ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES COLLEGE OF
EDUCATION AND BEHAVIORIAL STUDIES

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGMENT

Attitude of Students Towards Technical Vocational Education and Training (TVET) at Yeka Sub-city Government TVET Colleges

By: Israel Workineh Kiltu

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A thesis submitted to Department of Educational Planning and Management in Partial Fulfillment for the Requirement of Degree Masters of arts in Educational Leadership and Management

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This is to certify that the thesis prepared by Israel Workineh a Study on Attitude of Students Towards Technical Vocational Education and Training (TVET) at Yeka Sub-city Government TVET Colleges in Partial Fulfillment for the Requirement of Degree of Masters of arts in Educational Leadership and Management compiles with the regulation of the university and meets the accepted standard with respect to originality and quality.

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ACRONYMS

AU: Africa Union

CTE: Career and Technical Education

ESDP: Education Sector Development Program

ETP: Education and Training Policy

ICBEM: International Conference for Business, Economics and Management

MOE: Ministry of Education

TVET: Technical and Vocational Education and Training

UNESCO: United Nation Educational Scientific and Cultural Organization

VET: Vocational Education and Training

ABSTRACT

The main purpose of this study was to assess attitude of students towards technical and vocational education. In order to meet the objectives of the study, a descriptive survey design was employed. From the total population of 86 teachers and 514 students, 61 teachers and 151 students were selected using stratified sampling technique for this study. TVET deans were also selected using purposive sampling. Questionnaires and interview were used for collecting data. The data obtained through the questionnaires were analyzed using frequency, percentages, mean, standard deviations and t-tests. The information obtained through interviews was qualitatively analyzed to supplement the quantitative data. The findings revealed that students were undecided whether TVET contribute to the economy of our country, leads to jobs which are well paid, offer good career opportunities, learn skills that are needed by employers and students disagree that TVET training leads to jobs which are well regarded by society. Furthermore, the study revealed that students' perceived negatively that TVET offering high quality learning, TVET training gives access to modern equipment and competence of teacher. Students were undecided whether TVET enable to learn skills such as communication or teamwork and enabling of technical and vocational education students to continue with university studies later. It was also noted that students were, disagreed that TVET help students to set up their own business. But students undecided whether TVET creates wide job opportunities, demanded by the labor market, alternative to get job and temporary means of employment. The study also stated that, students' agreed that their preference was to join preparatory program, not ready to attend TVET program and students were not happy with joining TVET, students perceived TVET as it designed for low achiever student, high achiever students do not join TVET, it is not attractive for students, students prefer TVET to academic subjects and most TVET Students are from poor family. Therefore, in order to tackle those problems it is recommended that collaboration of all stakeholders is vital to create awareness among students, the TVET deans should fulfill teaching learning materials and all stake holders have to give due emphasis to solve the problem. The management bodies (deans, vice deans, and department heads) in collaboration with parents and others stakeholders should work hard to increase their level of readiness to attend the program.

CHAPTER ONE

1. INTRODUCTION

In this chapter, the background of the study, statement of the problem, research questions, objectives of the study, significance of the study, delimitation of the study, Terms, and organization of the study have been treated one after the other.

1.1. Background of the study

Technical and vocational education and training (TVET) defines by UNESCO as "*those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic life*" (UNESCO, 2006:41). TVET thus equips people not only with vocational skills, but with a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life. Examples of the benefits include self-awareness and self-esteem, and strengthened interpersonal, citizenship, communication and entrepreneurial skills.

In relation to this, the African Union's (AU's) also recognizes the importance of technical and vocational education as it helps to overcome any challenges of individuals in their lives and suggests the integration of technical and vocational and training into the general education system as suggested during Plan of Action for the Second Decade of Education (2006–2015). However, the integration of TVET strategies into comprehensive employment policies remains a challenge in most African countries. Many interventions in the labour market are clustered under the title "Active Labour Market Programmes" (ALMP). Such programmes may lead to direct job creation which, help the unemployed fill existing vacancies or improve the functioning of the labour market through employment information and labour offices (kingombe, 2012).

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 (MOE, 2008). According to Demessew (2012) Technical and Vocational Education (TVET) in Ethiopia, is

institutionally separated from the rest of the education system, and forms a parallel track. As indicated in 1994 Education and Training Policy (ETP), the formal TVET system of the country requires completion of a tenth-grade education to obtain certificate, diploma and advanced diploma upon completion of the levels 10+1, 10+2 or 10+3 of the TVET program. According to the new National Technical and Vocational Education and Training Strategy of 2008 it was replaced by the kind of training program that based itself on leveling as L1, L2, L3, L4 and L5 (Demessew, 2012)

In Ethiopia the structure of the education system is primary education (grades1-8) which aims to provide the basic literacy and numeracy skills. General Secondary Education (grades 9-10) that aims to enable students to identify areas of interest for further education and training. The preparatory level (grades 11 and 12) prepares the students for the higher education or careers. National examinations are administered at the end of grade 10 and 12. According to the officials of the MoE, approximately 30% of students that reach 10th grade will continue to higher education. The remaining students will enroll in TVET (Tsegaye, 2003).

Technical and Vocational Education and Training is highly expanded in Ethiopia; mainly aimed at filling skill gaps created in the industrial sector .The government were began to believe that low productivity in industrial sector is due to the skill gap, and that left to its own, the industry will provide less training than is socially optimal. According to the Industrial Development Strategy of 2003, the tremendous human resource deficits in Ethiopia being a major reason for the low state of industrial development (Tsegaye, 2003). It adds "we do not as yet have an educational and a training system that is capable of producing the manpower that is both professionally and ethically capable of carrying and sustaining the responsibility of seeing to it that our industrial development program will have achieved its goals". It therefore, calls for efforts to raise the quality of the Ethiopian workforce to international standards, to reverse the previous marginalization of industrial professions in the TVET system, and to put a substantial focus on building a culture of entrepreneurship and preparing people for self-employment (MOE, 2008). So publicly provided vocational education is seen by the government as the means to close this skill gap and the key in improving the productivity of the enterprises and increasing their competitiveness in the global market.

Government involvement goes beyond more in provision of TVET. The Ministry of Education administers the centralized exam at the end of the General secondary education, and scores on this

exam determine if a student continues to the preparatory school or is placed in the TVET track. This national exam is also determines which level of the TVET the individual can join. Furthermore, the allocation of the numbers of places for specialization is also centrally determined. In this regard, TVET system in Ethiopia is essentially command driven, even though the government recognizes the importance of ensuring the system is sufficiently flexible and responsive to demands of industry, It is important, therefore, to know whether TVET is well-received by the public in general and the students in particular (Tsegaye, 2003).

Students' attitude and interests towards the training program will have impacts on acquiring the necessary skill and knowledge. For effective training to occur in TVET, the training needs to match to the students' characteristics, including their attitudes, interests, and motivation. In addition to this, attitudes towards fields of a study are influenced by many factors. Some of these factors could be attributed to employment opportunity, job prestige, achievement educational level, gender and the like which have a great impact on trainees' perception on the field of the study as future preference of profession (Morrow,1995)

1.2. Statement of the problem

Technical and vocational education and training (TVET) today faces huge demands, challenges and opportunities. Labour markets are rapidly changing and youth unemployment and social disengagement are among many pressing concerns facing UNESCO member states. Worldwide, governments and other stakeholders expect TVET to address multiple social and economic development priorities, from poverty reduction, food security and social cohesion to economic growth and competitiveness. (UNESCO, 2012).

Unemployment is remaining a very crucial issue that needs more attention, for many countries in the world. Moreover, it becomes very challenging of economic development. TVET plays major role with the reduction of unemployment, as its objective is to provide trained workers in various applied fields, to provide technical knowledge and technical and vocational skills. Therefore trained work force has lion share of in bringing up of economic development, self-employment, attract foreign direct investment and expansion of industries. Nevertheless, the Rate of enrolment and completion

rate in Technical and Vocational institutes is going to be low day by day which results in decreasing in well-trained workforce. (ICBEM, 2015)

According to ICBEM (2015) report, presently so many youth graduated from formal TVET program is unemployed. Youngsters are interested in white collar job and feel embarrassment in job, which is related to practical work or work in factories. For example, In Pakistan perception on Technical and Vocational Education is negatives and considered a low status jobs relating to it. This is the main reason of unemployment, which is spreading all over the country (ICBEM 2015).

Technical and vocational education in Ethiopia also was encircled with so many problems. Having recognized the problem the government has decided to reform TVET system since late 1990s. The reform was delayed and focused on massive expansion of public TVET supply. Therefore, training programmes lacked relevance to the workplace reality. the programmes, by-and-large, do not address actual competence needs in the economy, with most programmes of low quality and theory-driven due to resource constraints and lack of skilled TVET teachers. A systematic integration of TVET with the world of work has not yet been achieved. Most curricula used in formal TVET were not developed based on occupational standards (MoE, 2008).

According to new TVET strategy Ethiopia mainly focus on having middle level human power and transfer demanded technologies, and by doing so, to contribute to poverty reduction and sustainable development. Ethiopia's national TVET strategy is mainly aimed at encouraging job creation and self-employment in the economy. The strategy also highly intended to create integrated, coherent and outcome-based TVET system, which includes formal, non-formal, informal, initial and further training for all sectors. Because of this significant strategy, now a day the numbers of TVET institutions are increasing even more and more from time to time. Ethiopia has increased the number of TVET institution from 153 in 2003 to 505 in 202. (MoE, 2008).

In Ethiopia, as in many African countries, TVET suffers from a relatively poor public image. TVET is usually associated with low status job, low salary and lack of personal development opportunities, partly due to the low quality of previous TVET programmes that did not allow TVET graduates to successfully compete in the labour market. TVET is generally perceived as a place of last resort for those students who failed to get into higher education (MoE, 2008).

According to Tigist (2014) attitude of students towards technical and vocational education were negative. As the study implies, students were more interested in attending preparatory program than technical and vocational education. But the gap in this study is, it is not specified the area that students attitude is negative. It is generalized as students' attitude is negative but it was better if it was expressed their attitude in relation with job opportunities of TVET, quality of TVET and the like. Therefore, this study investigates students' attitude towards TVET from different angles, first by presenting the problems observed in yeka sub city TVET colleges.

Students of government TVET in yeka sub city were not ready to attend the program and most students were interested white-collar jobs. Students still consider TVET as for those of unable to pass grade 10 national exam, as a result; they prefer to join preparatory program. Therefore, this study is very use full in understanding the attitude of students towards technical and vocational education and further to propose to the policies to address this issue. Therefore, this study will answer the following research questions.

1. How do students perceive technical and vocational education?
2. What is the attitude of students towards TVET?
3. What are the factors that contribute to such attitude?

1.3. Objectives of the study

1.3.1. General objective

The general objective of the study is to investigate students' attitudes towards TVET and training program.

1.3.2. Specific objectives

1. Investigate the perceptions of students on the value of TVET
2. Identify the attitude of students towards TVET program
3. Examine factors affecting students attitude towards TVET

1.4. Significance of the study

The study has the following significances for communities of TVET, the researcher himself and other concerned bodies.

1. It will help the institutions to identify their problems and take timely measure
2. The study will help in reflecting the status of students attitude
3. It will serve as a reference for those who are interested to conduct study in the area

1.5. Delimitation of the study

The study was delimited to Addis Ababa city administration yeka sub-city, government TVET Colleges on the topic Attitude of students towards Technical Vocational Education and Training.

1.6. Limitation of the study

One of the major problems that the researcher faces was reluctance of some students and teachers to fill out and turn back the questionnaires in time. On the other hand, lack of time is the other obstacle that the researcher seriously faces. However, the researcher managed these limitations with continuous follow up and negotiation.

1.7. Organization of the study

This study is organized into five chapters. In the first Chapter, background of the study, statement of the problem, research questions, objectives of the study, significance of the study, delimitation of the study and definition of key terms are included. In the second Chapter, relevant review of the related literature was incorporated. The third Chapter presented methodology, which included design of the study, data sources, sample population and sampling technique, instruments of data collection, procedures of data collection, and data analysis. The fourth Chapter dealt with presentation, analysis, and interpretation of data. The last Chapter incorporates the summary of major findings, conclusions, and recommendations.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. The Concept of Technical and Vocational Education and Training

Technical and vocational education has historically been known as “education for work.” Mainly it has aimed at focused on providing the necessary skills and knowledge needed for students to bring positive changes to the workplace. For example, in United States of America, technical and vocational education is broad in its scope and complex, as it includes many grade levels, subject areas, and educational institutions. The TVET system initially it was focused on entry-level job preparation to include adult retraining programs, college preparatory coursework, postsecondary options and programs, and many other options. However, technical and vocational education in America continues to play great role in its education system. It also plays a significant role in educational systems across the globe. In developed countries such as Australia, Germany, Great Britain, and South Korea, TVET is a key to economic prosperity, while in developing countries TVET is seen as a key to economic self-sufficiency (Chris, 2016).

Technical and Vocational education (or Vocational Education and Training (VET), also called Career and Technical Education (CTE) that focused on students to get career or practical activities related to, a specific trade, occupation, or "vocation." These are what we call traditionally non-academic. Vocational education sometimes opposed with education because education is broader scientific field, that depends on theory and abstract conceptual knowledge, characteristic of tertiary education **(** New world Encyclopedia, 2015).

According to MOHTE (2005**)** Technical and vocational education designed to obtain middle level human resource at (technicians, middle management, ET (usually) upper secondary and lower tertiary levels. It also largely focused on having engineers for higher-level management position at university level; Technical education includes general education, theoretical, scientific and technical studies and related skills training**.**

The main purpose of technical and vocational education and training in sub-Saharan Africa is focus on acquiring of skills that are helpful for the world of work. Because job-related skills, are plays a decisive role to make youth people and adults benefit from employment opportunities that offer a

decent income. In sub-Saharan Africa out of 200 million, it is estimated that 95 million young men and women are illiterate and are either unemployed or engaged in precarious jobs as street vendors and poorly paid workers in irregular and seasonal employment (Garcia and Fares, 2008).

MoE (2010) states that, the main objective of TVET sub-sector in Ethiopia is to train middle level human power and transfer demanded technologies, and by doing so, to contribute to poverty reduction and sustainable development. In this aspect, ESDP I, II, and III showed significant achievement with regard to increasing trained middle level human power. Under ESDP III, the new TVET strategy has developed in order to avoid challenges that exist before and national TVET strategy mainly developed in Ethiopia "to create competent and self-reliant citizens and transfer of demanded technologies to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty". In addition, under ESDP IV TVET shift from a system based on input to outcome, providing policy direction were the TVET focus direction, the nationwide education conferences and the reports on capacity building and manufacturing extension.

Presently technical and vocational education is considered as a best alternative with regard to reduction of dire poverty, creating new employment opportunities and income-generating activities and it can contribute for the development of economy in several ways. It gives wider opportunity in reversing or overcoming unemployment crisis in a nation across the world. TVET can play an important role in economic development and poverty reduction if it is properly implemented or consider education and training provision to local needs (NICHE, 2010).

2.2. The History of TVET in Ethiopia

2.2.1. TVET in Ethiopia

Technical and vocational education is started following the establishment of the first TVET in 1942 The first formal technical and vocational Education School in Ethiopia was established in 1942 followed the school- based model of training beginning from the establishment of the system. The beginning of TVET in the formal educational scheme dates back to the founding of the 1st TVET School in 1942 in Addis Ababa which had the name Ecole National des Artes Technique (re-named later on as Addis Ababa Technical School). The school offered trainings in many occupational fields such as electricity, economics, woodwork, secretarial science, accounting, auto mechanics, building

construction, carpentry. Qualified candidates were enrolled into the three-year training program me known as 8+3 program, and upon completion, they were awarded diplomas. Over the years, Addis Ababa technical school underwent a number of changes in terms of the trainings offered and their entry level and duration (Eden, 2006).

The school offered the 8+4, 10+2, and 10+3 programs and applicants from many parts of the country with the best academic achievements competed for admission to the then prestigious school. In 1943, the Addis Ababa School of Business and Administration (later renamed Addis Ababa Commercial College and now currently named Addis Ababa University Commercial College was inaugurated with the aim of supplying trained personnel in the vocational fields of accounting and secretarial sciences for business and commerce, as well as for civil service. Later, banking and finance training fields were added. It offered trainings at the 8+4, 10+3, 11+3 and 12+2 levels. Currently, it offers Bachelor of Arts and Graduate degree level programs under Addis Ababa University (Abebe, 2010).

According to Abebe, (2010) in 1962, an educational reform in the country was made which saw secondary schools curriculum transform to a more inclusive education and training. This made TVET more available to students. Even though this reform was not well supported by the resources essential for its success, it was made with the intention that TVET will offer the chance for the secondary school students to join the world of work right after completion of secondary school. In reality, an alteration offered the needed attention and credit for the significance of TVET in the education scheme.

In 1963, the Bahir Dar Polytechnic Institute was established which further sustained the development of TVET in Ethiopia. This school was later upgraded to a higher education institution level and currently it offers Bachelor and Graduate degree level programs under the name Bahir Dar University. Abebe (2010) argues that no major institutional expansions or development agenda intended at developing TVET took place in the educational scheme between the mid-1960s and the mid- 1980s (Abebe, 2010).

Wanna, (1996) made a study in 1978/79 to review the quality of training in comprehensive secondary schools. The results of the study recommended that a few comprehensive secondary schools be selected and strengthened to give effective training. As a result, 14 consolidated government training schools and 3 non-government schools were established. These schools were

organized to admit students who completed Grade 10.There were two streams in secondary schools– academic and vocational. Students who performed well in completing Grade 10 and who were interested in entering a technical school were assigned and trained for three years.

According to Wanna (1996) that the aforementioned vocational /technical schools had been in operation since 1984 as a '10+3 programs' and all 14 government technical schools were managed by the Ministry of Education of the 14 technical schools, Entoto Vocational and Technical School, General Wingate Construction School and Addis Ababa Technical School were in Addis Ababa. All the technical schools continued providing their training at the 10+3 level up to the 2000/2001 academic year. In 2001/2002, the new education and training policy came into effect and 10+1, 10+2, 10+3 TVET programs began (Wanna, 1996).

Starting from 2001/2002, the TVET program came into practice according to the 1994 education and training policy. Students who completed Grade 10 and were unable to continue academic learning were assigned in 10+1, 10+2, 10+3.In an Ethiopian context, the term TVET combines theory and practice elements of education, such as specific calculation, knowledge about certain materials, working methods and also practical training through instruction in the workshop of an institution or practical work in an enterprise (MoE, 2008).

2.3. The Importance of Technical and Vocational Education and Training

Technical and Vocational Education and Training (TVET) is viewed as a tool for productivity enhancement and important with regard to poverty reduction (Margarita, 2014).
In this 21st century, technology is changing very fast that affects the way society works and lives. TVET is a key to anticipate and response accordingly by offering relevant programmes, suitable curriculum, and new ways of teaching-learning and assessing the students (Paryono, 2017).

Working and living in global community, TVET should not only prepare the graduates for the local and national job market but also regional and global. This will also affect the way TVET is planned and run (Paryono, 2017).

We cannot ignore the fact that humans have made significant progress in developments but at the same time is also creating negative effect on its sustainability, especially in regards to environmental sustainability. TVET as the major producer of skilled workforce must play significant roles in

addressing sustainable development. TVET players must play at different levels such as creating awareness, be the agent that promotes SD, creating workforce that support green technology, and in developing and implementing regulatory or monitoring tools to assess the sustainable practices (Paryono, 2017).

According to Fernandes (2005) cited in Joel (2012) Education is a vehicle to Life goals and essentials of good life. Philosophy which is theory need to be put into practice, this statement then suggest that for a theory to be effective it has to be put into practice so as to result into education. Any good education is the one that put theories into practice

Vocational pedagogy theory (Lucaset, 2012) advocates that the evidence is clear that vocational education needs to be taught in the context of practical problem-solving. The best vocational learning is broadly hands-on, practical, experiential, real-world as well as, and often at the same time as, something which involves feedback, questioning, application and reflection and, when required, theoretical models and explanations.

2.4. Policy Frame Work of TVET

Technical and Vocational Education and Training (TVET) provides trainees with the technical skills applicable for the particular trade. In practice, different types of programs are included under the umbrella of TVET.Grubb and Ryan (1999) cited in Krishnan 2013) distinguish the following four types of programs. (1) Pre-employment VET –prepares individuals for the initial entry into the employment. The regular track of the TVET in Ethiopia falls under this category. (2) Upgrade training provides additional training for the employed individuals; (3) Retraining provides the training for individuals that have lost jobs or for those wishing to switch careers; (4) Remedial VET provides training to individuals out of the mainstream labour force (Krishnan, 2013).

In Ethiopia, students in grades10 and 12 take a centrally - organized examination, conducted by the National Education Assessment and Examination Agency (NEAEA). The tests consist of the multiple choice questions and are marked electronically. Failure rates in these tests are very high. One third of all students and half of all the girls fail the exam (Joshi & Verspoor, 2013 cited in Krishnan).The students that pass the exam in grade 10 can continue to preparatory school (grades 11 and 12), while the remainder are expected to pursue TVET or join the labour force.

There is another stream of individuals that can go to TVET those who could not get sufficiently high scores to go to university during the national exam at the end of grade 12. In addition, students can go to TVET from the universities, in which case they can go to level 5 (Krishnan, 2013).

According to the Education and Training Policy (ETP), the formal TVET system of the country requires completion of a tenth-grade education to obtain certificate, diploma and advanced diploma upon completion of the levels 10+1, 10+2 or 10+3 of the TVT program. (Educan Foundation, 2009). As to the new National Technical and Vocational Education and Training Strategy of 2008 the aforementioned system, was replaced by the kind of training program that based itself on leveling as L1, L2, L3, L4 and L5 (Demessew, 2012).

TVET training is delivered at five levels (levels one to five; increasing in duration of training from one to three years and level of skill on completion, with level five being the highest) by competent trainers at all levels (Level C, level B and Level A; increasing in level of skill) (MOE, 2015).

As the system expands, ongoing recruitment of trainers will be required to match enrolment increases. In addition, ESDP IV analysis showed that the current trainer distribution is not aligned with need. In particular, there exists a shortage of trainers at B-Level and of industry trainers at all levels. Trainers will be recruited from industry and directly from TVET institutions. Higher-level TVET completers become eligible for trainer positions and this process will continue – helping to ensure that up-to-date skills are retained within the training system. C-level institution trainers will be recruited from level four and above training completers who are ethically and technically competent and interested in completing the upgrading to become a trainer. While hiring C-level trainers, female candidates will be preferred in order to increase the share of female trainers to 32%. Trainer updating and upgrading will also take place to promote C-Level to B-Level and B-Level to A-Level, as required to match training needs (MOE, 2015).

The core business of the TVET institutions is the development and delivery of sufficient well-trained and competent workers to satisfy the demands of industry. During ESDP V, the system reform initiated under the TVET strategy will continue, with a refreshed emphasis on the enhancement of quality. An outcome-based Training system, which meets the demand of the priority sectors of the second Growth and Transformation Plan, will be realized. Trainees will join TVET institutions to receive market-driven training. There are two types of training provision: formal training and non-

formal training. At the end of either training type, assessment will be conducted to check the acquisition of competencies in line with OS. Formal training targets those who have completed Grade 10 of general education. Formal programs are provided at five levels, with student enrolment depending on performance in their general education completion examination results. By the end of ESDP V, expert trainers to improve their productivity will support the TVET system and the overall capacity for adapting and fabricating high technology prototypes will rise (MOE, 2015).

2.5. International practice of Technical Vocational Education and Training (TVET)

2.5.1. Practice of TVET in Democratic Republic of Korea and Mongolia

In order to cope up with the rapid development of science and technology, all sectors of the economy need abundant skillful technicians and specialists. In recognizing the important role of technical and vocational education in socio-economic development, the government of the DPR of Korea has placed great emphasis on its promotion and development. It is provided largely through the following systems: regular education system via secondary schools and specialized schools, and field education system via vocational schools (UNESCO, 2000:16).

Both the regular and field education systems intensify basic technical education and specialized technical education. The former places emphasis on the choice of subjects, for example, electronics, automation, theoretical dynamics and material dynamics. Sequence of subjects is also ensured. The latter actively introduces the latest achievements of science and technology in a specific field. It also imparts technical skills of operating electronic automation equipment and other modern technical means. (UNESCO, 2000:17).

In secondary schools, technical studies are incorporated into the curriculum in the last two years of secondary education. Students learn the basic principles of production and technology and study how modern technical equipment is used. They also acquire practical skills based on specific regional characteristics and needs of the local community, For example, schools near factories teach skills needed by workers in that field, whereas students in agricultural areas study farming techniques, technical details about tractors and other machinery, and crop chemicals and fertilizers. In addition, specific technical knowledge and skills are taught to girl students through “Girls’ Practical Skills”. (UNESCO, 2000:17).

Vocational schools are located in the field. Large factories and industries run these schools in the DPR of Korea. They enroll secondary school graduates and in-service workers for 6 months to 2 years, depending on the field. Practice constitutes about 60 to 80 percent of the curriculum time. The government has established a system of day-to-day technical and functional study so that workers and farmers are engaged in regular study and skill improvement to keep abreast with changes in the world of work. (UNESCO, 2000:18).

In order To improve the quality of education, technical and vocational teachers must continually upgrade themselves and acquire new techniques in their fields. They must also have a strong background in teaching and lecturing skills, and the ability to weave new techniques into the curriculum. Secondary school teachers are retrained for 15-20 days a year during the summer and winter vacations. They also go through a two or three month long intensive retraining every four or five years. Teachers at technical universities, specialized schools, and factory colleges are retrained by the appropriate technical universities, and are retrained intensively every three to four years. (UNESCO, 2000:18).

The Practice of TVET in the case of Mongolia

Clearly solutions are needing help the large percentage of the Mongolian population that is untrained for work. Technical education and vocational training (TVET) is essential, so they will acquire skills and become successful employees. Several industries collapsed following the transition to a market economy, leaving even more people without jobs. TVET was then not a priority for the government since newly trained workers would still not be able to find employment. Recently new enterprises have been started through the privatization of industry and the creation of small and medium sized businesses. They bring promise that regenerates the hope for economy and provide new jobs. The nation still needs knowledge from foreign countries to learn modern technologies and entrepreneurial skills, so even more new businesses can flourish. More and new TVET is, again, necessary in Mongolia to help the society grow and prosper. At present, the most needed skills are in the fields of construction (foreman), sewing, photographing and hairdressing. To cater to the newly arising large demands of vocational education, a new section on TVE has been established under the National Institute for Education; the National Programme on TVE has also been formed. Vocational schools have tuition rates that are too expensive for many poor families. One of the reforms carried

out, therefore, is to explore innovative methods of vocational training in order to reach all citizens. (UNESCO, 2000:24).

The Mongolian government, with assistance from the Asian Development Bank, designed strategies for the development of TVET in 1999. The first goal is to adjust TVET to better meet the needs of the market by evaluating the market and population and providing appropriate career counseling. National standards and examinations for vocational aptitudes is another goal to improve training and strengthen cooperation between educators and employers. Improving teacher training and upgrading is also important, so that current skills are being taught. By upgrading facilities, students will be prepared to work on the equipment they use when employed. Students will be taught most appropriately with new, updated textbooks. Finally, the Mongolian government plans to reconfigure finance strategies for TVET programs to allow the previous goals to be achieved. When these goals have been achieved, TVET should be available to those who need it. Innovative methods that minimize expenditure and maximize results should be identified, rewarded, and implemented everywhere. The project at No. 7 School in Ulaanbaatar is an example of such a programme. (UNESCO, 2000:24).

The Arts and Crafts College and the Building Construction College assist the project further by conducting theoretical and practical lessons and holding exams to students. The Association of Employers of Ulaanbaatar also observes the project, giving advice on the activities, attending final examinations, and assessing the skills of students. The Labour Coordination Department of Han-Uul district, where Ulaanbaatar is located, and some factories affiliated with the Association of Employers have also been involved with the project. (UNESCO, 2000:24)

2.5.2. Practice of Technical and Vocational Education in Ethiopia

MOE (2008:1) states that TVET has to respond to the competence needs of the labor market and create a competent, motivated and adaptable workforce capable of driving economic growth and development. The main thrust of the strategy is that TVET development relies on an outcome based system and dedicated and trusting cooperation among stakeholders.

TVET Colleges are responsible to produce a number of trainees as per the ratio of 1:3:24 to meet the manpower demand of the country. If there one person is trained in level V Program, there must be

three professionals in level III and IV programs. Through short Term (in formal training system), training twenty-four trainees should be trained in level I and level II programs.

2.5.2.1. Delivery of Technical and Vocational Education in Ethiopia

TVET provision of technical and vocational education in Ethiopia comprises of all modes of formal, non-formal and informal trainings offered by either government and/or non-government providers such as non-government offices (NGO), or private institutes. TVET provision is open to a variety of groups such as illiterates, school leavers, school dropouts, farmers, entrepreneurs, and other groups (Biazen and Amha 2009).

The formal TVET programs are for those students who have failed to achieve the Ethiopian General Secondary Ethiopian General Secondary Education Certificate Examination (EGSECE) scores for admission to preparatory program. Students in the TVET path could attend programs that range from one year to three years that would enable them to join the world of work. Working people also join the formal program through distance learning and evening classes. Informal TVET is described as those man oeuvres, which are operating unregistered with a low level of organization are said to function mostly through home-based activities or in small channels without fixed locations. The government has small or no straight association with informal TVET in other words it is not supported or regulated by the government (MoE, 2008).

On the other hand the non-formal TVET is provided to wide range of target groups such as school dropouts, those with below grade 10 education or lower including illiterate people, unemployed, youth and adults, who could produce supporting letters from their respective woreda's. The training is offered through different channels (community based, institutional, apprentice-ship) such as Community Skill Training Centres (CSTC), prisons, and farmers training centres. The trainings are offered over different periods from short-term courses of a few days to long-term programs of up to 6 months. The selection criterion of trainee's for non-formal TEVT depends on the training centre's own basis. No one criterion is sufficient for recruiting trainees. Most training institutions employ a combination of criteria to recruit their trainees. What is common to all institutions, except the private ones, is having low income and having the interest to be self-employed after completion of the training programs. Since the private institutions are profit makers, they enroll all those who could afford it (Biazen and Amha, 2009).

2.5.2.2. TVET Curriculum Development

Every formal government training establishment is responsible for developing their own training materials based on the centralized occupational standards (OS) facilitated, monitored and evaluated by regional TVET agencies. Model training materials is developed and disseminated by the Federal TVET Bureau to the regional TVET agencies in order for them to develop their training material based on their local market needs and surroundings. At the beginning of the TVET programme in 2002, all training materials were prepared centrally and used by all institutions. Those materials were prepared for 10+1, 10+2 and 10+3 but Occupational Standards (OS) changed the programme shortly in 2004 (MoE, 2008).

This curriculum reform aimed to ensure quality and relevance of TVET by facilitating the setting of National Occupational Standards, which is equivalent to international standards and organizing an occupational assessment, and certification system, which offers National Occupational Qualification Certificates to those who have proven, in an assessment, that they are competent in accordance with the defined occupational standards. The development of the occupational standards has been categorized into five levels now i.e. Level 1, Level 2, Level 3, Level 4 and Level 5 packages. The Level 1 and Level 2 pack-ages are short term training packages and are developed for those not entitled to enroll in the 10+1, 10+2 and 10+3 program i.e. students who drop out before completing grade 10 (MoE, 2008).

An outcome-based TVET system, which is the centerpiece of the TVET reform, strives for enhanced quality and relevance of TVET. It plans to make it easier to recognize the wide range of non-formal training and informal learning schemes available, opening access to previously neglected target groups. Responsibility for establishing and facilitating a national occupational assessment and certification system rests with the Federal TVET Agency. It stipulates rules and procedures for assessment item development, for conducting assessments and will facilitate, supervise and regulate the system. Responsibility for implementing the occupational assessment, i.e. ensuring that assessment is properly conducted and certificates issued, rests with the state TVET authorities (MoE, 2008).

2.6. Challenges of TVET

2.6.1. International Challenges of TVET

Challenges to TVET in Developing Countries

Although many developing countries have committed resources to TVET and have made substantial progress, challenges still remain in most of the TVET systems.

According to UNEVOC (2005) the following challenges of TVET were identified.

1. TVET does not respond to the demands of the market and the needs of industry. Many of those leading the TVET system look at industry not as partners but as source of funds. They have no desire to develop partnerships with industry beyond funding.
2. TVET does not promote the priorities of the Government especially its economic policy. TVET, being part for a long time of education, still sees itself as part of social policy not of economic so TVET managers are not even aware of the country's economic priorities.
3. Most developing countries put less value to TVET than university or college tertiary education. Parents and the community as a whole look down on TVET so bright students often veer away from this and TVET became the dumping ground for those whose academic capacity is not up to the requirements of higher learning. One high school offering TVET divided the students into the Science group and the TVET group based on average academic performance.

   In another school, the division is by interest of the student, so students who want TVET enroll in Electronics or Automotive or Construction. However very few students opt for TVET especially among the female enrollees. Two or 3 girls in a school year is what TVET gets. This really affects the flow of bright technicians to industry.
4. Resources for TVET are very limited. Previous investment is left idle due to expensive trading supplies no capacity to repair the imported equipment and few knowing now to use it. Some of this equipment has already relics of previous industrial requirements. No much contribution from the private sector has come in to support TVET. The private sector would rather spend money to train their own workforce than to ask TVET institutions to do some give the poor quality of the course offerings.
5. Lack of transfer across streams in the education system. The idea of enabling students to move from one stream to another with easy so that they can see a better career path

whichever entry they take is not getting much support in its enforcement. Each part of the education budges guards its own offering with very little regard for the students' needs or demands. There is not much sharing among institutions or private sector training.

6. Weak participation from other stakeholders. This largely results from the relevance of TVET programs and lack of skills of TVET graduates in industry. If industry is strongly involved in TVET chances are its graduate can easily find employment.
7. Lack of industry experience for many teachers. TVET institutions cannot really hire trainers from industry as their fees are much higher often; TVET institutions have to higher graduates of the government teachers training institutions in one country the graduate of this type of training institutions are sent to technical colleges each year regardless of the school needs.
8. Lack of motivation for students to invest in TVET education which they know will not land them jobs. Whereas TVET institutions offering courses relevant to the needs of the market are getting students working to support themselves in these course
9. Curricular challenges. Attempting to reconcile TVET activities with academic courses become difficult for many schools. Most of a time, the two types of instruction are separate and do not intersect. This is unfortunate because in productive learning it is important to contextualize in a real life setting the abstract lessons of the classroom. The various academic disciplines can converge around productive learning in ways that allow students to understand the interrelationships between the natural sciences, social sciences, mathematics, and humanities. In this regard an interesting experiment takes place in Mexico: All the publicly-funded secondary technical vocational schools offer, since the autumn of 2004, thematic interdisciplinary curriculum that also includes the productive activities.

2.6.2. Challenges of TVET in Ethiopia

With the introduction of the new middle level TVET programmes, an industrial attachment period has been introduced to formal TVET. However, its implementation has faced a number of problems, mainly due to the lack of cooperation of the employers as they were not consulted during the planning process. An internship and cooperative training system based on profound cooperation

between TVET institutions and employers and a joint training delivery still needs to be developed in order to increase the quality of TVET and hence the employability of graduates. (MOE, 2010)

There are also indications that TVET lacks effectiveness and efficiency. Studies have shown that many TVET graduates remain unemployed even in those occupational fields that show a high demand for skilled manpower. Furthermore, substantial resource wastages occurred as a result of underutilization of equipment in public TVET institutions (MOE, 2010).

The shortage of a sufficient corps of TVET teachers/instructors represents one of the obstacles to TVET development in Ethiopia. The quality of TVET teachers/instructors has suffered as a result of the low reputation of their profession. Most TVET teachers/instructors have relatively low formal qualifications, severely affecting TVET delivery at higher qualification levels. Furthermore, technical teachers, more often than not, have been unmotivated. They did not choose to become technical teachers, but were placed in technical teacher colleges because there were no other options available to them. Finally, existing TVET teachers/instructors are (mostly) inappropriately practically skilled, i.e. not competent to provide TVET in accordance with the occupational standards. This is a result of a training system that long emphasised theoretical knowledge (though often not aligned with modern technology requirements), disregarding the importance of practical skills and appreciation of the world of work (MOE, 2010).

Finally, under-funding is a structural problem in the TVET sector, particularly in the public system. Costs of TVET will remain high, if it is to be provided as centre-based training, which is still the predominant mode of TVET delivery in Ethiopia. As with most other countries, public TVET programmes in Ethiopia are usually more expensive than general education, requiring lower than average teacher/student ratio and substantial capital and recurrent expenses incurred through practical training. As a consequence of budgetary constraints, most urban public TVET programmes are under-funded while rural public TVET programmes suffered from poor facilities and shortages of training materials (MOE, 2010).

2.7. Attitude of students towards TVET

Several studies were conducted in different times to identify the Perceptions of Students toward technical and Vocational Education. According to Chambliss and Chiariello, as cited in Al-sad 2007)

literatures emphasized that there is problem in attracting of students with an interest and a need for a change of technical and vocational education program. Therefore, the researcher conducted the study to explore the perceptions of secondary school students enrolled in a Specific vocational program to identify necessary changes. The study included 244 participants and survey was used mainly to determine Beliefs of students about the importance of current trends in vocational education, measured students' opinions of their current vocational/technical education program. The researchers' findings indicated that students perceived a need for Considerable change in the current vocational education programs. The participants indicated that there was a need for change in the quality and diversity of vocational education.

Teferi (2011) is conducted a study to examine the attitude of students towards TVET program and the result of the study indicated that majority of participants make sure that TVET program is their favorite field of study. And, preferred TVET to academic subject viewed TVET as fascinating and fun, liked their current fields of study, aspired to learn more in TVET program and felt that they developed positive attitude to the technical jobs and TVET program.

According to Nassir (2014) attitude of students towards technical and vocational education is positive. As the study shows that, majority of high school students consider TVET as very crucial with regard to job creation as well as for the development of the people and the country. As of the study, TVET is their favorite field of study, as it would help them in building their self-confidence. They also believe that TVET is an alternative means to get a job in the same time they promised to encourage others to join TVET, because it is confirmed TVET is not boring and using time and money properly.

Tigist (2014) examined attitude of students towards technical and vocational education. The result revealed that Students had unfavorable attitude towards TVET program. More than 60% of students had a plan to attend preparatory program and TVET was their second choice.

2.8. Factors affecting students' attitude towards technical and vocational education

On factors that influence attitude of an individual, Gopi (2005) cited in Joel L, 2012) identified eight factors: maturation, physical factors, home influences, the social environment, government, media, the teachers and the curriculum. These factors have great impact on students to have either positive

or negative attitude towards vocational education and training. They may emerge due to direct personal experience, or they may result from observation. Social roles and social norms can have a strong influence on attitudes. Social roles are related on how people are expected to behave in a particular role or context. Social norms involve society's rules for what behaviors are considered appropriate. This may result from classical conditioning, operant conditioning or observation of people around .Florentina (2005) cited in Joel L, (2012) adds to it that education and religious institutions are among the factors that influence attitude. It is further argued that educational and religious institutions have a strong influence in shaping attitudes because they lay the foundation of understanding and set moral concepts within the individual. Understanding of good and bad, the dividing line between what can and cannot be done, derived from educational and religious centres and its teachings.

Lavendets et al (2006) cited in Al-sad a (2007) examined that the attitude of students towards technical and vocational had influenced by their parents. The result of the studies outlined that, parent's income, occupation and level of education can affect student's choice towards Technical and Vocational Educational.

According to Indoshi et al (2006), cited in Al-sad a (2007) peer pressure is mentioned as one of the major factor that influence students attitude towards technical and vocational education. In time of selecting TVET, Some students select that subjects which their friends chose. Some peer group belongs to any social class who share same values so peers group influence to their Peer in the choice of Vocational Education.

As studies indicated that student's perceived career related to Technical and vocational education associated with low payment and low status by the community. Therefore, future career and employment opportunities affect student's attitude towards technical and vocational education (Ozioma, 2011) Different researchers find out that socioeconomic background of students determined attitude of students towards technical and vocational education. As the study briefed students perceived) Technical and Vocational education is for students from Poor socio-economic background (Awang et al 2011). On the other hand, Lavendets (2006) et al as cited in Al-sad a (2007) identified that parent's place of living affect selection TVET as career. In general the findings of researches clearly show that there are many factors that affect students' attitude towards Technical

and Vocational Education. There are some factors, which have a direct relation for formulation of students' attitude like parental influence, and some variables have indirect relation in formulation of student's attitude like future career and job potential.

Research findings indicated that, factors that influence the attitude of subjects towards the Study of technical vocational subjects are interest, shortage of teachers and instructions, parental socio-economic status, gender and shortage of guidance and counselors in secondary schools. Since Technical vocational education and training is the development of skills, knowledge, abilities and behavior necessary for entry into or advancement in a specific occupation, students should be properly integrated into it to enable the students acquire the basic knowledge of Technical vocational education and training subjects (Ozioma, 2011).

2.9. Barriers to the attractiveness of TVET

1. Lack of demand from employers

Supply of TVET cannot generate sufficient demand from employers. Failure of employers to demand TVET from their employees or prospective employees will, in turn, affect the demand for TVET from prospective employees. Whatever we think of human capital theory (HCT) as an exclusive account of the propensity to invest in TVET, it is nonetheless the case that individuals are less likely to do so if low or zero economic returns are known to be the result. In any event, were an individual to so invest, the inability to transform that investment into employment commensurate with the skills and qualifications achieved would tend to discourage other individuals from making such an investment (UNESCO, 2013).

The main reason for employers not investing in TVET is that, there is inadequate return on investment. Employers are likely to invest in TVET if there is a positive economic return from doing so. However, it may well be the case that the business strategy of employers is not consistent with extensive investment in TVET. A common reason for this is the existence of low-skill equilibrium (LSE) in the economy. In an economy run as an LSE the dominant pattern is production by low-wage employees, of low-specification, low-cost goods and services which are purchased by people who can only afford goods and services of this low quality. Equilibrium in this sense is a state of

affairs any change to which would result in a loss of utility to at least one of the affected parties (Finegold, 1991).

TVET can be attractive to employers when it is supported by their business strategy. The existence of an occupational Labour Market (OLM) in the relevant occupations helps considerably. An OLM ensures that there is an adequate supply of skilled labour which is relatively mobile within the occupation. The loss of a valued employee can be minimized through easy recruitment. It is important to point out however that unless there are appropriate institutional arrangements to prevent it, there remains a possibility that a single employer could fail to provide TVET but benefit from its rivals doing so. This situation would, inevitably lead to the disappearance of the OLM unless there was an exogenous supply of trained labour. OLMs are therefore usually supported by institutional arrangements. These are often voluntarily arrived at by employer associations, but they typically also need regulatory and resource underpinning by the state. Such arrangements include (UNESCO, 2013).

2. Suspicion on the part of trade unions

Such suspicion is by no means universal. In countries with strong social partnership institutions and OLMs, trade unions are likely to show a deep commitment to high-quality TVET. However, there are two circumstances where the expansion of TVET may lead to suspicion. The first is where trade unions are organized on craft lines with informal apprenticeship. These could be disrupted by more formal kinds of TVET, which would undermine a union's ability to control entry into the trade. The second circumstance is where a trade that has traditionally relied on unskilled and unqualified labour is in a state of transition towards qualification or up skilling. Unless the situation is handled carefully it is quite possible that trade unions will consider the new arrangements to be a potential threat to the employment and conditions of their current member (UNESCO, 2013).

On the other hand, there are very good reasons for TVET to be attractive to trade unions under certain conditions. The need for good qualifications in an OLM can lend a degree of independence to employees relative to individual employers. Occupationally oriented trade unionism can benefit from a steady supply of qualified workers, who are relatively easy to organize along occupational divisions (UNESCO, 2013).

Critical to promotion of the attractiveness of TVET to trade unions is the development of social partnership arrangements in which practical problems of governance and implementation are addressed in a concerted way by employers, unions and governmental organizations. Some countries rely heavily on social partnership to ensure the running of their TVET systems, and in such arrangements trade unions play a central role (Streeck, 1992).

3. Lack of government action

Governments almost always find TVET attractive at an abstract level, but they will weigh up the benefits and costs in an economic and social sense, as well as the political capital that needs to be expended in order to achieve certain objectives.

Many governments are committed to up skilling and to the 'knowledge economy', whether or not this is an assumption that is useful for policy-making. Governments also have at their disposal various instruments that enable them to exert a positive influence on supply. The most effective are perhaps subsidizing employer-provided TVET and providing TVET directly. Both of course are expensive. There is also the possibility that demand will not match supply, and the 'deadweight' problem, in which state-funded provision of TVET replaces rather than supplements employer-funded provision (Welters and Muysken, 2004).

Other key areas in which governments can make a crucial difference include enhancing the quality of TVET through ensuring there are high-quality curricula, qualified teachers, suitable investment in buildings and equipment, stable and comprehensive governance and a recognized and trusted qualification structure (Watters, 2009).

4. Lack of demand from potential TVET students and their families

A number of factors can lead to a lack of demand for places on TVET courses. The Attitudes of potential TVET students and their families cannot however be considered in isolation from the attitudes of employers, governments and other players in the economy.

There is naturally a close relationship between employer demand for TVET qualifications and individual demand for TVET courses. Individuals might choose to enroll in TVET for more than one reason, particularly if the target TVET qualification is considered desirable for broader educational reasons, as well as useful in the labour market. But at the heart of the attractiveness of TVET to

individuals is the question of whether it will lead to a well-paid job. This has an impact in turn on its attractiveness to parents, trade unions and governments; and it depends, of course, on whether employers are willing to pay a premium for TVET course graduates (UNESCO, 2013).

Another issue of great importance for individuals and their families is the status of TVETcourses and qualifications. When an activity is perceived to be of low status it is likely to be seen as unattractive. Some of the factors that contribute to the low perceived status of TVET have deep cultural and historical roots which may be difficult to deal with. We can, however, make some fairly confident observations about these issues. Remuneration and status are closely related, although the relationship is not a linear one. Generally speaking good remuneration for those who have taken part in TVET is more likely to increase its status and attractiveness than relatively poor remuneration. So it is necessary to consider ways of countering both the cultural factors and the remuneration issues involved. It would be a step towards removing the lack of attractiveness of TVET to individuals if employers demanded more of it, but this is by no means a full solution (UNESCO, 2013).

5. The attitudes of schools

Schools in many countries, transition to employment is not a major preoccupation of their staff, and is it considered to be a major part of their mission. In those countries where mass secondary education leads, not to higher education, but to the labour market, the emphasis has tended to be on providing as good a secondary education as possible before the pupils enter general labour markets as unskilled or semi-skilled labour. Those who are destined for an apprenticeship are generally able to make arrangements for employment without too much help from their school (UNESCO, 2013).

Schools' knowledge of the labour market for their pupils and their ability to provide specific links to employers have tended, in many countries, to be limited, although this is not the case in many European countries, where careers advice is very well developed. Careers departments often lack the expertise to provide the kind of detailed advice and connections that an individual pupil might need in order to gain an apprenticeship or the appropriate kind of course at a college (Watters, 2009).

This has not been such a problem for countries where sections of the secondary school system have a strong labour market orientation. Germany and France for example have vocationally oriented schools, in Germany at lower as well as upper secondary level. In these countries TVET has a dual value (as general education and for the labour market), and the school leaving certificate tends to be

a requirement for enrolment on a TVET programme, providing both schools and pupils with an incentive to prepare for appropriate programmes (UNESCO, 2013).

2.10. Summary

TVET also refers to "deliberate interventions to bring about learning which would make people more productive (or simply adequately productive) in designated areas of economic activity (e.g., economic sectors, occupations, specific work tasks). This is the distinctive purpose of TVET. However, TVET will also have other purposes which are not unique to TVET, and which also apply to other forms of education, e.g., knowledge, skills, insights and mindsets which are deemed to be generally valuable for the learners, not only in designated areas of economic activity. Such "other" aims will be especially pertinent for longer and full time courses for youth in contrast to short and episodic training events (e.g., for persons already at work in the occupations concerned). TVET also needs to be conducted according to general social norms about how learners and people in general are to be treated by institutions, e.g., that persons be treated with respect. Thus "work productivity" is not the only aim and concern of TVET, but it is its distinctive objective which sets it apart from other forms of education and training" (MoE, 2015).

In case of Ethiopia (MoE, 2010) the main objective of the TVET sub-sector is to train middle level human power and transfer demanded technologies, and by doing so, to contribute to poverty reduction and sustainable development. In this aspect, ESDP I, II, and III showed significant achievement with regard to increasing trained middle level human power. Under ESDP III, the new TVET strategy has developed in order to avoid challenges that exist before and national TVET strategy mainly developed in Ethiopia "to create competent and self-reliant citizens and transfer of demanded technologies to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty"

The government has been working with eight priority sectors (agriculture, industry, economic infrastructure, and health, hotel and tourism, trade, mining, labor and social affairs) for the last five years to develop an outcome-based TVET system. This system is designed to ensure the competitiveness of the sectors through the provision of a competent workforce and demanded technologies. Major achievements during ESDP IV include the development of OS and assessment tools, assessors and assessment centres through the participation of the industries as well as the

delivery of all TVET training by competent trainers. The coverage of the cooperative training and the rate of competent training completers have increased. In addition, the establishment of industry extension services and the transfer of demanded technologies allow MSEs to raise capacity with a view toward substituting imported goods and to remain Competent in the market (MoE, 2015).

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Research design

A descriptive survey design was used in order to assess the attitude of students towards technical and vocational education. The rationale for the selection of this method is that it is helpful to gather enough information from many people on the issues under study. Many scholars noted the appropriateness of this design for such study. For example, Koul (1996:405) states that descriptive survey design becomes useful particularly where one needs to understand some particular information.

3.2. Sources of data

In this study, primary sources used to gather adequate information about the topic under study. A primary source is to get first-hand information and it is obtained from students, teachers and TVET deans.

This study was carried out on the target population of about 514 students and 112 teachers in five Technical and Vocational Education Colleges (yeka industrial college, kotebe TVET, Vision TVET, Ferensay TVET and Birhan TVET College). Because of their direct relationship with the study, department heads and dean of the TVET were also target population of the study. A primary data were collected from the representative samples of the above target population through questionnaire and interview.

3.3. Sampling Technique

The study delimited to yeka sub-city government TVET colleges. There are about five government TVET colleges, because of their smallness, all of them included in the study. In these five colleges, there are 514 students and 112 teachers. According to Louis Cohen and etal (2000) calculation, population size 514, a sample of 217 should be taken. Therefore, from 514 students 217 students were selected using stratified sampling because it is helpful to obtain enough samples from different departments. If the population size 112 it is advised to take a sample of 86.Therefore, from 112 teachers 86 teachers were selected using stratified samplings as it helps to get sample from different departments. TVET deans are selected using purposive as they provide enough information.

3.4. Instruments of Data Collection

A questionnaire and an interview were the main data gathering instruments. This was because of the need to collect adequate data for the study. Therefore, employing multiple data collection instruments helped the researcher to combine, strengthen and amend some of the inadequacies of the data.

3.4.1. Questionnaires

Questionnaires are used to collect relevant and first-hand information from key informants such as teachers and students. The items of the questionnaires were close-ended questions. The reason why questionnaires are use that, it is easier to handle and is simpler for the respondents to answer within a short period of time (Koul, 2008:146).

3.4.2. Interview

Structured interview was used to collect data from TVET deans. The reason why structured interview was employed is that the procedure to be used was standardized and determined in advance as well as to obtain answers to carefully phrased questions (Koul, 2008:176). Using this instrument was important to get thick data about the issue under study.

3.5. Procedures of Data Collection

In order to assess the attitude of students towards technical and vocational education, the researcher developed questionnaires and structured interview. Then, it was pretested (piloted) being administered to 10 teachers and 10 students of TVET in different fields of study. Accordingly, with some modifications and clarifications, the final instruments were developed and used for the purpose. The questionnaires were designed and administered by the researcher to teachers and students. An interview was also conducted through disclosing the purpose of the study based on the permission and willingness of the participants by the researcher.

3.6. Data Analysis technique

The researcher used different statistical techniques based on the nature of the data collected. Consequently, the data collected from the respondents were analyzed quantitatively and qualitatively. In analyzing the quantitative data, respondents' were categorized and frequencies were talled.

Percentage and frequency counts used to analyze the characteristics of the population as it helps to determine the relative standing of the respondents. Moreover, mean scores, standard deviations and independent sample t-tests were used for analyzing the questionnaires with five point Likert scales to assess attitude of students towards technical and vocational education.

The scale was interpreted as 5= Strongly Agree, 4= Agree, 3= Undecided, 2= Disagree, and 1= Strongly Disagree. For the purpose of easy analysis and interpretation, the mean values of each Item and dimension was interpreted. The mean values from 1.00-2.49 was represented as disagree, from 2.5-3.49 as undecided, from 3.5 and above represented as agree. Qualitative date, from the interview was summarized to validate the findings during the process of presentation and analysis of all data in each close-ended item as necessary.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This Chapter deals with the presentation, analysis and interpretation of the data collected through questionnaires and interview. The Chapter consists of two parts. The first part is concerned with the description of the background characteristics of the respondents of the sample population. The second part is concerned with the analysis and interpretation of the main data.

4.1. Background Characteristics of the Respondents

The questionnaires were administered to 217 students and 86 teachers. From these 200 students 151 students and 61 teachers returned the paper which shows papers for analysis and representing response rate of 69.5 % and 70.9% respectively. The background information of teachers (n = 61 and students (n = 151) who completed properly and returned the questionnaires were indicated hereunder.

Table 1: Background Information of Sample Students in the Study

Variables	category	no	percent (%)
Sex	Male	60	39.7
	Female	91	60.3
	Total	**151**	**100**
Age	15-20	35	23.2
	21-25	60	39.7
	26-30	30	19.9
	31-35	25	16.6
	36-40	1	0.67
	Total	**151**	**100**
Level of education	Level 1	46	30.5
	Level 2	53	35.1
	Level 3	35	23.2
	Level 4	31	20.5
	Level 5	12	7.9
	Total	**151**	**100**
Department	Manufacturing	37	24.5
	ICT	49	32.5
	Automotive	12	7.9
	Construction	26	17.2
	Others	27	17.9
	Total	**151**	**100**

Regarding the sex of the respondents, 39.7% of students were males and 60.3% of students were females. Therefore, the number of female students is greater than that of male students. Hence, this indicates that the majority of the students in the sample areas of the study were females showing that the number of female students is higher than male students.

Regarding the age of the respondents, 23.2% of the students were between 15 and 20 years and 39.7% of the students were between 21 and 25 years. The rest of the students 19.9%, 16.6% and 0.76% were between 26 and 30 years, 31 and 35 years, and 36-40 years respectively. This shows that the majority of the students were very young.

With regard to the educational level of the respondents, 30.5% of the students were level 1, 35.1% of level 2, 23.2% of level 3, 20.5% of level 4 and 7.9% were level 5. This indicates that majority of respondents were level 2.

Table 1 show that 24.5%, 32.5%, 7.9%, 17.2% and 17.9% of students were from department of manufacturing, ICT, automotive, construction and others department respectively. This shows that the majority of the students were in the department of ICT.

Table 2: Background Information of sample Teachers in the Study

Variables	category	no	percent (%)
Sex	Male	41	67.2
	Female	20	32.8
	Total	**61**	**100**
Age	21-25	18	31.5
	26-30	28	51.3
	31-35	11	16.6
	36-40	4	0.67
	Total	**61**	**100**
Educational level	BSC	14	22.9
	BA	9	14.8
	MSc	0	0
	Level 4 completed	17	27.9
	Level 5 completed	21	34.4
	Total	**61**	**100**

Regarding the sex of the respondents, 67.2% teachers were males and 32.8% of students were females. Therefore, the number of male teachers is greater than that of female teachers. Hence, this indicates that the majority of the teachers in the sample areas of the study were males showing that the learning environment was male dominated.

Regarding the age of the respondents, 31.5% of the teachers were between 20 and 25 years and 51.3% of the teachers were between 26 and 30 years. The rest of the teachers 16.6% and 0.67% were between 31-35 and 36-40 years, respectively. This shows that the majority of the teachers were young.

4.2. Analysis of data

4.2.1. Students Perception on Status of Technical and Vocational Education Occupation

This part deals with the discussion of the data gathered from respondents concerning students' perception on status of technical and vocational education occupation. The perception of students on status of technical and vocational education occupation was presented to respondents through questionnaires that they were required to rate the level of how student perceive the status of technical and vocational education occupation on the basis of a five point Likert scale. These five point scales range from strongly agree (= 5) to strongly disagree (= 1). Mean scores, standard deviations and t-test results were calculated from the responses. Thus, Students' perception on status of technical and vocational education occupation based on the responses of the respondents with a mean value from 1-2.49 represented disagree on the item, and if the mean value is 2.5-3.49 were represented as undecided and if the mean value is 3.5 and above represented as agree. Responses from the interview were summarized to validate the findings during the process of presentation and analysis of all data in each close-ended item as necessary.

Table 3: Teachers' and Students' Mean Scores on Status of Technical and Vocational Education Occupation

Item	Respondent Group	N	Mean	Std. deviation	Mean difference	t-value	p-value
1. TVET helps to develop the economy of our country	Teachers	61	4.33	0.908	0.988	6.210	0.00
	Students	151	3.34	1.322			
2. TVET leads to jobs which are well paid	Teachers	61	4.00	0.966	0.974	6.113	0.00
	Students	151	3.03	1.233			
3. TVET offer good career opportunities	Teachers	61	4.03	0.795	0.536	3.801	0.00
	Students	151	3.50	1.99			
4. TVET training leads to jobs, which are well regarded society	Teachers	61	2.25	1.011	0.105	0.694	0.489
	Students	151	2.35	0.967			
5. People in TVET learn skills that are needed by employers	Teachers	61	4.00	0.856	0.517	3.706	0.00
	Students	151	3.48	1.057			
Average	Teachers	61	3.74	0.64	0.560	5.419	0.00
	Students	151	3.18	0.76			

It can be seen from Table 3 item 1 that, teachers and students were asked to give their agreement or disagreement regarding TVET's contribution to develop the economy of our country. The Mean scores of teacher respondents and students respondent mean were 4.33 and 3.34 respectively, with mean difference of 0.988.The t-test result with p-value of 0.00 < 0.05 proves that there is statistically significant difference between the two groups of respondents towards the item. The t-value (6.21) which is greater than the t- critical value (1.96) shows that the two groups of respondents

significantly differ in their agreement on the item. This shows that teachers' respondents agree on the item, but students' undecided on the item.

With regard to item 2 in the same Table, the mean scores of teacher and student respondents were 4.00 and 3.03, with mean difference of 0.974. The t-test result with p-value of 0.00 < 0.05 indicates that there is statistically significant difference between the two groups of respondents towards the item. The t-value (6.113) which is greater than the t-critical value (1.96) also proves that the two groups of respondents significantly differ in their agreement on the item. This shows teacher respondents agree on the item TVET leads to jobs which are well paid. However, students replied that they were undecided.

The mean scores of the teacher and student respondents on offering TVET good Career opportunities were 4.03 and 3.50 respectively with mean difference of 0.536.The t-test result with p-value of 0.00 < 0.05 indicates that there is statistically significant difference between both groups of respondents on the item. The t- value (3.801) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. Both teachers and students agree that technical vocational education and training offering of good Career opportunities.

Regarding item 4 in the same Table, TVET's training leads to jobs, which are well regarded by the society, was also rated by each group of the respondents. The mean scores of the teacher and student respondents were 2.25 and 2.35 respectively; with mean difference of 0.105.The t-test result with p-value 0.489 shows that there is no statistically significant difference between the two groups of respondents towards the item. Similarly, the t-value (0.694) which is less than the t-critical value (1.96) proves that the two groups of respondents do not significantly differ in their agreement on the item. This, therefore, shows both respondents disagree on the item that TVET training leads to jobs which are well regarded by society. In the same way, the data obtained from interviews were that TVET jobs like being technician, mechanic and in general non office jobs are not well regarded by the society.

It can be seen from Table 3 item 5 that teachers and students were asked to rate students if TVET learn skills that are needed by employers. The mean scores of the teacher and student respondents were 4.00 and 3.48 respectively, with mean difference of 0.517. The t-test result with p-value of 0.00 < 0.05 indicates that there is statistically significant difference between the two groups of

respondents towards the item. The t-value (3.706) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. This shows that teacher respondents' agree on the item, TVET enables to learn skills that are needed by employer, while students undecided whether, TVET enables to learn skills that are needed by employer.

An overall student's perception on the status of TVET occupation was computed by aggregating the responses of the five items related to perceptions on the status of TVET occupation in average mean scores of 3.74 and 3.18 by teachers and students respectively, with a mean difference of 0.560. This shows that there is statistically significant difference between the responses of the two groups of respondents (p-value of 0.00 < 0.05). The t-value (5.419) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the items. This shows that teachers agree on the item. But students undecided concerning the status of TVET occupation.

The data obtained from the interviews made with the faculty deans about the status technical and vocational education occupation shows that even though students identify technical and vocational education as a way to get a job, as it increases their educational level, and leads to jobs which is well paid; but there exist students' unwillingness to attend the program.

4.2.2. Students Perception on the Quality of Technical and Vocational Education

This part deals with the discussion of the data gathered from respondents concerning students' perception on the quality of technical and vocational education. The perception of students' on the quality of technical and vocational education was presented to respondents through questionnaires that they were required to rate the students perception how they perceive the quality of technical and vocational education on the basis of a five point Likert scale. These five point scales range from strongly agree (= 5) to strongly disagree (= 1). Mean scores, standard deviations and t-test results were calculated from the responses. Thus, students perception on the quality of technical and vocational education based on the responses of the respondents with a mean value from 1-2.49 represented disagree on the item, and if the mean value is 2.5-3.49 were represented as undecided and if the mean value is 3.5 and above represented as agree. Responses from the interview were summarized to validate the findings during the process of presentation and analysis of all data in

each close-ended item as necessary. Findings during the process of presentation and analysis of all data in each close-ended item as necessary.

Table 4: Teachers' and Students' Mean Scores on the Quality of Technical and Vocational Education

Item	Respondent Group	N	Mean	Std. deviation	Mean difference	t-value	p-value
1. Technical and Vocational education and training offers high-quality learning	Teacher	61	3.41	1.04	0.589	3.676	0.00
	Students	151	2.82	1.09			
2. In TVET, students learn life skills such as communication or teamwork	Teachers	61	3.80	0.81	0.373	2.598	0.01
	Students	151	3.43	1.21			
3. Vocational education and training gives access to modern equipment (computers, machines, etc.).	Teachers	61	3.38	0.92	0.622	4.140	0.00
	Students	151	2.75	1.15			
4. Teachers and trainers in vocational education and training are competent.	Teachers	61	2.61	1.01	0.261	1.63	0.11
	Students	151	2.87	1.18			
5. TVET enables people to continue with university studies later	Teachers	61	3.80	0.75	0.704	5.159	0.00
	Students	151	3.10	1.19			
Average	Teachers	61	3.40	0.44	0.405	5.231	0.00
	Students	151	2.99	0.64			

The mean scores of the teacher and student respondents on offering high-quality learning by TVET (item 1) were 3.41 and 2.82 respectively with a mean difference of 0.589. The t-test result with p-

value of 0.00 < 0.05 shows that there is statistically significant difference between the responses of the two groups of respondents. The t-value (3.676) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. This indicates that teachers' undecided on the item while the students express their disagreement on the item. The data obtained from the interviews made with the faculty deans showed that, Technical and Vocational education and training are not on circumstances of offering high-quality learning due to shortage of trainers, lack of competent instructors, lack of equipment and teaching learning materials.

It can be seen from Table 4 item 2 that teachers and students were asked to express their agreement or disagreement regarding students in TVET learn skills like communication or team work. The mean scores of the teacher and student respondents were 3.80 and 3.43 respectively, with mean difference of 0.73. The t-test result with p-value of 0.01 < 0.05 indicates that there is statistically significant difference between the two groups of respondents towards the item. The t-value (2.59) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. This indicates that, teachers respondents agree on the item. But students express as they undecided on the item.

From the data in Table 4 item3, the mean scores of teacher and student respondents were 3.88
And 2.75 with mean difference of 0.622.The t-test result with p-value of 0.00 < 0.05 indicates that the two groups of respondents significantly differ in their average agreement towards the item. In the same way, the calculated t-value (4.140) which is greater than the t-critical value (1.96) confirms that there is statistically significant difference between the responses of the two groups of respondents. This shows that teachers agree, that TVET's training can giving access to modern equipment but students' disagree on the item, that TVET's training can giving access to modern equipment.

Regarding item 4 in table 4, the mean scores of both the teachers and students were 2.61 and 2.87 respectively, with mean difference of 0.07.The t-test result with p-value of 0.106 > 0.05 indicates that both groups of respondents do not significantly differ in their average agreement towards the teachers or trainers competence in TVET. Similarly, the calculated t-value (1.628) which is less than the t-critical value (1.96) confirms that there is no statistically significant difference between the

responses of the two groups of respondents. This confirms that both groups of respondents disagree on the item.

As it was depicted in Table 4 item 5, the mean scores of the two groups of respondents were 3.80 and 3.10 respectively, with mean difference of 0.704. The t-test result with p-value of 0.00 <0.05 shows that there is statistically significant difference between the two groups of respondents in their ratings towards the item. The t-value (5.159) which is greater than the t-critical value (1.96) similarly proves that the respondents have a significant difference regarding the item. This indicates that teacher respondents agree that TVET enables students to continue with university studies, even though students' undecided on the item.

An overall students' perception on the quality of TVET computed by aggregating the responses of the five items resulted in average mean scores of 3.40 and 2.99 by teachers and students respectively with mean difference of 0.405. This indicates that, there is statistically significant difference between the two groups of respondents (p-value of 0.00 < 0.05) in the computed average agreement for the overall students' perception on the quality of TVET. The t-value (5.23) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. This indicates that teachers groups of respondents agree on the item while students disagree on overall of the items on aggregate.

4.2.3. Students Attitude on Job Opportunities of Technical and Vocational Education

This part deals with the discussion of the data gathered from respondents concerning students' attitude on job opportunities of technical and vocational education. The attitude of students' on job opportunities of technical and vocational education was presented to respondents through questionnaires that they were required to rate the level of students attitude on job opportunities of technical and vocational education on the basis of a five point Likert scale. These five point scales range from strongly agree (= 5) to strongly disagree (= 1). Mean scores, standard deviations and t-test results were calculated from the responses. Thus, Students' attitude on job opportunities of technical and vocational education based on the responses of the respondents with a mean value from 1-2.49 represented disagree on the item, and if the mean value is 2.5-3.49 were represented as undecided and if the mean value is 3.5 and above represented as agree. Responses from the

interview were summarized to validate the findings during the process of presentation and analysis of all data in each close-ended item as necessary.

Table 5: Teachers' and Students' Mean Scores on Job opportunities of Technical and Vocational Education

Item	Respondent Group	N	Mean	Std. deviation	Mean difference	t-value	p-value
1. TVET help students to set up their own business	Teacher	61	3.74	1.079	0.870	5.204	0.00
	Students	151	2.87	1.159			
2. TVET creates wide job opportunities	Teachers	61	3.79	1.127	0.668	3.901	0.00
	Students	151	3.12	1.131			
3. TVET graduates are highly demanded by the labor market	Teachers	61	3.34	1.078	0.225	1.329	0.186
	Students	151	3.12	1.205			
4. TVET is an alternative to get job.	Teachers	61	3.62	0.986	0.431	2.681	0.008
	Students	151	3.19	1.215			
5. TVET is temporary means of employment.	Teachers	61	3.57	0.903	0.382	2.476	0.014
	Students	151	3.19	1.253			
Average	Teachers	61	3.61	0.737	0.515	4.54	0.00
	Students	151	3.10	0.775			

Table 5 items 1 depicts that the mean scores of both groups of respondents were 3.74 and 2.874, with mean difference of 0.87. When we compare the scores of the two groups of respondents with a t-test p-value of 0.00 < 0.05, it can be concluded that there is statistically significant difference

between the responses of the two groups of respondents. In the same way, the t-test value (5.204) is greater than the t-critical value (1.96) proving that both groups of respondents significantly differ in their average ratings. These revealed students disagree on the item, while teachers show their agreement on the item, that TVET training help students to set up their own business.

Teacher respondents and student respondents mean value were 3.79 and 3.12 respectively with mean difference of 0.668. Similarly, the t-test result with p-value of 0.00 < 0.05 shows that there is statistically significant difference between the two groups of respondents towards the item. The t-value (3.901) which is greater than the t-critical value (1.96) also proves that there is statistically significant difference between the responses of the two groups of respondents. Therefore, this indicates that, teachers agree on the item but students undecided that, TVET is good in creating wide job opportunities.

For item 3 in the same Table, the mean scores of teacher and student respondents were 3.34 and 3.12 respectively with mean difference of 0.225. The t-test result with p-value of 0.186 > 0.05 reveals that there is no statistically significant difference between the responses of the two groups of respondents. The t-value (1.329) which is less than the t-critical value (1.96) also proves that there is no statistically significant difference between the responses of the two groups of respondents. This indicates that both groups of respondents' express that they undecided on the item, TVET graduates demanded by the labor market.

As indicated in Table 5 item 4, the calculated mean value of the teachers and the students were 3.62 and 3.19, with mean difference of 0.431. The t-test result with p-value of 0.008 < 0.05 proves that there is statistically significant difference between the two groups of respondents in their ratings towards the item. The t-value (2.68) which is greater than the t-critical value (1.96) similarly proves that there is statistically significant difference between the responses of the two groups of respondents. So the calculated mean value of respondents shows that teachers agree on the item that TVET training is an alternative to get job, while students remain undecided.

With regard to item 5 in Table 5, the mean scores of the teacher and student respondents were 3.57 and 3.19 respectively, with mean difference of 0.382. For the purpose of comparing the average level of agreement of the two groups of respondents, an independent sample t-test was computed. To

this end, the t-test result with p-value of 0.014 < 0.05 indicates that there is statistically significant difference between the responses of the two groups of respondents in their average rating of the item. Similarly, the t-value (2.46) is greater than the t-critical value (1.96) implying that there is statistically significant difference between the teachers and students respondents. Therefore, as the calculated mean value clearly shows that teachers agree on the item, that TVET creates a temporary means of employment, but students' undecided on the item.

An overall student's attitude on job opportunities of TVET was computed by aggregating the responses of the five items related to students' attitude on job opportunities of TVET in average mean scores of 3.61 and 3.10 by teachers and students respectively, with a mean difference of 0.51. This shows that there is statistically significant difference between the responses of the two groups of respondents (p-value of 0.00 < 0.05). The t-value (4.15) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the items. This indicates that teachers agree on aggregate items, but students' undecided as aggregate of items shows.

4.2.4. Students Willingness to Join Technical and Vocational Education

This part deals with the discussion of the data gathered from respondents concerning students' willingness to join technical and vocational education. The willingness to join technical and vocational education was presented to respondents through questionnaires that they were required to rate the level of students willingness to join technical and vocational education on the basis of a five point Likert scale. These five point scales range from strongly agree (= 5) to strongly disagree (= 1). Mean scores, standard deviations and t-test results were calculated from the responses. Thus, willingness to join technical and vocational education based on the responses of the respondents with a mean value from 1-2.49 represented as disagree, and if the mean value is 2.5-3.49 were represented as undecided and if the mean value is 3.5 and above represented as agree. Responses from the interview were summarized to validate the findings during the process of presentation and analysis of all data in each close-ended item as necessary.

Table 6: Teachers' and Students' Mean Scores on Willingness to Join Technical and Vocational Education

Item	Respondent Group	N	Mean	Std. deviation	Mean difference	t-value	p-value
1. Students preference was to join preparatory program	Teacher	61	4.23	0.462	0.009	0.103	0.918
	Students	151	4.24	0.781			
2. TVET students are ready to attend the program	Teachers	61	2.39	1.053	0.044	0.284	0.777
	Students	151	2.44	0.899			
3. Students joined TVET with their interest	Teachers	61	3.34	0.964	0.146	0.937	0.351
	Students	151	3.20	1.161			
4. Students joined TVET as a result of peer pressure	Teachers	61	3.63	0.920	0.441	2.921	0.004
	Students	151	3.19	1.147			
5. It is their parents that encourage students to join TVET	Teachers	61	3.30	1.038	0.116	0.438	0.662
	Students	151	3.41	2.798			
6. Students are happy with joining TVET	Teachers	61	2.39	0.900	0.009	0.067	0.947
	Students	151	2.38	0.965			
Average	Teachers	61	3.22	0.444	0.073	0.894	0.372
	Students	151	3.14	0.718			

It can be seen from Table 6 item 1 that, teachers and students were asked to give their agreement or disagreement regarding the preference of students to join preparatory program. The mean scores of the teacher respondents 4.23 and that of the student respondents 4.24, with the resulting mean

difference of 0.009, is tested for its significance beyond zero. The test result with t-value= 0.103 and p-value of 0.918 > 0.05 shows that the mean difference is not significantly different from zero. This indicates that, both groups of respondents have no statistically significant difference to one another. That is, teachers and students agree on the item that Students preference to join preparatory program. Similarly, the data obtained from faculty deans were, students were not ready to attend the program, and they always miss the class and others. Therefore, this reveals that students' preference was to join preparatory program than joining TVET.

Concerning item 2 in Table 6, the mean scores of the teachers and the students were 2.39 and 2.44 respectively, with mean difference of 0.19. The computed t-test result with p-value of 0.777 > 0.05 and shows that the teacher respondents and student respondents do not significantly differ in their average ratings. This can also be proved by the t-value (0.28) which is less than the t-critical value (1.96). This clearly showed that both groups of respondents' disagree on the item that students' readiness to attend, technical and vocational education.

For item 3 in the same Table, the mean scores of teacher and student respondents were 3.34 and 3.20 respectively with mean difference of 0.146. The t-test result with p-value of 0.351 > 0.05 reveals that there is no statistically significant difference between the responses of the two groups of respondents. The t-value (0.937) which is less than the t-critical value (1.96) also proves that there is no statistically significant difference between the responses of the two groups of respondents. This indicates that, both groups of respondents undecided on the item that students joined technical and vocational education with their interest.

As it was mentioned in Table 6 item 4, the mean scores of the two groups of respondents were 3.63 and 3.19 respectively, with mean difference of 0.441. The t-test result with p-value of 0.004 < 0.05 shows that there is statistically significant difference between the two groups of respondents in their ratings towards the item. The t-value (2.921) which is greater than the t-critical value (1.96) clearly indicates that, the respondents do have a significant difference in rating towards the item. This revealed that teachers agree on the item that Students' joined to TVET with their peer pressure. However, students' undecided on the item, as the calculated mean result shows.

In the same Table item 5, students' joined TVET with the encouragement their parents' was also rated by each group of the respondents. The mean scores of the teacher and student respondents were 3.30 and 3.41 respectively, with mean difference of 0.116.The t-test result with p-value 0.662 > 0.05 shows that there is no statistically significant difference between the two groups of respondents towards the item. Similarly, the t-value (0.438) which is less than the t-critical value (1.96) proves that the two groups of respondents do not significantly differ in their agreement on the item. This, therefore, shows that teachers and students undecided that, parents encourage students to join TVET.

In Table 6 item 6, the mean scores of the teachers and the students were 2.38 and 2.39 respectively, with mean difference of 0.009. The computed t-test result with p-value of 0.947 > 0.05 shows that the teacher respondents and student respondents do not significantly differ in their average ratings. This can also be proved by the t-value (0.067) which is less than the t-critical value (1.96). This clearly showed that both groups of respondents disagree on the item, students' happiness with regard to joining TVET.

An overall students' willingness to join TVET was computed by aggregating the responses of the six items related to students' willingness to join TVET items resulted with an average mean scores of 3.22 and 3.14 by the teacher and student respondents respectively, with mean difference of 0.073. The two groups of respondents have no statistically significant difference (p-value of 0.37 > 0.05) in the computed average agreement for the students' perception on the quality of TVET items. Both groups of respondents' undecided to all items, on students' perception on the quality of TVET items with the exception of item 2 in which the mean scores of teachers and students were 2.44 and 2.39, and item 6 in which the mean scores of teachers and students were 2.38 and 2.39.

Similarly, the data obtained from faculty deans reveals, students have negative attitude towards technical and vocational education and training. Because, there is information gap, no curriculum designed in high schools that helps to create awareness about TVET, they consider as for those of low achiever and other reasons have been mentioned that make them to have negative attitude towards technical and vocational education.

4.2.5. Factors Affecting Students Attitude Related to Image of Technical and Vocational Education

This part deals with the discussion of the data gathered from respondents concerning Factors affecting Students attitude. The factors affecting students attitude was presented to respondents through questionnaires that they were required to rate factors affecting students attitude related to image of technical and vocational on the basis of a five point Likert scale. These five point scales range from strongly agree (= 5) to strongly disagree (= 1). Mean scores, standard deviations and t-test results were calculated from the responses. Thus, Factors related to image of TVET, affecting Students attitude based on the responses of the respondents with a mean value from 1-2.49 represented disagree on the item, and if the mean value is 2.5-3.49 were represented as undecided and if the mean value is 3.5 and above represented as agree. Responses from the interview were summarized to validate the findings during the process of presentation and analysis to supplement the quantitative data.

Table 7: Teachers' and Students' Mean Scores on Factors Related to Image of Technical and Vocational education

Item	Respondent Group	N	Mean	Std. deviation	Mean difference	t-value	p-value
1. TVET is designed for low achiever student	Teacher	61	3.70	0.803	0.06	0.416	0.678
	Students	151	3.65	1.066			
2. High achiever students do not join TVET	Teachers	61	3.85	0.792	0.14	0.798	0.426
	Students	151	3.75	1.008			
3. TVET is not attractive for students	Teachers	61	3.85	0.910	0.263	1.862	0.065
	Students	151	3.59	0.982			
4. Most TVET Students are from poor family	Teachers	61	3.57	0.921	0.402	2.663	0.009
	Students	151	3.17	1.148			
5. students prefer TVET to academic subjects	Teachers	61	2.41	0.938	0.059	0.412	0.681
	Students	151	2.35	0.954			
Average	Teachers	61	3.48	0.500	0.173	2.295	0.024
	Students	151	3.30	0.494			

Regarding item 1 in Table 7, the mean scores of both the teachers and students were 3.70 and 3.65 respectively, with mean difference of 0.056.The t-test result with p-value of 0.678 > 0.05 indicates that both groups of respondents do not significantly differ in their average agreement with the idea of technical and vocational education designed for low achiever student. Similarly, the calculated t-value (0.416) which is less than the t-critical value (1.96) confirms that there is no statistically significant difference between the responses of the two groups of respondents. This reveals that both groups of students agree on the item that technical and vocational education designed for low achiever student.

In the same Table item 2, the calculated mean scores of the two groups of respondents were 3.85 and 3.75 respectively, with mean difference of 0.14. Therefore, the t-test results with p-value of 0.426 > 0.05 proves that there is no statistically significant difference between the responses of the two groups of respondents. In the same way, the calculated t-value (0.798) which is less than the t-critical value (1.96) confirms that there is no statistically significant difference between the responses of the two groups of respondents. This shows that both groups agree on the idea, low achiever students do not join TVET.

Similarly, as depicted in Table 7 item 3, the calculated mean value of the teachers and the students were 3.85 and 3.59, with mean difference of 0.263. The t-test result with p-value of 0.065 > 0.05 proves that there is no statistically significant difference between the two groups of respondents in their ratings towards the item. The t-value (1.862) which is less than the t-critical value (1.96) similarly proves that there is no statistically significant difference between the responses of the two groups of respondents. This revealed that the respondents agree on the item which says technical and vocational education is not attractive for students.

As indicated in Table 7 item 4 that teachers and students were asked to rate if most TVET Students are from poor family. The mean scores of the teacher and student respondents were 3.57 and 3.17 respectively, with mean difference of 0.402. The t-test result with p-value of 0.009 < 0.05 indicates that there is statistically significant difference between the two groups of respondents towards the item. The t-value (2.663) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. This shows that teachers agree on

the idea of most TVET Students are from poor family background, while students undecided on the item.

For item 5 in the same Table, the mean scores of teacher and student respondents were 2.41 and 2.35, with mean difference of 0.059. The t-test result with p-value of 0.681 > 0.05 reveals that there is no statistically significant difference between the two groups of respondents on the item, students prefer technical and vocational education to academic subjects. The t-value (0.412) which is less than the t-critical value (1.96) also proves that there is no statistically significant difference between the two groups of respondents. This indicates that both respondents disagree on the item that the student's preference of TVET to academic subjects.

An overall factor related to image of TVET computed by aggregating the responses of the six items resulted in average mean scores of 3.48 and 3.30 by teachers and students respectively with mean difference of 0.73. This indicates that, there is statistically significant difference between the two groups of respondents (p-value of 0.024 < 0.05) in the computed average agreement for the overall factor related to image of TVET. The t-value (2.59) which is greater than the t-critical value (1.96) proves that the two groups of respondents significantly differ in their agreement on the item. As the aggregate mean value clearly indicate that both groups of respondents' undecided to the overall factor related to image of TVET.

However, the data collected from the TVET deans through interview showed that students of technical and vocational education affected negatively with the image of TVET as a factor, like TVET is for low achiever, economic factor, information gap, family unawareness, shortage of machineries(teaching learning materials), equipment's, handouts, it's attractiveness, trainers competence and other many factors are accountable.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

On the basis of the analysis and interpretation of the data gathered through the instruments (questionnaires and interview), the following summaries of the major findings, conclusions, and recommendations have been made.

The main purpose of the study was to assess attitude of students towards technical and vocational education at Yeka sub-city Government TVET Colleges. Teachers, students and TVET deans were the target population of the study. The population is composed of 86 teachers, 514 students, and 4 TVET deans. As a result, 61 teachers and 151 students were selected from the population. TVET deans were included in the study using purposive sampling technique. Descriptive survey design was employed as a design of the study.

The basic research questions were: how do students perceive technical and vocational education, what is the attitude of students towards technical and vocational education and what are the factors that contribute to such factor.

Questionnaires and interview were employed to collect the data from the sample. Interview was employed mainly to explore important information on the study from the participants to strengthen the data.

Quantitative and qualitative methods were used in analyzing the data obtained through the instruments. In the analyses of the quantitative data, percentages, frequencies, mean scores, standard deviations, and independent t-test results were used. The average mean value from 1-2.49 represented disagree on the item, and if the mean value is 2.5-3.49 were represented as undecided and if the mean value is 3.5 and above represented as agree. In the analyses of the qualitative data, descriptive statements were used. As a result, the major findings of the study are discussed hereunder.

5.1. Summary of major Findings

The following are the major findings of the study.

The Perceptions of Students on Status of Technical and Vocational Occupations

With regard to student's perception on the status of TVET occupation, the teacher and student respondents showed that they were agreed and undecided with their average mean values 3.74 and 3.18 respectively that student's perception on the status of TVET occupation. The data revealed that there was statistically significant difference between the two groups of respondents with t-value (5.42) which is greater than the t-critical value (1.96) at $\alpha = 0.05$.

Students' Perception on the Quality of TVET

With regard to the students' perception on the quality of TVET, the teacher and student respondents showed undecided and disagree with their average mean values 3.40 and 2.99 respectively that students' perception on the quality of TVET. The data revealed that there was statistically significant difference between the two groups of respondents with t-value (5.23) which is greater than the t-critical value (1.96) at $\alpha = 0.05$.

Students Attitude on Job Opportunities

With respect to the students' attitude on TVET job opportunities, the teacher and student respondents with their average mean values 3.61 and 3.10 respectively. This revealed that teachers' respondents agree on the overall items on students' attitude regarding TVET job opportunities. But students replied undecided. Therefore, this shows that there is statistically significant difference between the two groups of respondents with t-value (4.54) which is greater than the t-critical value (1.96) at $\alpha = 0.05$.

Students' Willingness to join TVET

Regarding the Students' willingness to join TVET**,** the teacher and student respondents revealed with their average mean values 3.22 and 3.14 respectively that both groups of respondents undecided on the students' willingness to join TVET items with the exception of both respondents on item 2 with a mean score of 2.44 and 2.39 also item 6 with mean scores of 2.38 and 2.39 respectively. The

data demonstrate that there was no statistically significant difference between the two groups of respondents with t-value (0.894) which is less than the t-critical value (1.96) at $\alpha = 0.05$.

The Image of TVET as Factors for Students' Attitude

With respect to the image of TVET as factor for students' attitude, the teacher and student respondents with their average mean values 3.48 and 3.30 respectively revealed that both groups of respondents had undecided on image of TVET as a factor for students' attitude towards TVET. But the calculated mean score, shows that there is statistically significant difference between the two groups of respondents with t-value (2.59) which is greater than the t-critical value (1.96) at $\alpha = 0.05$.

5.2. Conclusions

Based on the major findings, the following conclusions were drawn:

- With regard to the students perception on the status of technical and vocational education occupation students were undecided as to TVET contribute to the economy of our country, leads to jobs which are well paid and learn skills that are needed by employers. Students agreed that TVET offer good career opportunities and express their disagreement that TVET training leads to jobs which are well regarded by society. Therefore, this indicates that students were unable to decide on the status of technical and vocational education occupation.
- With respect to the students' perception on the quality of technical and vocational education, students express their disagreement that TVET as offering high-quality learning, TVET training gives access to modern equipment (computers, machines, etc.) and competence of teachers. But students were undecided as to learn skills such as communication or teamwork and enabling of technical and vocational education to continue with university studies later. This indicates that students do not have positive attitude towards the quality of technical and vocational education.
- With regard to the job opportunities of technical and vocational education students were, disagree that it helps students to set up their own business. But students were undecided whether TVET creates wide job opportunities, demanded by the labor market, alternative

to get job and temporary means of employment. This reveals that students were confused whether technical and vocational education creates job opportunities.

- With regard to willingness to join technical and vocational education, students' preference was to join preparatory program, were not ready to attend the program and were not happy joining TVET. But students were undecided whether they join TVET with their interest, as a result of peer pressure and by their parents. This shows that students' willingness to join technical and vocational education is negatively affected.
- With regard to Factors related to image of technical and vocational education students perceived technical and vocational education as it is designed for low achiever student, High achiever students do not join TVET, it is not attractive for students, students prefer TVET to academic subjects and most TVET students are from low income family. Therefore, this shows that image of technical and vocational education as a factor affects student's attitude negatively, even though the aggregate mean score shows that they were undecided.

5.3. Recommendations

The study shows that students' perception towards the status of technical and vocational education occupation and training were undecided. Concerning quality of technical and vocational education, students perceived negatively. Students' attitudes on job opportunities of TVET were undecided. With regard to students' willingness to join TVET were, negative as the study implies. Factors related to image of technical and vocational education, students were affected negatively. Therefore, on the basis of the findings and the conclusions drawn, the following recommendations were forwarded.

- The study revealed in relation to status of technical and vocational education, it leads to jobs which are not well regarded by the society. Therefore, in order to tackle such idea all stakeholders have to work together.
- Students perception on Technical and Vocational education and training offering of high-quality learning, were negative and the result of interview showed that the institution were not on circumstance of provision high-quality learning, as a result of shortage of teachers and lack of teaching learning materials. Therefore, it is recommended that the TVET deans

should fulfill teaching learning materials in collaboration with the concerned bodies and should hired qualified teachers.

- TVET students' readiness to attend the program was not good. Therefore, the management bodies (dean, vice dean, and department heads) in collaboration with parents and others stakeholders should work hard to increase their readiness to attend the program.
- Students were not happy with joining technical and vocational education and training. Thus, the management bodies of the TVET highly focused on awareness creation among students and creating good teaching learning environment as much as possible.
- The idea TVET is designed for low achiever student was agreed by students. Therefore, the management bodies of technical and vocational should work to change such idea by raising their level of awareness.
- The study revealed that technical and vocational education and training, with regard to attracting of students' was disagreed by the students. Therefore, concerned bodies have to focus on making attractive by fulfilling different teaching and learning materials and etc.

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APPENDIX-A

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF EDUCATION

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

This is a questionnaire only filled out by students and teachers of yeka sub-city government TVET College's in Addis Ababa. The purpose of this questionnaire is to collect data is utilized in writing a Master's thesis from students enrolled in yeka sub-city government TVET College's in Addis Ababa regarding their **ATTITUDE TOWARDS TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)**.So, as you read through the questionnaire, please answer the questions as **TRUTHFULLY** and **THOUGHTFULLY** as possible. Moreover, kindly try to answer all the questions. The completed questionnaires will be picked up within two days by the researcher or somebody on behalf of the researcher. Therefore, as soon as you finish filling out the questionnaire please send to the responsible person as soon as possible. PLEASE sure that any **information that you supply will be kept strictly CONFIDENTIAL and will be used only for the purpose of this study.**

Thank you very much for your cooperation.

APPENDIX-B

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF EDUCATION

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Filled by students

I would like to say thank you in advance for your Cooperation to fill this questionnaire. The questionnaire is designed to assess the attitude of students towards technical and vocational education. The result and success of this study will highly depend on the quality of your response and I hope you will give accurate and honest responses to the items presented. Your response will be kept confidential and used only for this academic purpose

Directions

- ✓ no need to write your name on any part of the questionnaire.
- ✓ For all close ended questions; indicate your options by marking "√"on the appropriate space provided

Part 1: personal information

1. Sex Male ☐ Female ☐
2. Age; 15-20 ☐ 21-26 ☐ 26-30 ☐
   31-35 ☐ 36-40 ☐
3. Your level of study; Level 1 ☐ level 3 ☐ level 5 ☐
   Level 2 ☐ level 4 ☐
4. Field of study; Manufacturing ☐ ICT ☐
   Automotive ☐ Accounting ☐ Others ☐

Part 2: Students' perception on status of technical and vocational education occupation

Please indicate your perception on the status of technical and vocational education by putting "√" mark. There are five alternatives and their value is indicated as follows.
A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	SA	A	UD	D	SD
1	TVET helps to develop the economy of our country					
2	TVET leads to jobs which are well paid					
3	TVET offer good career opportunities					
4	TVET training leads to jobs, which are well regarded society					
5	People in TVET learn skills that are needed by employers					

Part 3: Items related to perceptions of students on the quality of TVET

Please indicate your perceptions on the quality of TVET by putting "√" mark. There are five alternatives and their value is indicated as follows.

A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	SA	A	UD	D	SD
1	Technical and Vocational education and training offers high-quality learning					
2	In TVET, students learn life skills such as communication or teamwork					
3	Vocational education and training gives access to modern equipment (computers, machines, etc.).					
4	Teachers and trainers in vocational education and training are competent.					
5	TVET enables people to continue with university studies later.					

Part 4:Items related to Attitude on job opportunities

Please indicate your attitude on job opportunities of technical and vocational education by putting "√" mark. There are five alternatives and their value is indicated as follows
A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	TVET help students to set up their own business					
2	TVET creates wide job opportunities					
3	TVET graduates are highly demanded by the labor market					
4	TVET is an alternative to get job.					
5	TVET is temporary means of employment.					

Part 5: Students' willingness to join TVET

Please indicate your willingness to join TVET by putting "√" mark. There are five alternatives and their value is indicated as follows.

A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	Students preference was to join preparatory program					
2	TVET students are ready to attend the program					
3	Students joined TVET with their interest					
4	Students joined TVET as a result of peer pressure					
5	It is their parents that encourage students to join TVET					
6	Students are happy with joining TVET					

Part 6: Factors related to image of TVET

Please indicate to what extent you are affected related to image of TVET

by putting "√" mark. There are five alternatives and their value is indicated as follows.

A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	TVET is designed for low achiever student					
2	High achiever students do not join TVET					
3	TVET is not attractive for students					
4	Most TVET Students are from poor family					
5	students prefer TVET to academic subjects					

APPENDIX-C

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF EDUCATION

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Questionnaire to be filled by teachers

I would like to say thank you in advance for your Cooperation to fill this questionnaire. The questionnaire is designed to assess the attitude of students towards technical and vocational education. The result and success of this study will highly depend on the quality of your response and I hope you will give accurate and honest responses to the items presented. Your response will be kept confidential and used only for this academic purpose.

Directions:

- ✓ No need to write your name.
- ✓ Put a "√" mark in the space provided in front of each item.
- ✓ The questionnaire has 6 parts. Please try to fill all the items
- ✓ Please choose the one, which you think, is the most appropriate response to each question.

Part 1: Background Information

1. Sex: Male ☐ Female ☐

2. Age: 20-25 ☐ 26-30 ☐

31-35 ☐ 36-40 ☐

3. Educational level: BA ☐ BSc ☐ MSc ☐

Level 4 completed ☐ Level 5 completed ☐

Part 2: Students' perception on status of technical and vocational education occupation

Please indicate students' perception on the status of technical and vocational education occupation by putting "√" mark. There are five alternatives and their value is indicated as follows.
A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	TVET helps to develop the economy of our country					
2	TVET leads to jobs which are well paid					
3	TVET offer good career opportunities					
4	TVET training leads to jobs, which are well regarded society					
5	People in TVET learn skills that are needed by employers					

Part 3: Items related to perceptions of students on the quality of TVET

Please indicate students' perceptions on the quality of TVET by putting "√" mark. There are five alternatives and their value is indicated as follows.

SA- Strongly agree=5 A- Agree=4 UD- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	Technical and Vocational education and training offers high-quality learning					
2	In TVET, students learn life skills such as communication or teamwork					
3	Vocational education and training gives access to modern equipment (computers, machines, etc.).					
4	Teachers and trainers in vocational education and training are competent.					
5	TVET enables people to continue with university studies later.					

Part 4:Items related to Attitude on job opportunities

Please indicate students' attitude on job opportunities of technical and vocational education by putting "√" mark. There are five alternatives and their value is indicated as follows
A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	TVET help students to set up their own business					
2	TVET creates wide job opportunities					
3	TVET graduates are highly demanded by the labor market					
4	TVET is an alternative to get job.					
5	TVET is temporary means of employment.					

Part 5: Students' willingness to join TVET

Please indicate students' willingness to join TVET by putting "√" mark. There are five alternatives and their value is indicated as follows.

SA- Strongly agree=5 A- Agree=4 UD- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	Students preference was to join preparatory program					
2	TVET students are ready to attend the program					
3	Students joined TVET with their interest					
4	Students joined TVET as a result of peer pressure					
5	It is their parents that encourage students to join TVET					
6	Students are happy with joining TVET					

Part 6: Factors related to image of TVET

Please indicate to what extent students are affected related to image of TVET by putting "√" mark.

There are five alternatives and their value is indicated as follows.

A- Strongly agree=5 A- Agree=4 U- Undecided=3 D- Disagree= SD- Strongly Disagree=1

	item	**SA**	**A**	**UD**	**D**	**SD**
1	TVET is designed for low achiever student					
2	High achiever students do not join TVET					
3	TVET is not attractive for students					
4	Most TVET Students are from poor family					
5	students prefer TVET to academic subjects					

APPENDIX-D

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF EDUCATION

DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Dear Sir/Madam,

Interview guiding questions for TVET deans.

The purpose of this interview is to gather information from TVET Deans about attitude of students towards technical vocational education and training.

1. How students perceive the value of TVET occupation.
2. Do you think TVET provide high quality learning?
3. What is attitude of students towards TVET?
4. What are the factors affecting attitude of students towards TVET?

Thank you for your cooperation!

APPENDIX- E

አዲስአበባ ዩኒቨርስቲ

የስነ-ትምህርት ኮሌጅ

የትምህርት ስራ አመራር ትምህርት ክፍል

በአዲስ አበባ ከተማ የካ ክፍለ ከተማ የመንግስት ቴክኒክና ሙያ ኮሌጆች በመማር ላይ በሚገኙ ተማሪዎች የሚሞላ መጠይቅ

የመጠይቁ አላማ

የድህረ-ምረቃ ጥናት የሚሟያ ፁሑፍ ለማዘጋጀት የሚረዳ ተማሪዎች በቴክኒክና ሙያ ትምህርትና ስልጠና ላይ ያላቸዉን አመለካከት **(Attitude towards Technical and Vocational Education and Training)** ዙሪያ መረጃ መሰብሰብ ነዉ፡፡ መረጃዉን መሙላት የሚገባቸዉ በአዲስ አበባ ከተማ የካ ክፍለ ከተማ የመንግስት ቴክኒክና ሙያ ኮሌጆች በመማር ላይ የሚገኙ ተማሪዎች ብቻ ናቸዉ፡

አጭር መልዕክት

የዚህ ጥናት መሳካት ያንተ /ያንቺ ሙለ ትብብርና ፍቃደኝነት እጅግ በጣም አስፈላጊ በመሆኑ በመጠይቁ ዉስጥ የተካተቱትን ጥያቄዎች በሙለ በጥሞና አንብበህ /ሽ እዉተኛዉን መልስ ትጽፍ /ፊ ዘንድ በአክብሮት እየጠየኩ መጠይቁን በተሰጠዉ ጊዜ ዉስጥ ሞልተህ/ሽ እንደጨረስክ/ሽ የጥናት አድራጊዉ ወይም በጥናት አድራጊዉ የተወከለ ግለሰብ መመለስ እንዳለብህ/ሽ በአክብሮት አስታዉስህለዉ/ሻለሁ፡፡

በመጨረሻም መጠይቁ ላይ ያሰፈርከዉ /ሽዉ መረጃ በሙለ በሚስጥር የሚያዝና ከላይ የተገለፀ አላማ ብቻ የሚዉል መሆኑን በትህትና ለማረጋገጥ እወዳለሁ፡፡

ለሚደረግልኝ ትብብር ሁሉ ምስጋናዬ ከልብ ነው!

ስጠቃላይ መመሪያ

- **መጠይቁ ላይ ስም መፃፍ አይቻልም፡፡**
- **ከስንድ በላይ ስማራጭ መልስ ያላቸዉን ጥያቄዎች በሙለ ለመልስ መስጫ በተዘጋጀዉ ክፍት ቦታ ዉይም ባይ ሳጥን ላይ የ "√"ምልክት በመፃፍ መልስ/ሽ፡፡**

ክፍል 1 ፡- ግላዊ መረጃ

1. ፆታ ወንድ ☐ ሴት ☐
2. እድሜ; 15-20 ☐ 21-26 ☐ 27-30 ☐
   31-35 ☐ 35-40 ☐
3. የትምህርት ደረጃ; ደረጃ 1 ☐ ደረጃ 3 ☐ ደረጃ 5 ☐
   ደረጃ 2 ☐ ደረጃ 4 ☐
4. የትምህርት መስክ; Manufacturing ☐ ICT ☐
   Automotive ☐ Accounting ☐ ሌላ ☐

ክፍል 2፡- የቴክኒክና ሙያ ትምህርትና ስልጠና እና የሚያስገኘው ስፋ ስለመልክች የግንዛቤ ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች መገለጫዎች የተጽዕኖ መጠን በአዎንታዊም ሆነ በአሉታዊ ጎኑ ምን ያህል እንደሆነ የ"√" ምልክት በማድረግ ስሳዩ::

	የግንዛቤ ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች መገለጫዎች	በጣም እስማማለሁ	እስማማለሁ	አልወሰንኩም	አልስማማም	በጣም አልስማማም
1	የቴክኒክና ሙያ ትምህርትና ስልጠና ለሀገር እድገት ይረዳል					
2	የቴክኒክና ሙያ ትምህርትና ስልጠና ጥሩ የሚከፈልበት ስራ ያስገኛል					
3	የቴክኒክና ሙያ ትምህርትና ስልጠና ጥሩ ሙያዎች እንድኖርን እድል ይፈጥራል					
4	የቴክኒክና ሙያ ትምህርትና ስልጠና ጥሩ በህብረተሰቡ ዘንድ ከበሬታ ያለው ስራ የስገኛል					
5	የቴክኒክና ሙያ ትምህርትና ስልጠና በቀጣሪዎች ተፈላጊ የሆነ ክህሎት የስጨብጣል					

ክፍል 3፡- የቴክኒክና ሙያ ትምህርትና ስልጠና የትምህርት ጥራት ስለመልክቶች ያለህን/ሽ ግንዛቤ በአዎንታዊም ሆነ በአሉታዊ ጎኑ ምን ያህል እንደሆነ የ‘‘√’’ ምልክት በማድረግ ሰሳዩ፡፡

	የአመለካከት ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች መገለጫዎች	በጣም እስማማለሁ	እስማማለሁ	አልወሰንኩም	አልስማማም	በጣም አልስማማም
1	የቴክኒክና ሙያ ትምህርትና ስልጠና ከፍተኛ ጥራት ያለው ትምህርት ይሰጣል					
2	የቴክኒክና ሙያ ትምህርትና ስልጠና በህይወታችን ወሳኝ የሆኑ እንደ ተግባቦት(communication) ወይም በህብረትመስራት (teamwork) ያስለምዳል					
3	የቴክኒክና ሙያ ትምህርትና ስልጠና የኮምፒተር ሜካኒክስ እና የሌሎችም ትምህረት ተደራሽነትን ያስፋፋል					
4	የቴክኒክና ሙያ ትምህርትና ስልጠና መምህራን ብቁ የማስተማር ችሎታ አላቸው ናቸው					
5	የቴክኒክና ሙያ ትምህርትና ስልጠናን ካጠናቀቅን ዩኒቨረሲቲ ገብተን እንድንማር ያስችላል					

ክፍል 4፡- የቴክኒክና ሙያ ትምህርትና ስልጠና ከስፈ እድል ፈጠራ ጋር በተያያዘ የተጣሬዎች ስመለካከትና ተያያዥ ሁኔታዎች

ቀጥሎ በቀረበዉ ሰንጠረዥ ቴክኒክና ሙያ ትምህርትና ስልጠና ስስመልክቶ የስመለካከት ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች መገለጫዎች የተጽዕኖ መጠን በአዎንታዊም ሆነ በአሉታዊ ጎኑ ምን ያህል እንደሆነ የ ‘‘√’’ምልክት በማድረግ ሰሳዩ፡፡

	ከስራ እድል ጋር በተያያዘ የአመለካከት ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች መገለጫዎች	በጣም እስማማለሁ	እስማማለሁ	አልወሰንኩም	አልስማማም	በጣም አልስማማም
1	የቴክኒክና ሙያ ትምህርትና ስልጠና የራስን ስራ ለመፍጠር ይረዳል					
2	ቴክኒክና ሙያ ትምህርትና ስልጠና ብዙ የስራ እድል ይፈጥራል					
3	የቴክኒክና ሙያ ትምህርትና ስልጠና ተመራቂዎች በከፍተኛ ደረጃ በቀጣሪዎች ይፈለጋሉ					
4	ቴክኒክና ሙያ ትምህርትና ስልጠና ስራ የማግኛ አማራጭ ነው					
5	የቴክኒክና ሙያ ትምህርትና ስልጠና በጊዜያዊ ስራ ለመቀጠር ይረዳል					

ክፍል 5፡- ወደ ቴክኒክና ሙያ ትምህርትና ስልጠና ገብቶ መማርን በተመለከተ የተማሪዎች ፍቃደኝነት ምን ያህል እንደሆነ ቀጥሎ በቀረበዉ ሰንጠረዥ የ ‘‘√’’ምልክት በማድረግ ስሳዩ፡፡

	የተማሪዎች የመማር ፍቃደኝነት በተመለከተ የቀረቡ መገለጫዎች	በጣም እስማማለሁ	እስማማለሁ	አልወሰንኩም	አልስማማም	በጣም አልስማማም
1	የኔ ምረጫ ፕሪፓራቶሪ ጉብቼ መማር ነበር					
2	የቴክኒክና ሙያ ትምህርትና ስልጠና ተማሪዎች ሁሌም ለመማር ዝግጁ ናቸው					
3	ወደ ቴክኒክና ሙያ ትምህርትና ስልጠና የገባሁት በራሴ ፍላጎት ነው					
4	ቴክኒክና ሙያ ትምህርትና ስልጠና የገባሁት በጓደኞቼ ግፊት ነው					
5	ወደ ቴክኒክና ሙያ ትምህርትና ስልጠና የገባሁት ቤተሰቦቼ አበረታተውኝ ነው					
6	የቴክኒክና ሙያ ትምህርትና ስልጠና ተማሪ በመሆኔ ደስተኛ ነኝ					

ክፍል 6፡- የቴክኒክና ሙያ ትምህርትና ስልጠና ገጽታ ጋር በተያያዘ የተማሪዎች አመለካከትና ተያያዥ ሁኔታዎች ቀጥሎ በቀረበዉ ሰንጠረዥ የአመለካከት ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች በተጽዕኖ መጠን በአዎንታዊም ሆነ በአሉታዊ ጎኑ ምን ያህል እንደሆነ የ ‘‘√’’ምልክት በማድረግ ስሳዩ፡፡

	የቴክኒክና ሙያ ትምህርትና ስልጠና ገጽታ ጋር በተያያዘ የአመለካከት ተጽዕኖ እንዲፈጠርብህ/ሽ ያደረጉ ሁኔታዎች መገለጫዎች	በጣም እስማማለሁ	እስማማለሁ	አልወሰንኩም	አልስማማም	በጣም አልስማማም
1	የቴክኒክና ሙያ ትምህርትና ስልጠና የተዘጋጀው በትምህርታቸዉ ደካማ ለሆኑ (ለወደቁ) ተማሪዎች ነው					
2	ነዐኛ ክፍል ከፍተኛ ውጤት ያመጡ ተማሪዎች ወደ ቴክኒክና ሙያ ትምህርት ስልጠና መግባት አይፈልጉም					
3	የቴክኒክና ሙያ ትምህርትና ስልጠና ሳቢ አይደለም					
4	አብዛኛዎቹ የቴክኒክና ሙያ ትምህርትና ስልጠና ተማሪዎች ዝቅተኛ ገቢ ካላቸው ቤተሰብ የመጡ ናቸው					
5	የቴክኒክና ሙያ ትምህርትና ስልጠናን ከቀለም ትምህርት የበለጠ እመርጣለሁ					