources, and needs(Hollenbeck,1997)..

School -to -work transition is a phrase refereeing to on-the -job training, apprenticeships, cooperative agreements or other programs designed to prepare students enter the job market. School-to-work is a system to introduce the philosophy of school-based, work-based, and connecting activities as early as kindergarten to expose students to potential future careers. School to work emphasizes lifelong learning (Wikipedia, 2010).The transition from school to work is a critical stage in the human lifecycle during which young people take on new roles and responsibilities in the society. It is a period of social, psychological and economic transitions,

and for many young people, it means making important choices that can affect their life course and determine their chance of inclusion in the society through access to work.

To a large extent, the nature and quality of young people's future lives depend on how successfully they transit from school to work. The failure to find decent employment after leaving school tends to have serious and lasting effects on occupational patterns and incomes over the life course of a young graduate. An ineffective school-to-work transition system also affects the countries' economic growth, productivity and ability to compete in the global economy (Berar-Awad, Azita and Qaryouti, Yousef cited in Alissa, 2007). If students are to prepare for a successful transition from school to work, they need to be able to spend adequate amounts of time in industry acquiring appropriate industry-specific skills and experience. This is especially the case for school-based part-time apprentices and trainees who need to be engaged in meaningful on-job activities as part of their contract of training (NCVER, 2004). In addition to this, Zunker's (2002) explanation in 1994 (U.S), the school to work opportunities Act was signed into law, offering the possibility for all sectors of community to work together in making education a more meaningful experience.

Every school to work system must contain the following three core elements (U.S. Department of Education, 1996):

- School-based learning: classroom instruction based on high academic and business-defined occupational skill standards.
- Work-based learning: career exploration, work experience, structured training, and mentoring at job sites.
- Connecting-activities: courses that integrate classroom and on-the-job instruction; matching students with participating employers, training mentors, and building other bridges between school and work.

According to NIER (2007) study, school-to-work transition is a broad term, and gained currency during the 1990's with a widespread renewed emphasis on labour market and educational reforms. The term covers areas such as:

- preparing school leavers for the world of work;
- supporting young people through the actual transition process; and
- strategies to increase labour market outcomes in initial employment opportunities.

Shortly, quality school to work programs must be expertly coordinated between the work site and classroom. Thus, teachers must also be convinced of the program's benefits. Teachers, supervisors, and students must cooperatively plan academic contents and skill development to ensure an appropriate learning experience.

According to NIER (2007), the cost of teaching TVET in schools is high. Introducing school-to-work transition programs will incur significant additional costs for school management and for government. As a result, teaching of TVET is done in poor facilities, with poorly trained teachers and with the absence of or lack of teaching and learning resources for effective learning to take place. To effectively teach TVET in schools, proper workshops, laboratories, equipment, and learning resources (including stationery, raw materials, textbooks and teaching aids) must be provided. Governments must secure funding and technical assistance from industries and donor agencies to supplement their own funding. In addition, there is a need for proactive partnerships between industry and schools. A successful school to-work transition program will only work if there is a strong school and industry partnership. Industries can provide training for teachers and attachment opportunities for teachers and students, thus ensuring appropriate skills for employment.

According to Hollenbeck (1997) the promise of school-to-work activities lies in the following benefits:

- Enhanced career preparation of youth
- Enhanced learning through hands-on, contextualized instruction
- Increased collaboration between education , employers and restructured curricula

2.2.2 Work Study

The study of work must be as old as work itself and work is as old as man because one could interpret the hunting that was essential at the dawn of civilization for life to continue as work. Similarly study can be interpreted as any mental thought given by a human being to what is being done by that human being (Girma, 2010). Work study or internship program is a training program where students are partially kept in the school for their academic and partially in place where they get work experience. Usually a work -study program is carried out in relation to vocational education which itself is established with the following principles (Patrick and Selden, 1965, cited in Girma, 2001) should be observed:

- Vocational education should occur as close to the time of application as possible.

- There must be sufficient concentration of work in each area to enable the student to develop sufficient competence to hold an entry job in a given occupation upon the completion of the curriculum;
- A well-planned vocational program integrates vocational education, general education and some diversity of curriculum offerings and to give flexibility to the program;
- Vocational instruction must be geared to the times, preparing the individual to enter the world of work of today and tomorrow.

The work study approach to vocational and technical education is an educational strategy that is applied to a program of study leading to certification. The approach combines, in a structure way, periods of learning in school and periods of practical training in the workplace (Yekunoamlak, 2006). In sum, the objective of work study is to assist management to obtain the optimum use of the human and material resources available to an organization for the accomplishment of the work upon which it is engaged and has three aspects:

- the most effective use of plant and equipment
- the most effective use of human effort and
- the evaluation of human work (Girma, 2010).

2.2.3 Cooperative and apprenticeship Training

The flexibility of TVET delivery also allows for a strengthening and further development and deepening of cooperative TVET (including apprenticeship training). Cooperative TVET is a mode of TVET provided in partnership between enterprises and TVET institutions. Usually, the bulk of practical training takes place in an enterprise, while theory and initial practical exposure is provided by the TVET institution. In more advanced TVET systems – for instance in many European countries – cooperative TVET schemes are organized as formal apprenticeship training, implying a work or apprenticeship contract between the trainee and the company. The major advantage of apprenticeship training (and more generally cooperative TVET delivery forms) is its vicinity to the world of work. Trainees are systematically exposed to the world of work and learn the occupational practice in a real life situation. Experience shows that this leads to significantly better training outcomes, practical skills, work attitudes and theoretical comprehension of the occupational requirements. Furthermore, enterprises get to know the trainees, which often lead to employment after graduation. Through cooperative TVET schemes companies can also contribute to the further development of TVET system (MoE, 2008).

2.2.4 Lifelong learning/Training

Lifelong learning is defined as learning through all aspects of life, so that each citizen has the opportunity to acquire the necessary knowledge for personal development, social and professional enhancement, to become an active participant in society and economy. Lifelong learning sees learning as happening not only through the formal educational systems but also in all other places where learning realized. Not only schools, but also the family, the work environment and the local community can be places of learning. Lifelong learning is based on the acquisition of the necessary skills enabling one to learn, rather than merely accumulate knowledge. Neither is it a set of academic knowledge or training what is most important is to train people to learn how to learn through the acquisition of multi-skills in the fields of communication, information, society and culture (Añonuevo-Medel, 2002).

In addition, lifelong training is constantly seen as to take up new courses, to acquire new skills in order to keep up with the changing market in jobs. It is recognized that, for many, there is a constant need for re-skilling -and hence a need to upgrade, as it were, the qualifications that one has (Clarke and Winch, 2007).

2.3 Resources Required for TVET programs

2.3.1 Trained administrative staff

According to UNESCO and ILO (2002) recommendation the heads of technical and vocational education establishments should devote a significant portion of their time to the educational and scientific aspects of their work. Sufficient staff should be available to provide the following services:

- counselling and guidance for candidates , students, the preparation, supervision and coordination of all practical work and experiments;
- the maintenance of instruments, apparatus, tools in workshops, laboratories, academic support services such as libraries, information and communication technology centers and information resource centers.

Additionally, this recommendation states that, administrators should keep up to date with new administrative techniques and trends, especially through relevant lifelong learning programmes. They should receive special training in the methods and problems associated with the specific

features of technical and vocational education programmes, such as flexible entry and re-entry patterns, continuous training in the workplace, and relevance to the needs of the world of work. This preparation should include, the management methods appropriate to educational administration, including techniques that utilize information and communication technologies, financial planning methods that facilitate the allocation of available resources, given the objectives and priorities of the various programmes, and ensure their efficient utilization and contemporary human resources management and development methods. According to Gasskov (2000), the strengths of VET administration tend to be; policy development, regulation, prevention of discrimination in schools, equity management in support of education and training for students from low-income families, and ability in public services. By contrast, the weaknesses of public services are thought to include: an inability to perform complex tasks, adjust rapidly to change or be innovative; failure to be highly productive or cost-efficient; and a tendency to deliver services that become obsolete quickly (cited in, Osborne and Gaebbler, 1992).

Routine management activities consist of decisions regarding programming and planning, budgeting and financing, staffing, and monitoring the performance of units and individuals. Consequently, effective management requires policies on planning, human resources, resource allocation, wages and other matters (Gasskov 2000). Apart from building the competence of TVET teachers/instructors; sufficient resources and efforts will be invested into human resource development activities among TVET administrative and management staff. This includes those stakeholders involved as council and board members at different levels in the governance of TVET too. Tailor-made training and/or awareness creation programmes will be drawn up. Specific target groups for such human resource development include:

- Members of TVET councils, administrative staff and TVET executive bodies at federal, state levels, zonal and woreda levels;
- Facilitators of occupational standard setting and assessment item development Assessors in the occupational assessment system
- Heads of TVET institutions and members of TVET institution Management Board (MoE, 2008).

According to UNESCO (2004) it is apparent that better management, particularly at the TVET College or regional level could result in more effective outcomes. TVET college management should have clear objectives and be free to manage the resources under their control, whilst at the

same time being held accountable for achievement of targets. They should also have more flexibility to modify TVET programmes to meet the needs of the local community. Decentralization of management should encourage exploration of more effective use of resources, such as providing additional classes on a shift delivery basis, more efficient use of staff, or the sharing of resources with a cluster of colleges in a region.

2.3.2 Trained Trainers

It is often the teachers and trainers who are the “real” change agents when it comes to educational reforms, as they are the ones who most directly deal with the clientele, i.e. the students. They are also the ones who in the end have to put into practice the policies that are decided at a higher level. School-to-work transition strategies and programmes can only be successful, if teachers and instructors are motivated and well qualified, and in touch both with the current demands of the local labour market and the needs and abilities of their students. To attract motivated and qualified TVET teachers and instructors, adequate remuneration and career prospects should be offered. Regular in-service training is necessary to keep their knowledge about new technologies and work processes up-to-date (NIER, 2007).

All nations are faced with the challenge of improving their human resources to respond to social and cultural issues, national development needs, global competition, and the rapidly changing worlds of work, technology and economy. High quality initial teacher education is needed to improve and shape TVET, as well as further training of teachers who are already in service (Bandung Declaration on TVET-Teacher Education, 2008). Qualified TVET human resources are in chronic short supply in many countries. At the most basic level, there is the problem of how best to institutionalize initial instructor training and how best to recruit instructor-trainees to such training. Small countries frequently have problems designing provisions for instructor training in the many vocational specialties in such a way that they avoid underutilization of training capacity. Large and small systems have problems ensuring that the pedagogy part of such training will be sufficiently relevant for the practicalities of skills teaching in the concerned vocational specialty (Lauglo, 2006).

The role of technical and vocational education teachers is undergoing a radical change. Teachers are no longer just dispensers of information. They are expected to be curriculum designers, student counsellors, educational and resource managers, internet operators, and vocational

practitioners .At the same the successful implementation of TVE programmes very much depends on the availability of well trained and experienced TVE teachers (UNESCO, 1997).

The professional preparation of all technical and vocational teachers should include the following elements in pre-service training and in-service upgrading programmes:

- educational theory in general and particularly as it applies to TVET, educational psychology , sociology, classroom management, special teaching methods appropriate to the subjects/fields of the future teachers and methods of evaluating/ assessing the students' work;
- training in how to create and produce appropriate teaching materials, including modular and computer-aided instructional materials, whenever such materials are in short supply, an introduction to educational and occupational guidance methods as well as to educational administration;
- planning the instructional environment of practical classes and laboratories and managing/maintaining these facilities and a sound training in safety, with emphasis on teaching safe working practice and setting a good working example (UNESCO-ILO ,2002).

Furthermore, as UNESCO-ILO's recommendation teaching staff should be encouraged to continue their education and training, whatever their specialized field, and should have the necessary means to do so. Lifelong learning should be made available in a wide range of facilities, and should include, continuous and updating of specialized professional skills and knowledge and periodic work experience in the relevant occupational sector. Zhao (2006) further elaborates on lifelong study for TVET Teachers as follows:

With the popularization of multimedia tools, network information technology in schools, and the adoption of new materials, new techniques, and new methods, a vocational school teacher must be constantly kept abreast of the latest developments. In many countries TVET is currently undergoing a transformation as a direct consequence of fundamental political, economic, and social developments. Efforts are being made to find suitable concepts and approaches to tackle the new challenges for TVET. It is a simple but extremely important fact that the quality of vocational education crucially depends on the qualification and motivation of the teaching staff.

Furthermore, Zhao explains that, there is general world-wide agreement referring to the general goals and purposes of TVET. Every TVET-system has to: provide marketable and employable

qualifications for everyone who is able and willing to work, facilitate the transition from school to work for all male and female high school graduates, including those with an incomplete general education, offer suitable continued professional development for upgrading and adjusting an individual's qualifications in order to cope with changing and new demands of the labour markets, offer inputs on the development of a growing economy and to create new jobs by fostering the chances of self-employment and provide the motivation for self-reliant and independent life-long-learning.

When we acknowledge these general functions that every TVET-system has to meet, it is evident that the training measures of TVET-personnel should reflect them. In other words, the goals, contents and organisational forms of pre-service and in-service teacher training have to be orientated toward the **five functions** of the TVET-system listed above.

Adding to this, Zhao further elaborates that, in order to develop a coherent strategy of training of TVET teachers, the following are some of the critical issues which need to be examined in depth and their impact on recruitment and training of TVET teachers/trainers have to be assessed:

population growth and rapid urbanization, poverty and lack of skills for income-generation, increasing demand for secondary education, female education; technological change and labour market shift, changing patterns of international trade, liberalization and globalization of the workforce, pollution and environmental degradation; new technologies of training for TVET education and population growth.

In addition (UNESCO,1997),planning and implementation of reforms in TVET teacher training will require effective partnerships among : a) national planners; b) TVET institutions; c) teachers' organizations; d) media experts; and (e) international agencies.In summary, effective teachers of today should be lifelong learners. One of the most practical approaches is to involve them in problem-solving, experiential learning programs with their colleges. Where there is a learning culture among teachers, there will also be successful learning for the children ((Anonuevo, 2002).

According to UNESCO (1997), skills and competencies necessary to meet the challenges of TVET teacher training will not be achieved through the traditional forms of TVET teacher-training curriculum and delivery and its systems. A multi-dimensional approach is necessary to meet the objectives. These will include:

- pre-service and continuing teacher education through formal and open learning systems;

- more broad-based and flexible teacher-training curriculum replacing skill-specific training programmes;
- integration of training and education in cooperation with industries and private sectors;
- life-long and flexible learning to enable the teachers to meet the demands of higher and varied demands of the teaching job;
- knowledge and skills of using new technologies of training and education including the computers and development of multi-lingual and communication skills;
- a increased emphasis on development of work ethics, teamwork, human values and other non-technical competencies like leadership, time management, environmental awareness.

Furthermore, UNESCO (1997) explains that, technical and vocational teacher education must be analysed in terms of the three possible models that are applied.

- The first is where appropriate people from industry who have been employed in their trade or profession for some years are selected for technical and vocational education teaching. These people have industry experience but no formal qualifications. They must then be given pedagogical training and in some cases, formal technical qualifications.
- The second model is where concurrent training is offered to a person through which the person is given the technical knowledge and skills needed for teaching, and the pedagogical training at the same time. These people lack industry experience and may find it difficult to make their teaching relevant to the real world of work. Further, they may find it difficult to keep their knowledge and skills up-to-date by obtaining some periods of work placement within a relevant occupation.
- The third model is where employees with some years of experience in a relevant work situation and who already have the necessary technical qualifications are brought into technical and vocational education teaching. These people primarily need pedagogical knowledge and skills to function as teachers. They may also have the advantage of gaining graduate status for further study. This third model was thoroughly endorsed by the international round table as the preferred model, and should be adopted, as far as is possible, around the world. However, it was recognised that it is difficult to entice such people in to teaching, given the low comparative wages with industry.

2.3.3 Financing TVET

According to Federal Negarti Gazeta (2004) the source of fund of every public training intuition shall be annual budget and subsidy allocated by the government, training tuition fee collected from trainees, the institution's internal income as well as donations and assistance the institution may receive. Funding diversification can take many different forms; in particular, four different avenues may be pursued, separately or in combination.

- **Fund Augmentation:** public sector training funds available for the support of training institutions via subventions, may be augmented from other sources - the classic method is to impose special taxes, earmarked for training.
- **Cost Sharing:** the weight of training finance falling on public funds may be lightened through the introduction of cost sharing with the beneficiaries of training, mainly in the form of introducing training course fees or by raising them to more realistic levels. These measures will allow a reduction in public subsidies for training or the provision of more or better training services with given levels of public support.
- **Income Generation:** training institutions may seek additional income from other sources, such as selling of products (combining production with training) or renting out of facilities.
- **Private Training Provision:** encouragement may be given to the development of private training institutions, thus generating additional funding for training and, in parallel, reducing the call on public funds. This approach is particularly relevant where expansion of the training system is desirable (Ziderman, 2001).

According to Middleton, Ziderman, and Adms (1996) technical schools are even more expensive. A number of factors account for this pattern, including significant differences in teacher and capital costs as well as class size. The reasons for the higher recurrent unit costs are straight forward.

- First, the low student-teacher ratios required for training in workshops increase the cost of instructors.
- Second, where wage policies permit the hiring of skilled workers and experienced technicians as instructors, the need to compete with other employers raises the cost of instructors beyond that of teachers in general secondary schools.

- Third, higher requirements for specialized facilities and equipment can raise costs substantially and continuously for vocational schools that seek to match the level of technology in use in advancing industries.
- Fourth, the costs of consumable supplies and maintenance are significantly higher than they are in general secondary schools; these costs amounted to 30 percent of unit costs in industrial courses vocational high schools.
- A final factor is the low level of utilization of expensive staff, workshops, and equipment. This is caused by under enrollment, which stems from limited employment opportunities and consequently low student demand for places.

Similarly, Atchoarena and Delluc (2002) add to this, the high cost of technical and vocational education is due to smaller class size and to the need for expensive equipment, facilities and teaching materials. In this regard MoE (2004 cited in Yihune, 2007), most forms of vocational education and the practical arts are more expensive per pupil hour of instruction than most other phases of the education programs. Cost of tools and equipment, need for more floor space per pupil, smaller teacher-pupil ratios, and (in some cases) higher teacher salaries are among the causes. According to, Coleman et.al (2000) resources allocation concerns how both financial and real resources are deployed. Resources fall into two main categories: those used to provide support services and those for the operational core of teaching and learning. Support services, such as the running costs of the building, administration and management, are intermediate.

According to MoE's (2009), explanation, pupil teacher ratio (PTR) is one of the common education indicators for efficiency and quality. However, there are two views on PTR. Namely:

- The lower the PTR the better the opportunity for contact between the teacher and pupils and for the teacher to provide support to students individually, thereby improving the quality of education;
- On the other hand, very low PTR may indicate inefficient use or under utilization of teachers resulting in low efficiency. Therefore, low or high PTR alone does not explain the quality of education because quality of education depends on other factors such as mode of delivery, commitment, qualification of teachers, the supply of educational materials, and similar others.

2.4 Selection and Placement of Students in TVET Fields

Placing students in different field of study of TVET based on their interest and attitude make the outcome of education fruitful and productive. According to Evan (1971) the first task of the school in relation to placement is the determination of the numbers of entrants in each field. This task involves weighing a number of variables such assessment of the need for manpower for each field, availability of equipment and other workshop facilities and availability of skilled and qualified staff to use the training.

Similarly, in vocational education some programs admit only students who have abilities and attitudes which virtually guarantee success in employment, even if the vocational program does noting for them. From an educational standpoint, this type of evaluation and student selection is unacceptable.” Value added by education”. Should be the criterion of the program’s success, and students should be selected who will gain most from the program, regardless of the level at which they start. As stated in the Federal Negarti Gazeta (2004), criteria for admission of TVET programs are listed below:

- For basic vocational training program: trainees should have at least attained literacy and citizens who leave school before completing primary education and whose age is appropriate.
- For junior TVET program: trainees shall have completed a minimum of primary education.
- For middle TVET program: shall have completed general secondary education and have the inclination and will to be so trained and person who have completed junior TVET and obtained a certificate, have worked experience of two years ,fulfill the completion of general secondary education or have passed the theoretical and practical test prepared for this purpose.

2.5 Vocational Guidance and Career Counseling

2.5.1. Concepts of Vocational Guidance and Career Guidance

In modern times, needs of people are unlimited. People are not satisfied with what they have; rather, their desires are increasing continuously. To satisfy the needs, one has to work, for which one has choose vocation. The world of work is very large i.e. it is like a sea and if we want to touch the shore, then we must be guided. So when one has to select occupation, he needs expert direction to successful in that field. It only possible if right man is put on the right job. And, for

this purpose, vocational guidance is needed. The best definition of vocational guidance is given by 'National Vocational Guidance association, U.S.A.' it is as follows:-

Vocational guidance is the process of assistance the individual to choose an occupation, prepare for in tender upon and progress in it. It is considered primarily with helping individuals make decision and choices involved in planning a future and building a career"(Bhatia, 2006).

According to Bhatia (2006, cited in Crow and Crow),"guidance is assistance made available by personally qualified and adequately trained men or women to an individual of any age to help him manage his own life activities, develop his own points of view, make his own decisions and carry his own burdens." In addition to this, the United States office of Education defines guidance as "the process of acquainting the individual preparedness for courses of action centered round the basic functions of men, especially those pertaining to vocational, recreational and community services fields."

Singh (2005) also stated that, a guidance programme is taken to mean some special arrangement whereby more or less expert help in the solution of problems is made available to students, either individually or in groups. Similarly, Nayak and Rao (2004) expert assistance is also required for enabling the students in making proper adjustment in relation to general academic life college or university to effect maximum intellectual, emotional and physical development. In addition they proposed the following points to be offered to students. These are:

Pre-admission guidance needs to be imparted to help the students make educational plans consistent with their abilities, interest and goals and to select appropriate courses and co-curricular activities which will enable them to join careers of their choice. Post-admission guidance needs to be imparted to enable students to succeed in their educational plans. They need to be guided for developing good study habits, prepare for examinations properly and face examination with confidence. The students need to be guided in selecting subjects for specialization and additional courses of studies.

Similarly, guidance in technical and vocational education as preparation for an occupational field should, inform students of the various possibilities open in the particular field of interest, the educational background required, and the subsequent possibilities for continuing education and further training. Encourage students to choose educational programmes that will not limit their later employment options, follow the students' progress through their educational programmes

and supplement the programmes by short periods of work experience and study of real work situations (UNESCO/ILO, 2002).

Counseling is an integral part of an over-all programme of guidance. "Counselling is a scientific process of assistance extended by an expert in an individual situation to a needy person"(Bhatia, 2006).In addition , Singh (2005) defines counseling as a mutual learning process involving two individuals in an educational environment, one who is seeking help from a professionally trained person, and the other, two by reason of his breadth of training and background, utilizes many adjustment techniques and methods in assisting the individual to orient and direct himself toward a good leading to maximum growth and development in a social and democratic society.

Additionally to Zunker (2002) Career counselling -includes all counseling activities associated with career choices over a life span. In the career counseling process, all aspects of individual needs (including family, work, and leisure) are recognized as integral parts of career decision making and planning. According to Mohan (2008, in Mayers) "vocational education is a human conservation which is aimed at wise use by the individual of priceless native capacity and the results of costly training provide by the school for the good of the individual and of society."

Nayak and Rao (2004), lists the following objectives of vocational guidance to:

- Assist students to acquire knowledge of the characteristics, functions, duty requirements of occupations in which they are interested and enable students to get relevant information about abilities and skills in terms of related to qualifications and competencies required to take up the identical occupation.
- Assist students in developing abilities to analyze occupational information and make suitable choice by using appropriate career information effectively. Assist students in getting information various post-educational and training facilities and apprenticeship schemes and develop entrepreneurship qualities in students for taking up self employment.

Additionally, according to (Hiebert and Borgen,2002) vocational guidance and counselling is widely accepted as a powerful and effective method of helping to bridge the gap between education and the world of work, as well as between school and society.

Similarly, career information, guidance and counselling services are services intended to help individuals, of any age and at any point in their lives, to make educational, training and occupational choices and to manage their careers.According to UNESCO and ILO (2002)

recommendation Guidance staff should receive special preparation for their tasks. They should be equipped to make objective assessments of aptitude, interest and motivation, and have up-to-date information concerning education and work opportunities and acquire a direct knowledge of the economy and the world of work through systematically organized visits to enterprises and training periods in enterprises. Guidance staff should be provided with facilities – including the opportunity for practical experience, to keep up with new information and methods of guidance. Most importantly, they should bear in mind the concept that technical and vocational education must be available to all as part of the lifelong learning process and it must contribute to personal, economic development and responsible citizenship.

2.5.2 Role of Vocational Consular in Relation to School to Work Transition

According to, Nayak and Rao (2004), guidance is an all-inclusive programme, intended to help the students achieve their optimum potential. It both a generalized and a specialized service. In such a programme, the total needs of the students need to be met by the total staff. Since guidance and conselling is one of the important student welfare services, the Dean has to ensure its effectiveness. He can contribute his share to this programme in a number of ways: These are:

- Organize and administer services such as orientation for new students, counseling services, financial aid, to the needy, remedial services, and so on. Coordinate the various student activities so that every activity gets adequate time and finances.
- Initiate policy regarding behavior of students during their spare time and keep in touch with the various public organizations such as the rotary club, lions club and so on. Ensure optimum utilization of resources, human and material and create congenial atmosphere on the campus.

In addition, Vocational guidance and counselling is widely accepted as a powerful and effective method of helping to bridge the gap between education and the world of work, as well as between school and society. It is a means of assisting young people to make appropriate and judicious educational choices that will enable them to develop their potential and to have access to work opportunities that are compatible with their interests and abilities. It can also help to instill confidence and positive attitudes, to derive fulfillment from their chosen areas of learning and work and, most importantly, to inculcate an eagerness for lifelong learning (UNESCO, 2002). In sum, MoE (2008) attention will be given to vocational guidance and counselling to enable future trainees, in particular youth, to choose the right career and make full use of the initial and

life-long learning opportunities provided by the TVET system. Accordingly, TVET institutions will also assign and train vocational guidance staff. The vocational guidance staff at TVET institutions will be instrumental in facilitating apprenticeships and preparing youth for apprenticeship training. They will also be focal points in organising self-employment support for TVET graduates. VET authorities will develop a concept for the introduction of appropriate vocational guidance and counselling structures within the TVET system, including a system of aptitude assessment to support personal career choices.

2.6. The practices of TVET Systems and Transition from School to work in an International Perspective

2.6.1 Introduction

The outputs of a well structured TVET system have led countries such as Canada, Australia, Germany, Singapore and Japan to become global leaders in all aspects of their enterprise in a very short space of time. The following are key strategies being used by these countries for workforce development:

- Promotion and marketing of TVET as a viable alternative to the more traditional mode of advancement and education. This was done through the integration of competency-based training with academia both at the secondary and tertiary level.
- Establishment of a National Qualification Framework for education and training to include all levels from pre-primary to post-graduate. Creation of mechanisms for defining, classifying, training and certifying people in the informal sector and establishment of a National Training Fund with contributions from the Government and private sector.
- Passage of legislation for the funding, accreditation, standard setting and quality assurance within the national training system. Encouragement of lifelong education through a seamless system i.e. school to work and work to school models and provision of information on careers & proper career guidance etc(Boodhai ,2010).

In summary, InWent/UNESCO-UNEVOC (2008) international round table discussion the following main points were listed below:

- many countries, both industrialized and developing, have embarked upon a range of education and training policy and system reforms (e.g. integrated workplace-based learning and training into the vocational education curriculum) to address the challenges of promoting employability, productivity and social inclusion.

- Reforms endeavor to improve the relevance, effectiveness and equity outcomes of education and training. They also aim at increasing investment in training by all parties concerned, in particular the private sector and individuals themselves. These reforms target the systems of general education, the systems of vocational education and initial training and the (nascent) systems of further education and training and lifelong learning.
- For example, institutional approaches that have proven effective in ensuring young people access to quality employment-like the school-to-work transition schemes, including apprenticeship in Germany, and recruitment linkages between schools and employers in Japan - are being emulated elsewhere. Countries need to establish policies that lay a solid foundation for employability, e.g. by instilling the development of core skills.

2.6.2. Vocational Guidance and Counselling

In Argentina:

- the vocational guidance services are under the overall responsibility of the National Council for Technical Education (CONET). These services are decentralized to 48 Units throughout the country, which provide vocational orientation and guidance at school level, under the control of a Secretariat for Vocational Guidance.
- This Secretariat works in close co-operation at central level, with the Ministry of Labour, which is responsible for the initial training and continuous re-training of the technical manpower. Guidance counsellors are educators, specialized in **educational psychology and sociology**.

In Belgium.

- Vocational guidance centers facilitate the transition from school to work. Companies are represented at qualification tests and exams in schools, in co-operation with the teaching staff. This guarantees smooth transition of graduates to employment.

In Finland.

- A system of student counselling, providing educational and vocational guidance has been created at national, local and institutional level designed to develop in students the capacities needed for study, career planning, and working life.

- Education and employment authorities participate in arranging student counselling. At the school level specially trained teachers are employed under the authority of the Ministry of Education, and in the employment offices career-advisers are available.
- A co-operative body of educational and employment authorities, trade unions and employers' organizations (the Council of Career Guidance) has representatives of each interest group.

In Morocco

- the Ministry of Education is responsible for Technical education, while the vocational training is under the jurisdiction of other authorities, e.g. Ministry of Tourism - for hotel catering training, Ministry of Agriculture - for agricultural training, etc.
- At the school level, professional orientation is conducted under the Ministry of Education directives. Students and parents are provided with information about various professions, occupational opportunities and required qualifications (UNESCO, 1997).

2.6.3 Teachers/trainers Training

The quality of technical and vocational education depends in part on the efforts made by governments and TVE institutions to obtain well-trained teaching staff. In this respect, some institutions, generally in higher education, also make use of instructors from the private sector, chosen for their competence to teach specialized training courses.

- An example is Senegal's École nationale supérieure universitaire de technologie. The Government of Benin has taken a somewhat different approach: in the context of developing co-operation between training institutions and enterprises, the government considers that teacher training should be conducted in synergy with business via the inclusion of hands-on training courses in firms.
- The Centre africain d'études supérieures en gestion (CESAG) in Dakar is endeavouring to set up training, counselling and research activities in the field of educational engineering in order to respond to the current problems involving skills and the labour market; to serve as a regional centre of excellence in the field of human resources 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 programmes to meet these requirements.

- To this end, the CESAG offers two new services: a Diplôme d'études supérieures spécialisées (DESS) in educational engineering, addressed to various groups (instructors, designers of training programmes, consultants, training managers) and delivered in 'dual' mode allowing participants to combine training in Dakar with their current professional activities and ;
- Consultancy services in connection with the development of the relationship between employment and training: forecasting studies on jobs and qualifications, analyses of organizations' training requirements, design of training programmes for enterprises, training plans, analysis and design of training systems (Atchoarena and Delluc, 2002).

2.6.4. School to work transition

Transition from school-to-work – a typology for the competing vocational education systems
 An international comparison of 'School-to-Work' transition shows how vocational education Systems can be classified in connection with this discussion (Rauner 1998, cited in Rauner, 2005).

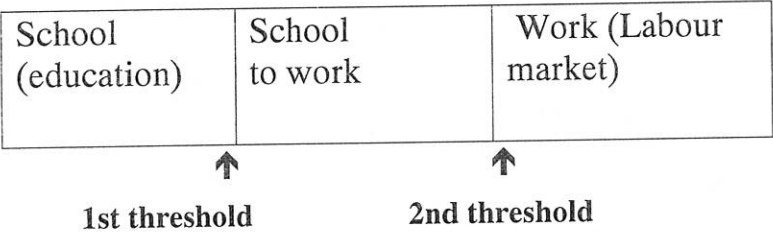


Fig.1. Thresholds in the transition from school to work

The following four models of the school-to-work transition can be distinguished in an international comparison. Each is characterized by great differences in the transitions from (general education) school to vocational training (first threshold) and vocational training to work (second threshold), with regard to time, institution, and content.

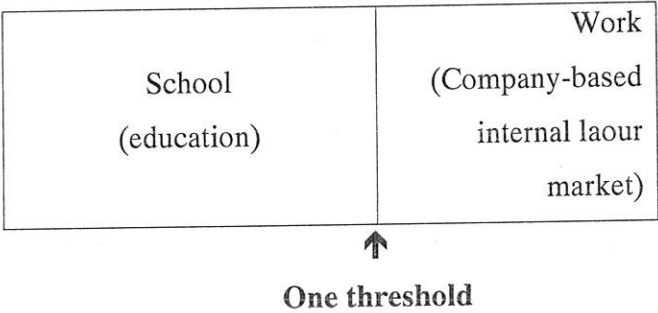


Fig. 2. Model 1: Direct transition.

In the first model (see Fig. 2), the first and second thresholds of the transition from school to work are reduced to a single threshold. In-company labour markets dominate and the occupational form of work plays a subordinate or non existent role. On that basis vocational training can be dispensed as an independent career step between school and employment systems. The workforce becomes competent by participating in organisational development. When a high level of general education, abstract qualifications, and a high degree of work morale and loyalty to the company are combined, this model represents one cornerstone of the experimental field in which school-to-work transition traditions compete with each other. The Japanese situation is the closest to this model (Bowman 1981; Georg 1990; Moritz/Rauner/Spöttl 1995; National Council on Education Reform 1986, cited in Rauner, 2005).

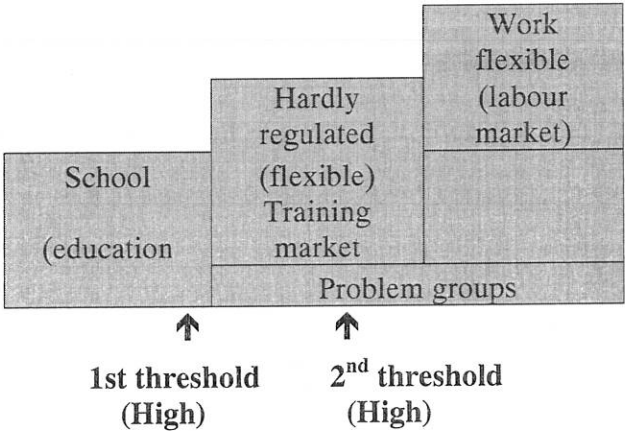


Fig. 3: Model 2: deregulated transition

The second model (Fig. 3) is characterised by a relatively long and little regulated transition phase with extended search and orientation processes for youth, a simultaneous high rate of youth unemployment and other social risk situations, and a demand-oriented flexible, continuing training market with relatively low-qualified, industrial jobs. This model is also characterised by a high first and second transition threshold. Participation in training programmes is closely linked to entry into the employment system and commencement of gainful employment and can be a temporary solution during one’s search for a job.

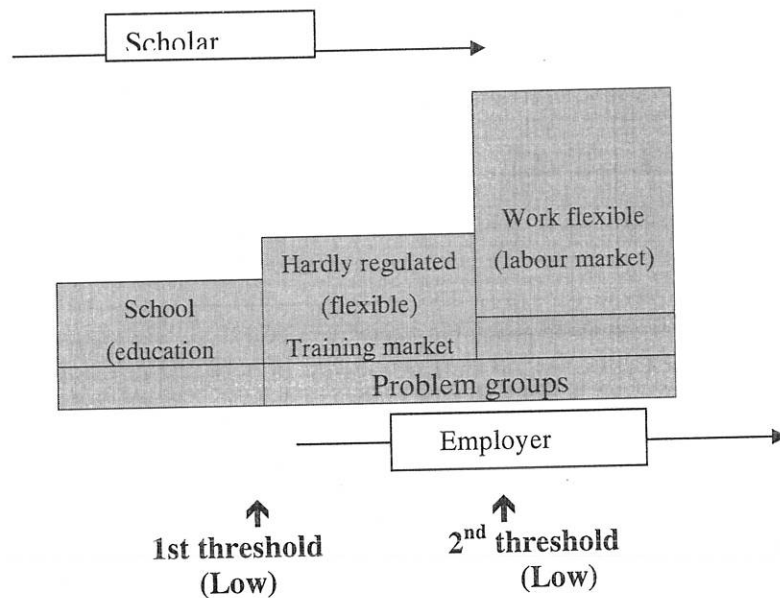


Fig. 4: Model 3: Regulated overlapping transition

In the third model (see Fig. 4), the transition from school to work takes place via a regulated system of apprenticeship. In this model the young person is a trainee, a student in a vocational school, and an apprentice employee in a company at the same time.

Both the first and second threshold are of a relatively low level. The transition to the training system is smooth because the role of the youth as a student is gradually taken over by the role of the youth as skilled worker. The education system and working world are linked to each other in a demand as well as supply oriented manner. Vocational training thus becomes a bridge between the working world and the education system. Youth unemployment is correspondingly low. In central European countries such as Austria, Germany and Denmark this model dominates (Mertens 1976, cited in Rauner, 2005).

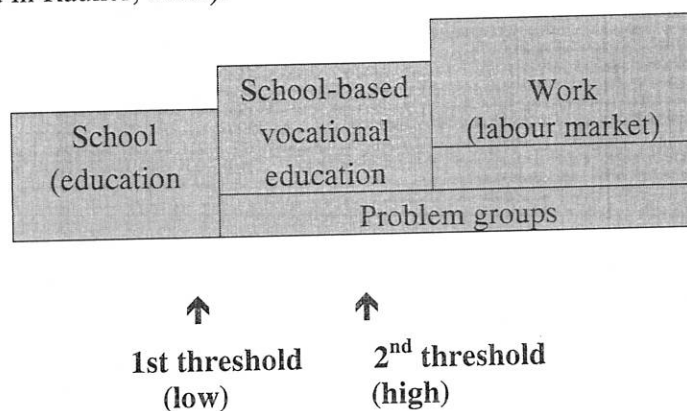


Fig. 5: Model 4: Shifted transition

In the fourth model (see Fig. 5), the transition from school to work is through a system of school-based vocational training. Completion of general education is followed by a vocationally related or vocationally oriented form of school. On completion of the vocational course, the student usually acquires a state certificate for subject or a school occupational attainment. Whereas the first threshold in this model poses no problem for youth, the second threshold becomes the decisive transition to the employment system. The transition from school to work is postponed for the duration of the school-based vocational training. School and work remain institutionally separate. Vocational training is supply-oriented. The large number of countries with a well-developed, school-based state vocational training system can be classified under this model. The four school-to-work transition models essentially differ dependant on the significance accorded to the occupation as the organizing principle for labour markets, company work organization, and vocational training. In the first model (e.g. in Japan) the occupational form of work and related vocational training has limited significance whereas occupations represent the central aspect of the third and fourth models. An important question that we discuss in Europe, therefore, is that of the importance attached to this polarity for the developing European labour markets as well as integrated skilled labour markets. If one assumes the technical transformation and increasing flexibility of production do not necessarily lead to an erosion of the occupational concept (Heidegger/Jacobs/Martin/Miz-dalski/Rauner 1991, cited in Rauner, 2005), then special significance must be attached to the vocational training systems when analyzing the school-to-work transition.

2.6.5. TVET Issues and challenges faced by Asia-Pacific (AP) Countries

According to ILO/Korea (2008), information on the TVET issues and challenges being faced by Asia-Pacific countries (Afghanistan, Australia, Bangladesh, Cambodia, China, Fiji Islands, India, Iran, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of the Marshall Islands, Singapore, Solomon Islands, Sri Lanka, Thailand, Vanuatu, Vietnam). Based on the identified individual country issues, there are several challenges that are common to many of the member countries. Among them are:

- Skills Mismatch and limited linkages with Industry
- High Youth Unemployment and shortage of training instructors
- Lack of Coordination between Government Agencies and skills shortages
- Rural to Urban Migration, weak training capacity and large informal economy

2.6.6. Challenges for School-based Training and Education

According to Joo(2005), the biggest challenge is how to promote an effective transition from school to work. In this regard, efforts have been made in both developed and developing countries. Development and Continuous Improvement of Career and Technology Education (CTE) Programs in Maryland, USA and Transition from school to work in Ghana serves as good examples. Also many countries have tried to replicate the dual TVET system to improve the relevance of education. Under such a system, theoretical training is provided at vocational secondary schools that are mostly established and financed by government. Practical training is provided and financed by enterprises in the form of apprenticeships

a) Development and Continuous Improvement of Career and Technology Education (CTE)

Programs in Maryland, USA

- The Maryland Career Clusters system was designed by Maryland business, industry, and labor leaders under the guidance of the Maryland State Department of Education (MSDE). It was devised primarily to **mold the modern student into a highly skilled and desirable commodity in today's knowledge-based economy, equipping students' in the art of multi-tasking, career management, self-direction, and proper preparation for the rigors of challenging careers and continued learning.**
- In Maryland's case, the system's primary goals are to **organize teaching and learning to meet the specific needs and resources of their community; enhance economic development and provide a common framework by connecting educators and employers to insure that Maryland has a high-quality workforce that attracts and retains businesses to the state.**
- By paving the way with smooth educational pathways from kindergarten to high school, on to postsecondary education, and into the workplace, the system simultaneously propels students easily and successfully through the levels of education and properly equips them with the training and continued learning needed to excel in their career of choice and obtain their future goals.
- To keep apace with the 21st century economy, the career clusters system is being utilized in Maryland to enhance career pathways to include flexibility in program design. Career pathways are the core functions of each industry represented by the Career Cluster.

- These pathways offer students many options which lead them to further their education and careers in various ways, i.e. early college admissions through dual enrollment, articulated credit, advanced placement at two- and four-year colleges, etc. Career and Technology Education (CTE) Programs also prepare students to earn industry-recognized credentials. It is crucial to note that not every pathway has a corresponding program of study, so it is important the students receive proper guidance from teachers and counselors.
- The foundation of the clusters is the Maryland content standards, which reflect the common knowledge (skills) that students need for each industry or cluster. Content standards include: academic, technical and workplace skills. In Maryland, the workplace skills are known as the Skills for Success and include learning, thinking, communication, technology and interpersonal skills. Due to the academic and technical standards, educators are able to create more rigorous and challenging course sequences for each CTE pathway program.
- The ten career clusters in Maryland include: Arts, Media & Communication, Business Management and Finance, Construction and Development, Consumer Services, Hospitality & Tourism, Environmental, Agricultural and Natural Resource Systems, Health and Biosciences, Human Resource Services, Information Technology, Manufacturing, Engineering and Technology and Transportation Technologies.
- Today, 50 percent of secondary students in Maryland are enrolled in CTE programs of study. Students divide their day between general secondary school coursework and two to three hours in CTE programs

b) Transition from School to Work in Ghana

- In Ghana, a body known as the Council for technical and vocational education and training (COTVET) has been established by an Act of Parliament under the Ministry of education to oversee all TVET activities.
- A National Apprenticeship Board is to be established under COTVET to handle issues such as registration, training content, duration and certification under the aegis of the Ghana National Training Authority.
- The National Vocational Training Institute (NVTI) currently allows for the proficiency testing of illiterate trainees, including traditional apprentices, who submit their skills to

practical, non-written evaluation. The Opportunities Industrialisation Centres (OICs) provide post-training support and follow-up services to their trainees. COTVET is expected to address the issue of multiplicity of oversight responsibility and testing standards with the TVET system. Government has pledged to assume full responsibility for the first year of apprenticeship training.

- The NTVI initiative has allowed for illiterate trainees to enter the formal labour market on the basis of their skill proficiency certificates. The transition from school to work is eased by the OIC post training support system. While it is still early to assess the effectiveness of COTVET, there is a need to ensure that the proposed registration and regulation of private training providers does not result in the creation of a parallel formal system and a loss of diversity in training provisions.

c) National Training Levy and Funding Arrangements for the Sector

Education and Training Authorities' (SETA's) Learnerships, South Africa

- SETAs, devised in terms of the Skills Development Act in 2000 and responsible for disbursement of the training levies, have been established to insure that the skill needs for every sector of the South African economy are identified and that training is available to provide these skill needs.
- In regards to learnerships, **SETAs are involved in developing, registering, promoting and monitoring learnerships** (ensuring access to quality training within the National Qualifications Framework (NQF)). **SETAs can develop learnerships in conjunction with any range of stakeholders**, i.e. employers, sectors, etc. Also, **SETAs' discretionary funding is used to provide a number of financial incentives for employers to sign a learnership agreement**, where the employer contributes to the levy.
- Learnerships replaced the former apprenticeship system, which was regarded as a young, white, male-dominated training program. These **programs provide access to entrants at different career levels, combine practice and theory, and develop basic and core skills**. In general, learnerships have been viewed as a success.

CHAPTER THREE

PRESENTATION AND INTERPRESATION OF THE DATA

In this chapter, the data collected for both quantitative and qualitative approaches are analyzed and results are interpreted. Based on this assumption, a total of 366 questioners were distributed. Out of these 306 questionnaire copies distributed to trainees 263,(85.95%), out of 36 questionnaires distributed to trainers, 34 (94.44%), out of 21 questionnaires distributed to TVET management staff 19,(90.48%) and out of 3 questionnaires distributed to vocational guidance and counselor 3,(100%), were filled and returned. The data obtained through questionnaires, interviews and the result of the observation are included in the analysis and interpretation of the data as follows.

Table I

**Demographic Characteristics of Trainees by Sex, Age, Level of year
and Field of Study**

No	Items	Response	
		N	%
1	Sex		
	Male	184	69.96
	Female	79	30.04
	Total	263	100
2	Age Range		
	a) 16 - 18	134	52.55
	b) 19 - 21	113	44.31
	c) > 21	8	3.14
	Total	255	100
3	Field of Study		
	Construction	120	48.98
	Auto Mechanics	45	18.37
	Electric and Electronics	80	32.65
	Total	245	100
4	Year Level		
	a) Year one	11	4.2
	b) Year two	128	49.4
	c) Year three	120	46.3
	Total	259	100
5	TVET Colleges		
	a) Addis Ababa Tegebared	98	37.3
	b) Entoto	101	38.4
	c) General Wingat	64	24.3
	Total	263	100

Table I shows that, trainees of both sexes were included in the study in order to find their views concerning the research topic. Consequently, 184(69.96%) of respondents were males and 79(30.04%) were females. Therefore, it is possible to precisely figure out that, the domination of male population in Industrial field of studies. It is also observed that the data obtained by sample trainees reflects the ideas and opinions of both sexes. Similarly, the increase in the number of female enrollment in industrial program was an encouraging one. Concerning the age of trainees, 134(52.55%) range between 16 and 18 years, while 113(44.31%) of them between 19 and 21 years old. The majority of respondents are below 21 years old. This shows that the majority of trainees are found in their proper age and level of years of study. Item number 4 of Table I show that all respondents were chosen from each level of programs. Accordingly, 128, (49.4%), of the respondents were from level II, 120(46.3%) of them are level III & 11, (4.2%) were from level I.

From this, the researcher believes that trainees can provide the complete and trustworthy information in relation to the implementation of TVET programs in their respective colleges.

The field of study in which students were enrolled shown in item number 3 indicates that out of the total respondents 122(49.4%) were construction students, 120(46.3%) and 45(18.2%) were electric/electronics students and auto mechanics students respectively. Item number one in Table II, 30, (88.245) of vocational teachers, 3(100%) of vocational guidance and 19(100%) of management staff are male. Whereas female participation is 4(11.76%) indicating that female teachers are less in number in TVET Colleges in teaching industrial subjects. This may indicate that the enrollment of female students in the industrial field of study is very less than males and associated with their choice of field of study as observed in Table I of this research.

Regarding to teachers age, in Table II, item two, 8(23.53%) of teachers are 21 -25 and 7(20.59%) of teachers are 26-30 years. Similarly, teachers who are 4,(11.76%) are females few in number. Teachers who are 41 and above 9(26.47%) are assumed moderately more experienced in teaching profession and can correctly assist students in the training process. As can be seen from the same Table II, 3(100%) of vocational guidance and 10(52.6) of management staff are above 40 years old. From this one can recognize that all teachers, vocational consular and management are in their better work experience and can easily perform their duties and responsibilities. Item three in Table II also reveals that majority of teachers 73.5% and 14.7% of them possess their first degree and second degree respectively. Similarly, vocational guidance 2(67.67 and 1(33.33%) of them posses first degree and second degree respectively. On the other hand educational level of management staff shows 9(47.37%) and 9(47.37%) of them posses first degree and second degree respectively. This shows that an appropriate fulfillment of the requirement to undertake activities pertaining to the training offered at this level.

Table II

Demographic Characteristics of TVET Teachers, Vocational Guidance and managements Staff.

No	Items	Respondents					
		Teachers		Vocational Guidance		Managements Staff	
		N	%	f	%	f	%
1	Sex						
	a) Male	30	88.24	3	100	19	100
	b)Female	4	11.76	-	-	-	-
	Total	34	100	3	100	19	100
2	Age Range						
	a))21 -25	8	23.53	-	-	3	15.8
	b) 26 - 30	7	20.59	-	-	1	5.3
	c)31 -35	6	17.67	-	-	3	15.8
	d)36 - 40	4	11.76	-	-	2	10.5
	e) 41 and above	9	26.47	3	100	10	52.6
	Total	34	100	3	100	19	100
3	Qualification						
	a)Diploma	4	11.8	-	-	1	5.26
	b)First Degree(BSc/BA)	25	73.5	2	67.67	9	47.37
	c)MSc/ MA	5	14.7	1	33.33	9	47.37
	d)Doctoral	0	0	0	0	0	0
	Total	34	100	3	100	19	100
4	Field of specialization						
	a)TVET Fields	32	94.12	1	33.33	14	73.68
	b)General Education	2	5.88	2	67.67	5	26.32
	Total	34	100	3	100	19	100
5	Years of Service						
	a) 1 up to 4 years	8	23.53	-			
	b) 5 - 7 years	5	14.71	-		1	5.26
	c) 8 - 10 years	6	17.65	-	-	6	31.38
	d) Above 10 years	15	44.12	3	100	12	63.16
	Total	34	100	3	100	19	100

Table II further indicates service years of the respondents. Total number of service years of the majority teachers 44.12%, 100% of vocational guidance and 63.16% of management staff served more than ten years. The longer years of service implies maturity to shoulder responsibility entrusted to them.

Table III

Students Needs to Study Vocational Education

Question	Respondents	Response	College					
Why do you want to study Vocational Education.?	Students		Addis Ababa Tegb.ID		Entoto		General Wingate	
			N	%	N	%	N	%
		a) Due to my inclination	15	32.61	18	39.13	13	28.26
		b) Since there is job opportunity	11	44.00	11	44.00	3	12.00
		c) To get high salary	1	50.00	1	50.00	0	0
		d) To create my own work	13	46.43	10	35.71	5	17.86
		e) Since the country needs vocational manpower	21	37.5	22	39.29	13	23.11
		f) Since I lacked other field of education	34	36.56	34	36.56	25	26.88
		Total	95	38	96	38.4	59	23.6

Table III shows that, trainees (respondents) indicated the reasons why they wanted to study vocational education and percentages are computed based on the horizontal total of the three TVET colleges respondents for each reason and one can also see the comparisons among the

listed possible reasons based on the general column totals from all TVET colleges. Accordingly out of the total (250) respondents of the three TVET colleges 93(37.2%), 56(22.4 %) and 46(18.4%) of them responded as the reasons were "due to lack of other fields of education, the country needs vocationally trained manpower and due to their inclinations toward vocational education "respectively.

This shows that in comparison the highest percentage why they wanted to study vocational education is due to lack of other alternative educational program and the other reasons had also slight influences on trainees in joining their current vocation program. Of the 93 respondents for lack of other alternative fields of education, Tegbarid and Entoto TVET colleges’ respondents have higher and the same percentages than General Winget college respondents. The results indicates that there is a need of the TVET colleges effort to create awareness on benefits of vocational education on order to enable trainees consider TVET is important for economic development a nation in general and for individual in particular and in providing job opportunities for those who will be trained in TVET programs.

Table IV
Assignment of Students in different fields of study

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
What are the criteria's for the enrollment of students in different fields of study?	<i>Students</i>	a)on the basis of the national exam result	245	94.96
		b)on the basis of entrance exam	13	5.04
		<i>Total</i>	258	100
	<i>Vocational Guidance and counselor</i>	a)On the their own choice	1	33.33
		b)On the basis of examination	2	67.67
		<i>Total</i>	3	100

The research had attempts to examine the enrollment of students in different field of study. Results of the research is illustrate as follows. As noted in Table IV, most of the respondents, 245(94.96%) and 9(5.04%) agreed that the enrollment to their field of study was done on the

basis of the national exam result and entrance exam respectively. This suggests that majority of students are aware that the national exam results would be the decisive factor for their assignments. Vocational guidance and counselors were asked to point out how vocational students chosen for the enrollment of different fields of study. Accordingly, 2(67.67%) and 1(33.33%) of the vocational guidance ascertained that, the criteria would be set on the basis of examination result and their own choices respectively. This implies that, majority of respondents agreed the enrollment of trainees to different field of study was on the basis of national exam result. Similarly, the response the interview obtained from management staff also revealed the same answer, that is, the criteria set for the assignment of student to their field was on the basis of students result.

Table V
Availability of Trained/Skilled Teachers

Question	Respondents	Response	N	%
Do you think that teachers in the college are well trained/skilled?	Students	Yes	136	52.11
		No	125	47.89
		Total	261	100
	Teachers	Yes	10	31.25
		No	22	68.75
		Total	32	100
	Management staff	Yes	7	36.84
		No	12	63.16
		Total	19	100

The research had attempted to assess perception of students, teachers and management staff on the status of training materials, human resource and infrastructure. As college teachers are professionals engaged in shaping the future generation, their role is immense in the development of a country. To this end, teachers need to be well equipped with knowledge and skill pertinent to their respective areas of work. However, finding of the research was found to be contrary to the aforementioned expectation. As depicted in Table V, the majority of college teachers were not found to be adequately trained and skilled in their respective field of work. About 68.75%

and 63.16 % of college teachers and management staff respectively were found to have replied “no” to the question “Do you think that teachers in the college are well trained/skilled?” Response of students in this regard was not also found to be encouraging. Only 52.11 % of college students were found to feel that their instructors are well trained and skilled

Table VI
Adequacy and Compatibility of Hand tools and Machineries

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
<i>Do you think that hand tools and machineries available in the college are adequate?</i>	<i>Students</i>	<i>Yes</i>	<i>115</i>	<i>44.57</i>
		<i>No</i>	<i>143</i>	<i>55.43</i>
		<i>Total</i>	<i>258</i>	<i>100</i>
	<i>Teachers</i>	<i>Yes</i>	<i>7</i>	<i>20.59</i>
		<i>No</i>	<i>27</i>	<i>79.41</i>
		<i>Total</i>	<i>34</i>	<i>100</i>
	<i>Management staff</i>	<i>Yes</i>	<i>6</i>	<i>31.58</i>
		<i>No</i>	<i>13</i>	<i>68.42</i>
		<i>Total</i>	<i>19</i>	<i>100</i>
<i>Do you think that hand tools and machineries available in the college are compatible?</i>	<i>Students</i>	<i>Yes</i>	<i>95</i>	<i>36.54</i>
		<i>No</i>	<i>165</i>	<i>63.46</i>
		<i>Total</i>	<i>260</i>	<i>100</i>
	<i>Teachers</i>	<i>Yes</i>	<i>5</i>	<i>14.71</i>
		<i>No</i>	<i>29</i>	<i>85.29</i>
		<i>Total</i>	<i>34</i>	<i>100</i>
	<i>Management staff</i>	<i>Yes</i>	<i>5</i>	<i>26.32</i>
		<i>No</i>	<i>14</i>	<i>73.68</i>
		<i>Total</i>	<i>19</i>	<i>100</i>

With the major objective of building a generation with marketable and entrepreneurial skills, Education policy of the Federal Democratic Republic of Ethiopia (FDRE) argues that Technical Vocational Education and Training (TVET) shall incline more too practical than theoretical orientations. Adequacy and compatibility of hand tools and machineries are amongst the necessary and essential conditions towards achieving the aforementioned policy objectives. However, finding of the research reveals that the existing situation in colleges was found to be far below what was supposed to happen. As depicted in Table VI, the majority of the respondents accounting for 79.41%, 68.42% and 55.43 % of students, teachers and management staff respectively replied that hand tools as well as machineries available in TVET colleges were not

found to be adequate. Response of respondents with regard to compatibility of hand tools and machineries was not also found to be encouraging. The lion’s share of respondents accounting for 85.29 % of teachers, 73.68 % of management staff and 63.46 % of students replied “no” to the question “Do you think that hand tools and machineries available in the college are compatible?”

Table VII
Adequacy of Library and Room Services

Question	Respondents	Response	N	%
How do you see classroom to student ratio?	Teachers	Yes, matches fairly	4	11.76
		No, they don't match fairly	30	88.24
		Total	34	100
Do you think that library of the college is adequately equipped with books?	Students	Yes	73	28.08
		No	187	71.92
		Total	260	100
	Teachers	Yes	4	11.76
		No	30	88.24
		Total	34	100
	Management staff	Yes	5	27.78
		No	13	72.22
		Total	18	100

Size of students in a class room is amongst the major determinants of quality of education. Proper size of students in a class room is convenient for instructors to manage the teaching learning process. Findings of the research revealed that a lot remains to be done in this regard. As depicted in Table VII, 88.24 % of the students replied that student to class room ratio is too large to manage the teaching-learning process. Libraries are amongst the centers where learning process goes on. Therefore, populating libraries with adequate and up to date books is beyond doubt important. However, TVET college libraries for which the research was carried out were found to be inadequately equipped with books. As portrayed in Table VII, 88.24 % of teachers, 72.22 % of management staff and 71.92 % of students replied “no” to the question “Do you think that library of the college is adequately equipped with books?”.

Table VIII

Inclination of Students towards their field of study

Questions	College						Total	
	Addis Ababa Tegbar.id		Entoto		General Wingate			
Are you happy (complacent) with the field of you are in at present.	N	%	N	%	N	%	N	%
Yes	69	71.1	62	62.6	40	67.8	171	67.1
NO	28	28.9	37	37.4	19	32.2	84	32.9
Total	97	100	99	100	59	100	255	100

Table VIII shows trainees' inclinations toward their fields of studies in the selected three TVET colleges. Accordingly, 69(71.1%) of Tegbarid 62(62.6%) of Entoto and 40(67.5%) of General Winget TVET colleges respondents had responded as they are interested with their fields of studies respectively. Of the total (255) respondents of three TVET colleges 171(66.1%) of them respondents as "yes" and 84(32.9) of them said "no" for the above item. Hence, this implies that majority of the respondents of all the selected TVET colleges were happier based on their fields of studies.

Table IX

Major Reasons for Students to Choose Vocational Field of Study

Item	Rank						
	N & %	1st	2nd	3rd	4 th	5th	Total
The field gives job opportunity	N	61	64	26	10	10	171
	%	35.66	37.43	15.21	5.85	5.85	100
It enables me to create my own work	N	61	36	45	13	13	171
	%	35.66	21.05	28.07	7.7	7.7	100
The training has great acceptance in the society	N	28	42	61	23	16	171
	%	16.86	24.56	35.67	13.45	9.36	100
Encouraged by my family	N	10	23	19	81	38	171
	%	5.55	13.45	11.11	47.37	22.22	100
Encouraged by my friends	N	10	10	16	42	93	171
	%	5.85	5.85	9.36	24.56	54.38	100

Table IX, presents responses of trainees on the major reasons which enable them to choose their fields of studies by ranking them from one to five and percentages are computed based on the horizontal totals for each reasons. As a result, out of 53 respondents 61(35.66%) them ranked

"their fields of studies give job opportunities" as first rank and 64(37.43%) of them ranked as second rank. Similarly 61(35.66%), 36(21.05%) and 48(28.076) of the respondents ranked it enables me to create my own work" as first, second and third respectively. However, the highest percentage (35.67%) of the respondents to "the acceptance of the society for their fields of training" rank as a third reason to choose their respective fields of studies. This implies that societal influence in choosing their fields of studies was moderate as ranked the third one. In addition, 81 (47.37%) of the respondents ranked" their respective family encouragement in choosing their fields of studies as a fourth rank or reason. Similarly, 93(54.38%) of the respondents also ranked " friends influence or encouragements" in choosing their fields of studies as fifth rank or reason. All in all, in comparing the responses of the respondents for each reason and under each rank the first two reasons" it gives hob opportunity and it enables to create my own work" have highest percentages under the column of first rank and this indicates that trainees were influenced to choose their respective fields of studies or were satisfied considering TVET training or their fields of studies provide job opportunities but influence of their families and friends had slight effect in choosing their fields of studies or on their satisfactions towards their fields or studies.

Table X

Reasons for Students for not being Satisfied with their Field of Study

Item	Rank						
	N & %	1st	2nd	3rd	4 th	5th	Total
The finding of job is low	N	49	7	7	7	14	84
	%	58.33	8.33	8.33	8.33	16.67	100
Teachers give low respect to the field	N	3	21	28	14	18	84
	%	3.57	25.00	33.33	16.67	21.43	100
Families give low respect to the field	N	3	21	25	21	14	84
	%	3.57	25.00	29.76	25.00	16.67	100
Friends give low respect to the field	N	10	18	21	25	10	84
	%	11.90	21.43	11.11	29.76	11.90	100
Due to my low result of the national exam	N	18	18	3	17	18	84
	%	21.43	21.43	3.57	20.24	33.33	100

Frequencies and percentages of the respondents are presented for each reasons why trainees are not being satisfied with their fields of studies under each ranks designed in Table X.

Accordingly, out of the total (84) horizontal sum of each reason 49 (58.33%) of them indicated "gaining of job in their fields of studies is low" under the column of first rank. This indicates that the major reason in not being satisfied is low of job opportunities in the future. Concerning the respectation of teachers to the fields of studies, the highest percentage (33.33%) is indicated or presented under the column is third rank and low respectation of their teachers is as a moderate problem or reason as indicated as a third rank. Similarly, family low respectation on their fields of studies has a highest percentage, (29.76%) under the column of third rank and this also can be a moderate reason is not being satisfied on their fields of studies.

Moreover, the highest percentage (29.76%) for friends low respectation is presented under the column of fourth rank, however percentages under the columns of first, second, and third ranks are also significant. Hence, this reason can moderately influence trainees to being dissatisfied on their fields of studies. Finally, the highest percentage (33.33%) on "due to my low result of national exam" is presented under the column of fifth rank but significant percentages are also indicated under the first, second and fourth ranks. This implies that in general results of the national exam can be moderate influential reason for being not satisfied on their fields of studies. All in all, "gaining job is low" or low of job opportunity is ranked as the major reason out of the listed possible reasons in the above Table and this implies that occupational information, it can be in employers or self-employment, opportunities was lacked and efforts of the TVET colleges in providing information on job opportunity is low in the case of the first major reason. In addition, one can conclude from this obtained data, trainees are not fully assisted by vocational guidance and counselor.

Table XI

Expectation of Job after Graduation

Question	Respondents	Response	N	%
Do you think you will get job in the field of your specialization?	Students	Yes	176	70.4
		No	74	29.6
		Total	250	100

Table XI, presents frequencies and percentages of the respondents as "yes" and" no" on the availability of job in their fields of studies or specialization after graduation. Accordingly, of the total (260) respondents 176(70.4%) of them responded as " they think they will get jobs in their respective fields of studies" after graduation. However, 74(29.6%) of them said "no". This

implies that although the majority of the respondents are confident enough on their fields of specialization in getting jobs in the future, some trainees are not confident at all. Hence, this indicates that occupational or labor market information for trainees on each of the selected TVET colleges is to some extent lacked.

Table XII
Trainees’ Interest and Placement

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>Frequency</i>	<i>Percent</i>
<i>Do you think that the placement and choice of your field of study is based on your own interest?</i>	<i>Students</i>	<i>Yes</i>	<i>118</i>	<i>46.46</i>
		<i>No</i>	<i>136</i>	<i>53.46</i>
		<i>Total</i>	<i>254</i>	<i>100</i>
<i>Do you think that placement of trainees in different field of studies is based on their interest and inclination?</i>	<i>Teachers</i>	<i>Yes</i>	<i>-</i>	<i>-</i>
		<i>No</i>	<i>15</i>	<i>44.12</i>
		<i>Sometimes</i>	<i>14</i>	<i>41.18</i>
		<i>Rarely</i>	<i>5</i>	<i>14.70</i>
		<i>Total</i>	<i>34</i>	<i>100</i>

It is very human that people will develop sense of ownership and belongingness for what they are interested in than otherwise. Literature in the area of education time and again states importance of enrolling students in their areas of interest and inclination to produce productive and effective citizens. Results of the research revealed that placement of most of the students took place without taking their interest/inclination into account.

As portrayed in Table XII, 53.46 % of students and 44.12 % of teachers replied “no” to the question “Do you think that placement of students to fields of study is based on interest and inclination?” On the other hand, 46.46 % of students replied that the placement took place taking their interest and inclination into account. It was possible to learn that most of them were found to be placed without taking their interest and inclination into account, but they were found to have liked the placement once they were placed in.

Table XIII

Practices of Apprenticeship

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
Do you think the college gives enough apprenticeship training in the workshop found in the college?	Students	Yes	126	51.22
		NO	120	48.78
		Total	246	100
	Teachers	Yes	6	18.75
		No	19	81.25
		No, idea	7	21.88
		Total	32	100

Apprenticeship is one of the basic factors in TVET programs. In **Table XIII**, students and teachers were asked about the adequacy of apprenticeship given at college level. Table XIII presents the response of the TVET colleges' students and teachers in the practice of apprenticeship training in their respective colleges. Accordingly, 183(74.30%) of the students and 26(81.25%) of teachers responded of apprenticeship training is not provided in those TVET colleges. This implies that the TBET colleges do not use their workshops for the apprenticeship program in order to solve shortage of practice training institutions outside the college and to use efficiently their resources. Management body responses on the practice of their TVET colleges in providing apprenticeship training in the workshops of the colleges were also analyzed and indicated that the practice is not satisfactory.

Table XIV

Linkage with Stakeholders for Apprenticeship Training

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>f</i>	<i>%</i>
Does your college have a link with well organized enterprisers for apprenticeship training?	Students	Yes	60	23.72
		No	193	76.28
		Total	246	100
	Teachers	Yes	6	18.75
		NO	26	81.25
		Total	32	100
	Management Staff	Yes	17	94.44
		No	1	5.56
		Total	18	100

Table XIV, shows the frequencies and percentages of the respondents on linkage TVET colleges with stakeholders for apprenticeship training. As a result, 193(76.25%) of students and 26(81.25%) of teachers responds as there is no well linkage with stakeholders or outside enterprise for apprenticeship training however, 17(94.44 %) of management staff responded of they do have well organized linkages with outside enterprises. Therefore, although management body provided information about the preparation or practice of the TVET colleges on certain of strong relation with the enterprises students and teachers are not satisfied with existing relationship of their colleges and outside enterprises and lack of well organized relationship among the TVET colleges and enterprises can affect the practical training or trainers.

Table XV

Provision of Vocational Guidance and Counselor

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
Does your college give vocational guidance & counseling service?	<i>Students</i>	<i>Yes</i>	128	52.48
		<i>No</i>	115	47.52
		<i>Total</i>	243	100
	<i>Teachers</i>	<i>Yes</i>	15	45.45
		<i>NO</i>	2	6.06
		<i>Some times</i>	9	27.27
		<i>Rarely</i>	7	21.21
	<i>Management Staff</i>	<i>Yes</i>	15	78.97
		<i>NO</i>	4	21.05
		<i>Total</i>	19	45.45
If your answer is "yes" for the above question, who does this?	<i>Students</i>	<i>The right person</i>	73	28.08
		<i>Teachers only</i>	187	71.92
		<i>Total</i>	260	100
	<i>Teachers</i>	<i>The right counselor</i>	7	46.67
		<i>Teachers</i>	8	53.33
		Total	15	100
	<i>Management staff</i>	<i>The right counselor</i>	15	78.95
		<i>Teachers</i>	4	21.05
		<i>Total</i>	19	100
Do you give vocational guidance & counseling service?	<i>Vocational Guidance</i>	<i>a) I am assigned in the fields</i>	3	100
		<i>b) I give additional service</i>	0	0

Vocational guidance involves advising students about career paths, and job opportunities. Students need to know what skills, talents, adequate information in relation to market, and availability of jobs after graduation or self employments. As depicted in item one of Table XV, trainees were asked on the provision of vocational guidance and counselor in the selected TVET Colleges. Accordingly of the total 243 respondents of the three TVET colleges 128(52.48%) of responded as "yes" and 115 (47.52%) of then said "no" for the above item Hence, this implies that majority of the respondents of all the selected, TVET colleges were confirmed that there is vocational guidance and counselor service in the colleges. As shown in the above table 3(100 %) of vocational guidance respondent replayed that, they are assigned to provide guidance service.

On item 2 of the same Table XV, 36(28.22%) and 92(71.88%) of student respondents replayed that the counseling has be done by the right person in the field of counseling and by teachers respectively. Based on this response vocational guidance was not conducted by trained counselor. This implies that trainees are not properly advised about there skill, talents qualifications and lack awareness of where to go for aspirate training.

Accordingly, of the total 33 respondents 15(45.45%) of them responded as "yes" and 2(6.06 %) of them said as "no". similarity, 9(27.27%) of the respondents say sometimes and 7(21.21%) of them answered rarely. This implies that majority of teacher (respondents) confirmed that, vocational guidance and counselor service were rendered in their respective colleges. For item 24, in the same Table XV, 7(46.67%) and 8(53.33%) answered vocational guidance has been given by the right counselor and of the respondents assured that teachers provide the service respectively.

Hence, the 53.33% of teacher respondents, who indicated that vocational guidance is not provided by trained guidance, implies that trainees are not getting the required vocational guidance service. On item two of the same Table XV, management staffs were also asked whether the trainees are getting vocational guidance service by qualified person(s) 78.95% of respondents confirmed that vocational guidance offered by specialized person(s) while 21.5% of respondents replayed that the service was offered by teachers outside their specialization. In general, we have to bear in mind that the quality of vocational guidance in the college can be greatly influenced by the appointment of suitable specialist staff to manage, coordinate and provide career teaching and guidance on a day to day basis.

Table XVI

Participation in Designing the Curriculum

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
Do you participate in designing the curriculum of the college?	<i>Students</i>	<i>Yes</i>	8	13.17
		<i>No</i>	244	96.83
		<i>Total</i>	252	100
	<i>Teachers</i>	<i>Yes</i>	2	6.06
		<i>No</i>	15	45.45
		<i>Some times</i>	9	27.27
		<i>Rarely</i>	7	21.21
		Total	33	100
	<i>Vocational guidance</i>	<i>Yes</i>	3	100
		<i>No</i>	-	--
		Total	3	100

Table XVI depicts responses of the TVET students and teachers on their participation in designing TVET curriculums. Accordingly, 244 (96.83%) of students and 15(45.45%) of teachers said "no" this indicates that TVET students, teachers and vocational guidance had not participated in designing of TVET curriculums. In addition, management staff of the TVET colleges gave their responses of "the TVET curriculums were developed by some experts. Hence, this can de-motivate TVET both students, management staff, vocational guidance and teachers during the teaching and learning process and may not goes with the interests of stakeholders but the TVET strategy of MOE, encourages participation of stakeholders in curriculum designs. So, the findings indicate that the TVET colleges did not follow the principle of the TVET strategy in designing their curriculums.

Table XVII

Preparation of Curriculum

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
Do you think the curriculum under use can meet the needs of the stakeholder?	<i>Teachers</i>	Yes	12	35.29
		No	7	20.59
		I didn't have any answer	15	44.12
		Total	34	100
Do you think the curriculum of the college is prepared well?	Management Staff	Yes	8	44.4
		No	10	55.6
		Total	18	55.6

Table XVII presents responses of TVET teachers and managements staffs on the preparation of TVET curriculum. Accordingly 12(35.29%) of teachers responded as the TVET curriculum under use meet the need of stakeholders or employers but majority (44.12%) of them were reserved in giving responses on this item. This implies that, there is a gap on information about the needs of stakeholders or there is no cooperation in order to identify their needs. In addition management staffs were asked about the preparation, of their colleges curriculum. As a result 10(55.6%) of the respondents reported as TVET curriculums were not prepared well. All in all, the collected data indicate that, TVET curriculum of the selected TVET colleges need attention in their preparation and should encourage stakeholders to participate in the curriculum development.

Table XVIII

Adequacy and Relevance of Training

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
Do you think the college gives enough training for trainees, which enhance them to execute the expected work in the field of their study?	<i>Teachers</i>	Yes	14	41.18
		No	9	26.47
		No, idea	11	32.35
		Total	34	100
Do you think the training in the college provides conducive opportunity in preparing trainees in transiting from school to the world of work?	<i>Teachers</i>	a)Yes, it does	21	67.74
		b) No, it doesn't	5	16.13
		c)I don't know	5	16.13
		Total	31	100
Do vocational students get practical work in the workshop of the college?	<i>Vocational Guidance</i>	a)Yes	0	0
		b)No	2	67.67
		c) sometimes	1	33.33
		Total	3	100

Table XVIII presents responds of teachers and vocation counselors on the adequacy and relevance of TVET training. Hence, 14(41.18%) of the TVET teachers gave their responses as the colleges give enough training and this enable trainees to execute the expected work in their specialization and 9(26.47%) of them replied no .However, 11(32.35%) of them have no idea about the adequacy of the training to perform their future duties. This information gap might be due to lack of awareness on the labor market demands or lack of knowledge on practical training of their TVET colleges in each department. Item 2 also asks the opportunity in school to work transition.

As a result, 21(67.74%) of the teachers responded as, the colleges provide conducive opportunities in preparing trainees for the world of work. This indicates that, these colleges are well prepared to help trainees in school to work transition. However, vocational counselors gave their responses for item 3 which asks about the practical training of students in the colleges workshops is not enough because 2(67.67%) of them said no and 1(33.33%) of them said sometimes. In addition teachers forwarded some major problems in the colleges. Such as lack of enough teaching materials, lack of enough workshops and lack of staff training and developments. Similarly, students also mentioned the above problems and there is poor utilization of resources, problem of curriculum design and quality training of the colleges is at risk. Therefore, preparations of the TVET colleges to transmit students from school to work and in providing adequate training are low. This may affect students negatively in preparing them selves to the work of work.

Table XIX

Delivery of Training

Question	Respondents	Response	N	%
In your opinion the training in the college is much of:	Teachers	a) Theory	19	57.6
		b) Practice	8	24.2
		c) Equally both	6	18.2
		Total	33	100
if you answer for above question (a), it is because of:		Due to lack of workshop space	7	36.84
		Due to lack of machinery & row materials	7	36.84
		Due to lack of vocational teachers	1	5.27
		Due to large number of students	4	21.05
		Total	33	100

Table XIX, tells us the information about the delivery of TVET training. Accordingly, 19(57.6%) of the respondents responded as TVET training much of theory. This implies that there is problem or school to work transition of students as if the training is more theoretical. Concerning the reasons that lead training to more theoretical also indicated and the same percentages (36.84%) of each reported the main reasons as due to lack of workshop and machineries and row materials and 4(21.05%) of them reported as due to large numbers of students. These problems can affect quality of training negatively and in return these also affect school to work transition mainly in a negative ways.

In support to this response from the open ended questions and interview questions are also reported as : there were lack of training materials and the existing materials are old, lack of practical skills of teachers, lack of proper vocation guidance services, no linkage with employers, the workshops are very poor and not equipped with appropriate materials, and in sufficient training. This indicates that the practical training can be affected negatively due to the above mentioned problems and school to worth transition is at risk in these TVET colleges.

Table XX

Chi-square Test (by college)

Trained teachers, good workshop and enough supply of materials of colleges(students)				
Name	N/ %	Yes	No	Total
Addis Ababa Tegnabareid	N	41	57	98
	%	41.84	58.16	100
Entoto	N	64	36	100
	%	64	36	100
G. Wingate	N	31	31	62
	%	50	50	100
Total	N	136	124	260
	%	52.31	47.69	100

Pearson chi-square (at 5% significance level, two tailed) = 0.007

Students were asked on the performance of their college in enhancing school facilities that contribute for better quality of teaching-learning process and education. Responses for the

question that asked availability of skilled teachers, good workshops and enough supply of materials showed that majority of the respondents explained they have skilled teachers and workshops (52.31%). However significant proportion of students (47.69%) has mentioned that there are no skilled teachers, good workshops and enough supply of materials that ensure good quality of teaching learning-process. The level of response however varies from college to college. Majority of the students in Entoto (64%) confirmed the existence of good educational services; on the other hand, majority of the students from Addis Ababa Tegebare.D (58.16%) of students explained that they have no quality educational services. From this we can see the responses provided differ from college to college. When tested for statistical significance, using the chi-square test, with 5% level of significance, it has showed that responses provided for the variable of interest has significant association with type of college. i.e. quality educational services are not throughout good or throughout worse but differs from college to college.

Table XXI

Staff Training and Development

Question	Respondents	Response	N	%
Do you often give skill improvement course for your staff?	Management Staff	Yes	7	43.8
		No	9	56.3
		Total	16	
What are you doing to promote the level of your training	Teachers	Yes , I am attending	11	34.37
		No , I am not attending	21	65.63
		Total	32	100
If you are improving your level of training under what level?	Teachers	Diploma	-	-
		First Degree	2	18.2
		Second Degree	9	81.8
		Doctorate Degree	-	-
		Total	11	100
Have you taken vocational guidance training course?	Vocational Guidance	Yes	1	33.33
		No	2	67.67
		Total	3	100

Table XXI, presents responses on staff training and development by management staff and teachers. Accordingly, 9(56.3%) of management staff replied as the colleges did not give

courses for their staff to improve their skills but 7(43.5%) of them said “yes” for item 1 in the above Table. As a result, lack of or absence of skill improvement affects quality of training and in return their can also affect school to work transition of TVET students. In addition, item 2 also asks teachers about their promotional training and as a result they responded as 11(34.37%) of them are attending training to up date their profession but the majority (65.63%) of them are not attending.

This implies that no professional upgrading means no improvement of training delivery because there is a technological change from time to time and training is required to fill skill gaps of teachers. Finally, item 3 asks the level of training for those who are responded as they are attending further training for item 2 above as a result, 2 (18.2%) of them are attending in first degree program and 9(81.8%) of them are for master programs. This implies that they can contribute more in the quality training of these TVET colleges and this should be encouraged. Item number four in the same table presents .All in all, although some of the teachers are attending their training to upgrade their professions, majority of the teachers are not improving their skills through training and this could also affects quality of training negatively and this can also create problems on students in their preparation for school to work transition or for the future world of work.

Table XXII

Readiness of students

<i>Question</i>	<i>Respondents</i>	<i>Response</i>	<i>N</i>	<i>%</i>
How much eager are students in their studies in the college	Teachers	a)Highly Eager	1	3.1
		b)Eager on the average	18	56.3
		c)Very low	13	40.6
		Total	32	100
If your answer for question number 23 is “C”, why do you think it is no?	Teachers	a)Lack of student efficiency	12	52.2
		b)Lack of enough materials	7	30.4
		c)Lack of smooth relationship between teachers and students	1	4.3
		d)Lack of respect from society	3	13.00
		Total	23	100

As indicated in Table XXII, item one shows teachers asked to respond on students readiness towards vocational training. Accordingly, 56.3% and 40.6% of teachers had responded as

students are eager on the average and very low respectively. In addition 52.2% and 30.4% of respondents replied for item two the lowness of their readiness was because of lack of student efficiency and lack of materials. This implies that students are not ready to attend proper classes due the above reasons.

Table XXIII

Major Problem that hinder vocational guidance to implement guidance work

Question	Respondents	Response(Rank)	N	%
Please put the problems that you face to implement your guidance work? (Rank 1 up to three)	Vocational guidance	1)lack of maintenance of old machineries	2	67.67%
		2)High number of students	2	67.67
		3)Shortage of money	3	100
		4)shortage of qualified teachers	3	100

In Table XXIII, vocational guidance were asked to rank the problems they face to implement the guidance work .Hence, 2(67.67%) of respondents gave their response as lack of maintenance of old machineries, 2(67.67%) high number of students, 3(100%) shortage of money and 3(100%), of respondents replayed as shortage of qualified teachers by ranking from one up to four respectively. This implies that the colleges are facing acute problems to implement school to work transition unless the above problems resolved.

Table XIX

Practice of vocational Guidance and counseling services

Question	Respondents	Response	N	%
Do you give consecutive consultation for new as well as for those students who are enrolled early and still learning	Vocational guidance	Yes	1	33.33%
		No	2	67.67
		Total	3	100
Do you give joint consultation with other teachers of your college?		Yes	2	67.67
		No	1	33.33
		Total	3	100

In general, by observing the response given in item one of Table XIX, one can assure that vocational guidance and counselor's are not give consecutive consultation for new as well as for those students who are enrolled early and still learning. In addition as shown in Table XIX, item

2(67.67%) of respondents replied that they give joint consultation with other teachers. As already mentioned in this study this response will assure you that teachers are fully involved in providing vocational guidance services. This implies that there is a shortage of skilled and well trained vocational guidance and counselor and this will have an adverse effect in learning and teaching process.

CHAPTER FOUR

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with the summary, conclusions and recommendation concerning the research findings analyzed in chapter three.

4.1 SUMMARY

The purpose of this study was to investigate the major challenges of TVET colleges in implementing school to work transition in selected vocational colleges in Addis Ababa, particular to the industrial fields of study. In this regard, the study tried to addresses the following basic questions.

1. What are the criteria for the selection and placement of trainees for TVET programmes in industrial occupational fields?
2. Does the college have adequately trained instructors to provide quality training?
3. Does the college provide appropriate guidance and counseling services?
4. Do TVET colleges have a profound link with enterprise (employers) to provide work based learning programmes (training)?
5. Do the college administrators have the necessary training and experience to handle such a program?

The study employed descriptive survey method and it was conducted in three governmental TVET Colleges. The focal purpose of this study is to investigate the general conditions encountered by students/trainees in their school to work transition in selected TVET College on industrial fields of studies. Three out of the seven TVETs, all located in Addis Ababa are selected using purposive sampling techniques. The three deans, six vice deans, twelve section heads, three vocational guidance and counselors, 121 trainers and 306 trainees were included in the sample by using cluster and simple random sampling techniques. The research technique used in this study is basically a descriptive survey method. Using a mixed method of data gathering, questionnaires to collect quantitative data and qualitative data from the participants in the form of open- ended and interview questions. The secured data were analyzed using percentage and chi-square methods to find out the highlights of the responses to the different factors in the study.

Based upon the analysis made, the following major findings were set up.

1. Regarding the age of respondents; the majority of students are in their proper school age. The age of teachers, vocational guidance counselors and administrative staff, is found within the age range of 26 and above 41 years. This age range of staff shows as they are with maximum and minimum practical teaching and administrative experience in the colleges.
2. The enrollments of male, 184(69.96%) students in industrial field of study are moderately distributed whereas that of females are very low. In addition, the involvement of females in decision making or as a management staff is very low compared to males.
3. With regard to qualification of teachers and Vocational Guidance Counselors majority of them possess first degree and few are second degree holders. In addition, all TVET management staffs were qualified with first degree and second degree and this qualification fulfils the requirement set by MOE.
4. From the observation taken in TVET colleges as well as the interviews conducted, it is confirmed that, 33.33% (one out of three) of vocational guidance counselor is trained in the appropriate field of study (psychology) and 67.67% of vocational guidance counselors were not trained in the area which allows them to provide vocational guidance service as a professional. Apart from unattained qualification, majority of respondents 71.92% of students and 53.33% of teachers confirmed that, the task of vocational guidance was undertaken by teachers in addition to their teaching profession.
5. Regarding the choice of vocational education, the results revealed that, out of the total respondents (37.2%), (22.4 %) and (18.4%) of them responded their reasons were "due to lack of other fields of education, the country's needs of vocationally trained human resource and due to their inclinations towards vocational education "respectively.
6. On the assessment made on the perception and availability of trained (skilled) teachers, about 68.75% and 63.16% respondent teachers and management staff respectively, confirmed that, the majority of college teachers were not adequately trained and skilled in their respective field of work. In contrary, 52.11% and 47.89% of college students were found to feel that their instructors are well trained (skilled) and are not well trained respectively.

7. Regarding the adequacy and compatibility of training materials, the majority of the respondents, 79.41%, 68.42% and 55.43% of students, teachers and management staff respectively replied that hand tools as well as machineries were not adequate. Compatibility of hand tools and machineries was not also found as required. Because, 85.29 %, 73.68 % and 63.46 respondents of teachers, management staff and students replied “no” respectively.
8. In addition to the above findings the following are also listed as major findings:
- a) Lack of well trained human resource in the area of teaching profession
 - b) Skills could not be efficiently taught, because relevant equipment and machineries were not available and some of the materials are obsolete. The result of this situation is that many trained graduates will not get jobs because they do not meet the needs of employers.
 - c) Shortage of qualified vocational guidance and counselors.
 - d) Reliance of TVET teachers highly on teaching the theoretical aspect not practical one.
 - e) Low participation of all stakeholders and students in the TVET curriculum development and preparation of TVET curriculum.
 - f) Low staff training and developments
 - g) TVET colleges did not utilize their workshops for apprenticeship training
 - h) Absence of well organized linkage of TVET colleges with outside enterprises for apprenticeship training programs.
 - i) Lack of adequate workshops, teaching materials and reference books and other facilities.

4.2 Conclusions

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

1. In light of the major findings of the study, it is possible to conclude that age level of the students and trainers is at the right stage to take the responsibilities of school to work transition practice.
2. The enrollment of female trainees in the industrial fields of studies and number of female staff members in the selected TVET colleges were low and it can be concluded that low enrollments of female trainees in the industrial schools in return affect negatively the participation of female as instructors and in management bodies of these TVET colleges.
3. Regarding the qualification of the trainers and vocational counselors of these TVET colleges, it is possible to conclude that it is as of required by the TVET strategy and they can facilitate the school to work transition properly. However, specialization of vocational counselors of the two TVET colleges is not as required because; the vocational guidance guideline of TVET colleges requires psychology graduates. Hence, in proper assignment of vocational guidance counselors could hinder the facilitation of the transition from school to work
4. On the choice of the students to enter their desired fields of studies, the finding indicate that the majority of the students responded to lack of other alternative fields of study and it is possible to conclude that placement of TVET college students is not based more on their talents and interests. This also indicates that performance of the students could be affected. However, some students responded as they are interested on their fields of studies and this enables or assists them to perform their duties of the transition from school to work.
5. Trained trainers play great role in school to work transition. However, the findings indicate that there is a problem of adequate trained instructors and the delivery of training is more theoretical. Hence, this could affect the enhancement of school to work transition unless students acquire enough practical training with skilled trainers.
6. In addition, adequacy and compatibility of training materials contribute more in the school to work transition practices. But the findings of the study imply that training, materials and workshops facilities are not adequate and compatible enough to perform school to work practice as required. Hence, it is possible to say the above mentioned problems could affect practical training of the students and in return adversely affect the school to work programs.

7. In addition, the findings of the study indicate that there is :

- a lack of confidence on trainees in getting jobs and low participation of all stakeholders and students in the TVET curriculum development and lack of research based preparation of TVET curriculum
- Low staff training and developments and low utilization of their workshops for apprenticeship training
- Lack of organized linkage of TVET colleges with outside enterprises for apprenticeship training programs. From the above mentioned major problems, it is possible to conclude that the transition from school to work practice could be affected negatively and this often prevents trainees from locating suitable employment following their graduation.

4.3 Recommendations

Based on the analysis, summary and conclusion of the study so far, the following points could be recommended.

- The implications of TVETs in the education system and the developmental path of the nation is so great. Hence, regional education bureaus and concerned stake holders are likely to give due attentions to the provision of the necessary adequate materials, tools and other appropriate facilities to the TVETs. Substitutions of obsolete equipments and strengthening workshops are a way forward.
- Trained human resource is a vital factor in the dissemination of technical knowledge and skills. Hence, trainers are preferable to be equipped with up to date and technologically assisted, pre-service and in-service programs. Policy makers and concerned authorities effectively conduct closer observations on TVETs and allow further opportunities for researches so as to align the educational strategies to what is practically found on the ground on TVETs and to revise the current curriculum.
- The industrial experience of trainers is in general weak or not existent, with most trainers being employed directly after graduation therefore lacking exposure to any kind of industrial environment. This lack of industrial experience makes it very difficult to introduce and socialize trainees into the real world of work. Therefore, it is recommended that teaching staff members should have relevant industrial experience through planned programs in order to expose them to the real life of work and business.
- On the part of the managerial staff, the right person for the work be assigned in the right place. To do so, consistent capacity building efforts and orientation trainings focused on professional ethics are the means to upgrade duties and responsibilities of them.
- The placement of trainees is sound full be for the sake of statistics or it must not be seen as a situational issue. Instead, it must be based on the accommodation capacities, material and human resource provisions, job markets and other facilities for enhancing quality education.

- TVET agency, Education bureaus, the community, sectoral governmental organizations and other stakeholders including the media are responsible to create closer links to facilitate cooperative and finally bridge the gap between TVE training and the transitions to the world of work.
- Motivating trainers, based on their contributions and work merits, allowing them further job related qualifications, responding to their fringe benefits of one form or another is the other issue worth considering.

REFERENCES

- Afeti, (2007). Strategy to Revitalize Technical and Vocational Education and Training /TVET/ in Africa, background document for the African Union's TVET Experts' Meeting 13-14 December 2006. Addis Ababa.
- Aggarwal, J.C (1996).Principles, Methods and Techniques of Teaching. Delhi. Vikus Publishing House PVT LTD
- African Union (2007).Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa .Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF II+) 29-31 May 2007 Addis Ababa
- Airasian, Peter and Gay, L.R (1996). Educational Research: Competencies for Analysis and application.Perntice -hall,Inc.,
- Alissa, Sufyan(2007). The school-to-work transition of young people in Syria. Geneva:ILO.
- Añonuevo-Medel, Carolyn (2002).Integrating Lifelong Learning Perspectives. UNESCO, Paris
- Asian Development Bank (2008). Education and skills: Strategies for Accelerated Development in Asia and the Pacific.
- Atchoarena, D, and dellucm, A. (2002). Revisiting Technical and Vocational in Sub-Saharan Africa: an update on trends, innovations, and challenges. Paris: UNESCO/IIEP
- Atchoarena, David and Delluc, André, Marcel (2001). Revisiting technical and vocational education in sub-Saharan Africa: an update on trends, innovations and challenges
- Baharu Zewdie (2002) A History of Modern Ethiopia. Addis Ababa University Press.
- _____ (2005).Pioneers of Change in Ethiopia. The Reformist Intellectuals of the early Twentieth Centry.Addis Ababa University Press.
- Basta,Nick(1999). Careers in High Tech. VGM Career Horizons
- Bhatia, K.K (2006). Principles of Guidance and Counselling. Kalyani Publishers: New Delhi
- Bills David B. (2004). The Sociology of Education and Work. Blackwell Publishing

- Boodhai, Navneet. Concept paper for the development of a Caricom strategic plan for Vocational education services in the Caricom single market and economy (csme)
- Borgen, William and Hiebert, Bryan (2002). Understanding the Context of Technical and Vocational Education and Training. Paris: UNESCO
- Burden, P.R. (2003). Classroom Management-Creating a Successful Learning Community. John Wiley and Sons, Inc., Kansas.
- Caillods, F (1994). "Diversite et convergences des systems de formation professionnellement" Revue internationale du travail, Vol 133. No 2. Geneva: ILO.
- Centre international d'études pédagogiques (2004). Challenges and Opportunities at the Secondary Level Technical Education and Vocational Training Reform in the Knowledge. International Conference, Paris, France: December 16-18, 2003
- Clarke, Linda and Winch, Christopher (eds) (2007). Vocational Education. International Approaches, Developments and Systems. Routledge, Taylor & Francis Group
- Coleman, Marianne and Anderson, Lesley (2000) (ed). Managing Finance and Resources in Education. Paul Chapman Publishing Ltd.
- Dyankov, A. (1996). Current Issues and Trends in Technical and Vocational Education Section for Technical and Vocational Education: UNESCO, Paris.
- Evan, R.N (1971) Foundations of Vocational Education. Columbus: Charles E. Charles and Merri publishing Company.
- Federal Democratic Republic of Ethiopia (2004). Report on the Development of Education in Ethiopia to the UNESCO Forty-seventh session of the International Conference on Education 8-11 September 2004; Geneva, Switzerland.
- Federal Negarte Gazeta. TVET Proclamation. No. 391/2004. Addis Ababa. Brehanena Selam printing Enterprise.
- Finch, Curtis, R. and Crunkilton, John, R (1989). Curriculum Development in Vocational and Technical Education: Planning, Content, and Implementation. Allyn and Bacon, Inc
- Fluitman, F, and Xavier, O. (1991) Skill Acquisition and Work in Micro-Enterprise: Evidence from Lome, Togo. A joint study by the World Bank, the ILO and the OECD. Geneva: International Labour Organization.

- Furlong, Johan (2009). Teachers Education and Pedagogical Change: What Does the Research Tell Us? Proceedings of the 1st International conference on educational Research for Development 13-15 May 2009: Addis Ababa University, Akaki Camps.
- Gasskov, Vladimir (2000). Managing Vocational Training Systems. A handbook for Senior Administrators. International Labour Office, Geneva 2000.
- Ghazalah, Ismail (1994). Vocational Education and earning Power: How You Investment in Training Leads to a Better Future. Peterson's Guides, Inc.
- Girma Zewdie (1994). The Interface of Vocational Schools and the Community in Ethiopia: A Missing Perspective on Job opportunity (Unpublished). Addis Ababa
- Girma Zewdie, Mehari Haile and Nigatu Fantaye (1994). the Training and Placement of Vocational Secondary School Teachers in Ethiopia. The Ethiopian Journal of Education. Vol.XV No.2
- Girma Zewdie(2001). Linking primary Education with Occupational Needs in the Community. Proceedings of National Conference Held in Adma Ras Hotel November 9 – 11, 2001.
- Girma Zewdie(2010). Management of Work Study Program. Addis Ababa University
- Haileselassie Woldegerima, Embet Mulugeta and Wanna Leka (2002). Moving beyond the Classroom: Expanding Learning Opportunities for Marginalized Population in Ethiopia. The Forum for African Women Educationalists. Nairobi, Kenya
- Hiebert, Bryan and Borgen, William (eds) (2002) .Technical and Vocational Education and Training in Twenty First Centure: New Roles and Challenges for Guidance and Counselling. Paris: UNESCO.
- ILO and Republic of Korea (2008). Major Skills Challenges Facing Skills-AP Member Countries in 2008 and Strategies to Address Them. Network Partner Organizations held in SIVAT, Incheon, Republic of Korea on April 16-18, 2008. www.tesda.gov.ph/uploads/file/ilo_korea.pdf Accessed on May 21, 2010.
- Hollenbeck, Kevin (1997). School to Work: Promise and Effectiveness. Accessed on March 25, 2010, from: www.upjohninst.org/publications/newsletter/kh-f97.pdf
- Johanson, Richard K. Adams, Arvil V. (2004). Skills Development in Sub-Saharan Africa .THE WORLD BANK : Washington, D.C.
- Johansson.(1996). Diversifying the Source of Financing Vocational Training: A Set of Training Modules. ILO

- Joo, Lan. TVET deliveries modes: info.worldbank.org/etools/docs/...bTVET%20delivery20modes.pdf
Accessed on March 18, 2010.
- Kogoe, A (1990). The Diploma Disease and Unemployment in Francophone West Africa
Lome Togo.
- Koul,Lokesh(2006). Methodology of Educational Research. Delhi, Vikus publishing
House PVT LTD
- Mesfin Silesh (1994). Context Evaluation of the Technical and Vocational Education
Curriculum. Emphasis on Industrial Education. Addis Ababa. Master Thesis (Unpublished).
- Middleton, J, Ziderman, A, and Van Adams, A (1996). Skills for Productivity Vocational
Education and Training in Developing Countries. Washington, DC: World Bank.
- Mohan, G. Aruna (2008). Psychological Foundations of Education. Neelkamal
Publications PVT.LTD: New Delhi
- MoE/ECBP. (2008).National Technical & Vocational Education & Training
Strategy. Addis Ababa
- MOE (2009) Educational Statistics Annual Abstract: 2000 EC/2007-2008 G.C
- MNSE, Ayuba (2006). The role of Technical and Vocational Education and Training
(TVET) in Human Resources Development: The case of Tumba College of
Technology (TCT)-Rwanda, [http://www.affica-union.org/root/au/docunments/
decision/hog/au6th_ord_Khartoum_jan2006.pdf](http://www.affica-union.org/root/au/docunments/decision/hog/au6th_ord_Khartoum_jan2006.pdf) [Accessed...tct.ac.rw/images/
Ayuba.pdf. Accessed on February 5, 2010.
- Nayak,A.K., and Rao,V.k(2004). Guidance and Career Counseling. S.B. Nangia A.P.H
Publishing Corporation.
- NCVER (2004).Effective measures for school-to-work transition in the vocational
education system Lessons from Australia and Korea
- NIER (2007).From School to Work:Contemporary TVET Regional Experiences National
Institute for Educational Policy Research (NIER) Tokyo, Japan March 2007 Final
Report of the Seminar 23 - 30 January 2007
- OAYEC (2005). School to Work Transitions for Youth to 18 Background Paper: A report
Prepared by the Ontario Association of Youth Employment Centers for the Ontario
Ministry of Training Colleges and Universities.
- Pankhurst, Sylvia (1955). Ethiopia: A Cultural History.

(Ravner, Felix (2005). Work process knowledge and development of vocational competence
Lecture for Oman conference from 17th to 18th June 2005 in Muscat/Oman

Ryan, Paul (2000). The School-to-Work Transition: A cross-National perspective

Ryan, Robin (2002). Making VET in Schools work: a review of policy and practice in
the Implementation of Vocational Education and Training in Australian Schools.
Retrieved on February 20, 2010 from, www.ojs.unsia.edu.au/index.php/EDEQ/article/546/416

Seng, Song (2005). Dynamics and challenges in vocational education and training –the
Singapore experience. 21st Century Education Symposium – Liuzhou, China, 29-30
October 2005

Singh, Raj (2005)(ed). Educational and Vocational Guidance. Commonwealth
Publishers: New Delhi.

Teklehaimanot Haileselassie (2002). Misconceptions on Technical and Vocational Education and
Training in Ethiopia. Flambeau Vol. 10 No.1

TGE (1994) Educational and Training Policy Addis Ababa .EMPDA

UNESCO (1997). Training of Teachers/Trainers in Technical and Vocational Education

_____ (2008). Education for All by 2015 will we make it? EFA Global Monitoring
Report

_____ (2002). Technical and Vocational education and Training in the Twenty –First
Century: New Roles and Challenges for Guidance and Counselling: UNESCO,
Paris

_____ (2004). Synthesis Report. Improving Access, Equity and Relevance in Technical
and Vocational Education and Training (TVET). UNESCO: Bangkok

_____ (1999). Technical and Vocational Education and Training: A Vision for the
Twenty first Century. 26 - 30 April 1999 Seoul, Republic of Korea

_____ (2002). Technical and Vocational Education and Training in the twenty-first
Century-New Roles and Challenges for Guidance and Counselling. UNESCO: Paris

UNESCO-UNEVOC (2006). Orienting Technical and Vocational Education and Training
for sustainable - development a discussion paper. Bonn, Germany

_____ (2009). Reorienting TVET Policy towards Education for Sustainable Development:
A Building Block for Education for All. Berlin, 26th-

UNESCO/ILO (2002) Technical and vocational Education and Training for the Twenty

First century: UNESCO and ILO Recommendation Paris: UNESCO

Wanna Leka (1998). The Current Status of Vocational/Technical Education in Ethiopia. Problems and Prospects. Proceedings of national Conference Held in Awassa College of Teacher Education, July 12-18, 1998.

_____. (2006). The opportunities and Challenges of Expanding Technical and Vocational Education and Training (TVET) in Ethiopia. A Critical Analysis. Proceedings of the First annual Conference on the Development of TVET Education in Ethiopia: Addis Ababa Tegbared TVET College.

World Bank (1991). Vocational and technical education and training. A World Bank Policy Paper Washington, DC: World Bank.

Yekunoamlak Alemu (2006). "Networking between Vocational Training and Employment." Unpublished Dissertation, University of Klagenfurt, Austria. 28th August 2009

Yihune Abate (2007). An assesment On the Implementation of Technical and Vocational Education and Training program in selected private TVET Colleges in Addis Ababa: In particular Reference to Business Fields. Addis Ababa. Master Thesis (unpublished)

Ziderman, Adrian (2001). Financing Vocational Training to Meet Policy Objectives: Sub-Saharan Africa: World Bank Revised, November 2001.

Ziderman, Adrian (2003). Financing Vocational Training in Sub-Saharan Africa. The World Bank, Washington DC.

Zunker, Vernon G. (2002). Career Counseling: Applied Concepts of Life Planning. Books/Cole, USA.

Zhao, Zhi-Qun (eds) (2006). TVET Teacher Education on Threshold of Internationalisation: The conference was held at University of Tianjin/China.

Appendix I.

Addis Ababa University

School of Graduate Studies

Business Education Department

Students Questionnaires

The aim of this questionnaire is to find and try to give solution to the problems that students face during their training in TVET College. The factual answer that you give will help to find solutions and improve your college. The information you provide will be kept confidential and used only for the academic purpose.

I thank you in advance for sparing your time

Notice 1. Keep the information secret

Notice 2:-

- Don't write your name
- What you answer is used only for this research and nobody is to question you for what you did.
- When you meet blank (empty) lines, please write your opinion
- Put "√" mark in a box that you think has the right answer

1. Name of College _____
2. Sex a) Male ☐ b) Female ☐
3. Age a) 16-18 ☐ b) 19 – 21 ☐ c) 21 above ☐
4. Field of study _____
5. Year of study
a) 1st year b) 2nd year ☐ c) 3rd year ☐
6. Why do you want to attend vocational education?
a) Due to my inclination ☐
b) Since there is job opportunity ☐
c) To get high salary ☐
d) To create my own work ☐
e) Since the country needs vocational manpower ☐
f) Since I lacked other field of education ☐
7. What are the criteria's for your enrollment in the field you are in now?
a) on the basis of the national exam result ☐
b) on the basis of entrance exam ☐

8. In the field of your study do you think you have well trained teachers, good workshop and enough supply of material?
a) Yes ☐ b) No ☐
9. Are you happy (complacent) in the field you are in at present?
a) Yes, I am ☐ b) No, I am not ☐
10. For the question number 9 if your answer is (a) Yes, I am, please put your prior choice in the box given. The highest is 1 and the lowest is 5
a) ☐ The field gives job opportunity.
b) ☐ It enables me to create my own work
c) ☐ The training has great acceptance in the society
d) ☐ Encouraged by my family
e) ☐ Encouraged by my friends
11. For question number 9, if your answer is (b) No, I am not, please put your prior choice in the boxes given. The highest is 1 and the lowest is 5
a) ☐ The gaining of job is low
b) ☐ Teachers give low respect to the field
c) ☐ Families give low respect to the field
d) ☐ Friends give low respect to the field
e) ☐ Due to my low result of the National exam
12. Do you think you will get job in the field of your specialization?
a) Yes ☐ b) No ☐
13. Do you think that the placement and choice of your field study is based on your own interest?
a) Yes ☐ b) No ☐
14. Do you think the college gives enough apprenticeship training in the workshop found in the college?
a) Yes, it does ☐ b) No, it doesn't ☐
15. Do you think that hand tools and machinery available in the college are adequate? a)
Yes ☐ b) No ☐
16. Do you think that hand tools and machineries available in the college are compatible?
a) yes ☐ b) No ☐

17. Is there vocational guidance and counseling service in your college?

a) Yes ☐ b) No ☐

18. If your answer is (a) Yes, for question number 16, counseling is done

a) by the right person in the field of counseling ☐ b) by teachers only ☐

19. Does your college have a link with well organized enterprises for apprenticeship training?

a) Yes ☐ b) No ☐

20. Do you participate in designing the curriculum of the college?

a) No ☐ b) Yes ☐

21. Do you think that library of the college is adequately equipped with books?

a) Yes ☐ b) No ☐

22. Please write down what you think are major problems in your college?

23. What do you think are the solutions for the problems you mentioned in Question number 22? _____

Thank you so much for your genuine answer

Appendix II.

Addis Ababa University

Graduate Studies Programme

Department of Business Education

Teacher's Questionnaire

The aim of this research is to explore problems and solution that students face during their training in TVET colleges. Hence your co-operation in giving genuine answers this questionnaire will meet the desired aim (goal).

I thank you for your co-operation in advance!

Notice

- Please don't write your name on the questionnaire.
- The answer that you give serves only for a research
- Put "✓" sign in the empty box that you think has the right answer.
- Give your own opinion or suggestion in the blank lines provided.

1. Name of the training college _____

2. Gender a) Male ☐ Female ☐

3. Age a) 21 – 25
 b) 26 – 30
 c) 31 – 35
 d) Above 40

4. Level of education a) Diploma ☐ b) BA/BSC ☐
 c) Ma/MSc ☐ d) Ph.d ☐

5. Trained field on teaching area

a) Construction ☐
b) Electricity ☐
c) Metal work ☐
d) Wood work ☐

e) If other, please mention _____

6. Years of service.

a) 1 up to 4 years ☐

c) 8 - 10 years ☐

b) 5 - 7 years ☐

d) above 10 years ☐

7. Do you think the teachers in the college are well trained and skilled?

a) Yes ☐ b) No ☐

8. Do you participate in designing the curriculum?

a) Yes ☐ b) No ☐

9. Do you think the curriculum under use can meet the needs of the stakeholder?

a) Yes ☐ b) No ☐ c) I didn't have any answer

10. Do you think that the placement of trainees in different field of studies is based on their interest and inclination?

a) Yes ☐ b) No ☐ c) Some- times ☐ d) Rarely ☐

11. Do you think the college gives enough training for trainees which enhance them to execute the expected work in the field of their study?

a) Yes ☐ b) No ☐ c) No idea ☐

12. Does your college have a link with well organized enterprisers for apprenticeship training?

a) Yes ☐ b) No ☐ c) No idea ☐

13. Does your college give vocational guidance and counseling service?

a) Yes ☐ b) No ☐ c) sometimes ☐ d) rarely ☐

14. If you answer is "yes" for question no.14, who does this?

a) The right counselor ☐ b) Teachers only ☐

15. Do you think the training in the college gives conducive opportunity in preparing trainees in transiting from school to the word of work?

a) Yes, it does ☐ b) No, it doesn't ☐ c) I don't know ☐

16. In your opinion the training in the college is much of:

a) Theory ☐ b) Practice ☐ c) Equally both ☐

17. If your answer for number 18 is (a), it is because of :

- a) lack of workshop space. ☐
- b) lack of machinery and raw material ☐
- c) shortage of vocational teachers ☐
- d) due to large number of students ☐

18. Do you think that hand tools and machineries available in the college are adequate?

- a) Yes ☐ b) No ☐

19. Do you think that hand tools and machineries available in the college are compatible?

- a) Yes ☐ b) No ☐

20. What are you doing to promote the level of your training?

- a) I am attending course ☐
- b) I am not attending courses ☐

21. If you are improving your level of training, under what level?

- a) Diploma level ☐
- b) First degree Level ☐
- c) Second degree level ☐
- d) Doctorate degree level ☐

22. How much eager are students in their studies in the college?

- a) Highly eager ☐ b) eager on the average ☐ c) very low ☐

23. If your answer for question number 23 is "C", why do you think it is no?

- a) lack of students efficiency ☐
- b) lack of enough technical materials ☐
- c) lack of smooth relationship between teachers and students ☐
- d) lack of respect for the field of training among the society. ☐

24. Do you think the college gives enough apprenticeship training (practice) given in the workshop of your college?

- a) Yes ☐ b) No ☐ c) Very low ☐

25. Do you think the number of students and the number of room match fairly?

- a) Yes, they match fairly ☐ b) No, they don't match fairly ☐

26. Do you think that library of the college is adequately equipped with books?

a) Yes ☐ b) No ☐ c) not so much ☐

27. Do teachers participate in research if they participate, what benefits do they get? _____

28. What are the major problems that prevail in the college? _____

29. What solutions you think are good (beneficial) for the above question?

Thank You for Your genuine response!

Appendix III.

Addis Ababa University
Graduate Studies Programme
Department of Business Education
Questionnaire for deans, assistant deans and Section Heads of
TVET Colleges

The aim of this research is to explore the problems and solution that students face during their training in TVET College. Hence your co-operation in giving genuine answer in this questionnaire will meet the desired aim/goal.

Notice:

- Please don't write your name on the questionnaire
- The answer you give serves only for this research
- Please put "✓" sign in the empty box that you think has the right answer
- Give your opinion in the space provided.

1. Name of the college _____

2. Gender a) Male ☐ b) Female ☐

3. Age a) 21- 25 years ☐
 b) 26- 30 years ☐
 c) 31 – 35 years ☐
 d) 36 – 40 years ☐
 e) Above 41 years ☐

4. Level of Education

a) Diploma ☐ b) First Degree ☐
c) 2nd degree ☐ d) Doctorate ☐

5. Field of training (specialization)

6. Years of service.

a) 1 up to 4 years ☐ c) 8 - 10 years ☐
b) 5 - 7 years ☐ d) above 10 years ☐

7. Do you think the curriculum of the college is prepared well?

a) Yes ☐ b) No ☐

8. Do you think that teachers in the industrial technology training program are well trained and skilled?

a) Yes ☐ b) No ☐

9. In the field of industrial section, do you think that hand tools and machines are available in the college are adequate?

a) Yes ☐ b) No ☐

10. In the field of industrial section, do you think that hand tools and machines are compatible?

a) Yes ☐ b) No ☐

11. Do you often give skill improvement courses for your staff?

a) Yes, ☐ b) No ☐ c) Sometimes ☐

12. Does your college have a link with well organized enterprises for apprenticeship training?

a) Yes ☐ b) No ☐

13. Does your college give vocational guidance and counseling service?

a. Yes ☐

b. No ☐

14. If your answer for Question 11 is "yes" who does this?

a) The right counselor ☐ b) Teachers ☐

15. Do you think that library of the college is adequately equipped with books?

a) Yes ☐ b) No ☐

16. Have you ever taken course that improves your role in the college?

17. How do you exercise the utilization of the college's source of income?

16. Who issues the criteria for the enrollment of your college students?

17. Do the administrators and teachers participate in research? If they do, what benefit do they get?

18 Do you think the training of your college gives trainees enough knowledge and skills that enables them to transit from school to the world of work?

19. Do you think the trainees get apporopatre apprenticeship training with well organized workshop in your College?

20. What do you think is the level of the quality of training? It you have problems, how did you tackle is over come?

21. Please give the major problem that you face in the college and the measures that are needed to overcome them?

Thank You for Your genuine response!

Appendix IV

Addis Ababa University
Graduate students Programme
Department of Business Education
Questionnaire for vocational Guidance

The aim of this questionnaire is to find and try to give solution to the problems that students face during their training in TVET College. The factual answer that you give will help to find solutions and improve your college. The information you provide will be kept confidential and used only for the academic purpose.

I thank you in advance for sparing your time.

Notice 1. Keep the information secret

Notice 2:-

- Don't write your name
- What you answer is used only for this research and nobody is to question you for what you did.
- When you meet blank (empty) lines, please write your opinion

Put “ ✓ ”mark in the box or write in empty space

1. Name of College _____
2. Sex a) Male ☐ b) Female ☐
3. Age a) 25 – 30 ☐ b) 26- 30 ☐ c) 31 – 35 ☐ d) 36 – 40 ☐
e) 41 and above ☐
4. Education level a) Diploma ☐
b) First degree ☐
c) 2nd degree ☐
d) Doctorate ☐
5. Field of Qualification _____
6. Years of service.
a) 1 up to 4 years ☐ c) 8 - 10 years ☐
b) 5 - 7 years ☐ d) above 10 years ☐

7. Have you taken vocational Guidance training course?

a) Yes ☐

b) No ☐

8. If your answer is "yes", for question No.6, how long are you trained? _____

9. Do you give vocational guidance and counseling at present?

a) I am assigned in the field ☐

b) I give additional service besides my major work ☐

c) If you have other reasons please give, _____

10. How are the vocational students chosen for the enrollment of the different fields you have?

a) on their own choice b) on the basis of examination ☐

b) If you have other criteria, please explain?

11. Do vocational students get practical work in the workshop of the college?

a) Yes ☐

b) No ☐

12. Please put the problems that you face (in order of rank) to implement your guidance Work? Give your order (from one up to four) number in the blank space provided.

- _____ 1. Shortage of money.
- _____ 2. Lack of enough teaching material.
- _____ 3. Lack of maintenance of old machinery.
- _____ 4. Shortage of qualified teachers.
- _____ 5. No enough workshops.
- _____ 6. High number of students.
- _____ 7. Lack of support from the administrators.
- _____ 8. No enough safety machineries available.
- _____ 9. Teachers low moral in teaching.

15. Do you give consecutive consultation for new as well as for those students who are enrolled early and still learning?

a) yes ☐

b) No ☐

C) sometimes ☐

16. Do you participate in designing the curriculum of the college?

a) yes ☐

b) No ☐

17. Do you give joint consultation with other teachers of your college?

a) Yes ☐

b) No ☐

19. Generally what problems are there in vocational Guidance of the college? _____

20. What measures you think are essential to curb the problems of vocational guidance of the college? _____

Thank You for Your genuine response!

students, even if randomly selected, adequately represent the population. On the other hand, we would all agree that a sample of 299, 298, or 297 students would represent the population. How about 10? Too small, you say. OK, how about 30? 75? 100? At what point does the sample size stop being "too small" and become "big enough"? That is a question without an easy answer.

Knowing that the sample should be as large as possible helps some but still does not give any guidance as to what size sample is "big enough." In many cases, the researcher does not have access to large numbers of potential research participants. In fact, obtaining permission from potential study participants is generally not an easy task. Usually the problem is too few participants rather than too many.

Some guidelines can help you decide what size sample is "big enough." However, these guidelines are just that—*guidelines*—and are not endorsed by all researchers. As noted earlier, the size of the sample influences both the representativeness of the sample itself and the statistical analysis of study data. The smaller the sample, the more problematic these issues. Your advisor can help you think through the "how much is enough" issue in your own study.

The minimum sample size depends on the type of research involved. Some cite a sample size of 30 as a guideline for correlational, causal-comparative, and experimental research. Thus, for correlational studies at least 30 participants are needed to establish the existence or nonexistence of a relationship. For causal-comparative and experimental studies, a minimum of 30 participants in each group is recommended, although in some cases it might be difficult to attain this number for each group. The larger the sample, the more likely to detect a difference between the different groups. While we would not be super confident about the results of a single study based on small samples, if a number of such studies obtained similar results, our confidence in the findings would generally be higher.

For descriptive research, it is common to sample 10 to 20% of the population, although this range will change with the size of the population studied. In reality, the appropriate sample size depends on a number of factors such as the specific type of descriptive research involved, the size of the population, and whether data will be analyzed for given subgroups. Based on a formula originally developed by the United States Office of Education, Krejcie and Morgan generated the numbers shown in Table 4.2. For a given population size (N), Table 4.2 indicates the sample size (S) needed in order for the sample to be representative, assuming one is going to survey a random sample. Although it is true that in certain respects Table 4.2 represents an oversimplified approach to determining sample size, it does suggest some general rules of thumb. As with other types of research, statistical techniques and related software are available for determining sample size in a more precise way, given knowledge of relevant related variables.

Table 4.2 does, however, suggest the following generalities.

1. The larger the population size, the smaller the percentage of the population required to get a representative sample.
2. For smaller populations, say $N = 100$ or fewer, there is little point in sampling; survey the entire population.
3. If the population size is around 500 (give or take 100), 50% should be sampled.
4. If the population size is around 1,500, 20% should be sampled.

TABLE 4.2

Sample Sizes (S) Required for Given Population Sizes (N)

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Source: R. V. Krejcie and D. W. Morgan (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 608. Copyright © 1970 by Sage Publications. Reprinted by permission of Sage Publications, Inc.

5. Beyond a certain point (about $N = 5,000$), the population size is almost irrelevant and a sample size of 400 will be adequate. Thus, the superintendent from our previous examples would be relatively safe with a sample of 400 teachers, but would be even more confident with a sample of 500.

Of course, these numbers or percentages are suggested minimums. If it is at all possible to use more participants, you should do so. Using samples larger than these minimums is especially important in many situations. For example, in an experimental study the difference between groups is more likely to show up if the samples are large. There are relatively precise statistical techniques and computer programs that can be used to estimate required sample sizes given knowledge of certain facts about the population.

AVOIDING SAMPLING ERROR AND BIAS

Selecting random samples does not guarantee that they will be representative of the population. *Sampling error*, which is beyond the control of the researcher, is a reality of random sampling. Of course, no sample will have a composition precisely identical to that of the population. If well selected and sufficiently large, however, the chances are that the sample will closely represent the population. Occasionally, however, just by chance (remember, *random* means out of the



Appendix VI

ቁጥር

REF. NO

49/15/ፔሪ-201

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DATE

8/1/2002

ለ 107
ለ 67
ለ 57
ክፍል ከተማ ት/ሥልጠና/ቤት
ቴክ/ሙያ ት/ሥልጠና ኮሌጅ
መካ/ደ/ቴክ/ሙያ ት/ሥልጠና ተቋም

አዲስ አበባ፣

ጉዳዩ፡- የ2002 ዓ.ም በቴክኒክና ሙያ ተቋማትና ኮሌጆች የሰልጣኞች ቅበላን ይመለከታል፤

የኢ.ፌ.ዴ.ሪ ት/ሚ.ር የሰልጣኞች መግቢያ መቀበያ መስፈርት በ26/01/2001 ዓ.ም በቁጥር 4/1-355/11667/35 በተሣፈ. ደብዳቤ ለደረጃ 4 ፕሮግራም 2 ነጥብ እና ከዚያ በላይ እንዲሁም በ05/01/02 በቁጥር 08/1-33/11667/35 በተሣፈ. ደብዳቤ

- ለደረጃ 3 ፕሮግራም 1.71 እና ከዚያ በላይ
- ለደረጃ 1 እና ደረጃ 2 ሥልጠናዎች የመቀበያ መስፈርት ከ1.71 በታች ሆኖ አፈፃፀሙ በሚኖረው የሥልጠና ቦታና አቅም እንዲሁም በገበያ ፍላጎት የሚወሰን መሆኑን አሳውቋል፡፡

በዚህ መሠረት የ2002 ዓ.ም ሰልጣኞችን ቅበላ ለማካሄድ የአገር አቀፉን መቀበያ መስፈርት መሰረት በማድረግ ፡-

1. ለደረጃ 4 ፕሮግራም መግቢያ ነጥብ ለወንዶች እና ለሴቶች 2 ነጥብ እና ከዚህ በላይ
2. ለደረጃ 3 ፕሮግራም መግቢያ ነጥብ
 - ለሴቶች 1.71 እና ከዚያ በላይ ሲሆን ለወንዶች 1.81 እና ከዚያ በላይ ሆኖ በኮሌጁ ወይም በተቋሙ ቦታ ካለ ከ1.71 ጀምሮ ሊሆን ይችላል፡፡
 - ለደረጃ 1 እና ለደረጃ 2 ፕሮግራሞች ከ1.71 በታች ይሆናል፡፡

በመሠረታዊ የሥራ ሂደት ለውጥ አሰራር የሰልጣኞች አቀባበል ያልተማከለ የአሰራር ስርዓት እንዲይዝ በተደረገው መሰረት ተቋማትና ኮሌጆች በራሳቸው ሰልጣኞች በመመዝገብ ቅበላ የሚያካሂዱ ሲሆን ሁሉም ተቋማትና ኮሌጆች ወጥነት ያለው የሰልጣኝ ቅበላ ስራ ለመስራት እንዲቻል የሚከተሉትን የምዝገባና የቅበላ ሂደት ተግባራዊ ማድረግ ይጠበቃል፡፡

“የቴክኒክና ሙያ ትምህርትና ሥልጠና ተቋማት የቴክኖሎጂ ሽግግር ማዕከላት ይሆናሉ”

☎ 2511 56 41 95 FAX 2511 56 44 55 ☎ 11129 E-mail aatvetagency@yahoo.com
Addis Ababa - Ethiopia

አዲስ አበባ ኢትዮጵያ

ግላገላዊ ሁልጊዜ የሚገኝበት ቁጥርን የገጽጽ ርዕስና የሚመለከተውን ክፍል ይጥቀሱ

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የቴክኒክና ሙያ ትምህርትና ሥልጠና
ኤጀንሲ

ምዝገባ በተመለከተ

- 1.1. ሁሉም ኮሌጆች የ የደረጃ 4 ምዝገባ ከ18/01/02 - 21/01/02 ባለው ጊዜ ውስጥ ያካሂዳሉ
 - 1.2. ሁሉም ኮሌጆች የደረጃ 4 የምልመላ ውጤት በ3 ቀናት ውስጥ በማጠናቀቅ ለአጩ ተመልማሮች ያሳውቃሉ
 - 1.3. ለደረጃ 4 ያልተመረጡ አጩ ተወደዳዳሪዎች ለደረጃ 3 መወዳደር ይችላሉ
 - 1.4. ሁሉም ተቋማትና ኮሌጆች የደረጃ 3 ምዝገባ ከ25 /01/02 - 28/01/02 ባለው ጊዜ ውስጥ ያካሂዳሉ፤
 - 1.5. ሁሉም ተቋማትና ኮሌጆች የደረጃ 3 የምልመላ ውጤት በ3 ቀናት ውስጥ በማጠናቀቅ ለአጩ ተመልማሮች ያሳውቃሉ፤
2. ሠልጣኞች መመዝገብ የሚችሉት በአቅራቢያቸው በሚገኙ ኮሌጆችና ተቋማት ብቻ እንዲሆን ስለተደረገ የክፍል ከተማ ትምህርትና ሥልጠና ጽ/ቤቶች ለየተቋማቱና ለየኮሌጆቹ የተመደቡ አስፈጻሚ ት/ቤቶች ከዚህ ደብዳቤ ጋር አባሪ የተደረገው ቅጽ 2 እና 3 ለአስፈጻሚ ት/ቤቶች ማሳወቅ ይጠበቅባቸዋል።
3. በተወሰኑ ኮሌጆች ውስጥ ብቻ የሚሰጡ ሙያዎችን በተመለከተ
- 3.1. ስነ ስዕል፣ መዘዎች እና ተያይዞ ለመሰልጠን የሚፈልጉ ተማሪዎች ከየትኛውም አስፈጻሚ ት/ቤት እንጠጣ ተክ/ሙያ ት/ሥልጠና ኮሌጅ በመሄድ መወዳደር ይችላሉ፤
 - 3.2 የጤና ሙያዎች ሥልጠና ዘርፍ ላይ መወዳደር የሚፈልጉ ከየትኛውም አስፈጻሚ ት/ቤት ዳግማዊ ሚኒስቴር የጤና ሳይንስ ኮሌጅ በመሄድ መወዳደር ይችላሉ፤
 - 3.3 ቆዳና የቆዳ ውጤቶች መሰልጠን የሚፈልጉ ቃሊቲ የቆዳና ቆዳ ውጤቶች ማሰልጠኛ በመሄድ ሊወዳደሩ ይችላሉ፤
 - 3.4 Bio medical technician ሙያ ላይ መሰልጠን የሚፈልጉ ከየትኛውም አስፈጻሚ ት/ቤት አዲስ አበባ ተግባረዕድ ኮሌጅ በመሄድ ሊወዳደሩ ይችላሉ፤
4. ተማሪዎች ወደ ምዝገባ ሲሄዱ የ10ኛ ክፍል መልቀቂያ ፈተና ውጤት እና የ9ኛ እና 10ኛ ክፍል ትራንስክሪፕት እርጂናል እና ፎቶኮፒ መያዝ ይጠበቅባቸዋል
5. በሁሉም ተቋማትና ኮሌጆች የ2002 ዓ.ም አዲስ አመት ትምህርትና ሥልጠና የሚጀመረው ጥቅምት 2 ቀን 2002 ዓ.ም ይሆናል፤
6. ሁሉም ተቋማትና ኮሌጆች የቀኑን የ Level 3 እና የ Level 4 ምዝገባ እና ቅበላ ከተጠናቀቀ በኋላ የማታ ሰልጣኞች ምዝገባና ቅበላ ያካሂዳሉ፤

“የቴክኒክና ሙያ ትምህርትና ሥልጠና ተቋማት የቴክኖሎጂ ሽግግር ማዕከላት ይሆናሉ”

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