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Addis Ababa University

School of Graduate Studies

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**Factors Affecting the Quality of TVET Programs: The Case of Four
Public TVET Colleges in Addis Ababa City Administration**

*A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in
Partial Fulfillment of the Requirements for the Degree of Master of Arts in
Management of Vocational Education*

Asrat Wondie Hailu

February 2014

Addis Ababa

Declaration

I, the undersigned, declare that this thesis is my original work and all sources of materials used for the thesis have been duly acknowledged.

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Date of Submission: _____

Advisor's Approval

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

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Signature: _____

Date: _____

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By: Asrat Wondie

Approved by Board of Examiners

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Abstract

The main aim of this study was to investigate the factors that affect the quality of technical and vocational education and training in selected public institutions of Addis Ababa city. Accordingly, it tried to look into the different factors related to management, resource and, training aspects of the TVET institutions. The sample population used in the study consisted of 60 trainers, 295 trainees, four department heads and 2 top management officials. Both the trainers and trainees were first selected on the basis of department and occupational area respectively by using stratified sampling. Then the sample population was taken from among these by employing simple random sampling method proportionately. The two top management officials were purposively selected; still purposive sampling was employed to select four department heads because of their dependability due to the positions they hold.

All in all, there were 361 respondents. The frequency count and percentages were the statistical methods used in analyzing data. Different inputs of training (facilities, materials, and services) are below the studied. The facilities in most cases were important in TVET training are assessed.

Because of this and other reasons like the trainers' being inexperienced and with lower qualification, the inefficiency of the leadership to properly conduct supervisory activities and provide supportive and timely feedback, the training process is being carried out are studied. From the findings conclusions were made that the institutions are not in a position to achieve the objectives stated in the Ethiopian National TVET Strategy. Therefore, in order to alleviate the problems associated with human and non-human inputs of training, it is recommended that the Ministry of Education and the regional TVET bureau should devise ways of securing competent TVET training staff and search for additional inputs in order to lessen the existing severe problems with regard to such as interests, motivations, assessments, equipment and facilities, etc, by regularly involving all concerned bodies including influential individuals, governmental, and non-governmental organizations.

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Asrat Wondie

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**Factors affecting the quality of Technical and Vocational Training program
in the case of Government TVET Colleges in Addis Ababa**

CHAPTER ONE

1.1 Background of the Study

The development of any country depends on the active and responsive participation of its population. Without having adequate workforce with the necessary knowledge, skills, and attitudes one cannot imagine changes that lead to the development of social and economic sectors. Several educators claim that education is the corner stone for any development. The quality of economic performance of a country is a function of the quality of its human resources specially of its young people. Moreover, the development of trained labor force makes a significant contribution to national development, facilitate the application of science and technology for the transformation of materials into services and goods. (UNESCO.1996).

According to (Todaro, 1985), it is the quality of human capital of the nations, not its material resource that ultimately determines the character and pace of its economic and social development. Improving the quality of education is the most important and an essential means by which any nation can achieve optimum development. Therefore, investment in population quality through schooling enhances the human capital for productive life.

The World Bank research (Johanson R., 2002) result indicated that countries were finding it extremely difficult to hire and retain highly competent, qualified, motivated, flexible, and creative TVET trainers and educators with the necessary skills and experience and thereby the training was very poor in quality. In addition, there is no reliable and recognized Africa-wide teacher qualification standard (Middleton and Ziderman, 1997). This implies, the implementation capability of TVET reform in Africa may be constrained by lack of trained manpower.

A direct link between education and material production is realized through Technical and Vocational Education and Training (TVET) which is increasingly recognized as an effective means of empowering young people to engage in productive work and quality life skills for sustainable livelihood. Hence, TVET programs that respond to the demands of the labor market, both local and global, are viewed as central to equip the young with the work skills that will enable them to escape the trap of poverty and lack of competencies needed for economic competitiveness and promote the skills needed in knowledge-based societies and economic wellbeing (World Bank, 2005).

However, there is a growing concern for TVET improvement worldwide. It has not been able to meet both the international development target of 1996 and as a millennium development goal since 2000. This paradox implies TVET has an inborn challenges which lasted long (OECD, 2007).

Similarly, Foster and Ziderman (1997) pointed out that vocational secondary schools in West Africa is characterized by low enrollment rate and poor employment outcomes because the best jobs did not require the kind of practical skills taught in TVET institutes. Foster also realized that students and their parents clearly saw vocational programs as the second best option.

Considering the Ethiopian TVET system, Ethiopia has been working on the development of TVET since 1942 when the first TVET institution (Tegbareid polytechnic) was established in Addis Ababa. Following the establishment of Tegbareid polytechnic school attempts have been made to promote TVET in the country. For instance, Ethiopia introduced the comprehensive secondary education system in 1962 to meet the potential middle level work force demand in the technical and commercial fields. The 1984 ten years national plan (1984-1994) envisaged, among other things, to promote polytechnic education as well as respect for work (Wanna, 1992).

The Transitional Government of Ethiopia (1994) reflected its commitment for TVET by issuing a new education and training policy and strategy. Following the strategy the first Education Sector Development Program (ESDPI) was launched where Technical and Vocational Training become one of the main

components. ESDP (1994) aimed to increase the trained labor force related to the development of the country as a whole and laid down specific objectives and strategic measures on TVET which are:

The provision of diversified technical and vocational training for those who leave school at any level of education,

The provision of apprenticeship training for those leaving primary education,

The provision of TVET in agriculture, industrial arts, construction, commerce and home science for those who may not continue in general education,

The provision of technical training for those who complete Grade 10 to develop middle-level manpower (TGE, 1994).

Similarly, the Industrial Development Strategy of 2003 highlights the tremendous human resource deficits in Ethiopia being a major reason for the low state of industrial development. According to the strategy, the country does not have an educational and a training system that is capable of producing the work force that is both professionally and ethically capable of carrying and sustaining the responsibility in industrial development programs. 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 2006)

Consequently, the Ethiopian government has initiated a new push towards creating frameworks conducive to economic and social development with the Plan for Accelerated and Sustained Development to End Poverty (PASDEP). Comprehensive capacity building and human capital formation are key pillars in all these efforts. As such, National TVET developed as an important element of the overall policy framework towards development and poverty reduction as TVET is a key role in building the required motivated and competent workforce (MOE, 2008).

Among the different categories of education, Technical Vocational Education and Training (TVET) is largely believed to determine the competitive strength of a country productive work force. The strategic thinking behind the expansion of the TVET sub-sectors is to meet the middle-level human power demand of the industry, service sector, commercial and agriculture which have become very essential to the overall development of the country. It is an instrument for producing technicians equipped with practical knowledge, who unlike in the past would be job creators rather than expecting job to be provided by the government (MOE, 2005).

Addis Ababa City Administration is concerned with the implementation of TVET reform and strategies. Addis Ababa TVET agency established by Addis Ababa City Administration is given a mandate to lead the TVET system in the City by article 1 of proclamation number 11/2009. Consequently, different offices have been organized in all sub-cities responsible to implement the new TVET system. One of the major rationales behind the establishment of the Agency as part of the structural reform was to boost the capacity of the training institutions to the level of providing quality practical training. Currently the agency is implementing the reformed TVET strategy of the city. However, several questions can happen in connection with its newness regarding its capacity to successfully realized, the quality of TVET program.

1.2 Statement of the Problem

Trained work force, as being one of the vehicles for national development, requires effective training to meet the requirements and need of employers. The Technical and Vocational Education and Training (TVET) system is responsible to provide the required labor force to the socio-economic development of one's country.

The economic policy and strategy of the country requires technical and professional skills in broad and specific occupational fields. To meet this demand, public and private TVET institutions have increased in number, qualifications have been diversified, enrolment has increased and the trainees are prepared to perform functions valued and needed by the agricultural development led industrialization strategy of the country. Although the

Education and Training policy of 1994 and ESDPII of 2005 showed the major educational issues such as relevance, quality, accessibility, and equity in general, the issues of quality in education as a whole and TVET in particular, have not yet been realized (MoE, 2004).

The question of delivering high quality technical and vocational training has now become an issue in Ethiopian TVET system. Training Colleges could not provide the expected quality training that can produce competent young graduates. The training given could not equip trainees as much as expected with the required morale and entrepreneurial motivation to start confidently their own business or be employed in institutions relevant to their saleable skills. Skilled and qualified instructors, well-organized workshops, motivated and interested learners, updated and competency based curriculum are required parameters to sustain a high quality of TVET delivery.

This research paper tries to address the main question, "What are the major factors affecting quality TVET delivery and what measures have to be taken to sustain an acceptable TVET delivery system in Addis Ababa's public TVET institutions?".

Based on the above research theme, this study attempts to address the following research questions:

1. Do the streaming procedures of the students have affected quality of the program?
2. Is the pedagogy which is the delivery system of teaching and learning process appropriate to ensure the quality of TVET programs?
3. Do they have enough educational materials to ensure the quality of TVET programs.
4. Are student assigned according to their interest during trade selection?
5. Do TVET colleges have enough skilled trainers\instructors?
6. Do teachers participate in curriculum revision?

7. Do trainers have a chance to comment on new curriculums before implementation?

8. Does the evaluation method encourage getting quality trained work force?

1.3. General objective of the study

The general objective of this research is to find the extent of major technical and vocational training quality factors affecting the delivery and outcome of training in selected government TVET colleges residing in Addis Ababa City Administration and to come out with a recommendation which could address the quality issue. To attain the major objective the following specific objectives have been set.

1.4. Specific objective

- To check streaming of students in various departments
- To assess the delivery methods of teaching–learning process
- To assess student’s performance evaluation methods
- To see the availability of relevant and adequate teaching material in the selected public TVET colleges
- To investigate the adequacy of qualified manpower, educational materials of the selected public TVET colleges.
- To analyze the major factors affecting the quality of TVET programs in the selected public TVET colleges.
- To pin point the major problems, of the selected public TVET colleges in Addis Ababa City, and to forward suggestions for further improvement.

1.5. Scope of the study

The scope the study is to investigate major factors affecting the quality of TVET program in Addis Ababa City Administration by taking four public TVET delivery colleges and then to come out with a recommendation to overcome the quality issue. The result of the study will address and identify those factors affecting the quality of teaching and learning processes currently

practiced. The study will also be a platform to other researchers to carry out further studies on quality improvement in TVET programs.

1.6. Delimitation of the Study

In order to make the study manageable, the study has focused only on four selected institutions located in Addis Ababa town. As all TVET public colleges are homogeneously equipped and operated in various factors such as training materials, curriculum, training staff, trainee interests and motivations, and school facilities it would be wise to select very few TVET institutions for the research and draw a conclusion that is applicable to all training centers located in the town. While the study is to assess students' interest, teachers and management staff capabilities and availability of resources related to the establishment of quality, due to time and cost factors this research will not enter into investigating apprenticeship programs and qualification assessment variables which are also directly related to the maintenance of quality education.

1.7. Limitations of the study

Even though the selected public TVET Colleges were four in numbers, it was hard to get students to distribute questionnaires and get them collected on time and students were fed up of filling questionnaires coming from similar researchers at the same time. This might have influenced the responses provided and affected the validity of the assessment. Results obtained from direct interviews with the concerned department heads and instructors are also susceptible from a probable fear of exposing their own system.

1.8. Organization of the Study

The thesis starts with an abstract to present the reader briefly about the whole picture of the study. Then comes chapter one, which describes the background to the initiation of the thesis and contains one major research question, what are the factors affecting quality and what should be done?, to be answered at the end of the thesis. Purpose and delimitation of the study are also included in this chapter. In chapter two, the theoretical frame of reference is presented to update the reader deep into the research topic. Chapter 3 describes the methodological choices and steps to be followed. Chapter 4 shows data

analysis and interpretation. Chapter 5 shows the summary of major findings and a conclusion is drawn based on the findings. Finally, a recommendation, which is the outcome of this research, is presented in the same chapter.

CHAPTER TWO

LITERATURE REVIEW

2.1 The concept of quality

Quality is a multi-dimensional concept, embracing all functions and activities of education, including teaching learning process /interaction between teachers and students/ staffing, classrooms, buildings, facilities, equipment, academic programs, financial issues, curriculum relevance, services to the community, cultural values and international dimensions such as exchange of knowledge, interactive networking, mobility of teachers and students. A number of individuals have contributed to the issues and definitions of quality. In light of this, quality means different things to various people depending on one's particular background. It also varies from society to society and from institution to institutions. It is multi-dimensional, dynamic, and hard measure, discrepant in terms of goals and susceptible to social interpretation's (Gillie, 1937:54)

Quality is relative and not easy to define and measure. Many educators agree that an adequate definition of quality of learning must be related to students' achievement (output) as its basis. In the context of schooling, the concept of quality is linked to how efficiently learning takes place. This is believed to be strongly determined by the teaching and learning style taking place at the classroom level, teachers' subject knowledge and pedagogical skills, the availability of textbooks and other learning materials including the time spent by pupils actually learning their lessons(UNESCO, 1993)

What is commonly employed in the learning institutions including vocational education as a way of checking quality is setting minimum standards on the educational processes, such as the qualification of the Academic staff, the organization of curriculum, and other resources, using student evaluation of teaching although there are differences in implementation and utilization (Aschroft, 2005:46). Aschroft also suggests the following standards: academic

standards, standard of competence, and service standards for quality check and balance.

Academic standards measure ability to meet specific levels of academic attainment in relation to teaching and learning.

Standard of competence measures specific levels of ability on a range of competencies, which include the general transferable skills required by employer and skills required for induction in to a profession. This regards TVET occupational standards and the capability of performing the different units of competencies at and above a satisfactory level.

Service standards measures identified elements of the service provided by higher education and TVET institutions.

TVET quality issues can be categorized into system, school or individual factors. System factors are funding, the need for cooperation between sectors, work placement requirements, teacher availability and human resource issues, the operation of clusters and sustainability. System factors are major drivers of or barriers to change in vocational education in schools

2.2 Quality characteristics

Quality is not a new subject in educational institutions, teachers administrators and policy makers have always been concerned with quality. Even without adopting a formal 'quality' approach, VET providers have needed to develop methods, norms, procedures, and standards that allowed them to ensure the quality of their provision. However, the notion of quality has often been ill defined in a narrow sense, or not defined at all. (Van den Berghe 1997b)

Quality is defined as:

- exceptional (i.e. special, excellent, exceeding particular standards)
- consistent (i.e. matching specifications, always right)
- fit for the purpose (i.e. relevant to standard mission or to clients' needs)
- valuable (i.e. accountable, effective, efficient)
- transformative (i.e. enhancing or empowering by means of cognitive change)(Baker 1997).

Seyfried categorizes quality aspects in VET according to the quality of the training process itself, the objectives, and contents of vocational training, context, and conditions within which the vocational training takes place. As quality is composed of quite different factors, depending on the point of view of the observer, he notes that possible quality indicators could focus on:

- Qualifications of trainers
- Equipment in classroom
- Participants evaluation of the course
- Usefulness of the course of participants (motivation/employment prospects)
- Relevance of acquired qualification for the workplace (practical orientation, social skills, etc.)

(Seyfried, Kohlmeyer & Futh-Riedesser 1999)

2.3 Concept of Quality Assurance

In general, the main responsibility for the effectiveness and quality of the education lies with the education provider

The definition of key terms related to quality in TVET institutions varies among countries and regions. It is important, therefore, that all stakeholders agree on definitions and vocabulary.

Quality in Vocational Education and Training (VET) refers to three aspects: VET qualifications, courses, and providers. Educational quality is to be consistent with the vision and mission of national education initiatives.

Quality Assurance for education is the process of monitoring and assessment in line with defined requirements. The quality assurance system helps an institution gain confidence in its quality and gain an increase in public trust. Quality assurance may be undertaken by an external agency or through a TVET institution's own internal quality management system (QMS). Quality assurance – whether external or internal and irrespective of how quality is

defined – requires established benchmarks against which qualifications, courses and providers can be assessed.

Quality Control means the systems and mechanisms for quality education that are in place and are in accordance with designed indicators.

The Quality Standard for TVET institutions may be developed and assessed through:

- Internal quality assurance processes;
- An external TVET quality assurance agency;
- International standard-setting of international generic applications (for example, ISO 9000 provisions).

Quality Auditing is the process of internal monitoring of TVET institutions to ensure the presence of quality control mechanisms. The administrator of the TVET institution should develop a positive environment for his/her staff, conducive to quality work. TVET institutions should develop their own sustainable approaches to quality monitoring to suit their needs.

Quality Assessment is identification of the quality of TVET institutions against indicators identified in the TVET QA Manual. This process is designed to help institutions identify strengths, weaknesses, and opportunities for improvement. Quality assessment will comprise self-assessment, internal assessment and external assessment.

Self-Assessment involves institution-level quality assessment and includes input from official committees, school staff, and students. A written self-assessment report (SAR) is required. Self-assessment must be conducted yearly in accordance with the annual development plan of the institution.

Internal Assessment involves quality assessment performed by the Technical and Vocational organizations. Organizations that employ graduates should be involved in the assessment.

Accreditation is the outcome of internal and external quality assessment. It helps to ensure that institutions are recognized for providing quality TVET programs.

Internal Quality Assurance is the result of internal quality assessment by an appointed committee, and external Quality Assurance is the process of quality assessment and assurance of TVET institutions by an external agency.

CHAPTER THREE

3. RESEARCH METHODOLOGY

This section is devoted to present the principles and procedures followed to address the research questions and the justification for the methodology selected by considering the research questions and literature reviews.

Since qualitative research provides deep in sight and understanding to the problem, factors affecting the quality of TVET programs, it is preferred than the quantitative way of research which depends in analyzing numerical data.

3.1 Research Type

Among the research model types exploratory, descriptive, and causal this research focuses on the descriptive type and descriptive survey research methods were employed.

The advantage of descriptive survey research methods as defined by Cohen (1994) and Grey (2004), is that it employs large amount of data from relatively wider area and allows high degree of interaction with respondents. It can easily be adapted to collect general information, provides relatively simple and straightforward approach to the study of attitude, values, and beliefs, and it can also help to measure particular phenomena at a fixed point in time.

3.2 Population and Sample of the Research

Population is the aggregate of all elements sharing common sets of characteristics that comprises the universe. Public TVET colleges residing in Addis Ababa City Administration is the selected population for the research ,determining the factors affecting the quality of TVET programs.

Out of all public TVET colleges found in the town, four were randomly selected to conduct the research, 360 questioners to trainees and 100 questioners to trainers\ teachers.were distributed.

3.4 Instruments of Data Collection

The instruments employed for data collection are questionnaires, interview, focus group discussion, and checklist. Close-ended and open-ended questions were enclosed. “category questions” such as “Always”, “Very frequently”, “Occasionally”, “Rarely”, “Very rarely”, or “Never”; “Scale questions”, which respondents were asked to indicate how strongly they agree or disagree with the subject matter and to indicate the levels of variables as “Very high”, “high”, “medium”, “low”, or “very low”; and multiple choice types were used.

One semi structured interview and focus group discussion guide were prepared with five major guiding questions with the intention of triangulating the data and to flexibly probe views and opinions and give chance for informants to expand their answers. Face to face, interview was conducted with planning and support process owners, TVET colleges heads and employers. Focus group discussion was administered to department heads in the respective TVET colleges.

3.5 Procedure of Data Collection

3.5.1 Pilot Test

Following the preparation of the questionnaires and before distribution, the questioners had been administered to Akakie TVET management bodies, trainers, and trainees that were selected through simple random sampling technique. Akakie TVET College has been selected for pilot testing purpose with a rationale of its staff being cognizant with the researcher. To test the validity of the questions, the questionnaires were distributed to four experts to comment on the clarity of the language, the inclusiveness of the questions and to identify irrelevant questions. Based on comments from these experts language usages for some questions were modified.

3.5.2 Data Collection

Following the pilot test, revised questionnaires were distributed to the respondents identified for the study of the four colleges after getting permission from the respective bodies. During distribution, orientations were given for all sample respondents. For student respondents guidance was given on the spot to assist them in filling the questionnaires properly.

Concerning the interview, guides were distributed in advance to the interviewee. Additionally suitable time and place for interview was arranged. Concerning data related to focus group discussion on respective TVET Colleges, an appropriate time and place was arranged after consulting the participants.

CHAPTER FOUR

4. Data Analysis and Interpretation

This study focuses only on regular students of four public TVET colleges. Level 3 and level 4 in 2013 academic year. TVET trainees, Trainers and top managements of selected colleges in Addis Ababa City Administration are the subjects of the study.

4.1. Analysis and Interpretation of Data

This chapter deals with the analysis and interpretation of data collected through questionnaires, interview, observation and checklist. Two types of questionnaires were constructed and distributed for instructors and students. Interview questions were discussed with top-level managers. The researcher to seek appropriate answers to the basic research questions raised in chapter one of this study filled observation checklist questions.

Since the study focus on TVET Colleges in Addis Ababa City Administration the total number of colleges are six. Out of these six colleges Tegbareede TVET College is excluded, because this college started functioning in 1942 with TVE program, so the researcher found it incomparable with other TVET colleges. From one of TVET colleges pilot Test was taken following the preparation of the questionnaires and before distribution.

Thus, among the six colleges five are used to conduct the study. From these five colleges one was taken for pilot test while the rest were used to collect data using questionnaires. 360 questionnaires were distributed to trainees, out of these 360 questionnaires 295 questionnaires were collected and 65 questionnaires were uncollected.

4.2. Data Presentation and Analysis of Responses Collected from Trainees

Table 1. Trainees' profile

No	Item	States	Respondents	%
1	Sex	Male	170	57.6
		Female	125	42.4
		Total	295	100%
2	Age	15-17	40	13.6
		18-20	203	68.8
		21-23	52	17.6
		Above 24	-	-
		Total	295	100%
3	Education	Level 3	140	47.5
		Level 4	155	52.5
		Total	295	100%

Source: Trainees, Response 2013.

As shown in Table 1 out of 295 170 (57.6%) were males and 125 (42.4 %) were females.

Table 2. Management Related Issues

No	Alternatives	Responses	
		Number Of Respondents	%
1	The College Has Experienced And Competent Supporting Staff		
	A, Strongly Agree	-	-
	B. Agree	70	23.7
	C. Undecided	70	23.7
	D. Disagree	120	40.7
	E, Strongly Disagree	35	11.9
	Total	295	100%
2	The College Has Procedures In Place To Ensure And Support Diversity Of Students		

	A, Strongly Agree	25	8.5
	B, Agree	100	33.9
	C, Undecided	78	26.4
	D, Disagree	63	30.3
	E, Strongly Disagree	29	9.8
	Total	295	100
3	Evaluation of the institution is periodically done		
	A, Strongly Agree	17	5.8
	B, Agree	74	25.1
	C, Undecided	22	7.5
	D. Disagree	100	33.9
	E. Strongly Disagree	82	27.9
	Total	295	100
4	The Institution Has Partnerships With Other Educational Institutions To Enhance The Quality Of Education		
	A. Strongly Agree	85	28.8
	B. Agree	104	35.3
	C. Undecided	45	15.3
	D. Disagree	41	19.1
	E. Strongly Disagree	20	6.8
	Total	295	100
5	Students Are Represented In Administrative Structures		
	A. Strongly Agree	---	---
	B. Agree	----	----
	C. Undecided	---	---
	D. Disagree	151	51.2
	E. Strongly Disagree	144	48.8

	Total	295	100
6	The College Has Qualified And Competent Dean		
	A. Strongly Agree	---	---
	B. Agree	19	6.4
	C. Undecided	8	2.7
	D. Disagree	174	59.0
	E. Strongly Disagree	94	31.9
	Total	295	100
7	Admission Of Students Depends On Man Power Demand Of The Market With Respect To Each Field		
	A. Strongly Agree	----	---
	B. Agree	136	46.1
	C. Undecided	22	7.5
	D. Disagree	83	28.1
	E. Strongly Disagree	54	18.3
	Total	295	100
8	The College Has Organized Information System		
	A. Strongly Agree		
	B. Agree		
	C. Undecided		
	D. Disagree		
	E. Strongly Disagree		
	Total		

Source: Trainees, Response 2013.

Management related issues are very important in changing the trends and effectiveness of TVET education. The top level system that can most play the role of changing such trends, the management is assessed in terms of varying criteria. One of the contributions from the staff is competent supporting staff that helps the college to be effective. As the

above table, 70(23.7%) respondents have agreed that the college has competent and supportive staffs. It is also clear that 70(23.7%) subjects do not decide if the college has competent and supportive staff or not. But, 120(40.7%) subjects have disagreed that the college does not have competent and supportive staffs. The rest 35(11.9%) also strongly disagreed that the college has no competent and supportive staffs. The sum of the disagreements and strong disagreements (155(52.6%) responses showed that the college has no competent and supportive staffs. When compared to those who have agreed and does not decide to respond, the total number of disagreements implies that the college is not having competent and supportive staffs for its effectiveness in the activities, missions, and visions of the TVET programs.

The second concept that the management is assessed with are the activities the college has as procedures in place to ensure and support diversity of students. The college has this quality as 25(8.5%) subjects who strongly agreed and 100(33.9%) subjects who agreed that the college has procedures in place to ensure and support diversity of students. But, 78(26.4%) subjects do not decide if the college has these procedures or not. 63(30.3%) and 29(9.8%) subjects respectively disagreed and strongly disagreed that the college has procedures in place to ensure students diversity. However, the sum of these disagreements does not exceed the number of subjects who have agreed and strongly agreed with the presence of these procedures.

The third important feature the management of the selected TVET colleges is assessed with is the periodical evaluation of the institution. The institution is expected to be evaluated in terms of its effectiveness of the overall activities related to the TVET education. Based on these, the data collected has shown that there are 17(5.8%) subjects who have strongly agreed that the college does evaluate its activities periodically. It is also clear that 74(25.1%) subjects have agreed that the evaluations are periodical. Unlike these, 22(7.5%) subjects do not decide if the college is evaluating its missions, vision, and success periodically or not. Contrary to the agreements, there are 100(33.9%) subjects who have disagreed, and 82(27.9%) subjects who have strongly disagreed that

the college is evaluating its overall effectiveness periodically. Thus, the total disagreements showed that the college is having poor performance in terms of evaluating its capacity and success.

The fourth most important concept to evaluate effectiveness of the institutions quality of education was their partnerships with other educational institutions to enhance the quality of education. Based on the data gathered the number of respondents who strongly agreed with the presence of inter-institution partnership are 85(28.8%) of the total subjects. The highest percentage, 104(35.5) agreed that there is partnership between the institution and other institutions. But, 45(15.3%) do not decide to agree or disagree with the presence of partnerships. In contrast, there are 41(19.1%) disagreements and 20(6.8%) strong disagreements that show the absence of partnerships. From the result shows that there are higher number of subjects who have supported the argument that there is inter-institutions partnership to enhance the quality of TVET education.

Further area the researcher wants to investigate in relation to the management under the TVET in representing students to administrative structures. As seen in the table , there are no students who are represented in administrative structures by the TVET institutions. But, 151(51.2%) disagreements, and 144(48.8%) strong disagreements have proved the absence of students who are assigned in administrative structures. this has negative impacts on students' motivation, experience, and contribution in administering future carriers.

More associated with the management of TVET, qualified administrative, deans, and other personnel are targets who are responsible and important in the provision of quality education and effective practice for trainers. For this study, the presence of a qualified dean is focused. There are the least, 19(6.4%) respondents who agreed that the dean of the college is qualified. except 8(2.7%) subjects who abstain to agree or disagree with the presence of a qualified dean, 174(59%) disagreements and 94 (31.9%) strong disagreements have proved that the college has no qualified dean. without the presence of

a qualified dean, it is not expected to have good management of resources, issues, and procedures the college should follow.

It is further attempted to assess the admission of students depending on the market demand. Each field of study has its own market after students complete their trainings. Each field of study may have varying level of market demand. The man power demand of the market is put in assumption when students are admitted to TVET colleges as 136(46.1%) of respondents. But, 83(28.1%) disagreements and 54(18.3%) strong disagreements showed that the students are not selected based on the market demand of manpower. The rest 22(7.5%) abstain to agree or disagree. when comparatively seen, the total number of agreements to disagreements is 137 to 136. It means that almost half of the students at various departments are admitted based on the market demand of manpower while the rest are not.

The last point of discussion in relation to the management of TVET is the availability of organized information systems.

Table 3 Items Related to Streaming (Admission) of Students

No	Alternatives	Responses	
		Number	%
1	Students Are Given Orientation To Choose Their Field Of Studies		
	A. Strongly Agree	56	19
	B. Agree	179	60.7
	C. Undecided	36	12.2
	D. Disagree	24	8.1
	E. Strongly Disagree	----	-----
	Total	295	100
2	The High School Courses Encourage Students To Join TVET		
	A. Strongly Agree	45	

			15.3
	B. Agree	234	79.3
	C. Undecided	16	5.4
	D. Disagree	---	---
	E. Strongly Disagree	---	---
	Total	295	100
3	Merit(Admiration) Is Observed During Admission Of Students To TVET		
	A. Strongly Agree	49	16.6
	B. Agree	186	63.1
	C. Undecided	37	12.5
	D. Disagree	23	7.8
	E. Strongly Disagree	---	---
	Total	295	100
	Determine the number of students Entering TVET		
	A. Strongly Agree	17	5.7
	B. Agree	149	50.5
	C. Undecided	33	11.2
	D. Disagree	96	32.5
	E. Strongly Disagree	---	---
	Total	295	100
4	Physical Fitness Is Used As Criterion For Admission To TVET		
	A. Strongly Agree	---	---
	B. Agree	---	---
	C. Undecided	30	10.2
	D disagree	185	62.7
	E. Strongly Disagree	80	27.1
	Total	295	100

5	Trainees/Students Are Informed About Criteria And Attitude Important To The Occupation.		
	A. Strongly Agree	55	18.6
	B. Agree	148	50.2
	C. Undecided	92	31.2
	D. Disagree	---	---
	E. Strongly Disagree	---	---
	Total	295	100

Source: Trainees, Response 2013.

By the table it is attempted to assess the streaming or admissions of students by the TVET institutions. Several issues associated with the students' admission, choices of departments as well as personal and physical criteria of selection are discussed. 56(19%) subjects strongly agreed that the institutions are giving orientations for students in choosing their field of study. The highest number of respondents, 179(60.7%) have agreed that the institutions give orientations to students before they choose their respective departments. 36(12.2%) responses do not decided to agree or disagree with the presence of orientations. The rest 24(8.1%) disagreed that the institutions are giving orientations that help students choose the departments that makes them effective. It is clear that the quality of education can be better if students choose the field of study based on their skills, knowledge, and interest.

Students' knowledge background is one important factor that is assumed to inspire and motivate them choose departments at TVET institutions. Thus, an attempt to find out if such background experience is helping students get encouraged to join TVET institutions. Thus, 45(15.3%) strong agreements and 234(79.3%) agreements showed that high school courses students have taken are encouraging them to join TVET institutions. However, 16(5.4%) subjects do not decide if it encourages them or not. But, there are no subjects

who have disagreed with the importance of high school courses to encourage students join TVET institutions.

Another important element in this section is the Merit (admiration) observed during admission of students to TVET. This helps students effectively learn and practice the disciplines they are engaged to with confidence and interest. As the data related to admiration shows, there are 49(16.6%) subjects who strongly agreed with the admirations by the institutions when students join TVET. the highest percentage, 186(63.1%) also agreed. it is shown that 37(12.5%) subjects who do not decide if there are admirations or not. But, 23(7.8%) respondents have disagreed that admirations are not given by the institutions.

It is appreciated that most of the subjects' argument shows the presence of admirations. This can help students be successful in each field of study at TVET.

When the criteria to join the TVET institutions are seen from wider angle, the admission of students based on their physical fitness takes a share. But, the institutions are not found to use this admission criterion since there are no subjects who agreed with the assumption. 30(10.2%) subjects do not decide if the criterion is used or not. however, 185(62.7%) disagreements and 80(27.1%) strong disagreements showed that the criterion is used to admit students to TVET.

Students are admitted in whatever means, but, it is necessary to be informed of the criteria and importance of the trainings they are going to take to their future carrier. The data shows that there are 55(18.6%) subjects who agreed and 148(50.2%) subjects who have strongly agreed that students are informed about the occupations and the criteria of selections when they join TVET institutions. though there are 92(31.2%) subjects who do not decide to agree or disagree, there are no subjects who objected the presence of information about occupations after TVET. It is good performance of the TVETs that information is absolutely necessary for learners/trainers to get experienced of how to change their knowledge and experience to a real practice after they complete their

education. The quality of education also becomes higher in that learners know every details of information about the trainings and the future occupation.

Table 4 Utilization of Teaching Methods

No	Items	Respondents Students	Percentage
1	Lecture		
	A. Always	178	60.
	B. Sometimes	117	39.7
	C. Not At All Used	---	---
	Total	295	100
2	Individual Project		
	A. Always		
	B. Sometimes	295	100
	C. Not At All Used	---	---
	Total	295	100
3	Group Discussion		
	A. Always	197	66.8
	B. Sometimes	98	33.2
	C. Not At All Used	---	---
	Total	295	100
.4	Team Work		
	A. Always	205	69.5
	B. Some Times	90	30.5
	C Not At All Used	---	---
	Total	295	100
5	Demonstration		

	A. Always	—	
	B. Some Times	295	100
	C. Not At All	---	---
	Total		
6	Visual Aids		
	a. Always	-----	-----
	b. Some Times	295	100
	c. Not At All Used	---	---
	Total	295	100

Source: Trainees, Response 2013.

The utilization of teaching methods is one major area of this study. The utilization of each teaching method has a significant impact on the quality of education. This is no exception to TVET education. Six teaching methods are studied based on their frequency of use by teachers. These are lecture method, Individual project, Group discussion, Team work, Demonstration, and Visual aids. The frequency of use of each method is studied. Among the teaching methods, the first is the lecture method. As 178(60.3%) responses, this method is always used by the teacher. the teacher(s) sometimes use this method as 117(39.7%) respondents. There were no subjects that objected the use of the method.

The second teaching method that is sometimes used is individual projects as 295(100%) subjects have agreed. we can see that methods, the lecture and individual project method are used by teachers.

The third method used to teach students is group discussions. 197(66.8%) respondents argued that this method is always used while the rest 98(33.2%) subjects argued that the method is used sometimes.

Team works are also teaching methods where it is possible to integrate students perform tasks and learn one another based on the principles, rules, formulas, etc they learn at classroom with descriptive explanation. For 205(69.5%) subjects, this method is always

used to teach them. the rest 90(30.5%) subjects argued that this method is sometimes used.

Another teaching method important in TVET institutions is the demonstration method. For 190(64.4%) subjects, this method is always used to teach them. it also found that the method is sometimes used for 105(35%) respondents. No subjects have argued the absence of this method.

The last method of teaching included in this study is the use of visual aids. As 197(66.8%) subjects believed teachers use visual aids to help them learn better. the rest 98(33.2%) subjects response shows the method is sometimes used.

From the teaching methods frequency of use it is clear to understand that each method is always used.

Table5 Evaluation methods

1	Assignment		
	a. always	116	39.3
	b. some times	179	60.7
	C .not at all used	---	---
	Total	295	100
2	Individual project		
	a. Always	98	33.2
	b. some times	197	66.8
	c. not at all used	---	---
	Total	295	100
3	Group project work		
	a. always		
	b. some times	295	100
	c. not at all used	---	---

	Total	295	100
4	Continuous tests		
	a. always	---	---
	b. some times	48	16.3
	c. not at all used	247	83.7
	Total	295	100
5	Final exam		
	a. always	187	66.8
	b. some times	98	33.2
	c. not at all used	---	---
	Total	295	100
6	Mid-term exam		
	a. always	98	33.2
	b. some times	197	66.8
	b. Not at all used		
	Total	295	100

Source: Trainees, Response 2013.

The data collected and presented in the above table are criteria to assess evaluation methods used by trainers to measure the effectiveness of students. One of the determinant factors assumed to influence the quality of TVET education is the evaluation. Students should have to be evaluated using different evaluation methods mentioned in the table. Thus, the frequency of evaluation is also addressed in that very rarely used evaluation may result in poor quality of education.

Among the methods presented in the data, assignments are taken as first. As shown in the data assignments are always used to assess students' level of performance for those 116(39.3%) subjects. it is sometimes used as 179(60.7%) subjects agreed. teachers also use individual projects to assess students' capacity and knowledge. This method is always used for 98(33.2%) subjects and sometimes used for 197(66.8%) subjects. for the

two methods used both the assignments and individual projects take the lion's share being used sometimes.

Another method of evaluation trainers' use to measure students' success in their education is the group project work. This method is sometimes used as all respondents, 295(100%) argued. The fourth method used to evaluate students is continuous tests. This method is sometimes used for 48(16.3%) respondents. but, the higher number of responses, 247(83.7%) shows that the method is not at all used by trainers to evaluate students.

Final exams and mid-term examinations are the rest two methods taken as evaluation methods that are used by trainers. For 187(66.8%) subjects final exams as evaluation methods are used always. for those 98(33.2%) subjects, this method is sometimes used. this mean that there is a difference in the use of the method across departments or courses. not only final exams, but mid-term examinations are also used to evaluate students. the difference here is that trainers use this method less frequently than final exams. for those 197(98%) the method is sometimes used to evaluate students. For the rest 98(33.2%) subjects, the method is always used to evaluate students. This means that there are trainers/teachers who use the method more frequently and there are trainers/teachers who use the method less frequently.

The data shows that the methods except final exam are mostly used "sometimes" to evaluate students.

Table6. Items Related to Availability, Competences and other qualities

No	Items	Respondent students	
		No	%
1	How interested you are in attending the class?		
	a. Highly	70	23.7
	b. Moderately	105	35.6
	c. Low	120	40.7

	Total	295	100
2	How do you assess market demand of your study?		
	a. Highly	93	31.5
	b. Moderately	79	26.8
	c. Low	123	41.7
	Total	295	100
3	How do you realize the quality assurance policy associated with the program?		
	a. Highly	58	19.7
	b. Moderately	143	48.5
	c. Low	94	31.9
	Total	295	100
4	Variety of teaching materials are used		
	a. Highly	42	14.2
	b. Moderately	164	55.6
	c. Low	89	30.2
	Total	295	100
5	Learning activity is repeated/ reinforced, until competencies achieved		
	a. Highly	---	---
	b. Moderately	73	24.7
	c. Low	222	75.3
	Total	295	100
6	Continuous and detailed feedback is given to students on their progress		
	a. Highly	43	14.6
	b. Moderately	69	23.4
	c. Low	183	62.0
	Total	295	100
7	Adequate materials and equipment are used		

	a. Highly	---	---
	b. Moderately	74	25.1
	c. Low	221	74.9
	Total	295	100
8	Enough space and workshops are available		
	a. Highly	87	29.5
	b. Moderately	175	59.3
	c. Low	33	11.2
	Total	295	100
9	Each student program is individualized and self-spaced		
	a. Highly	---	---
	b. Moderately	53	18.0
	c. Low	242	82.0
	Total	295	100
10	Students rating reflect the level of competency achieved		
	a. Highly	48	16.3
	b. Moderately	172	58.3
	c. Low	75	25.4
	Total	295	100
11	To what extent do you agree with the critique that says quality is declining?		
	a. Highly	94	31.9
	b. Moderately	176	59.7
	c. Low	25	8.5
	Total	295	100

Source: Trainees, Response 2013.

The table carries all elements related to items associated with qualities such as Availability, Competences and others. the interest of students to the field of study and teaching methods, the market demand of students after completing their study, quality assurance policies of the colleges, various teaching methods are parts of the discussion. It

is also clear that qualities such reinforcement of learning activities, presence of feedbacks on students' progress, adequacy of materials and equipment are relevant to this study. Further, as shown in the table, presence of enough places and workshops, individual teaching programs, students rate of competency, and students' agreements/disagreements to the critique that argues quality is declining are qualities investigated through questionnaire and presented in table V.

The first assessment of qualities and competencies of students is their interest to attend class. Thus, 70(23.7%) respondents are found being highly motivated to attend classes while 105(356.6%) respondents are moderately interested. the rest and the highest number of respondents, 120(40.7%) are found having low interest to attend class. it shows that there is high prevalence of students disinterest in attending class.

The second issue related to qualities and competencies is the assessment of the market demand by students. Students are expected to assess the market demand of each field of study they are engaged to. Based on the data, that is 93(31.5%) students highly assess the market demand of their study while 79(26.8%) do moderately. However, the highest percentage of responses, 123(41.7%) showed that most of the students do not assess the market demand of their study. It shows that there is a huge gap between those who are critically and highly assess the market demand of their study and those who do not.

The third most important feature included to this study students knowledge and attitude to the quality assurance policies of the TVET programs. The total numbers of respondents who have highly realized the presence of quality assurance programs at TVET institutions are 58(19.7%). as 143(48.5%) respondents have moderate knowledge and awareness of the presence of quality assurance programs at TVET, the rest 94(31.9%) respondents have low level of knowledge and awareness.

From the data we can interpret that the number of students who highly realized the presence and availability of quality assurance programs is lower than those who do not

aware it at all. But, it is appreciated that most of the students have moderate level of awareness and knowledge of the programs.

The fourth concept dealing with qualities and competencies is students' observation of the variety of teaching methods at TVET. The use of different teaching methods has greater significance to educational quality for many reasons. Some methods can give physical experience of the theoretical knowledge students have, some methods give students the chance to practice individually and in groups than listening to explanations of the teacher.

Thus, students were requested to provide their level of observation and the availability of varying teaching methods at TVET level Institutions. As the data in number 5.4 shows, there are 42(14.2%) respondents who have high observation and familiarity with variety of teaching methods. Those who have moderately observed the presence of different teaching are 164(55.6). The rest 89(30.2%) which are the highest numbers of respondents are not familiar with varying teaching methods.

The fifth issue related to quality and competency is the efforts made by the institutions to reinforce the learning activity until competency is achieved by students. As 73(24.7%) responses imply reinforcements are moderate. but, a remarkable number of respondents argued that it is low level of reinforcement that the institution has to enable students achieve competency levels

In addition to reinforcements, it is important that the institution has to provide continuous and detailed feedbacks to students regarding their progress. This would mean that the student can evaluate his/her achievement level after comments and feedbacks are given. Related to this, there are 43(14.6%) respondents who highly agreed that there are detailed feedbacks given to students by the respective trainer or the institution. the level of continuous and detailed feedbacks is moderate for 69(23.4%) respondents. the rest, but the highest number of respondents argued that there is low level of continuous and detailed feedbacks.

The seventh quality under investigation is the adequacy of materials and equipment. The adequacy of materials and equipment is important to help students have practical knowledge than the theories at classroom level. Thus, the researcher tried to find out that the adequacy of materials and equipments for the teaching learning process is moderate for 74(25.1%) subjects, and low for the rest 221(74.9%) respondents. It is clear that the availability of equipment and materials is not satisfying for the highest percentage of respondents.

The availability of enough space and workshops for students is stressed being the 8th element of this part of the study. Thus, it is found that 87(29.5%) subjects have argued the space and workshops are highly available. the highest percentage, 175(59.3) respond that the space and workshops are moderately available while the rest 33(11.2%) argued it is low level of space and workshops that is available.

The availability of space and workshops is moderate. Having this, it is important to see if each student is having programmed and individualized space for learning or not. Opportunities to give each student the chance to learn and practice individually may be cost-sharing but it is important to have quality education distribution. Based on this, the collected data shows that there are 53(18%) respondents who have argued that such a program is moderately available. the rest 242(82%) respondents' result implied that the programs for individual learning are low.

Students were further requested to reflect the level of competency achieved through the teaching-learning process. Thus, there is high level of competency achieved by 48(16.3%) respondents while 172(58.3%) students have moderate level of achievement. The rest 75(25.4%) agreed that the level of competency they have achieved is low. When it is seen comparatively, the number of moderately achieving and lowly achieving are exceeding to the number of those who are having high level of competency achievement.

At end, subjects were requested to describe the extent they agree with the critique that states quality is declining. Thus, 94(31.9%) respondents argued that it is highly true while

176(59.7%) agreed it is moderately true that the quality of education is declining. The rest 25(8.5%) lowly agreed that quality of education is declining.

4.3 Analysis and Interpretation of Data Collected From TVET Trainers

Characteristics of Respondents

In this study, questionnaire results collected from 60 TVET teachers/trainers are presented for data analysis. The total number of questionnaires distributed was 100. But, it is only 60 questionnaires that are returned. The rest 40 were not included to the study due some limitations.

Description of the characteristics of respondents, give some basic information about the sample population involved in the study. Therefore, the following tables are constructed to show the general features of respondents involved in the study.

Table 7 Characteristics of Top Management and Instructor Respondents

No	Descriptions	Instructors		Top Managers	
		No	%	No	%
1	Sex				
	a) Male	40	66.7	6	75
	b) Female	20	33.3	2	25
	Total	60	100	8	100
2	Qualification				
	a) MA\MSC	5	8.3	8	100
	b) BA)\BSC)\BED	20	33.3	---	---
	c) TVET DIPLOMA	15	25.0	---	---
	d) COLLEGE DIPLOMA	20	33.3	---	---
	Total	60	100	8	100

3	Field of study: Department (stream)				
	a) Auto mechanics	11	18.3		
	b) Electrical & Electronic (construction)	24	40		
	c) Chemical processing	2	33.3		
	d) Surveying	10	16.7		
	e) Management	4	6.7		
	f) Mechanical Engineering	3	5		
	g) Textile	6	10		
	Total	60	100		
4	Teaching Experience in TVTE				
	a) 2-5	25	41.7	2	25
	b) 6-8	15	25	3	37.5
	c) 9-10	10	16.7	1	12.5
	d) Above 11 years	10	16.7	2	25
	Total	60	100	8	100

Source: Trainers, Response 2013.

Male gender of the respondents in proportion to females is 40 to 60 for trainers and 6 to 2 for top managers. It means that 66.7% trainers are males and 33.3% are female trainers. The top managers take the percentage rate of 75% males to 25% female.

Another profile of the subjects of this section of the analysis is the qualification level of trainers and top managers. Thus, it is found that there are 5(8.3%) trainers who have their MA/MSC. it is clear that 20(33.3%) subjects graduates (BA) BSC/BED. Similar number of trainers have college diploma. The rest 15(25%) are TVET diploma holders But, all the top managers, 8(100%) under this study are qualified with MA/MSC.

It is identified that there departments seven departments where the selected trainers of this study are allocated to. As the data shows, there are 11(18.3%) trainers who are teaching auto mechanics, 24(40%) teaching (construction) Electrical and electronic,

2(33.3%) teaching chemical processing, 10(16.7%) teaching surveying, 4(6.7%) teaching management, 3(5%) teaching Mechanical Engineering, and the rest 6(10%) are teaching Textile.

At end, the teaching experience of trainers is also collected as it shows there are 25(41.7%) trainers experienced for 2 to 5 year, 15(25%) trainers experienced 6 to 8 years, 10(16.7%) trainers experienced from 9 to 10 years, and the same number of trainers are experienced for more than 11 years. concerning top level managers, 2(25%) are experienced from 2 to 5 years

3(37.5%) from 6 to 8 years. 1(12.5%) top managers are experienced for 9 to 10 years. the rest 2(25%) subjects are experienced for more than 11 years.

		Strongly agreed		Agreed		Undecided		Disagreed		Strongly disagreed		No	%
		No	%	No	%	No	%	No	%	No	%		
1	There are standard requirements for each courses	11	18.3	11	18.3	3	5	26	43.3	8	13.3	60	100
2	The standard req Have been comm Trainees	5	8.3	17	28.3	2	3.3	26	43.3	10	16.7	60	100
3	The standard req Have been comm Trainers	6	10	14	23.3	4	6.7	28	46.7	8	13.3	60	100
4	The sole factor for curriculum change is market demand	7	11.7	4	6.7	8	13.3	14	23.3	27	45	60	100
5	TVET teacher were asked to comment on previous TVET strategy before the new outcome based approach was introduced	—	—	—	—	12	20	30	50	18	30	60	100

6	TVET Teachers were asked to comment on the previous TVET strategy and curriculum development and implementation issues at anytime	12	20	39	65	9	15	—	—	—	—	60	100
7	There are sufficient guidelines and instructions for teachers to understand and execute the new TVET approach and the curriculum	—	—	6	10	21	35	33	55	11	18.3	60	100
8	There is ample opportunity for teachers to participate in curriculum related decision process at all level.	—	—	—	—	2	3.33	37	61.7	21	35	60	100
9	In the area I provide	10	14	36	—	14	23.3	—	—	—	—	60	100

	training, trainees usually like their own initiative to learn												
10	The ability of trainees in my department to quickly understand what they are taught is high	—	—	14	23.3	9	15	26	43.3	—	—	60	100
11	Teachers got sufficient training to update their knowledge and skill to each the new outcome (competence)-based curriculum	—	—	9	15	—	—	35	58.3	26	43.3	60	100
12	Teachers' effectiveness is assessed based on their accomplishments (merit-based)	21	35	39	65	—	—	—	—	—	—	60	100
13	TVET fits more for academically weak students than for	—	—	12	20	27	45	12	20	9	15	60	100

	academically strong students												
--	---------------------------------	--	--	--	--	--	--	--	--	--	--	--	--

Table 8. Factors that determine the quality of TVET programs.

Source: Trainers, Response 2013.

The above table has several qualities assessed in terms of quality education and its provision. Among many of the qualities, the standard requirements for selection of each course students join colleges to learn are the prior qualities. It is done in that students' willingness and effectiveness is highly influenced by the requirements set. Standard requirements for each course are set for 11(18.3%) subjects who strongly agreed and 11(18.3%) subjects who agreed. It is investigated that the total number of subjects who disagreed with the presence of standard requirements for each course are 26(43.3%) and who strongly disagreed, 8(13.3%). It shows that standard requirements for each course selection and presentation for students are not satisfying. The rest 3(5%) respondents do not decide if there are standard requirements or not.

The standard requirements and their presence are known when it is communicated to trainees. If not, it would be difficult to argue that the requirements are not available. Thus, it is found that there are 5(8.3%) subjects who strongly agreed and 17(28.3%) subjects who agreed that standard requirements are communicated to trainees. While 2(3.3%) subjects do not decide if it is communicated or not, the rest 26(43.3%) and 10(16.7%) respectively disagreed and strongly disagreed that the requirements are not communicated. Again like the availability of requirements for each course, the level of communicating these requirements is not supported by high level of respondents.

As in 2.3 the requirements are not only supposed to be communicated only for trainees. But, it is also advised to communicate them to trainers. As shown in the table, 6(10%) strong agreements and 14(23.3%) agreements have proved that the standard requirements are communicated to trainers. Except 4(6.7%) undecided results, the rest 28(46.7%) disagreements and 8(13.3%) strong disagreements have proved that the requirements are not communicated to trainers similar with trainees.

Another quality that is assessed as determinant factor to influence educational quality of TVET institutions is market demand. This factor may be a cause for changes in the curriculum. Based on this, 7(11.7%) trainers strongly agreed that the sole factor for curriculum change is market demand. 4(6.7%) of the trainers also agreed that is a factor for

changes in the curriculum of the institutions. while 8(23.3%) trainers undecided if the market demand is a sole factor for curriculum changes or not, 14(23.3%) disagreements and 27(45%) strong disagreements showed that it is not the market demand which is cause of curriculum changes.

Moreover, comments and suggestions by TVET teachers over previous teaching strategies are important factors for provision of quality education. In case, these comments and suggestions might be used to implement new outcome based teaching approach. In this regard, there are no trainers who were asked to comment on previous strategy before the new strategy was implemented. Though there are 12(20%) respondents' results that show no decisions over this question, there are 30(50%) disagreements and 18(30%) strong disagreements that implied the absence of comments on strategies before formulating the new TVET strategy. it shows that the institution is making decisions and implementing curriculum and strategy changes without collecting comments from trainers. but, it is found necessary to investigate if the trainers were asked to comment on the new strategies at any time after implementation of not. thus, 12(20%) trainers agreements and 39(65%) trainers strong agreements showed that trainers were asked after changes were made. but, the rest 9(15%) trainers do not decide to respond to this question.

The formulation and implementation of new TVET approaches are assumed to bring together sufficient guidelines and instructions to trainers. These instructions and guidelines must be executable and understandable by trainers. Thus, they can use the new approach efficiently and effectively in the teaching-learning process. However, it was only 6(10%) trainers who agreed that the guidelines and instructions are sufficient. it is found that 21(33%) trainers have abstained to decide if there are sufficient instructions and guidelines. the rest 33(55%) trainers disagreed that these guidelines and instructions are not sufficient to execute and understand the new TVET approach of the curriculum.

Teachers are also assumed to participatory in curriculum related decision making processes at all levels. It is found risky that teachers are not participating in curriculum change and other curriculum related decision making activities. The data shows no agreements that indicate their participation. Except 2(3.33%) undecided responses, all the rest responses have shown

disagreements. There are 37(61.7%) trainers who disagreed and 35(60%) who strongly disagreed with the presence of teachers on decision making process related curriculum.

Beyond curriculum and strategy changes, students' initiatives to learn are mandatory for the quality of education. As shown in the table, no 2.8, there are 10(14%) strongly agreed and 36(60%) agreed results that show students' initiative to learn. the rest 14(23.3) trainers do not decide if students have their own initiative to learn or not. But, there were no trainers who respond that trainers have no initiative to learn. This means that students have very good level of initiative to learn. Not only can the initiative of students make them competent and effective in their education. It is also important to see their level of understand of the lessons they learn. Trainers were asked to respond to the students level of understand of what they have learnt. Thus, 14(23.3%) trainers agree that students in their department have quick understanding of what they have taught. as 9(15%) trainers abstain to decide if students understand quickly or not, the rest 26(43.3%) disagreed that the students level of understand is not quick.

Furthermore, it was attempted to investigate if teachers are getting sufficient training that enables them update their knowledge and skills that fits each curriculum changes. It was found that only 9(15%) trainers get enough training to update their knowledge and skills. it is found that 35(58.3%) disagreements and 26(43.3%) strong disagreements have shown that highest number of trainers are not getting sufficient training to up-date their knowledge and skills. it mean that when curriculum changes are made, teachers are still with the oldest knowledge and skill of teaching without being familiar with the newer. it can thus, highly influence the quality of education.

At large, it was important to assess the assessments of teachers' effectiveness. Teachers must be assessed based on their level of accomplishments (merit-based). Thus, 21(35%) Trainers strongly agreed that they are assessed based on their accomplishments. The rest 39(65%) trainers have also agreed that the assessment is merit based. it is appreciated that the teachers are assessed based on their performance and effectiveness in the teaching process.

At end, trainers were requested to comment on the argument that states TVET fits for academically weaker students than those who are stronger. While 12(20%) respondents agreed

with the argument, there 27(45%) trainers who do not make decisions to agree or disagree with the argument. However, 12(20%) disagreements and 9(15%) strong disagreements have shown that TVET do not fit more for academically weak students than stronger students. the data shows the highest undecided responses and higher level of disagreements. the total disagreements showed that TVET more fits for academically strong students than weak students which disproves the argument.

The table below has some factors that have motivational influence over teachers’ desire of teaching at TVET. The different sources that may motivate teachers to join and teaching at TVET are assessed.

Table9. Analysis of results from teachers

	Items	Alternatives										Total	
		Strongly Agree		Agree		Undecided		Disagree		Strongly disagreed			
1	Your interest	—		—	—	14	23.3	24	40	22	36.7	60	100
2	The means you become a trainer is	No	%	No	%	No	%	No	%	No	%	No	%
3	Assignment of higher commission	11	18.3	25	41.6	13	21.6	9	15	2	3.3	60	100
4	College / institution assignment	—	—	—	—	17	28.3	27	45	16	26.7	60	100
5.	Family pressure	—	—	—		10	16.7	28	46.7	22	36.7	60	100
6	Lack of other opportunities	26	43.3	19	31.6	15	25	—	—	—	—	60	100

Source: Trainers, Response 2013.

The Interest of teachers is one of the major factors to impact students’ result, motivation, and desire to learn. Interested teachers have the inspiration to teach well and efficiently. But, no teacher is having either very high or high level of interest to teach in TVET. The data shows that there are 14(23.3%) trainers who have medium level of interest. 24(40%) trainers with low interest and 22(36.7%) with very low interest show that most of the trainers are working under TVET not being interested. among the reasons they joined TVET as trainers, the first is

assigned by higher commission institutions after graduation. the selection may be based on their grades than their interest to teach at TVET. the means the teachers are teaching at TVET must be beyond interest of the teachers. thus, among the following in the table, the reasons might be assessed as the researcher hypothesized.

Table 9 shows that there is no trainer who is teaching at TVET because he/she are interested. Among the reasons they are working 11(18.3%) trainers strongly agreed that it is because they are assigned by higher institutions to teach at TVET. about 25(41.6%) trainers also agreed that is the reason. but, 13(21.6%) trainers do not decide that it is being assigned by the higher commission which is the means they join TVET or not. however, 9(15%) disagreeing and 2(3.3%) strongly disagreeing trainers argued that being assigned by higher institutions is not the reason to make them disinterested in teaching at TVET.

Another hypothesis made as reason to cause teachers become disinterested is the college / institution assigning them as duty. But, no trainers have agreed that this is the reason for lack of interest. There are 17(28.3%) trainers who do not make decisions about this criterion. however, 27(45%) disagreements and 16(26.7%) strong disagreements have shown that being assigned by the college/ institution as duty is the reason for lack of interest in teaching at TVET.

Family pressure was also taken as one factor for teachers to join TVET. Without self interest, the teachers are not assumed to work hard and be effective. But, family pressure may have caused them join the institution since it is one means of income generating. It is only 10(16.7%) trainers who do not decide to agree or disagree; the rest 28(46.7%) disagreeing and 22(36.7%) strongly disagreeing trainers argued that it is not family pressure which made them join TVET as a trainer.

The last factor which was hypothesized to cause trainers join TVET was the lack of other opportunities such employment, supporters, etc. unlike other factors discussed above, this factor has been the major reason that trainers joined TVET. But, it is also found that they are working to overcome their life challenges having employment opportunity than being

interested to the occupation. The data shows that there are 26(43.3%) trainers who have strongly agreed and

19(31.6%) subjects who agreed that the factor that causes them join TVET was lack of opportunities than interest. the rest 15(25%) do not make decisions on this alternative.

Table 10. Analysis of teachers capacity building

No	Items on support systems	Alternatives										Total		
		Very high		High		Medium		Low		Very low		No	%	
		No	%	No	%	No	%	No	%	No	%			
1	Provision of refresher course on manipulating machineries	—	—	3			20	29	48.3		16	26.7	60	100
2	Provision of refresher course on the subject matter	—		14	23.3		55	13	21.7		—	—	60	100
3.	Provision of interdepartmental experience sharing programs						30	28	46.7		14	23.3	60	100
4	Provision of inter-college experience sharing programs	—	—	—	—		16.7	35	58.3		15	25	60	100
5	Provision of short term courses of the job	27	45	15	25		23.3	4	6.7		—	—	60	100
6	Provision of the job training by skillful trainers in college						21.7	28	46.7		19	31.7	60	100
7	Provision of the job training by inviting trainers externally	—	—	—			10	39	65		15	25	60	100

Source: Trainers, Response 2013.

In the above table, there are provisions trainers should have got from the institutions. These provisions may give motivation, experience, and interest to trainers. They can efficiently perform tasks if they have these provisions. Thus, the first provision under this section is provision of refreshers on manipulating machines. there is high level of provision of this service as 3(5%) trainers argued. for 12(20%) trainers, the provision of this service is medium. but, for 29(48.3%), and 16(26.7%) trainers, the service is respectively low and very and very low. the data shows that there is low provision of refreshments on working machines.

Another provision assessed in this section is provision of refreshments on the subject matter. Trainers are not assumed to be static with their knowledge. They must update their knowledge every time in the form of refreshments, workshops, and trainings. Refreshments on the subject matter every trainer is engaged must be given. Thus, 14(23.3%) trainers agreed that there high level of provision of this opportunity. For 33(55%) trainers; this provision is medium. but, 13(21.7%) trainers, the refreshments on the subject matter are low level.

Third form of motivating trainers and increasing their level of experience is the interdepartmental experience sharing programs. There is no high level of provision of these programs at all TVET institutions of this study. But, 18(30%) trainers argued that the provision of this program is a medium level of activity undergone by the institutions. 28(46.7%) trainers argued it is low while the rest 14(23.3%) argued the provision is very low. in addition to interdepartmental experience sharing programs, it important to study inter-college experience sharing programs at all TVET institutions. similar to provision of inter-departmental experience sharing programs, this program is taken into low consideration. thus, 10(16.7%) trainers argued it is medium level provision that the program is set. 35(58.3%) responses showed that the provision is low while 15(25%) trainers respond the provision is very low.

Furthermore, it was investigated that provisions of short term trainings for trainers are provided by the institutions to help them get experienced before joining the actual practical and theoretical teaching process. Thus, as in 4.5, there is very high provision of these trainings for 27(45%)

responses, and high provision for 15(25%) responses. for 14(23.3%) respondents the provision of these short term training is medium. however, 4(6.7%) respondents argued that the provision is low. the training are given to a positive responses. the researcher also wants to verify that the trainings are given by skillful trainers in the colleges. the provision of

trainings by skilled trainers is low for 28(46.7%) and very low for 19(31.7%). but, 13(21.7%) the provision is medium. It can be seen that there is no high level of provision of trainings by skillful trainers who have long experience from the college.

At end, it was tried to investigate if the colleges are training their trainers by inviting trainers externally. But, they did not invite trainers outside for most of the trainings. Only 6(10%) trainers respond that this provision is medium/ fair. the rest, 39(65%) and 15(25%) trainers respectively respond that the provisions of the job training by inviting trainers externally is low and very low.

Lists of criteria of selection are provided under the alternatives that best match the level of each criterion to determine the selection systems. The responses of the trainers are presented as follows.

Table11. Analysis of methods of students selection criteria for TVET

No	Criteria of selection	Importance of the criteria to select students										Total	
No	Criteria of selection	Importance of the criteria to select students										Total	
		Very high		High		Medium		Low		Very low			
		No	%	No	%	No	%	No	%	No	%	No	%
1	To what extent do the criteria are valuable to the course requirem	-		-	-	10	16.7	28	46.7	22	6.7	60	100

	et												
2	To what extent the criteria are clear to understand	-	-	-	5	8.3	42	70	13	21.7	60	100	
3	To what extent teaching machines, tools, and equipments are relevant to the training program	15	25	16	26.7	29	48.3	-	-	-	60	100	

Source: Trainers, Response 2013.

The criteria the TVET institutions select students are presented in table 5 with all details included. The relevance of the methods of selection is also presented with each response of the trainers. The first item under this discussion was the extent the criteria set to selected students and the value of each criterion for the course requirements. It is found that the value of the criteria for the course requirement is medium for 10(16.7%) respondents and has low value for 28(46.7%) subjects' responses. the rest 22(36.7%) respondents, the value of each criteria of selection when compared to the course requirements is very low. not only the importance of the criteria set was the attention of the study. but, it was important to assess the understandability of the criteria set by the colleges. it is clear that the criteria are understandable to medium extent for 5(8.3%) respondents, and lowly understandable for 42(70%) respondents. for the rest 13(21.7%) the criteria are understandable to a very low extent.

The availability of equipments and facilities should determine the total number of students to accept under a particular TVET program. This would enable them students become successful after learnt practically with sufficient materials and equipments. Thus, 15(25%) responses of trainers showed that there is very high level of accessibility of equipments and facilities which can be fitted to total number of students to accept. Similarly 16(26.7%) responses showed that there is high level of equipments and

facilities. From the total respondents, 29(48.3%) respondents do not decide to comment on the availability of equipments for training.

Table12. Analysis of provision of trainee support systems

No	Criteria of selection	Importance of the criteria to select students										Total	
		Very high		High		Medium		Low		Very low		No	%
		No	%	No	%	No	%	No	%	No	%		
1	Provisions of vocational counseling service	–		–		9	15	30	50	21	35	60	100
2	Provision of regular tutorial sessions	–		3	5	6	10	38	63.3	13	21.7	60	100
3	Arrangements of par time work	–		–		2	3.3	43	71.7	15	25	60	100

Source: Trainers, Response 2013.

Trainees need several provisions of several services. Provision of vocational counseling services for students is one of them. There is medium level of provision of this service as 9(15%) respondents. but 30(50%) trainers argued that the provisions of this service are low. the rest 21(35%) trainers argued it is very low level of provision the institution provides. it shows that counseling has less place in TVET. Another provision the institution is expected to have is regular tutorial for trainees. this service is high for 3(5%) trainers. for 6(10%) trainers the service is provided to medium extent. however, 38(63.3%) respondents answer shows that there is low provision of the service. far worse, the provision is very low for 13(21.7%) respondents. It shows that the provision of regular tutor is weak at TVET institutions/colleges.

Furthermore, an arrangement of par time work is considered as students' selection criteria. For 2(3.3%) respondents this program is conducted to a medium extent. 43(71.7%) responses showed that the program has low importance in the selection of students to various departments. the rest 15(25%) argued that this method is used to very low extent to select students who should join TVET.

The frequency of each assessment related issues is as follows. Assessments are important in that students can get evaluate and recommended with better ways of performing tasks and learn theories. Thus, trainers’ assessment of students’ performance in different ways is presented and analyzed in the table below.

Table 13. Analysis of responses related to students assessment by trainers.

No	Items	frequently		Occasionally		Rarely		Very rarely		Never		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
1	How often do trainees’ assessment carried out practically	–	–	22	36.7	20	33.3	18	30	–	–	60	100
2	How often do trainees’ assessment carried out theoretically	–	–	18	30	28	46.7	14	23.3	–	–	60	100
3	How often do low achievers get provided with tutorial	–	–	28	46.7	17	28.3	15	25	–	–	60	100

Source: Trainers, Response 2013.

As shown in the table, trainees’ assessment with practical methods is done occasionally for 22(36.7%) respondents. for 20(33.3%) trainers; this method is used rarely. for the rest 18(30%) trainers, the practical method of assessment is taken very rarely. No response shows that the method is used always.

In addition, theoretical method of assessment is done occasionally as 18(30%) responses implied. This method is rarely used for 28(46.7%) respondents. the rest 14(23.3%) trainers respond that the method is very rarely used. the two methods mentioned above; practical and theoretical are mostly rarely used to assess students’ performance.

At end, trainers were requested to respond to the frequency that low achievers are provided with tutorial to get motivated and be competent with high achievers. They get tutorial occasionally as 28(46.7%) responses showed and rarely get tutorials as 17(28.3%) responses

implied. the rest 15(25%) trainers' responses showed that tutorials are provided to these low achievers at a very rare frequency.

In this section respondents were requested to provide their comments in relation to achievements and failures of some material and social events at TVET. The data is presented as follows with alternatives that show opinions of trainers to provided alternatives.

Table 14. Analysis of data gathered related to improvements and declines of some qualities and features at TVET.

No	Qualities	Getting much better		Getting better		The same		Getting worse		Getting much worse		Total	
		No	%	No	%	No	%	No	%	No	%	No	%
.1	Society's perception about TVET	38	63.3	22	36.7	-	-	-	-	-	-	60	100
2	Trainees' perception about TVET	22	36.7	38	63.3	-	-	-	-	-	-	60	100
3	The employability of TVET graduates	25	41.7	27	45	8	13.3	-	-	-	-	60	100
4	Employees perception about TVET	16	26.6	18	30	28	46.7	-	-	-	-	60	100
5	Family participation in TVET	-	-	26	43.3	30	50	4	6.7	-	-	60	100
6	Teachers' commitment to teach in TVET	-	-	8	13.3	40	66.7	12	20	-	-	60	100
7	Resources allocated for TVET	-	-	8	13.3	38	63.3	14	23.3	-	-	60	100
8	The market orientation of TVET curriculum	-	-	12	20	10	16.7	38	63.3	-	-	60	100

Source: Trainers, Response 2013.

For TVET to get better performance both in increasing quality and number of trainees all part of the community; the outside, the teachers, students, principals, etc should have awareness and participation. This table is part that deals with these generally linked participants who should get involved in the process of teaching-learning at TVET.

As shown in the table, society's perception of TVET is getting much better for 38(63.3%) respondents, and getting better for 22(36.7%). there is no response that shows the perception of the society is getting worse. similarly trainees' perception about TVET is getting much better for 22(36.7%) trainers response and getting better for the rest 38(63.3%) respondents. again there is no result that shows the getting worse of trainees' perception about TVET.

Another feature that is assessed with increasing/ decreasing issues is the employability of graduates of TVET. There are 25(41.7%) respondents argued that the employability is getting much better while 27(45%) respond it is getting better. the rest 8(13.3%) argue it the same with previous level of employability.

The perception of employees about TVET is getting much better for 16(26.6%) respondents and is getting better for 18(30%) trainers. for the rest 28(46.7%) trainers, the perception is not changed.

Further, resources allocated for TVET are hoped to increase with increasing number of trainees joining the institution. In addition the resources will minimize the insufficiency of training materials improving practical education. But, 46(76.7%) trainers respond that the resource allocated for TVET is the same with the previous. the rest 14(23.3%) respond that it is getting worse.

Trainers were further requested to comment on the family participation in TVET. For 26(43.3%) respondents and for 30(50%) trainers the trend in the participation of the family in TVET is still the same. the rest 4(6.7%) argued that the participation is getting worse.

As a must teachers' commitment to teach in TVET was also part of the overall community functioning in the effectiveness of TVET education. But, we have so far seen that

teachers' interest to teach at TVET is poor. Their commitment is now getting better for 8(13.3%) respondents. However, for 40(66.7%) respondents, the commitment is still the same. for the rest 12 (20%), the commitment is getting worse. we can understand that teachers' commitment is still a situation that must be assessed and underlined.

At end, the market orientation of the TVET curriculum is one factor that motivates or demotivates students'. After graduation students need either to be employed to others or to self. If this market is included in the curriculum, students will have the chance to decide and learn effectively at TVET institutions. But, it is only 12(20%) of the responding trainers who argued that the inclusion of market demand in the curriculum is getting better. 10(16.7%) responses show that the market demand inclusion in the curriculum is still unchanged. however, the rest 38(63.3%) argued that inclusion of market demand in the curriculum is getting worse. this is the highest result that shows the institutions poor capacity of including graduates market demand in the curriculum. this means that students who are aware that the curriculum is not inclusive to market demand will not be inspired to join TVET institutions.

4.4. Analysis of Interview Results

4.4.1. Analysis of results from Top managements

Two Top managers of TVET institutions were subjects of this section. The managers were asked related to quality of TVET education and several factors that hinder the quality.

The first question presented to the managers was their suggestion of the preparations of trainers' assessments. One of the top managers argued that there are no preparations made by the trainers. The second argues that the preparations are in the international standards of trainers. The preparation is based on their level of competencies.

The second question presented to the managers was the qualification of trainers and their performance. They argued that the trainers are both qualified and unqualified. They are qualified in case they take trainings in the recent curriculum of TVET. They are not qualified because there are trainers who get trainings in the old curriculum. Following this, the managers were asked about the extent the new curriculum is important in relation to the

current occupational standard of students. They explained that the curriculum is in the standards of the international level of educational quality but accepted that in some institutions there are lacks of training materials that disprove the curriculum. These problems will be solved on the ongoing process of advancing TVET using the self produced materials and importing technologically supportive instruments in the future. Based on this, the managers were requested to mention some of the factors that affect the quality of TVET education. They stated that there are shortages of machines, low morale of trainees, and skill and interest gaps of trainers are some of them. The managers were also asked about students admission criteria. They respond that two ways are used to admit students to their colleges one of them is students who are willing to train at TVET and the second is those who failed to pass national examinations. It is an implication that there would be several trainers who would join TVET. Thus, the budget given to the institutions from the regional the strategies being implemented to improve quality of education. They underlined that filling the gaps of interest and skills of trainers and fulfilling the desire training materials are among those who are given recognition to enhance quality of education. It is also advised to create positive public attitude and awareness to increase the participation of trainers and supporters. In relation to this, they were asked about the means they evaluate the impact of quality assurance practices of the institution on the improvement of the daily teaching learning process. The evaluation is based on organizational assessments and national standards (COC). The competition levels of students who graduate from the institutions are the basic means to evaluate effectiveness of the institution that trained them. If the students are potential candidates who become effective in the field, that means the training institution has been working better.

Moreover, the managers were asked about their satisfaction of the involvement and contribution of trainers in the quality of the training. The level of competency of trainees can indicate how much the trainers are committed in the program. But, trainers do not take part in some other quality assessment programs. They argued that currently the trainers commitment and involvement in the process of evaluating and formulating educational rules and procedures in fairly satisfying. The teaching learning assessment has been out come based. In the areas where there are weaknesses of trainees, the institution made attempts to

assess and investigate reasons. The assessment is fairly satisfying but they believed that there must be more to be done on the area.

The other area the managers were interviewed on was the environment and the infrastructures. They argued that the current training system is a dual training system. Trainers take theoretical lessons at the institutions and made their practice at different institutions. So that there will be a solution to the problems of infrastructure. The institutions are also working to enable the increase their capacity to self sufficiency. The role of stake holders is significant in improving the standards and qualities of TVET education. The managers were asked about the extent stake holders understood and involved in the training programs. One of the managers argued that their awareness is poor and their contribution is also weak. But, the other believes that they have good awareness and there must be more to be done to enhance this level of awareness to the better.

As stated above, the infrastructure and involvement of stake holders is at a starting Thus, the researcher guesses that there will be some limitations in machineries, laboratory equipment's, and students' textbooks. The institution is fulfilling these demands to a fair extent. However, the

. They believed that: fulfilling necessary equipment's, regular upgrading of trainer knowledge to the new technology, increasing participation of stakeholders and communities, assessments and

follow up as well as motivating learners are some better solutions for the current problems hindering the performance of the institutions.

4.4.2. Analysis of interview results from managers agreed that there are some limitations of the full demand of these necessities.

At end, the managers were asked about some solutions to problems that are affecting the quality of TVET education .

.4.3. Analysis of Results from focus group discussion

This part of the study is the analysis of the data gathered from the discussions made with four department heads of TVET institutions. The following are the major topics of the discussions made.

The interest of students:

- students become less interested because TVET is valued as less important profession by the community as it is a recent phenomenon
- students become less interested if they are not trained with sufficient equipments and instructions with clarity
- trainers. trainers are leaving more loads on the trainee than motivating and encouraging them
- trainees expect no better future opportunities

Thus, awareness creation must be made on students and the community as a solution to these problems.

Knowledge and skill of trainers:

- trainers are from different institutions having different level of training and experience so that they lack some similarities
- the knowledge of trainers gets limited with the access to up-to-date trainings since technology is on ongoing process
- motivational rewards and salaries are not provided to trainers
- students are less interested so that teachers become the same

Therefore, there must be an attempt to update the knowledge of trainers through consecutive trainings, to motivate them with rewards, to motivate students, and providing satisfying salaries to trainers.

The departments' contribution to quality education:

- The departments must assess and support the quality of the trainings
- The department head is not yet working on creating links with companies and organizations to motivate trainers
- The department must identify and suggest methods of trainee admissions

Assessments and success resulted by the institution:

- Strong assessment of merits and challenges of TVET education are not yet well organized under a systematic approach
- Assessments must focus the departments, the trainees, the trainers, the market demand, and the curriculum
- TVET should also assess the trainee, the community, and the stake holders attitude, interest, and demand in link with the desired man power

4.5. Analysis of Observation Check Lists

Activities categorized into four were selected for the observation. The researcher had attempted to observe the trainers motivation, trainees related, facility and equipment related, arrangement related and, participation related issues. Thus, the following check lists were made for analysis.

Table 15 Analysis of Observation Check List

Training materials	Accessibility of training materials		
	Satisfying	Less satisfying	Poorly satisfying
Books		√	
Machines			√
Audio-Visual training materials		√	
Computers and assisting devices		√	
Computers and assisting devices		√	

The researcher had observed training materials used by the trainers for two consecutive training sessions. According to the observation, the total numbers of books for training are

less satisfying. There were one to three 1/3 ratio of books distribution for trainers. But, the number of machines for practice and training are poorly satisfying. There are 25 trainers taking practice on a single machine. Audio-visual training materials such as projectors, screens and so on are also poorly available as the researcher observed.

Table 16 Field training

Activities	Rank of activities, participation, and motivation		
	Very good	Good	Poor
Team work	√		
Group work		√	
Trainer motivation			√
Trainer mode of expression			√
Trainee motivation		√	

This observation was made during field training. Trainers were made to practice in team which was very good with good communication and understanding. Group work was good in that the chance to practice was limited with the number of training devices. Further, trainers' motivation was observed during field practice. The trainer does not go beyond instructing trainees to do what they have learnt. The mode of expression was poor and less impressive for the researcher. Trainee motivation was rather good.

Table 17 Class room training

Arrangements	Classroom, sitting, material arrangements		
	Very good	Good	Poor
Sitting arrangement	√		
Description Materials arrangement			√
White board and sitting chairs arrangement	√		

The researcher’s observation of arrangements during the class work has come up with the results shown in the table. Sitting arrangements are very good in that the trainee were sitting in proportions of both sexes. The male and female distributions as well as the arrangements of sitting tables and chairs were very good. The materials the trainer used for description and demonstration purpose were arranged irregularly. The white board and sitting chairs were arranged in a very good situation.

Table 18 Participation

sex	Participation and ratio		
	Very good	Good	Poor
Male			√
Female		√	

As the checklist shows, the participation of females was found to be good compared to the male participation observed to be poor. It is appreciated that motivation of female trainers is increasing.

CHAPTER FIVE

5 Summary, Conclusions, and Recommendations

This chapter deals with the summary, conclusions, and recommendations.

5.1 Summary

The main purpose of this study was to reveal the major institutional factors affecting the quality of TVET education in four selected public TVET institutions of Addis Ababa city. Among all public TVET institutions located in Addis Ababa city administration four were taken as sample unit due to the similarities of the training they provide. By so doing, the study tried to answer the following basic questions.

1. Do the streaming procedures of the students have affected quality of the program?
2. Is the delivery system of teaching and learning, process adequate to ensure the quality of TVET programs?
3. Do they have enough educational materials to ensure the quality of TVET programs in the selected Addis Ababa City Administration public colleges?
4. Are students assigned according to their interests?.
5. Do TVET Colleges have enough skilled trainers and instructors?
6. Do teachers participate in curriculum revision?
7. Do teachers have a chance to comment on new curriculums before implementation?
8. Does the evaluation method encourage getting quality trained work force?

To find answers to the above research questions a descriptive survey research method was used. The data gathering instruments employed were questionnaires, interviews, and observation checklists. Relevant data was gathered from the records of different TVET institutions, trainers, trainees, TVETB higher officials, training institute coordinators, and TVET institute core process owners. 360 questioners were distributed to selected TVET colleges trainees out of which 295 questioners were returned. 100 questioners were also distributed to the four TVET college trainers out of which 60 were returned. Based on the research findings, the following summary has been drawn.

There is a lack of experienced and competent teaching and supporting staff as observed from trainees' responses. Evaluation of the institution is not periodically done. Furthermore, some college require a better and comptent managing staff. Admission of students is not concurrent to the man power demand of the market with respect to each field

Regarding opportunities of giving orientations for students while choosing their respective departments, a good work has been done by each college. Students are encouraged to select fields depending on their high school courses. However, it is found that most of the students who join the TVET programs are the ones who could not be able to join the preparatory program leading to the universities. According to data observation and analysis, most trainees are not interested to attend class.

Although institution are using variety of teaching materials, trainees argued that there is no enough equipment and facilities to properly conduct the training. Most of the trainers were assigned in jobs far more beyond their qualification. In addition to the low acceptance by the trainees, the trainers may not have the needed confidence to train in those levels. As a result, the overall performances of the institutions become weaker. The fact that the degree holder trainers had no prior TVET training experience has negatively influenced the delivery of training. Almost all the trainers have adequate knowledge about the objectives of TVET but most of them have low interest to continue working in TVET institutions. Most of the trainers continue to work as a means of getting their lifelyhood and are forced to continue

teaching due to the commitment they made with higher commission as they studied in a free cost sharing scheme.

Colleges are not providing satisfactory services to trainers. It is found that provision of refreshment courses, provision of interdepartmental experience sharing programs, provision of inter-college experience sharing programs, provision of intra college on the job training by skillful trainers of , and provision of the job training by invited trainers are not satisfactory..

Also provision of trainee support systems such as counseling is very low having a negative impact on the quality of education in all TVET institutions under consideration.

Analysis of responses related to students assessment by trainers shows that there are no standardized methods used to assess students. It is found that practical assessment of students progress has been conducted though not frequently practiced. Theoretical assessment is also rare. Assessment is important in that students can benefit from evaluation and can get recommendations for a better way of performing tasks and learning.

Although the data gathered related to improvement and lack of some qualities and features at TVET showed that there are improvements in public attitude, trainees perception, the employability of TVET graduates, and employees perception of TVET: still \ family participation and teachers' commitment to teach in TVET is found to be low.. Further, it is investigated that the resource allocation for TVET is not satisfactory to implement quality education. As trainers argued the curriculum being not market oriented makes employability difficult which negates the raison de etre of TVET institutions.

5 .2 Conclusions

This study has focused on three areas of major interest to evaluate the quality of each college in the domain of study : the top management, the trainers, and trainees. The selected TVET institutions have management problems due to lack of capacity. The trainees in all institutions are almost found to be not interested in the trades they are learning.

Teachers are not interested in the profession but they are working because there are no other opportunities and they have a commitment of mutual agreement with the governing organ to serve as instructors.

Most of the students do not have job market knowledge and risk to be unemployed after graduation although there is a room of being organized to establish a Micro and Small Scale Enterprise assisted by the government. Students low interest of attending classes is hindering the quality of education at TVET institutions as observed by this study.

Resources are not properly allocated in a way that satisfies the desire of each college. This too has affected the effectiveness of the teaching-learning process.

5.3 Recommendations

Based on the findings and conclusions mentioned and observed during the research, the following recommendations are provided:

- 1) Most of the trainers are assigned to teach skills which are beyond their qualifications and interest. This is practiced in such a way as there are not enough and well trained instructors assigned to the different competency levels which are more than two hundred at the time of this study. Thus it is suggested to develop instructor's knowledge and skill by organizing short and long-term trainings. Most of the trainers lack teaching interest at TVET centers due to program burden and low remuneration. Hence, it is advisable for the TVET bureau to undertake payment enhancing and rewarding mechanisms to maintain the interest and commitment of the trainers and managing staff.
- 2) TVET trainees are over loaded by the program and also do not see a bright future from their training. This makes them less motivated to dwell hard on their program. More over the lack of training equipment observed in the colleges has made them less perfect in their skill. This has been observed by assessing the performance of graduates working in different industries.

3) It looks difficult to say that TVET management is practiced in its fullest sense at the different colleges observed during the study. Therefore, it is advisable that managing positions be occupied by merit having the necessary professional capacity and experiences thus requiring capacity building programs for most management team members.

4) It is recommended to regularly evaluate the performance of training institutions to employ relevant improving programs. Technical and vocational Education Bureaus (TVETB) need to conduct continuous and thorough supervision that can provide timely responses to the different material and intellectual short comings respective to the institutions.

5) It has been observed that students do not get appropriate industrial practice during the apprenticeship programs and it is recommended to establish a continuous tripartite discussion programs between the industry, TVET colleges and the governance so that this dual training scheme becomes efficient.

6) Finally from the data observation ,all the short comings observed on the availability of training material, capacity of instructors in different competencies, the improper implementation of apprenticeship programs, lack of motivated trainees and efficient managing team makes the quality of teaching – learning process to be as not to expected standard. To improve this current low quality TVET delivery, it is recommended to work hard on the above teaching learning parameters to:

- Maintain trainee’s interest by counseling and administrative activities,
- Avail and maintain sufficient, competent and flexible trainers,
- Avail and assign capable and competent managing team for each college,
- Avail an up to date technologically and sufficient education materials to meet minimum skill requirement of the different unit competency levels of 3 and 4 delivered vocations.