INSTITUTIONAL FACTORS THAT AFFECT THE QUALITY OF GOVERNMENT TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING COLLEGES OF AWASSA AND ARBA MINCH

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

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EYOB TADESSE

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APPROVED BY THE BOARD OF EXAMINERS

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Acronyms

EB	Education Bureau
ECBP	Engineering Capacity Building Program
ESR	Education Sector Review
ESDP	Education Sector Development Program
ERGESE	Evaluative Research on the General Education System of Ethiopia
ILO	International Labor Organization
ISO	International Organization for Standardization
KPMs	Key Performance Measurements
MOE	Ministry of Education
QMSs	Quality Management Systems
ReMSEDA	Regional Micro and Small Enterprise Development Agency
SNNPR	Southern Nations, Nationalities and Peoples' Region
SPSS	Statististical Package for Social Sciences
TGE	Tansitional Government of Ethiopia
TQM	Total Quality Management
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational ,Scientific and Cultural Organization
VET	Vocational Education and Training

Abstract

The purpose of this study was to analyse institutional factors that affect the quality of government Technical and Vocational Education and Training(TVET) Colleges of Awassa and Arba Minch in South Nation and Nationalities Peoples Region(SNNP). A descriptive survey method was employed in the sampled TVET colleges. A sample of one hundred eighty nine students, forty one teachers, two deans, two administrators, two finance heads of the colleges and one Regional Education Bureau TVET sub-sector official were involved as respondents. Students and teachers were selected using simple random sampling technique, where as, the deans, administrators,finance heads and TVET sub-sector official were selected using purposive sampling.Questionnaires with close-ended and open-ended questions and interview were used as instruments of data gathering. The data gathered through close-ended questions were then analyzed quantitatively using percentage , frequency counts, chi-squares, T-tests and ANOVA. The data gathered through open-ended questions and interview were analyzed and interpreted qualitatively. The major findings of the study were: the TVET curriculum reform process orientation for the trainers was found to be insufficient; the colleges did not make significant effort to retain qualified and experienced trainers; financial resource allocation in the colleges was found to be very low; and the management staff of the colleges were not competent to work positions. The major recommendations made based on the findings were: The TVET curriculum reform should be clearly known to the implementers; the colleges and other concerned body have to work closely to retain competent and motivated trainers; the regional government has to allocate sufficient budget and also the colleges have to diversify income generating schemes and the regional education bureau has to assign an appropriate profesionals at the right place.

CHAPTER ONE

THE PROBLEM AND ITS APPROACH

1.1 BACKGROUND OF THE STUDY

Technical and Vocational Education and Training (TVET) is an aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. The earliest and most widely accepted goal of vocational education was to provide a mechanism for meeting the needs of the local community for skilled workers (Evans, 1978: p-9).

Quality of education is greatly affected when its system encounters inadequate educational materials and facilities, inefficient management and administration, poorly trained teachers and poor working conditions and less relevant curriculum and evaluation. Supporting this, (Mbizela, 2004) noted that provision of education with inadequate material, financial and human resources and with no efficient and adequate system of management, and supporting services resulted in poor quality.

Improving quality of education is important and it is an essential means by which any nation can achieve optimum development. According to Kate Ashcroft 'Quality Assurance' process has a purpose to rank excellence and to foster improvement level of educational quality in assessing the input, and throughput so as to achieve good output (Ashcroft, 2003:10). Quality is not a new subject in education and training. Institutions, teachers, administrators, policy makers and learners have always been concerned with quality. Indeed the quality of an education or training provider eventually depends on the performance of the learners. Even without a formalized "quality'' approach such as TQM or ISO 9000 (Van den Berghe 1997), schools and training providers have needed methods, norms, procedures and standards to ensure the quality of their provision. It is equally true that, traditionally; quality has often been interpreted fairly narrowly, focusing on particular features of the education and training services delivered. A number of options for establishing vocational education performance standards are currently under consideration. Indicators of labor market performance of vocational graduates-the traditional standards by which the effectiveness of vocational education and employment training have been

measured-include job placement, earnings, and duration of employment and unemployment. None of the outcome measures currently in use appears to be sufficient for judging the quality of vocational programs when used singly. However, some combination of labor market outcomes, learner outcomes, and access outcomes seem to hold promise for developing measurable standards of performance. The management of national vocational training systems aims at productivity, responsiveness, flexibility, efficiency, continuous improvement in the quality of training and increased access to training.

Generally, enhanced training quality may be achieved through the introduction of national competency-based skills standards, examination and assessment requirements, and curricula; creation of standing industry bodies that participate in the development and maintenance of skill standards and examination requirements; establishments of quality related targets and other performance agreements between providers and government authorities; and promotion of best practices and benchmarking for quality delivery.

It was believed that the previous education system and technical and vocational program in Ethiopia were entangled with complex chronic problems that needed urgent remedy, to mention a few, limited access, inequitable distribution, low quality, lack of relevance, inefficiency(TGE,1994 : 2). Likewise, the technical and vocational education as part of education system faces most of the problems. Accordingly, the quality of training was highly affected by weak institutional set up, poor management, under qualified trainers, insufficient funding, inadequate equipment and facilities. Further more the curriculum was irrelevant, theory focused, less practical and less work related.

In Southern Nation, Nationalities and Peoples' Region (SNNPR), technical and vocational education and training colleges have been greatly affected by problems linked with quality of training delivery for their students at large. Among the government colleges of the region, Awassa and Arba- Minch TVET colleges which are located at 273 kilometers and 505 kilometers away from Addis Ababa respectively were selected for this study. The issue of quality is highly related to the provision of adequate financial resource, students back ground, teachers skill achievement, relevant curriculum and management potential to bring rapid and better training systems are common. Against this background, all relevant policy

statements and strategy papers, including the National Education and Training Policy, the Capacity Building Strategy and the National TVET Strategy, call for a new concept of training through efficient and effective use of existing resources need to be explored. The strategy is aimed at describing a feasible path for Ethiopia to achieve a competent and sustainable TVET system able to provide a relevant and quality training to the Ethiopian youth and other target groups.

1.2 STATEMENT OF THE PROBLEM

The focal point of this study was institutional factors that affect training quality of government TVET colleges at Awassa and Arba Minch in SNNP Region. Even though government TVET colleges of the region have contributed their share, the required skill competency of graduates is not as to the standards of the national and the international level of quality bench marks. Education and human resource development is a long term investment which requires stability and continuity over a period of time.

Improving Technical and Vocational Education and Training (TVET) quality helps to achieve a wide range of economic and social development goals. Quality Technical and Vocational Education and Training (TVET) is recognized to be a key for enhancing economic competitiveness and for contributing to social inclusion, decent employment and income and poverty reduction. An insufficient supply of technical skills can also be a bottleneck to private sector development and economic growth. The Ethiopian education system is entangled with problems of access, quality, equity, relevance and efficiency (MOE, 1994). As per the statement of the policy, quality problem is regarded as one of the major problems of our education system in general and TVET system in particular. The problems of TVET in Ethiopia are mainly related to inappropriate students' selection, under qualification of teachers/trainers, financial constraints, curriculum problem and weak management capacity could be mentioned. Thus, this study attempted to identify the possible solutions for existing challenges of training quality on the TVET delivery.

Based on the problem identified this study attempted to answer the following basic research questions:

1. How often do teachers get up-to-date training in the TVET Colleges?
2. To what extent is the financial resource allocated adequate for the TVET colleges?

3. To what extent students' selection is based on their interest and choice?
4. How is the competency of management team in the colleges?

1.3 OBJECTIVES OF THE STUDY

The principal objective of this study was, therefore, to identify the major institutional factors that affect training quality and to suggest possible solutions in the government TVET colleges of Awassa and Arba-Minch in SNNPR. Based on the general objective, the study was directed to achieve the following specific objectives:

1. To establish quality concept in the colleges that helps to improve training system and
2. To support policy and program initiatives to ensure accessible and quality TVET in the region.

1.4 SIGNIFICANCE OF THE STUDY

This research study in technical and vocational education and training colleges was believed to have the following significance:

1. It would help policy makers, education bureau experts and TVET officials to recognize and obtain solutions to the existing constraints, which impede TVET quality in the colleges;
2. It would help TVET trainers to identify major problems and to work more towards alleviating the problems of quality in TVET and it could encourage TVET trainees to play their part in quality training program.

1.5 DELIMITATION OF THE STUDY

This study was delimited to internal (institutional) factors affecting the quality of training colleges at Awassa and Arba Minch TVETs in SNNP Region The rationale behind the scope of studying on the two colleges was to make the study more manageable.

1.6 OPERATIONAL DEFINITIONS OF KEY TERMS

Stakeholders- all role-players in the TVET system, including TVET providers and institutions, teachers and instructors, employers, trainees, parents, policy-makers, NGOs and other institutions involved in training, etc.

Technical and Vocational Education and Training (TVET) – refers to those aspects of the educational process involving, in addition to general education, the study of technologies

and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

Vocational education- refers to a trade focuses on practical skills.

1.7 ORGANIZATION OF THE STUDY

The research report was organized in five chapters. The first chapter contained the background of the study and its approach, the second chapter deals with research design and methodology, the third chapter presents a review of related literature, the fourth chapter deals with data analysis and presentation of the major findings of the study and the final chapter contained summary, conclusions and recommendations of the study. At the end, papers containing relevant information used in this study were annexed in the appendices.

CHAPTER TWO

THE RESEARCH DESIGN AND METHODOLOGY

2.1 METHODS OF THE STUDY

This study employed a descriptive survey method to reveal the current training quality problems of TVETs in SNNPR, particularly in Awassa and Arba-Minch TVET colleges. The method was selected because it is a planned method of data collection which helps to gather the necessary information on the issue under study. As Seyoum and Ayalew (1989: 16) stated, the descriptive method is concerned with depicting the existing situation. Moreover, it deals with the relationships between variables, the testing of hypothesis, and the development of generalizations, principles, or theories that have universal validity. In the same line of argument, Best and Kahn (2003:114) have argued that a descriptive study is concerned with conditions or relationships that exist, opinions that are held, process that are going on, effects that are evident, or trends that are developing.

2.2 SOURCE OF DATA

An extensive literature that could serve as a conceptual framework was reviewed to identify the points to be included in the study and to develop instruments and strategies of data collection. The sources of data in this research study were primary and secondary sources. The primary sources were included TVET-trainees, trainers, deans, administrators, finance heads and official from Regional Education Bureau TVET sub-sector. The secondary sources were included TVET proclamation, policy documents and strategies.

2.3 DATA GATHERING INSTRUMENTS

The main data gathering instrument was questionnaire. The reason why questionnaire was employed is that it had been expected to secure relevant information on opinions and attitudes in a structured framework from large respondents. Essentially two sets of questionnaires were prepared and dispatched to the two groups of respondents, i.e. one type of questionnaire for students/trainees and another for teachers/trainers. After the questionnaire was prepared pilot testing of the questions were made at Awassa TVET College. Then important corrections were made on the question items to increase the instruments validity. Interview was another instrument in gathering information. It was

employed to get the necessary information from regional education bureau. TVET sub-sector official, TVET deans, administrators and finance heads.

2.4 SAMPLE AND SAMPLING TECHNIQUES

While gathering relevant and detailed information, the student researcher utilized the following sampling techniques. These included: stratified and simple random sampling for students, random sampling for teachers and purposive sampling for deans, administrators, finance heads of the colleges and regional education bureau TVET-sub sector. A stratified sample was employed by independently selecting a separate simple random sample from each population stratum because this method is superior to random sampling as it reduces sampling error, ensure that particular groups within a population are adequately represented in the sample and improve efficiency by gaining greater control on the composition of the sample. A population was divided into different groups based on their program levels (10+2 and 10+3) construction, industrial and business fields of study in the colleges. The strata of 10+2 and 10+3 were taken for further sampling through simple random sampling upon each stratum. Then the researcher conducted a lottery technique in order to give equal opportunities among the students. Also teachers were sampled using simple random sampling techniques in giving equal chances for all the teacher population of the respective colleges. Purposive sampling was carried out in order to obtain rich information from pre-determined population and as a result in depth data were secured for the study. The researcher took 30% of the sample from the study population and sample data which were summarized and presented in the Tables, 1, 2 and 3.

Table 1. Distribution of students /trainees population

TVET College	10+2		10+3		Total
	M	F	M	F	
Awassa	180	94	41	102	417
Arba-Minch	102	48	54	9	213

Table 2. Distribution of teachers/trainers population

TVET Colleges	Male	Female	Total
Awassa	64	13	77
Arba-Minch	57	3	60

Table 3. Total Samples for the study

No	Respondents	Male	Female	Total
1	Students/trainees	-	-	189
2	Teachers/trainers	-	-	41
3	Deans of the colleges	1	1	2
4	Administrators	2	-	2
5	Finance heads	1	1	2
6	REB-TVET sub-sector	1	-	1

2.5 METHODS OF DATA ANALYSIS AND INTERPRETATION

Once the data had been collected from target sources (samples), data were summarized based on the responses of each group using the statistical methods and finally they were interpreted. Accordingly, the following procedures and statistical tools were employed for quantitative and an interpretation for qualitative parts of the data. The data collected through the administration of data gathering tools were classified in to different categories or headings. Percentage, frequency counts, chi-square, T-test and ANOVA were employed to analyze various characteristics of the sample population. Also statistical tools helped in determining the relative standing of characteristics such as: age, sex, work experience, academic qualification and field of specialization. It also used for other questions with ordinal and nominal character. To facilitate manipulation of the quantitative data, the classified data were tabulated and recorded in quantified terms using SPSS. Percentage and frequency counts were used to describe characteristics of respondents. A Chi-square test was employed it is a test for

categorical data, it is non-parametric, is used to identify whether observed values differ significantly from expected values. A t-test was used to check whether the difference between means of samples was statistically significant. ANOVA was employed whether the mean of one group differ significantly from expected values .Accordingly, Best and Kahn (2003: 394) had stated that in education, 5% (α= 0.05) level of significance is often used as a standard for rejection. Narration of some qualitative data was also done.

CHAPTERR THREE

REVIEW OF RELATED LITERATURE

This chapter focuses on reviewing various literatures and research findings, which are assumed to have relevance to the study. One objective of making a review of the related literature is to get the current knowledge in the field or the topic that the researcher plans to study.

3.1 NATURE OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET)

Reform in TVET

The global economy represents new challenges to Education all over the world. Governments and education systems are expected to deliver "quality education" and "competencies for life" to all youth. Several of the broad categories concerning recent reform in technical and vocational education that are specifically mentioned in the national policies of countries are improvement of educational standards and the range of educational programs provided, improvement of the general quality of education and improvement of the methods for providing education; improvement of the facilities for and quality of technical and vocational education leading to an increase in the number of graduates and personnel with technical skills, updating curricula, provision of equipment and materials, training teachers and updating resources; provision of education for particular groups, improvement of education in rural areas, increasing the participation of girls and women and increasing the emphasis on continuing education and youth guidance; improvement of particular areas of technical and vocational education like computer education and science and technology education; improvements in curricula, upgrading of facilities and buildings, development of educational media facilities, establishment of departments and laboratories for areas of new and emerging technologies, improvement in teaching /learning methods, increasing the level of staff development and in-service training and restructuring the education system; involving industry and the private sector in the planning for technical and vocational education, teaching and course development; development of procedures of publicizes the education system's achievements and progress. The National Training Agency works in consultation with industry experts, employers, training providers and professional bodies to develop national occupational standards, which clearly define the

competencies, which are required for effective workplace performance. The agency's qualified staff can also be contracted to develop company-specific standards for employers who are interested in raising skill levels in specific areas.

Developing national vocational qualifications

A new standardized qualification for technical and vocational education and training is presently being developed and introduced as part of the TVET reform. Based on the competency standards set by industry experts, the qualification will be offered for TVET courses at different levels. The new qualification framework will allow people at any stage in their life to have access to training, which is at the right level for them.

Accrediting TVET providers

This service is targeted at TVET providers and employers who are committed to developing and maintaining quality standards for their centers and programs/qualifications. Accreditation not only enhances the credibility and image of an organization/employer but also assures trainees that they are getting value for their investment in training.

Quality enhancement and auditing support for TVET providers

Quality Assurance provides guidance and support to training providers in the widespread use of best practices and standards as it pertains to TVET. Assistance is offered in such areas as Quality Management Systems, Staff and Physical Resources, Delivery and Assessment. Labor Market Signaling information on labor market demand and supply is critical to human resource planning as well as assessing training needs. One of the most crucial factors for the successful implementation of the new vision for technical and vocational education and training (TVET) is support from industry and commerce. This support is imperative in light of the present mismatch between TVET being provided and the needs of the labor market. Education reform encompasses Technical and Vocational Education and Training (TVET), which responds to the needs and qualification requirements of the Ethiopian labor market. TVET is geared towards enhancing the competitiveness of all economic sectors through a dynamic, demand-driven and quality assured system of skills development. This will result in life-long learning and equal access opportunities for all target groups and envisages the formation of citizens able to contribute to the social and economic development of the country. In Ethiopia, throughout the late 1960s widespread expressions of dissatisfaction were expressed by students, parents and teachers alike and calls for basic changes and reforms were heard. In response to these

demands, a National Commission for Education to study and recommend feasible solutions to the problems was established in 1969(Teshome 1979:183). The historic 'Education Sector Review' ESR was launched in May 1971. But it was concerned on quantity. In the years between 1974 and 1981 the Ethiopian Educational system grew at a rate unprecedented in its history.

The educational budget had decreased as a percentage of the total government budget, which indicates that resources were being diverted away from education. The quantitative expansion was being achieved at the expense of quality. In view of the decline in quality of formal education despite its rapid expansion since the very start of the revolution of such content and quality as to prepare the youth from the point of view of the objective needs and ideological orientation of the country. The need for reform was thus obvious. Accordingly the Ministry of Education responded by launching a project known as the 'Evaluative Research on the General Education System of Ethiopia' (ERGESE). The purpose of the study was to investigate the quality of education system and to make recommendations. The future stages of TVET reform in Ethiopia require a paradigm shift from supply-driven system to demand and outcome-driven system.

3. 2 SUPPLY AND DEMAND RELATED ISSUES OF TVET TRAINEES

Nowadays, everyone agrees on the vital importance of vocational training for countries with rapidly changing economic and social conditions. On the one hand, competent people are wanted everywhere, at all levels, in all trades and occupations. For both these purposes to be effectively achieved, it is essential that training should be constantly and closely coordinated with employment policy. The most serious employment problems arise when there is a serious discrepancy between supply and demand for trained workers. It is true that demand adapts to supply as employers change their hiring requirements in loose or in tight labor markets. Adequate forecasting of the need for workers requires knowledge not only of the demand for workers of a particular type but also of the supply of such workers. Knowledge of the supply side of this equation is even more inadequate than knowledge of the demand side. Another problem in determining the supply of people prepared to enter an occupation is the matter of quality. Most training programs produce some graduates who are not qualified. If trained workers are in short supply, a person who otherwise would be

considered ineligible may be employed immediately. Conversely, when the labor market is tight, only the most qualified or those who have friends or relatives in influential positions may be employed.

SUPPLY AND DEMAND FACTORS

Stakeholders in planning

A VET system should aim to meet the current, emerging or anticipated needs for education and skills training within an increasingly complex and volatile local, national and global environment to the satisfaction of the stakeholders. Planning for training delivery is effective when it is assured that the risks of a mismatch between supply and demand are minimized. These mismatches may be quantitative (an undersupply or oversupply of a particular kind of enrolled students/trained graduates) or qualitative (the delivery of inadequate training content that does not meet the job requirements or personal needs of the stakeholders). In addressing the issue of who should determine enrolments and which programs to deliver, it is useful to consider the interests of the various stakeholders.

The interests of students

Many students make a substantial time commitment, and may for go income, to undertake training with the aim of improving their future employment or income prospects in the labor market. Both, the oversupply or undersupply of training courses or inadequate training content can diminish their future employment or income prospects. Jobs that are low paid and precarious and, as a result, students may be unwilling to undertake training even if courses are offered free of charge. Second, some occupations are commonly more prestigious than others and the number of young people willing to enroll in related courses is far and away greater than the number of graduates that the labor market can absorb.

The interests of industries and communities

Employers are clearly interested in having a regular supply of suitably trained graduates that meets their industries' current and future requirements for skills: an undersupply of training can lead to skills shortages and eventually to reduced productivity, and so forth. On the other hand, an oversupply of certain skills could conceivably distort the labor markets. Communities may have an interest in the delivery of TVET to the extent to the extent that it meets local development needs by enhancing local employment prospects. The demand for education and skills may reflect short-term fluctuations of economic activities, while rapid technological change may create pressing needs for new skills or make current skills

obsolete or redundant. Assessing future qualitative and quantitative requirements for occupational skills is often problematic.

Government concerns and powers

Governments have an interest in the delivery of training as it may fulfill their broader economic and social policy objectives, the supply of training could reasonably be expected to meet the broader needs of the economy and address unemployment. They may also be concerned about the use of public resources allocated to public TVET institutions, to industrious and to those students who receive training subsidies or other means of public training support.

A national training policy may express the strategic purpose of the planning of training by, ensuring a sufficient flow of new entrants to the labor market to address skills needs resulting from structural change and an ageing workforce; overcoming skills gaps and upgrading the skills of the existing workforce in order to boost productivity and support industry restructuring; providing for future skills needs in the identified key areas of economic and employment growth, such as, for instance, advanced manufacturing, design or environmental technologies; identifying and providing the skills needed for developing emerging industries and for innovation and knowledge creation; and meeting the skills needs of vulnerable groups, including young people, the unemployed and underemployed, people with a disability, displaced workers, indigenous people and those living in communities that have been hard hit by structural change.

Government interventions that are intended to influence training supply and demand often determine the national TVET priorities regarding, target groups, such as disadvantaged people, workers without skills certificates, and so on, which are entitled to priority services; industries in special need of the training services that the government decided to assist; training programs or trades that will have acquired considerable national importance; occupational skills in the sectors; strategic priority setting process by means of developing relationships across the various stakeholders (industry and community organizations, and government departments); establishing dialogue with VET providers on local training demand, taking account of their knowledge of local conditions and linking the ambitions of individual providers to government priorities; and negotiating training delivery targets and funding plans

with individual providers and outlining frameworks to verify that delivery targets have been met. The analysis of labor market information is a pre-requisite for re-orienting TVET to focus on labor market demand. Substantial relevant labor market information and forecasting is already available in Ethiopia, in particular through the Ministry of labor and Social Affairs, the National Statistics Office, ReMESEDAs and others (TVET strategy draft-August, 2006 Addis Ababa).

3.3 THE CONCEPT OF QUALITY

Quality in TVET

One concept of 'quality' has evolved from management theory and seeks to offer a customer-driven approach to meeting market requirements. However, the application of this concept to vocational education and training has been problematic given both difficulties in defining the term and lack of consensus where definitions are offered. The concept of quality is closely related to the excellence of a service and in the case of Technical and Vocational Education and Training (TVET), it relates to: the relevance of curriculum, the efficiency and effectiveness of course delivery, student management, the provision of required equipment and resources, the quality of lecturers or trainers and the training environment.

Training quality assurance, therefore, plays a key role in promoting quality of trainees produced in the TVET system. The provision of training in the country must meet labor market demands. As training providers face increased competition and globalization impacts on the labor market, with multinational firms increasingly seeking employees internationally, externally verified assertions of quality are more and more important. The role of regulatory bodies such as Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) is ensuring quality in TVET. Everyone is in favor of quality but when it comes to deciding what quality is, let alone how it is best achieved, there is far less agreement (Stone, 1997:1). There exists a variety of overlapping understanding of quality. Harvey (1995) in Warn and Tranter (2001:191) pinpointed five big approaches to defining quality in education. These are quality as exceptional, perfection, fitness for purpose, value for money, and transformation. Stone (1997) made a good effort to subside the several differing outlooks that we have about quality so that we would be in advantage

to make our choice about attaining it. He reflected on two broad approaches centering on customers and standards.

Customer centered definitions

Throughout industry, commerce and public services customer centered definitions are commonly adopted and increasingly used. Such definitions mean that customer perception is the input to understanding quality (STONE, 1997).

Standards centered definitions

Definitions of quality that are included in this category comprise definitions such as fitness for purpose and consistently meeting specification; the ability to satisfy stated or implied needs, conformance to requirements. Instances of this method in education contain the specification output competencies achievement targets (Stone, 1997). The concept of quality is that every thing can be improved. According to the old management philosophy "If it isn't broken, don't fix it". Quality is based on the concept that every process is perfect. According to the new management philosophy, 'If it isn't broke, improve it, because if you don't, someone else will'. This is the concept of continuous improvement.

3.4 INTERNAL FACTORS AFFECTING QUALITY IN TVET

3.4.1 RELEVANCE OF CURRICULUM

A curriculum is an action plan of what is to be provided in school as education /training. TVET curriculum must be relevant in terms of the needs of trainees, employers and society. Hence, there should be strong participation of relevant stakeholders at different hierarchal levels in planning, implementation and evaluation. To this end Gillie (1973:47) stated that some aspects of curriculum planning in occupational education takes place at different hierarchal levels.

The importance of philosophy in determining curriculum trends and decisions has been expressed by L.Thomas Hopkins: Philosophy has entered in to every important decision that has ever been made about curriculum and teaching in the past and will continue to be the basis of every important decision in the future. Curricula for quality TVET programs are developed on the basis of a careful analysis of the occupation in different employment areas by systematically studying what a successful worker does and needs to know in the practice of his/her job (Coe, 1973; Wenrich, 1958). The design of quality TVET curricula

involves modularization that emphasizes the specification of particular knowledge and skill, and their application to the standards of performance required in the workplace. King (1994:625) reiterated the curricula developed by the specification of learning objectives in a modular structure, makes learning easier in any TVET program.

Vocational curricula are organized to provide learning experiences for those who would prepare themselves for employment in a particular field of endeavor. In the development of curricula it is necessary to consider social and technological change and the effects these have upon occupations and preparation for entry to them. A TVET course involves a number of features, the major of which are the curriculum reflecting the detailed learning content of a course and the way a course is delivered and student progress assessed. Learning content may be structured into modules and research activities.

3.4. 2 TEACHERS /TRAINERS QUALIFICATION

To deliver high quality education, schools must attract, develop, and retain effective teachers. Working conditions play an important role in a school's ability to do so. The working conditions of teachers are greatly affected by both the learning environment in the school and teacher morale (The Carnegie Foundation for the advancement of Teaching, 1990 cited in Coulibaly, 1999:43). As stated earlier, unsatisfactory working conditions may account for part of the reasons for attrition among teachers. In addition to factors such as class size, a number of other factors come in to play in terms of working hours, including teaching time, and the number of hours devoted to extra-instructional activities such as preparation time, evaluating student, and staff meetings (Coolhan, 2003:65). Despite the fact that satisfactory working conditions is meant to encourage teachers to work harder, schools often neglect to provide for the simplest of agreeable working condition from both a human and an efficiency point of view (Harris, 1989:16-17). According to some authors, policies that address teachers' economic needs and concerns positively affect the quality and quantity of a teaching force (Dove, 1986, Thompson, 1990 cited by Tesfaye, 1999:21). It is accepted, for example, that teacher salary scales have an intimate connection with teachers' retention patterns. When salary levels drop in relation to the levels, which pertain for similarity, qualified personnel this gives rise to teacher dissatisfaction, which, if unresolved, can cause long-duration difficulties and lack of morale (Coolahan, 2003:81).

Technical and vocational teachers /trainers are the key elements in implementing training programs. The quality of any TVET program depends largely on the professional competence, personal quality and attitudes of teachers (UNESCO, 2001:16). Supporting this UNESCO (1973:11) states that technical and vocational teachers are '...responsible not only for imparting knowledge and skills, but also and most important is for preparing workers and technicians capable of contributing to a society which uses technology to serve the case of humanity'. In this regard, it is possible to say that TVET teachers are the linking device between industry, the real world and the education system. In order to play this role, the technical and vocational teachers must possess knowledge of their field and have had some experience in the real world of work for which they are preparing the students. They also must have knowledge and skills in pedagogical and practical teaching (UNESCO, 1973:23). Highly skilled, qualified, motivated, flexible and creative TVET teachers and instructors are the backbone of any TVET system, capable of adjusting to changing technological environments for different target groups. To this end, the Government of Ethiopia is in the process of fundamentally overhauling the system and provision of TVET teacher /instructor training and further training. The aim of this process is to create a corps of preparing trainees from different target groups and with different groups learning requirements to develop relevant occupational competencies as defined in the occupational standards and needed to pass occupational testing. Ernest Boyer(1983)has recommended that the working conditions of teachers should be improved by reducing class load, increasing preparation time, decreasing isolation, improving intellectual opportunities, decreasing routine tasks, improving salaries, creating a career path, and recognizing and rewarding teachers' good work and ideas. Palnsky(1986) recommended that teachers should be given more voice in the school decision making structure and encouragement. With many teachers leaving the profession (or indicating an interest in doing so) every year (Grant, 1988) and with the majority of teaching vacancies field by recent graduates (Darling-Hammond, 1988), the retention of effective teachers has become problematic. Relevant prior workplace experience is necessary if a teacher is to have the specialist knowledge and skills required to deliver quality VET that will prepare students for the workplace. In addition to a prerequisite level of specialist knowledge and skills, teaching

staff will also need to have adequate teaching skills (a teacher certificate) if they are to be effective as teachers.

Prior teaching and workplace experience and trade/professional and teaching qualifications may be recognized through graded teaching positions, for example associate teacher, teacher, senior teacher and principal teacher. The quality of teaching is, in the first instance, determined by the context in which teachers operate. The roles of teachers have altered greatly in recent years as the changes to curriculum structure, delivery and assessment modes, work-based training, industry liaison, the commercialization of training, the growth of a diverse student group and project-based work have taken place. At the same time, teachers may be impelled to incorporate equity principles into their approaches to ensure equal learning opportunities for all client groups. These new activities have all had an impact on the definition of quality teaching and the skills and knowledge required.

The external world of work has also given VET teachers a new range of challenges, since they now need to prepare students for a technological society, for periods of unemployment, lifelong learning and career changes rather than for one specific job. Business management practices impinge on teachers' roles, as globalization, information exchange; innovation and competition need to be addressed in most work contexts.

Professional development and monitoring

Professional development is used to introduce the latest teaching techniques, preferably through practice-based research. The process of moderating teaching and assessment tools and learning outcomes, and regular course meetings, as well as membership of professional associations all assist in teacher networking and development. Some jurisdictions undertake the systematic monitoring of instructional performance – in essence the monitoring of inputs to student learning-within TVET institutions, which includes the internal and external monitoring of teaching delivery. An important aspect of teaching is the extent to which the teaching conforms to the course curriculum. Compliance with the curriculum may, in some cases, be an internal matter for a TVET provider, and should be assessed as part of its internal QMS. Compliance is also relevant for a quality audit, which should be undertaken periodically by the TVET quality assurance body. The monitoring of teaching delivery evaluates the ability of teachers to transform curriculum into knowledge and

competences acquired by their students. The benefits of such monitoring include feedback to teachers on their performance and the quality assurance of teachers' pedagogical skills. Monitoring may be internal to the TVET institution (for example part of a teacher's performance review) or external (for example carried out by inspectors from an external monitoring agency). An assessment of teaching quality can essentially only be made by those who experience it, either as learners or observers. Therefore, the views of learners can and should be taken into account.

In some country systems, it is usual for managers to evaluate lessons as part of the staff appraisal system. Teaching observation forms part of the evidence for an individual teacher's performance appraisal. The data from these observations can be accumulated into a picture of the overall quality of teaching in the institution. This assumes that a sufficient proportion of staff is observed each year, which is a time-consuming activity for managers. The effective delivery of education and training requires that a TVET institution not only has adequate teaching spaces such as classrooms, workshops and laboratories but also adequate learning technologies and a range of equipment. Various traditional and newer teaching aids are available that enhance teacher-centered learning.

3.4. 3 FINANCIAL RESOURCE ALLOCATION

One of the major factors that determine the quality of TVET program implementation is availability of sufficient financial resource. This means technical and vocational education and training programs are expensive to run as compared to general education. According to UNESCO (1998:27) the cost of one TVET School is equivalent to two or three schools offering general secondary education. Financing is a powerful tool to shape the social and economic impact of the TVET system has a significant impact on its quality, efficiency and relevance. When public financing is the sole source of support to VET, institutions may face fluctuations in budget allocations. This can cause shortage of resources, which may lead to low quality programs with limited returns on investment.

In countries where the quality of vocational programs is poor in public funded institutions, these programs should be removed and available resources re allocated (Herschbach, 1993). As budget allocations from government sources for education get tighter, the

squeeze on availability of funds for Vocational Education and Training (VET) is apparent in so far as VET is so far VET is dependent on public funds: Costs on VET as compared with general education are also 2 to 3 times higher as classes are small with instructor trainee ratios of 1:7 sometimes. This increases the unit teaching costs. Expenditure on equipment, infrastructure, consumables e.g. raw materials and spare parts is also much higher. The challenge before policy makers is to introduce new and different ways of financing as well as to ensure that the resources, which are available for VET, are used more effectively in order to ensure quality-training delivery.

In most countries the budget for TVET from public sources is relatively small, ranging from 1 to 12 % of the current expenditure on education (UNESCO, 1993). When public training institutions are expanded and do not get adequate finances correspondingly the quality of training may become poor. In Egypt government enrolls more than half of upper secondary students in vocational schools to divert them from higher education. Open unemployment among graduates exceeds 35%. In Bangladesh, Cameroon less than half of public trainees find wage employment in their trade. Public training has to respond to the demand in the labor market only then can it become cost effective with good quality training leading to high placement rates (World Bank, 1991). In Germany more than two thirds of the 16-19 years olds receive training within the dual training system (Greinert, 1992). This system is called dual because there are two places of training-the vocational schools and the companies. The dual system sets high standards of training which leads to high productivity and competitive-ness of the labor force. This is why the workers and employees trained in the system are highly appreciated by the German society (Timmermann, 1993). Training in the dual system is successful when there is a constructive collaboration between social partners and adequate potential for placement. Training is also less likely to be obsolete as close links with employers are maintained (Herschbach, 1993).

Among the developing countries, Jordan has successfully adopted the dual training system conducted by the Vocational Training Corporation. If vocational training systems are very large and program activities cannot be adequately supported, it may be better to reduce the programmes and consolidate the existing resources and reallocate them appropriately. The important thing is effective management of the institution through a proper balance

between capital and recurrent expenditures. All training components should be strengthened and emphasis should be on quality training. The management should work closely with the employers. Strategies for financing VET have to take into account the pattern of economic development. There is no optimal combination of financing. In most countries there is a need to diversify training and new ways of financing may lead to new ways of training. Attempts to diversify financing will ensure stability in the long term as it will reduce excessive dependence on a single source. If there is financial stability, it will lead to better quality VET programs (Herschbach, 1993).

The Technical Vocational Education and Training (TVET) system in Ethiopia is currently undergoing a major reform process. One challenge of the system reform is to develop a financing mechanism for TVET in Ethiopia that will facilitate the generation of additional resources needed to implement the strengthening of the TVET system and its capacity increase (MOE, 2003). Public-Private partnerships, or social partnerships, are critical to the development of high quality vocational education and training because they allow for regular communication between employers and VET providers. This generation of better networks for communication is a tangible outcome of social partnership activities. Communication is critical in VET practice on many levels. This communication enables VET providers to learn what skills are in demand and to train for jobs that change regularly. The communication also allows employers to have input into the curriculum of VET and often gives them a recruiting tool to attract skilled workers. In systems such as those in Australia, New Zealand, or South Korea by developing a national qualifications framework and accountability system they have encouraged the development of communication. Therefore, communication is both a critical part of good social partnerships and an outcome of consistent engagement between the public and private sectors (Grubb and Lazerson, 2004). In a market economy, public private partnerships are the glue that links education and employers. The term is really used as shorthand for a range of public policies, funding systems, and curriculum frameworks that have as a shared goal to tighten the level of communication among educators and employers. The policy framework that governs these partnerships is varied, although there are archetypical systems. Germany's "dual system" is one model of public private engagement.

The German system is based on a law from 1969 that mandates a particular governance structure for vocational education and training. At the heart of the German system is a delegation of responsibility for curriculum and assessment to a coalition of labor representatives, businesses, and educators. The business associations play a particularly complex role, managing the system by monitoring the quality of training provided by firms in the dual system (Brand, 1998; Gill and Dar, 2000; Rauner, 1998). The German model has proven difficult to replicate internationally. Some Countries, such as Thailand or Korea, have managed to put into place a small number of dual system places (Gill and Dar, 2000). However, even the former Eastern Germany has had challenges in extending the dual system. Culpepper's book (2003) is a detailed examination of the reasons that the dual system can and can't be expanded within Europe.

There are several lessons, most importantly that unless companies see participation in their best interests they will not participate in and ultimately pay for training and hiring of vocational education graduates. The reality is that as labor markets are liberalized, and the cost of doing business in Germany itself has increased relative to other manufacturing intensive countries like China, the dual system has become less important as a critical part of the VET structure. The need to lower labor costs and maintain flexibility in the hiring and assignment of labor among nations means that firms are less interested in participating in a dual system (Culpepper, 2003).

A second model for private involvement in vocational education and training is Japan, which maintains a model completely different from that used by Germany, but one that is relevant in the US and other nations with strong social networks (Kariya & Rosenbaum, 2003; Rosenbaum, 2002). Historically, labor for Japan's manufacturing system has come from high schools, which have a network of relationships with hiring managers that allow them to place their most accomplished students preferentially. This system is based on a local relationship, and depends on high school staff correctly analyzing the skills of potential graduates and their fit with the academic and vocational needs of employers. The Japanese system is similar to an extent to what happens in US vocational schools, but only in those that are very high quality. In both cases, the high quality vocational schools are built of strong relationships between educators and employers.

A third model focuses on is encouraging firm level training through government policy. This is usually called a "Human Resource Development" or "Workforce Development" system. Countries that have this kind of program include South Korea, Malaysia, and Singapore. They evolved in East Asia largely as governments in the 1960s-1980s tried to strengthen economic growth through spending on both initial and further vocational training.(Ashton, Green, James, and Sung, 1999; The World Bank, 1993). The core of this HRD strategy is taxation policies that allow the government to collect revenue from firms (usually set at some percentage of the firm's labor costs) and then allows firms to use these resources to train within their own companies.

The question of financing technical and vocational education and training (TVET) is usually among the most crucial and at the same time most contentious issues discussed in the framework of TVET reforms. Underlying reasons may vary, however. In countries where training is mainly provided and financed by government, budget constraints force the authorities to diversify funding sources. Generally, high quality TVET is expensive, usually significantly more expensive than general education. And costs tend to increase. Globalization and the emerging knowledge society create new challenges for training. TVET needs to react flexibly to ever changing demands in the labor market, for instance with the development of new training courses, new training technologies and with creating possibilities for life-long learning. To meet these challenges, governments need partners in training, both in the delivery as well as in financing.

Governments alone can no longer run and finance comprehensive TVET systems. To respond to these challenges, an array of method to diversify the financial sources of training have been introduced world-wide, aimed in one way or the other at cost-sharing with those who benefit from training, i.e., employers, trainees and their families, or the society at large. TVET is generally substantially more expensive than general education. Mainly caused by: lower student to teacher/trainer ratio in TVET compared to general education; high capital cost for training workshops and equipment; higher cost of training material, in particular if technical fields are concerned; more diversified system of curricula and standards which increases administrative cost incurred in the TVET system.

The Government of Ethiopia is currently developing a new financing strategy for technical and vocational education and training (TVET) as part of the ongoing fundamental reform of the Ethiopian TVET system. The aim is to secure a sustainable finance base and develop operational mechanisms to support this ambitious reform.To enrich this process, the Ethio-German Engineering Capacity Building Program (ECBP) organized an International Symposium on Implementation Issues of Diversified Financing Strategies for TVET on November 20-21, 2006 in Addis Ababa, Ethiopia. The purpose of the symposium was to add an international perspective to TVET financing options at a time when Ethiopia faces the major challenge of fine-tuning and putting its TVET financing strategy into practice. In this spirit, the symposium was designed as an opportunity to benchmark the planned financing strategies against international best practice, to exchange lessons learnt with practitioners from other countries, and to assist Ethiopian decision-makers, implementers and stakeholders both at federal and regional levels in widening their understanding of the relevant issues, challenges and opportunities when developing and implementing sustainable mechanisms of financing TVET.

THE ETHIOPIAN APPROACH TO FINANCING TVET

In the past, the significant increase in TVET enrolment in Ethiopia was managed by a combination of government funding, intensive short-term teacher training and building of TVET centres.The rationale was still that of a supply-driven system. The future stages of the TVET reform require a paradigm shift towards a demand- and outcome-driven system. This holds not only for the training itself, but for the management of the TVET system and its institutions as well. The deciding factor for success is not input or supply, but performance. In countries like Ethiopia, where the consumers do not yet sufficiently value quality, it is difficult to convince private sector employers to invest in training skilled workers to improve the quality of their products. It is the role of the government to sensitize both consumers and producers about the benefits of quality – quality of products and services as well as of education and training. Public and private TVET providers need to explore ways to build partnerships.

3.4. 4 STUDENTS /TRAINEES MANAGEMENT

Another important principle that characterizes the quality of any TVET program is the principle on the students' career and occupation placements. In quality TVET programs,

the selection and placement of students in to diverse education and training areas require a cluster of services that include vocational guidance and counseling which help students to acquire appropriate positions for their careers, either academically or in the world of work. Education doctrine declares that the schools must be responsive to the full range of student interests, aptitudes, and abilities, but often in practice all but the gifted and retarded are herded through the general academic curriculum. In a great many school systems only those students who appear to have no hope at all of getting in to college or who are independently determined to study vocational subjects are guided to the vocational school, which is likely to be leveled' of lower quality,'' partly because of the students it receives and partly because of a perverted definition of quality.

Students should be supported by a number of formal and informal structures and processes that assist in their progress, involving: teachers and peers and their effective relationships with students; TVET institution's units: study support, welfare, library staff; disability support, and so on; the moderation of assessment items by teachers and the validation of assessment processes and tools with industry representatives; equal opportunity and anti-discrimination regulations; appeals and grievances procedures.

Another step that needs to be taken to assure the quality of courses is to ensure that student selection processes admit suitable students, who, once admitted, receive adequate monitoring and guidance. A publicly funded VET institution is required to attract, select and enroll its trainees in accordance with an enrolment policy determined by the government. The greater the autonomy granted to the institution, the more likely it is that the VET institution will set its own enrolment conditions.

Attracting potential students

Autonomous TVET institutions can attract student enrollment in a number of ways. A common approach is to use the media, by advertising in community and national newspapers, on local radio and (for particularly well-resourced institutions) through television commercials. Providers may also organize special events or attend community venues, such as shopping centers and career forums. A more selective approach to attracting students is through careers counselors, who are well placed to advise students in their final year(s) of schooling on their future options for training and/or employment.

The selection of students may also be linked to specific course requirements. These will be developed by the VET institution's departments with reference to individual courses or levels of study. Other training providers may conduct entry tests in order to rank prospective students, and allow selection to be undertaken on the basis of ranking indicated by such tests. These tests at least have the benefit of consistency, that is, all students are ranked according to the same criteria. Vocational guidance and vocational education have had a strong interrelationship since the beginning of the twentieth century. That relationship has been based on the assumption that vocational guidance could help people make wise occupational choices and that vocational education could help them prepare for what they had chosen. The primary contribution of Ginzberg and Super was the introduction of the notation of occupational choice as a process. This was a decisive improvement over the earlier notion among vocational guidance personnel that occupational choice was basically the matching of an individual possessing a set of observed characteristics of traits with a particular occupation in which these traits seemed important. In developing countries like Ethiopia, appropriate vocational guidance service will minimize the wastage of scarce resources which is invested on trainees due to their wrong or unwise choice of vocation (Seyoum and Tirusew, 1981: i).

The Ethiopian TVET system, however, lack up-to-date occupational information and the guidance of trainers themselves do not have current knowledge of education and employment option. Therefore, TVET opportunities should be better promoted and TVET programs should be ensured of first choice for more individuals based on skill demand of the market (MOE, 2005:21). Increased attention will be given to vocational guidance to enable future trainees, in particular youth, to choose the right career and make full use of the initial and life-long opportunities provided by the TVET system. Vocational guidance has to start at school level. The TVET Authorities will develop a concept for the introduction of appropriate vocational guidance structures within the system, including a system of aptitude testing to support personal career choices.

3.4.5 COMPETENCY OF THE TVET MANAGEMENT

Concerning management of TVET institutions UNESCO and ILO (2002:47) state that administrators of technical and vocational education programs should be equipped with teaching experience in a field of technical and vocational education and knowledge of

administrative techniques and procedures. Management activities aim at changing or marinating a system's status in order to achieve certain goals. Management is, therefore, goal-oriented.Routine management activities regarding programming and planning, budgeting and financing, staffing, and monitoring the performance of units and individuals. Consequently, effective management requires policies on planning, human resources, resource allocation, wages and other matters.In the countries where management systems have not yet matured management decisions can be based on broad criteria incorporating universal assumptions and values. A major impetus in the adoption of quality management systems (QMSs) in VET has been the rise in the need for accountability, especially with regard to publicly funded operations. As the consumption of education and training services grows, QMSs are now regarded as a useful way of reassuring clients and government about the beneficial outcomes of a VET provider.

The QMSs use various indicators and focus on improving different aspects of educational and training institutions. Some aim to improve customer satisfaction with education and training, whereas others concentrate on improving service productivity and reducing costs by, for example, focusing on strategic planning, leadership, control, customer focus, risk management and results or future plans. For TVET to provide the required services and live up to its core business, it must muster internal capacity. It is necessary to build its competencies along varies requirements of its responsibilities in direction setting, standard setting and systems development and in supporting TVET provision. Institutional capacity building also involves the installation of the TVET quality management system at all levels of the organization. Depending on its size and complexity, an autonomous VET institution will have several categories of employees. Larger institutions are likely to have a wider range of staff, reflecting their greater degree of diversity.

Managerial Staff

The managerial staff of public VET institutions will need to have prior management experience and sometimes management qualifications. A qualification in Education Management, which has recently been launched in some universities and polytechnics, could be of particular value. Management experience and qualifications are recognized through a hierarchy of graded positions, for example: the VET institution's chief executive; senior manager; teaching department (training school) manager (director/head); campus

manager; line managers in the course development department or other service departments, and so on. Managerial skills may assume greater importance in senior management positions, whereas trade-related work experience and teaching experience are arguably more important at the level of teaching department (training school) managers.

Other Staff

In general, non-teaching specialist staff (IT, library, public relations, technical support, and so forth) will be appointed for particular specialist skills that are not necessarily specific to VET. For example, the public relations staff of a VET institution is more likely to be skilled in the field of public relations than in aspects of VET, although an understanding of the latter could be a useful attribute. Student support staff (vocational guidance, counseling, recreation and health, and so forth) is likely to have work experience and skills in communicating with and providing useful services for prospective, current and graduate students. Administrative (finance, human resources, student records, clerical, and so on) and maintenance staff (in charge of site, buildings, equipment) are likely to have the generic skills required for the administration and maintenance of any organization that is characterized by the size and complexity of a VET institution. However, their skills may not necessarily relate to VET. In many jurisdictions, the selection and recruitment of staff for positions in public VET institutions are based on matching the attributes of aspiring appointees with a job (or position) description for the vacancy.

The management of national TVET systems aims at productivity, responsiveness, flexibility, efficiency, and continuous improvement in the quality of training and increased access to training. There is a growing need for a good research and development base to guide the implementation of reforms and make possible the best use of resources in the TVET sector. A strong research effort will benefit the TVET sector by providing a better information base, critical analysis of various issues that will improve effectiveness of the training delivery, cost effectiveness and better understanding of workers reforms. This is how the improvements initiated will positively influence on the development of a high profile TVET sector. Research based planning brings confidence to the policy makers to set the new direction for the TVET systems and justify the management stance on allocating resources and intensifying their efforts in alignment with the identified directions and proven practices

3.5 MONITORING TVET INPUTS, OUTPUTS AND OUTCOMES

Monitoring Through Inputs

It is usual in some VET systems to regard the education and training process as a production model with inputs and outputs. These are measured and quantified so as to create performance indicators in much the same way as a production plant might do. Although such measures have their uses, they need to be considered in the context of human behavior. The controls available within an education and training process do not always lend themselves to such precise measurement. Inputs are factors that have an impact on the VET delivery process: funding, staffing, enrolments, quality of teaching, teaching and learning equipment and materials, accommodation, support and infrastructure (catering, transport), and so on. For monitoring purposes, some of these inputs are not easily quantifiable and are usually measured as costs.

Output Monitoring

A VET course's outputs are the knowledge, skills and competencies acquired by its successful graduates. These outputs are somewhat intangible, variable and, therefore, difficult to measure. For reasons of simplicity, various proxies are used as measures of these outputs. Statistical information collected through output monitoring includes:the number of student enrolments; the number of student contact hours (SCHs) of curriculum delivered; the number of drop-outs; the number of course completers (or student retention rate); the number of successful graduations (or student graduation rate)

Outcome Monitoring

Outcomes are the impact that training has had on the employability of students and their capability to continue education and training, their salary levels achieved (improved), employer satisfaction with the quality and productivity of graduates, and the relevance of their training. Outcome monitoring of a VET course is commonly implemented through: graduate satisfaction surveys, graduate destination surveys, and surveys of employer satisfaction.

3.5.1 QUALITY AND PERFORMANCE MONITORING

Systems are necessary in order to ensure that VET institutions are held accountable to their various stakeholders (governments, students, industry, enterprises and the professions) for their inputs (public funding, tuition fees, and so forth), actual performance (the way

institutions conduct their business) and for their delivered outputs and outcomes (knowledge and skills of graduates, their employability, and so forth). Accountability systems generally involve quality and performance monitoring systems.

Quality Monitoring

Quality monitoring focuses on the quality of courses delivered by VET institutions and the quality of outputs and outcomes that result from these courses. Such monitoring involves the quality assurance of VET qualifications and courses by course approval and provider accreditation processes as well as by provider quality audits. Quality assessment generally covers both: inputs to learning (for example the quality of the curriculum, students, staff and teaching delivery); and outputs and outcomes of learning (for example the knowledge and skills acquired, enhanced employability, the capacity of graduates to engage in further learning and employer satisfaction with graduates).In many jurisdictions, quality monitoring by course approval and provider accreditation processes is the responsibility of a dedicated external quality assurance agency.

Performance Monitoring

Monitoring performance involves reviewing the achievement or non-achievement of an institution's objectives, which are derived from the key focus areas of the strategic plan and the departmental action plans that emerge from these areas. Key performance indicators (KPIs) form the benchmark for institutional accountability, linking government policy objectives with institutional outputs and budget processes. On a day-to-day basis, the VET institution's chief executive is finally accountable for the operations of the institution and the implementation of relevant policies and practices determined by the governing council. All staff is to be informed of their responsibilities within an operational framework, so that there is a whole-of-organization approach to accountability. Training programs and a good communications strategy help staff to understand their responsibilities. In recent years, communications and policy awareness have improved thanks to the use of Intranet systems in VET institutions.

Performance monitoring systems generally focus on the major input and output streams for each VET institution, including: student enrolments, hours of curriculum delivered, drop-out rates, completions, graduations, and so on, with reference to performance measures, such as quality, timeliness and cost; finance – government funding, other revenues,

expenditure, surpluses/deficits, cash flows, reserves, and so forth; capital assets – capital value, net equity, depreciation, expansion, disposal, and so forth; achievement of specifically targeted government objectives, such as, for instance, a rise in the participation of women in trade and technical training programmes. External and internal monitoring mechanisms are commonly implemented through: a regular course review by staff and students; staff observation and appraisal; graduate and employer surveys; departmental self-assessment and action plans for improvement; external inspection and reporting.

3.6 POSSIBLE STRATEGIES TO IMPROVE TVET QUALITY

3.6.1 COUNTRIES EXPERIENCES

The policy challenges facing most countries at the beginning of the 21st century-including developing countries-are ones that has to do with quality, rather than quantity. Higher quality translates into greater earnings for individuals over their lifetime (Gasskov, 2006).The experiences of autonomous public VET institutions in Australia, New Zealand, Germany, the United Kingdom, and Sweden suggest that their administrators direct their attention to managing their institutional balance sheets and operational efficiency, assuring the quality of education and training, and maintaining transparent accountability to their stakeholders. In these countries, VET institutions have developed as large-scale market operators in the national education and training industry. They cater to thousands of full-time and part-time students of all ages and employ large numbers of staff. Their financial turnover is significant and they generate large amounts in revenue. They operate as public companies and serve the interests of their governments, students, industry and the community.

AUSTRALIA

Quality has been a stated consideration in the Australian VET system since the advent of the Australian National Training Authority (ANTA), the National Training Framework and the implementation of the national training reform agenda. Australia's National Strategy for Vocational Education and Training 1998–2003 (A bridge to the future) identifies a range of system level indicators in the form of seven key performance measures (KPMs) that relate to quality of outputs and outcomes. The national VET system has in place three key quality assurance mechanisms to support the key performance measures. The increasing globalization of the VET training market has also motivated some Australian training providers to opt for

certification with the International Standards Organization, an approach to the management of quality.

THE UNITED KINGDOM

National Vocational Qualifications standards have been introduced in the United Kingdom in an attempt to establish a nationally applicable system of vocational qualification standards. These qualifications are based on the National Occupational Standards, which are statements of performance standards that describe what competent operators in a particular occupation are expected to be able to do. Standards Setting Bodies have developed the standards in collaboration with employer-led National Training Organizations. However, these qualifications have not proven universally popular among employees and employers. The purposes of the regulatory authorities' monitoring activities are, in part, to ensure the quality of programs and qualifications.

According to Seyfried, six aspects of vocational education in the United Kingdom have proven to be the main issues of contention at the system level: the relevance of the training provided, confidence in the standards of training, the credibility of the qualifications, the competence of the teachers, flexibility and cost effectiveness, the question of 'who benefits and who pays?'. The quality issue has become problematic not only because traditional key industries have declined and the general recognition that human resources are under skilled but also because of the necessity of a new culture of lifelong learning being accepted (Seyfried, Kohlmeyer and Futh-Riedesser 1999).

GERMANY

The central goal of the federal government's VET policy is to provide learners with long-term employment opportunities through initial and continuing education and training. It is regarded as essential from both the economic and social policy point of view that adequate numbers of training places are provided and also that vocational training institutions have appropriate material and human resources. Consequently, the provision of training places and the quality of resources within vocational training institutes are important indicators of quality in the German VET system (Federal Ministry of Education and Research 2002).

Vocational training is based on a 'dual system', which is similar to modern apprenticeships in the United Kingdom. In initial vocational training, the training is provided by companies (three or four days per week), and, additionally, the trainees attend

a course at a vocational college (one or two days per week). A vocational training law provides the framework for training, but the actual implementation is the responsibility of training organizations, professional bodies and trade corporations. Companies offering traineeships are subject to regulation. Continuing vocational training is based on a combination of publicly funded and privately funded (employer or employee) training provision (Gutschow 2001).

NEW ZEALAND

The New Zealand Qualifications Authority was established to oversee the development of a National Qualifications Framework. Industry Training Organizations were formed to assist in the development of industry-specific standards and qualifications (New Zealand Qualifications Authority 2001). The qualifications authority has recently developed and implemented a quality assurance system which is administered by the Quality Assurance Service. The authority focuses on the registration of training providers; registration of unit and achievement standards on the National Qualifications Framework; accreditation of schools, institutions and other establishments to offer approved courses and/or award credits for registered national standards; and accreditation of Industry Training Organizations to register workplace assessors.

The Quality Assurance Service uses systematic quality audits to verify that quality systems are effective. Providers are required to carry out self-assessment prior to audit. The standards against which providers and training organizations are audited have been developed through consultation with the stakeholders (New Zealand Qualifications Authority 2001). The focus of quality indicators in the New Zealand training environment is currently undergoing a shift in emphasis from monitoring quality on the basis of inputs to monitoring quality on the basis of outputs.

SWEDEN

The quality debate in Sweden concerns itself not only with the quality of vocational training but also with its broader social implications, and with such general objectives as creativity. The involvement of participants and other stakeholders is considered crucial, as is the use of different kinds of evaluations, both qualitative and quantitative approaches, and the wish for useful results for developers, planners and decision-makers (Seyfried, Kohlmeyer and Futh-Riedesser 1999). Vocational training and general education are not

clearly distinguished, and, indeed, it is an objective of the Swedish education system 'to narrow the gap between vocational and general education as much as possible' (Abrahamsson 1999). The Swedish Ministry of Education and Science recognizes that high quality VET will only be achieved if there is close cooperation between school and working life. Vocational programs at the upper secondary level are considered to be initial vocational training and all other forms of training, from labor market through to professional degrees at university are regarded as continuing vocational training. As the education system in Sweden is much decentralized, it is difficult to generalize about quality management. Private education institutes are guided by an annual survey of training needs conducted by an association of small enterprises, which operates as a de facto quality assessment mechanism. If it is apparent that an institute is attracting declining numbers of students, the association assumes that it is the quality of that institute's offerings that is lacking.

THE NETHERLANDS

The Netherlands' approach to quality is characterized by strong externally imposed quality controls, and top-down strategies. As well as self-assessing their internal quality programs, schools are evaluated by external visiting committees every five to six years, and the attempt to find the right balance between these internal and external quality assurance mechanisms is ongoing. Furthermore, 'reconnaissance' studies, for which approximately 300 evaluative questions have been designed, are conducted when the need becomes apparent in specific industrial/economic/disciplinary sectors (Nielsen and Visser 1997).

SOUTH AFRICA

South Africa's National Qualifications Framework is motivated by a balanced, twofold commitment to meet the needs of individual learners (and especially, to redress historical inequities in the education system) and to contribute to the country's economic and social needs. The intention of a national framework such as this is to enable nation-wide recognition and portability of qualifications. It is underpinned by a strong commitment to the principles of lifelong learning. The quality indicators for the National Qualifications Framework are intended to encompass the following objectives: integration (theory and practice and knowledge, values and attitudes should be integrated in all qualifications and standards), learning outcomes (expected standards of attainment should be clearly stated, and programs designed to ensure achievement), access, mobility and progression (learning

should lead to continued learning and to employment opportunities), redress (there should be increased access for those who were previously denied opportunities) personal and national development (learners should be empowered and enabled both for their own and their country's development needs). Implicit in the South African Qualifications Authority's implementation of the quality system is the understanding that quality assurance, quality management and accreditation are not things or products; rather, quality is a process (South African Qualifications Authority 2001b). The various countries experiences show the different approaches that help to facilitate for the improvement of quality in TVET system.

3.7 ETHIOPIAN SITUATION

The Ethiopian Government has decided to reform the Ethiopian TVET sector by designing and implementing an Ethiopian TVET –System based on international best practices. The new Ethiopian TVET-System is an outcome based system, meaning that it uses the needs of the labour market and occupational requirements from the world of work as the benchmark or standard for TVET delivery. The requirements from the world of work are analyzed and specified-taking into account international benchmarking. Developing vocational and technical skills costs much more than general education, and inadequate budgets lead to inadequate outcomes. If skills are not developed, however, productivity will not increase, and the benefits to society and individuals will not materialize. Meeting the recurrent costs of paying well-qualified managers and instructors and providing up-to-date teaching materials and maintenance are essential to achieving good training outcomes. The economic policy and strategy of Ethiopia requires technical and professional skills in broad and specific occupational fields. It is with this intention that the Government of Ethiopia has put in place a comprehensive capacity building development program aimed at strengthening its human resource potential through TVET. To meet this demand, public and non-public TVET institutions have increased in number, the training areas 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. However, at present most TVET graduates do not meet the expectations of the service and production sectors. This is due to three reasons: TVET concentrates on institution-based training, which favors theoretical instruction. Initial training is still input-oriented and

follows curricular requirements instead of workplace and labor market requirements, Further training and continuous upgrading for the existing workforce are only partially in place. A meaningful structure for steady adaptation to workforce demand and life-long learning is still missing, ongoing formal and informal non-public and private company-based training is closer to people and to the world of work. All these different training approaches are not yet part of the over-all training system thus excluding large majority of trainees, job seekers (creators) and working people. Thus their skills, knowledge and experience are not sufficiently acknowledged, developed and utilized. Based on the government economic and social development strategy program new training programs have been identified, and occupational standards were prepared for 50 priority trades.

The TVET institutions were provided with the necessary equipment, machinery, furniture and computers to make the training practical and of better quality. Training modules were also produced and distributed to the institutions. Moreover, 69 expatriate teachers were recruited and assigned in the different TVET institutions to improve the quality of training. The TVET qualification framework document was prepared to put in place a trade-testing center with the corresponding procedure and 5 other implementation guidelines were also developed and 5 centers of competencies development plans are prepared. The Federal TVET Authority is responsible for overall coordinating and steering of the entire TVET-System and related issues in Ethiopia, and for driving the envisaged TVET reform process. Within the process of decentralization Regional TVET-Authorities take over various functions and responsibilities. The institutional set-up is similar to that of the Federal TVET-Authority.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

This part of the thesis deals with analysis, interpretation and presentation of the data secured from the sampled groups. The data collected through questionnaires and interview were analyzed and interpreted. As a result, the basic questions rose in chapter one was given pertinent resolution .A total of 237 copies of the questionnaires were distributed to 189 trainees, 41 trainers, 1 TVET sub-sector official, 2 college deans, 2 college administrators and 2 college finance heads understudy. Out of the questionnaires distributed to respondents 189(100%), 41(100%),1(100%),2(100%), 2(100%) and 2(100%) were filled, replied and returned from trainees, trainers, TVET official, TVET college deans, administrators and finance heads respectively. The responses to the close-ended questions on the questionnaires were tabulated; responses to the open ended questions were summarized and interview reports were interpreted. Based on the responses obtained from the sample respondents, the analysis and interpretation of the data were presented respective with each table.

4.1 Respondents Characteristics

Table 4: Background Information of Trainers /Teachers Respondents

No	Item	Teachers			
		Awassa		Arba-minch	
		No	%	No	%
1	Qualification:				
	a. Diploma(10+3)	1	4.35		
	b. Diploma(12+2)	4	17.8	5	27.8
	c. Diploma(12+3)	2	8.70	1	5.6
	d. B.A/B.Ed/B.Sc	15	65.2	12	66.6
	e. M.A/M.Sc	1	4.35	-	-
	Total	23	100	18	100
2	Service years:				
	a. 1-5	4	17.4	6	33.3
	b. 6-10	1	4.4	2	11.1
	c. 11-15	5	21.8	3	16.7
	d. 16-20	4	17.4	2	11.1
	e. 21-25	7	30.0	5	27.8
	f. Above 25	2	9.0	-	-
	Total	23	100	18	100

Background information of teachers/trainers shows in Table 4, item 2 revealed that the respondents qualification in the two colleges were in first degree level and above at Awassa.

This implies that one of the quality indicators (qualification of teachers) was in a good condition. Item 2 of the same Table exhibited that majority of the teachers were greater than 11 years in their services in the two colleges .This indicates that one of an important pre-conditions for the colleges in using experienced workers for quality TVET delivery was achieved. Moreover, the literature supports that prior teaching and workplace experience and trade/professional and teaching qualifications may be recognized through graded teaching positions, for example associate teacher, teacher, senior teacher and principal teacher.

Table 5: Background Information of Trainees Respondents

No	Items	Students/trainees respondents			
		Awassa		Arba minch	
		No	%	No	%
1	Age:				
	a. 17-20	76	60.8	38	59.4
	b. 21-25	39	31.2	25	39.1
	c. 26-30	9	7.2		
	d. 31 and above	1	0.8	1	1.6
	Total	125	100	64	100
2	Field of study:				
	a. industrial	55	44	38	59.4
	b. construction	26	20.8	6	9.4
	c. business	44	35.2	20	31.3
	Total	125	100	64	100
3	Training program/level :				
	a. 10+2	81	64.8	34	53.1
	b. 10+3	44	35.2	30	46.9
	Total	125	100	64	100

The information in Table 5 of item 1 describes clearly that from sampled groups the data revealed that majority of the respondents at Awassa 76(60.8 %) was in the age of below 20 and at Arba Minch 38(59.4%) was also below 20. A small group of student population in the two colleges had had only 1(0.8%) above 31 years old. Hence, this data dictates training providers to reconsider and make close attention in creating the concept of quality in the minds of trainees as they were too young to realize quality in training. Regarding the information achieved from item 2 states that the respondents field of study at Awassa were 55 (44 %) industrial and at Arba Minch 38(59.4%) were seen as the lion share of trainees . The above fundamental category of the major fields also in turn accommodated many specializations and the aggregate sum of departments were required extra investment to secure quality delivery. The literature stated that the cost of Technical and Vocational

Education and Training is expensive and this reality becomes more in the case of industrial and construction fields. Information shown on the item 3 indicated that 81(64.8 %) and 34(53.1 %) of the respondents were 10+2 programs in the two colleges and they hold above an average of students. This implies that the colleges were not able to possess more 10+3 students as they require to be paid earmarked allowances.

Table 6: Background Information of EB-TVET Sub-Sector Official

No	Items	Responses
1	Age: 40-44 years	1
2	Field of study: Major Minor	-Chemistry -Mathematics
3	Qualification :	MSc.
4	Work experience(s):	In TVET- 9 years In other- 11 years

Background information of the respondent in Table 6 of item 1 shows an adult age range. It could be suggested that an individual might able to react socially with people in depth guided through life experiences. It is an age group on which people naturally mature to take responsibility. The qualification of the respondent, disclosed that the individual educational background was not from educational planning and management or related fields to manage TVET sub-sector properly. Concerning management of TVET UNESCO and ILO (2002) stated that administrators of technical and vocational education programs should be equipped with administrative background. Work experiences of the respondent in item 4 revealed that the respondent had sufficient service years though it was a mismatch between what the respondent possesses and what his current duty shows.

Table 7: Background Information of Respondents

No	Items	Respondents											
		Awassa TVET						Arba Minch TVET					
		Dean		Administrator		Finance head		Dean		Administrator		Finance head	
		No	%	No	%	No	%	No	%	No	%	No	%
1	Age												
	35-39 ,,			1	100								
	40-44 ,,	1	100			1	100						
	45 and above							1	100	1	100	1	100
2	Qualification												
	Diploma					1	100			1	100	1	100
	(12+2)												
	B.A/B.Sc/B.Ed	1	100	1	100			1	100				
3	Service year												
	6-10			1	100								
	11-15					1	100					1	100
	21-25												
	Above 25	1	100					1	100	1	100		
4	Field of study												
	Mathematics	1	100										
	Ed. Adm							1	100				
	Geography			1	100								
	English									1	100		
	Accounting					1	100					1	100

Ages of the respondents were presented in Table 7 of item 1 that almost the two deans were in the age of 40 and above. Here, it could be deduced that their ages' information revealed that they had served more and this has direct linkage with work experiences of an individual. The data in item 2 shows the age of the administrator at Awassa had more than 35 years old and at Arba Minch more than 45 years old. From this it could be said that all the respondents had sufficient maturity in work and this could match with their work experiences. As the age of the finance heads respondents in item 2 showed that both respondents were under the adult category. In this regard, it could be said that the respondents were matured as they stayed for a long years of work if other preconditions were fulfilled to the position. As the data depicted that the two college deans were qualified for fist degree in different specializations. It could be summarized that they had achieved minimum level of requirement in order to lead their duties and responsibilities. In

item 2 the qualifications of administrators at Awassa was better than that of Arba Minch .This also confirmed that more administrative duties and responsibilities were managed better. In the same item the qualifications of finance heads were shown and in two colleges it was found to be diploma. This implies that the level was sufficient in order to manage the over all financial activities of the colleges.

Descriptions of the respondents' service years in item 3 stated that the deans of the two colleges had sufficient service years. It could not be generalized that the service years of the respondents could guarantee an efficient management duty and responsibility in the TVET delivery. Rather the service years have to be linked with qualification on TVET and management areas. As to the service years of the respondents in item 3 described clearly and administrator of Awassa was served less than that of Arba Minch. This implies that unlike Awassa the administrator of Arba Minch (had been long served) gained better awareness regarding the technical work related activities of TVET college but this would not warranty effective managerial capacity. As far as, the respondents' field of study in item 4 was concerned dean of Awassa had no TVET backgrounds but dean of Arba Minch was qualified for educational administration which is believed to be acceptable to manage the work activities of the college. Here, it could be deduced that the actual condition of one TVET college seems inconsistent with universal rules and regulations. Concerning the administrators' field of study, all of them possess field of study which were not linked to administration. This implies that the administrators did not possess relevant specialization on TVET to administer. In contrast to the administration activities of TVET in general international reports of various documents suggested that the program had to be managed by individuals having TVET background. To the finance heads field of study under item number 4 indicated that almost all the respondents were exactly qualified to an appropriate field of study. This implies that the respondents' specialization was highly significant in managing the financial resources of the colleges. Since financial resource allocation of training colleges is essential to bring quality outcome, the finance workers of the colleges were properly assigned.

4.2 Institutional Capacity Assessment

Below quantitative items were analyzed using statistical tools at significance alpha level of p=.05. Also the researcher defined an average values for various rating scales of

questionnaire items of value 3 as an average for 1,2,3,4 and 5 and 1.5 as an average for 1, 2 and 3 values of respondents responses.

Table: 8 The Level of Conducive Situation Upon Trainees Needs

No	Items	Awassa TVET Trainers		Arba Minch TVET Trainers		df	X^2
		No	%	No	%		
1	Have you attended any refreshing courses recently?	23	56.1	18	43.9		
	A. Yes	5	21.7	7	38.9	2	X^2=20.829
	B. No	18	78.3	11	61.1		P=.000
2	Does equally qualified staff obtain similar salary?						X^2=33.39
	A. Yes	0	0	2	11.1	1	P=.000
	B. No	23	100	2	88.9		
3	Does your college retain qualified and experienced trainers?					1	X^2 =.610
	A. Yes	7	30.4	11	61.1		P=.435
	B. No	16	69.6	7	38.9		

In Table 8, item 1 indicated that majority of respondents in Awassa (78.3 %) and in Arba Minch (61.1) confirmed that there was insufficient provision of refreshing training for trainers. When the chi-square test employed to see the statistical significance of the item, it revealed that there is highly a significance difference on the responses at p= .000 values. On the other hand, open ended questions for teacher respondents were provided whether they attended and its duration. Accordingly, most teachers were not participated training to narrow their skill-gap. From this one could point out that refresher training for teachers is at its rudimentary stage and as a result they were not armed with the necessary up to date technologically linked information. In the same table, item1 revealed that almost all respondents in Awassa (100 %) and Arba Minch (88.9 %) responded that there is unequal benefit of salary for equally qualified staff. The statistical chi-square test also identified that there is a significance difference at p=.000 values. Regarding item number 1, respondents of Awassa replied that there are weak efforts to retain qualified and experienced trainers but Arba Minch respondents responded that there is a good attempt to retain trainers. In

general, the chi-square result shows there is no significance difference on both groups of respondents (p= .435). Teacher respondents were asked to state why equally qualified staffs not obtain similar salary. On the basis of such views Awassa teachers were mentioned the following points as a reasons, the respondents concluded that majority of them were excluded from getting the new higher education salary scale as 10+3 participants of their colleagues and for unequal distribution of salary scale may be due to poor image of the regional education bureau towards TVET sub sector and its college legislation weakness in holding hard and fast legal framework for teachers' rights. As a result the improved incentive is confined only to business department selective teachers' of business department.

Table: 9 The Status of Training Colleges' in Providing Basic Facilities

No	Items	Awassa TVET trainers		Arba Minch TVET trainers		df	Total
		No	%	No	%		X^2
1	Are there adequate infrastructure in your college?	23	100	18	100	2	
	A. Yes	6	26.1	10	55.6		X^2=1.98
	B. No	17	73.9	8	44.4		p=1.60
2	Are there adequate library resources?	23	100	18	100	1	
	A. Yes	7	30.4	10	55.6		X^2=18.93
	B. No	15	65.2	8	44.4		P=.000
3	Is there conducive environment to conduct research	23	100	18	100	1	X^2=17.78

	on quality improvement?						p=.000
	A. Yes	5	21.7	2	11.1		
	B. No	18	78.3	16	88.9		

In item 2 of Table 9, which is related with infrastructure adequacy linked request (26.1%) respondents of Awassa replied that there is inadequate and on the other hand (55.6%) of Arba Minch respondents responded there is an average adequacy. Test results of chi-square assured that there is insignificant differences on the responses of the two groups at (p=.160) values. In the same Table, item 1 showed that respondents of Awassa (65.2%) indicated as there is no adequacy of library resources. On the contrary, Arba Minch respondents (55.6%) stated that there is an average resource. As far as the chi-square test is concerned there is a significance differences at p=.000 values. For item number 3 which was related with research facilitating environment conduciveness, majority of respondents (78.3%) and (88.9%) in Awassa and Arba Minch respectively replied that there was no conducive environment which invites professionals to carry out research activities. Chi-square test outcomes also shows statically significant (p=.000).

Table: 10 Pre and Post Knowledge Assessment of Trainees on TVET

No	Items	Trainees respondents				df	X^2	Sig.
		Awassa		Arba Minch				
		No	%	No	%			
1	Did you have initial knowledge about TVET before joining it?							
	A. Yes	31	25.4	15	24.1	3	80.31	.000
	B. No	33	27.1	16	25.8			
	Total	122	100	62	100			
2	Are you happy in joining TVET program?							
	A. Yes	112	90.3	57	90.5	2	274.89	.000
	B. No	12	9.7	6	9.5			
	Total	124	100	63	100			
3	Are you joined TVET by your own interest?							
	A. Yes	88	72.1	48	77.4	2	142.95	.000
	B. No	34	27.9	14	22.6			
	Total	122	100	62	100			
4	Are you interested in your department now?							
	A. Yes	112	91.1	59	93.7	2	289.65	.000
	B. No	11	8.9	4	6.3			
	Total	123	100	63	100			

As it is indicated in Table 10, all items in the test category on respondents' perception towards TVET pre and post view of knowledge were not sufficient and both groups had consensus and therewere statistically significant difference at p=.000 values. From these it could be generalized that trainees understanding prior to join their respective field of study was essential and for this the colleges had to organize vocational guidance services. As the main component of TVET system, students were asked free response questions whether they joined TVET by interest or not. Accordingly, Awassa respondents described their views in brief as they joined either through: since there was no other option, no pre –knowledge, as there was no sufficient result for higher institution (preparatory) entry, due to family enforcement, because of the placement, joined instead of sitting ideal, preferred instead of killing time, since it was impossible to afford for other private training colleges, on the other hand, respondents of Arba Minch also mentioned how they joined as follows: My wish was joining university program but not ,as I scored poor result in national examination forced TVET, I joined by the college decision, and I joined due to my poor result but now I am enjoying it

Table: 11 Resources Management at The Institution Level

No	Items	Awassa TVET Trainees		Arba Minch TVET Trainees		df	X^2
		No	%	No	%		
1	Is raw material arrive at workshop on time?	118	100	64	100		
	A. Yes	78	66.1	29	45.3		X^2 =88.22
	B. No	40	33.9	35	54.7	2	P=.000
2	Do teachers use training time properly? A. Yes	123	100	63	100		
	B. No	91	73.9	54	85.7		X^2 =12.90
		32	26.1	9	14.3	1	P=.000

Table 11 of item 1, presents about raw materials arrival for training on its due time and as high as 78(66.1%) at Awassa and less than half 29(45.3%) and Arba Minch respondents were agreed on its timely arrival. Proper utilization of training time could be enhanced through the provision of training materials. Trainees can get the required skill if training materials arrive for the intended purpose on time. Moreover, the chi-square test depicted the existence of significance difference at p= .000 values. Item 2 of Table 11 shows responses for the question of teachers/trainers proper time utilization for training. Accordingly, the majority 91(73.9%) and 54(85.7%) replied upon proper time utilization. When considering chi-square test for the item 2, the responses indicated the existence of significance difference at p= .000 value.

Table: 12 Library Facilities of the Colleges and its Management

No	Items	Trainees respondents				df	X^2	Sig.
		Awassa		Arba Minch				
		No	%	No	%			
1	Is there well equipped library in your college?							
	A. Yes	7	5.6	1	1.6	1	158.35	.000
	B. No	117	94.4	62	98.4			
	Total	124	100	63	100			
2	Is the library managed by professionals?							
	A. Yes	21	17.8	7	11.1	2	204.69	.000
	B. No	97	82.2	56	88.9			
	Total	118	100	63	100			
3	Are you utilizing the library properly?							
	A. Yes	33	27.3	11	17.2	2	161.94	.000
	B. No	88	72.7	53	82.8			
	Total	121	100	64	100			

In item number 1 of Table 12 attempts were made to assess whether the library was equipped or not. Accordingly, the majority (94.4 %) and (98.4%) of Awassa and Arba Minch respondents respectively responded that the library was not equipped in the respective colleges. On top of this chi-square test depicted that there are statistically significant difference on the responses of respondents at p=.000 values. Similarly, in item number 2, student respondents were asked about library workers professional competency in managing services to the users. As a result, majority of the respondents 97(82.2%) of Awassa and 56(88.9%) of Arba-Minch confirmed that the libraries had been managed by non professionals. Also, the chi-square report confirmed that there are significance difference at p=.000 values. Regarding item 3, in the same Table student respondents were reflected the absence of proper utilization of the libraries 88(72.7%) and 53(82.8%) in Awassa and Arba Minch respectively. Moreover, the chi-square test employed supports the existence of significance difference at p= .000 values. From the open-ended question there was a feeling from a few student respondents that they were constrained by time to utilize the library. In concluding, the researcher posed question to assess about the weak utilization of libraries by students and students from Awassa presented the following rationale as there were no relevant and sufficient books, most of the time it was closed, through out the academic year we had hardly spare time, in some departments there was no books at all, it works for short duration, workers are not in a position to help students . books were not properly placed and categorized, for those students who are coming from other places the college does not provide ID on time to utilize the library, and since some of the students were self-helping themselves they have no extra time to utilize the library. Students from Arba Minch in their turn replied for the question as follows: we had got books through borrowing only for one night, no sufficient books in the library, workers were not willing to assist us and also we had no extra time to use the library resources.

Table: 13 Prior Understanding of Trainees on TVET

No	Item	Awassa TVET trainers		Arba Minch TVET trainers		df	Total X^2
		No	%	No	%		
1	In your opinion, do the trainees get sufficient orientation on TVET	23	100	18	100	1	X^2=1.19 P=.274
	1. Yes	11	47.83	13	72.2		
	2. No	12	52.17	5	27.8		

As shown in Table 13 of item 1, in both study areas all the respondents replied that trainees were not getting sufficient orientation (below average) which is less than moderate rating scale i.e. 3. Also, the chi-square result confirmed that there is insignificant difference between the responses of the two groups (p=.274).

Table: 14 Apprenticeship Implementation Practices

No	Items	Trainees respondents				df	X^2	Sig.
		Awassa		Arba Minch				
		No	%	No	%			
1	The status of apprenticeship at the world of work is--							
	A. High	49	40.2	16	25			
	B. Medium	62	50.8	34	53.1	3	115.57	.000
	C. Low	11	9	14	21.9			
	Total	122	100	64	100			
2	Do organizations assign supervisor for apprenticeship program?					2	116.22	.000
	A. Yes	78	63.9	45	72.6			

	B. No	44	36.1	17	27.4			
	Total	122	100	62	100			
3	Does the college have qualified vocational councilor for apprenticeship?							
	A. Yes	76	66.7	54	85.7	2	121.55	.000
	B. No	38	33.3	9	14.3			
	Total	114	100	63	100			
4	Does the college have vocational guidance services?							
	A. Yes	62	55.4	43	70.5	2	68.03	.000
	B. No	50	44.6	18	29.5			

As indicated in Table 14 of items 1 through 4 student respondents replied against various items and these are presented. On the status of apprenticeship in the world of work, average respondents of the two colleges (50.8%) and (53.1%) ranked medium implementation. On the same Table of item 2, supervision for apprentices (63.9%) of Awassa and (72.6%) of Arba Minch responded positively. Item 3 shows respondents perception on the issue rose to obtain whether there is qualified vocational councilor or not (66.7%) and majority (85.7%) in Awassa and Arba Minch respectively put their common perception. To item 4, vocational guidance service availability related question an average respondents of Awassa(55.4%) and more than an average of Arba Minch(70.5%) provided positive views on the existence of the aforementioned service. On top of the above findings for all items the chi-square test revealed that there were a common understanding for the items and there are significant differences while every items were analyzed (p=.000 values). Regarding apprenticeship training supervision- Proclamation No.391/2004 (Part Three, No. 21, Duties and responsibilities of organizations) states that every organization has to assign a capable supervisor who would

enhance the knowledge and skills of the apprentice, and should follow up and evaluate the day-to-day performance of the apprentice.

Table:15 Investigating Training Inputs in TVET Colleges

Rating scales: 1= very poor 2=poor 3= moderate 4= good 5= very good

No	Items	Awassa TVET Teachers					Arba Minch TVET Teachers				
		1	2	3	4	5	1	2	3	4	5
1	Appropriate allocation of training budget on time	3	8	7	4	1	3	5	7	2	1
2	Raw materials provision	2	3	11	6	1	1	2	8	5	2
3	Equipment supply	1	4	11	7	-	-	2	5	8	3
4	Adequacy of machines	2	6	10	5	-	-	1	7	6	3
5	Regular maintenance of machines	8	13	2	-	-	5	6	5	-	1
6	Computer availability	2	8	5	6	2	-	2	4	6	6

In Table 15 item 1 teacher were asked about training budget allocation. As the result indicated 11(47.8%) at Awassa and 8(44.4%) at Arba Minch the respondents replied that there was poor budget allocation. This implies that there was no sufficient training budget in the respective colleges. Item 2, on the same Table shows about raw material provision. Only 11(47.8%) at Awassa and 8(44.4%) revealed that the provision was moderate. This implies that there was still a gap and training raw materials were not fully available. Concerning equipment supply, in item 3 the colleges' teachers were asked to examine the existing situation. Some respondents of Awassa 5(22%) replied as it was poor and 11(61.1%) at Arba Minch confirmed that the supply was quite good. It could be said that one of the important inputs for training program in the colleges was sufficient. On the same Table, teachers were asked to reply about adequacy of machines. Accordingly, only 5(22%) and 9(53%) were confirmed about good provision of machines. In item 5 teachers were requested to level machine maintenance status of the colleges. As a result the data indicated

that, the majority 21(91%) and more than an average 11(65%) of the respondents in the colleges disclosed about the poor maintenance of machines. This implies that machines were not regularly maintained in the colleges. Regarding the availability of computer, respondents were requested to respond. As a result, only 8(35%) and 12(67%) were stated the existence of good computer access in Arba Minch than Awassa. This implies that, the availability of computers for training program was greatly varied in the colleges.

The researcher conducted an interview to assess training raw material provision in the colleges and gathered the following information from the college administrator. In the purchasing process of available education and training materials there was no problem in getting earmarked budget, but the problems were: weak departments' cooperation in facilitating purchase material identification, delay on the request what is to be purchased, Performa gathering problems, purchase committee related problems, finance office also takes extended time to finalize and permit purchase created delay, finally the aggregate problems brought failure in Performa validity and as mentioned purchase related issues were the most critical problems in the college the, informant concluded.

Related interview was conducted with the regional TVET sub-sector official to increase the validity of gathered information on the resource capacity of the colleges and the response is presented as:

> *'Re-implementation of the ex-TVET system up to the grass root level, allocation of sufficient financial resources, encouragement of income-generating activities and allowing*
> *the colleges to utilize the generated income, application of co-operative or in-company training and making an effort to narrow skill-gap of trainers through practical training.'* (March 5, 2008 Awassa)

Table: 16 Curriculum Approaches in TVET System to Enhance Quality

Rating scales: 1=very poor 2= poor 3= moderate 4=very good

No	Items	Awassa TVET Teachers Responses					Arba Minch TVET Teachers Response				
		1	2	3	4	5	1	2	3	4	5
1	Responsiveness to the labor market	-	3	11	9	-	-	1	5	9	3
2	Flexibility	1	7	8	7	-	1	2	9	5	1
3	Efficiency	-	1	10	11	1	1	3	8	5	1
4	Modularization	-	1	7	15	-	1	1	3	8	5

In relation to curriculum in Table 16 of item 1 teacher were asked about its responsiveness to the needs of labor market. Consequently, 20(87%) and 17(94%) of respondents revealed that the current curriculum was moderate and good to be responsive to the needs of labor market. It was found to be that the curriculum was targeted to the beneficiaries and seems to be demand driven. In the same Table, item 2 was presented to examine the flexibility of curriculum. In relation to this only 8(34.8%) and 3(16.7%) of the respondents confirmed that the curriculum was poor in its flexibility. This implies that the curriculum was meeting the beneficiaries training needs. Item 3 shows that only 1(4.4%) and 1 (5.6%) of respondents disclosed as the curriculum was poor with regard to efficiency. This reflects that, the existing curriculum was efficient and designed to be carried out within the boundaries of the existing resources and it could enable to utilize resources properly and economically. Regarding curriculum status on modularization teachers in item 4 were requested to state their part. In relation to this, 15(65%) and 13(72%) of respondents from the respective colleges confirmed its modularization was good. Generally the respondents' responses confirmed that in both issues in the items curriculum was appropriate.

Table: 17 Managing Teachers' Professional Needs

Rating Scales: 1=very poor 2=poor 3= moderate 4=good 5= very good

No	Items	Awassa TVET Teachers Responses					Arba Minch TVET Teachers Responses				
		1	2	3	4	5	1	2	3	4	5
1	Participatory decision making culture	3	8	8	3	-	4	8	3	2	1
2	Teachers involvement in work planning	2	7	5	9	-	3	2	6	3	4
3	Evaluation of teachers	2	3	10	7	-	2	3	5	4	4
4	Appraisalof teachers	2	8	8	3	1	2	6	4	2	2
5	Incentive for role model teachers	10	7	4	2	-	8	8	2	-	-
6	Work motivation of teachers for quality training	4	9	7	3	-	3	9	3	2	1
7	Payment of salary on time	-	1	3	9	10	-	-	1	2	15

In item 1 under Table 17, teachers were requested to what extent they participate in decision making process of the colleges' work related activities. As the response observed, in Awassa the average number of teachers 11(50%) of them had not participated and also in Arba Minch 12(67%) of the teachers were not exercising decision making role. This implies that, the respective colleges were not in a position to carryout participatory decision making with teachers in their work environment. In the literature it is stated that the question of quality lies upon various partners committed to change (shared responsibility). In the same Table item 2 shows that teachers' involvement in work planning process and with this regard, the responses of 9(43%) teachers in Awassa showed that they were not involved in work planning. The same issues were raised for teacher in Arba Minch 5(28%) of them were below average and their involvement were found to be poor. It is clear that every work activities require work planning through team work sprit. Opposite to this principle, the two colleges were not brought their majority of workforces to work planning activities. Concerning teachers evaluation based on their work performance questions were presented and the response revealed that 15(68%) of the teachers in Awassa were not being evaluated properly and in Arba Minch the scenario was in a better status and only 5(28%) were not. This indicates that the colleges were not fully exercising evaluation. Evaluation of teachers on their work related performance is mandatory in order to bring a better quality work. In item 4 teachers were requested to issues related with their appraisal at work and the responses indicated that, at Awassa 10(46%) of the respondents confirmed that the appraisal was properly conducted. The same question got responses from Arba Minch respondents and thus, only 4(25%) were agreed that appraisal was carried out in a better status. All in all the respondents revealed that there was not adequate appraisal of teachers in the colleges. In relation to incentive for teachers on items question was posed to access its practices in the colleges. Accordingly, the majority 17(74%) of Awassa respondents indicated that incentive was sufficient and poorly implemented. A great majority of respondents of Arba Minch 16(89%) reflected that they were not given. This implies that the colleges were not motivating workers could enhance them for better work initiation and also this had an impact on training quality. In item 6 respondents were requested to respond on their work motivation. As a result, more than an average number of respondents of Awassa 13(57%) disclosed that they were poorly motivated towards their work and 12(67%) of Arba Minch respondents were also agreed about the existence of poor motivation. This shows that the college management were lacking

motivating teachers. In the same table, item 7 was presented to respondents whether they obtain their salary on time or not. With this regard in the two colleges the majority 19(83%) and 17(94%) of respondents of Awaasa and Arba Minch confirmed the existence of timely payment. Moreover, information gathered through interview supported that the colleges' deans, administrators and finance heads confirmed the absence of salary delay.

Table: 18 Training Related Institutional Services

No	Items	Awassa TVET Teachers					Arba Minch Teachers				
		1	2	3	4	5	1	2	3	4	5
1	Teachers practical skill gap training opportunities	5	12	4	2	-	4	7	5	-	2
2	Internet access	18	4	1	-	-	17	1	-	-	-
3	Working environment facilities	4	6	10	3	-	2	6	7	2	1

As shown in Table 18 of item 1, an attempt was made to investigate skill gap training opportunities. The data indicated that at Awassa the majority 17(74%) of the respondents and 11(61%) at Arba Minch responded about the low opportunities of training. This implies that more teachers were not exposed to modern technologically attached training. The literature evidenced that quality training has a close linkage with the provision of up dating training for trainers. In the same table, item 2 shows that majority of Awassa respondents 22(96%) and 18(100%) of Arba Minch respondents confirmed about poor provision of internet services. This implies that teachers were not got opportunities to obtain information through electronic media. The last item in the Table provided to see working environment facilities. Accordingly, more than an average respondents 3(13%) at Awassa and 3(16.6 %) at Arba Minch disclosed that the aforementioned facilities were in a good status.

Open-ended questions were presented for teacher respondents of the study areas. To begin, the researcher posed question that how long teachers were attended refreshing training (duration) and as a result, the responses of Awassa teachers were presented as follows. Only two of them in the field of electricity (industrial technology) responded that they took part for four days and one week while the majority did not participated any training so far. In line with the above response teachers of Arba Minch also strengthened that of Awassa teachers' responses through the following rationale. Very few teachers were attended training while the great majority was not. One could conclude that, professional training update opportunities were accessible to only to limited number of the teachers in some fields. Generally, efforts were not directed to embrace the majority.

Dean of Awassa TVET suggested,

> *'Orientation of new curriculum to teachers, provision of sufficient budget, implementation of short term skill-gap training, enhancing teachers' professional ethics, and as developed nations teachers have to join company and enterprise training to assimilate technological innovations (technology transfer) from the world of work to the training colleges.'*
>
> (March2, 2008 Awassa)

Table: 19 Trainees Understanding on Training Appropriateness

	Test Values					
	t	df	Sig(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Students awareness in field selection	18.561	40	.000	2.927	2.61	3.25
Continuous assessment of students	29.952	145	.000	3.336	3.12	3.56

The test report of the item in Table 19 revealed that the mean scores of Awassa TVET and Arba Minch TVET were 2.74 and 3.17 respectively. Also it is indicated in the table, there is statistically significant difference regarding students' awareness in field selection in the

two colleges at (t=18.561 and sig. = .000). This shows the existence differences among respondents of the two colleges regarding awareness towards their field selection. In the same Table, the mean scores of Awassa and Arba Minch student respondents were 2.94 and 3.45 respectively. In which the mean score of 2.94 is below average and on the contrary, 3.45 is above an average value. The T-test computed indicates the existence of statistically significant difference at (p<.05), as it is shown p=.000. This implies that in the two colleges there was no similar understanding among the respondents about the practices of continuous assessment.

The researcher carried out an interview with the college dean in order to investigate whether students' selection is assisted by appropriate orientation. Accordingly, the dean replied as:

> *'Few students' selection and enrollment was primarily led by the college registrar and it included committee members and the basic criteria to select trainees were: consideration of standard entry point, provision in-depth orientation about each department, exclusion of registration fee and picking the first choice of students.'*

The informant rephrased that, sufficient orientation is usually given to every student prior to their field selection by the dean, department and vocational councilor.

An interview was conducted with the college dean to assess management competency in the college:

> *'Majority of the staffs had no management competency, improper placement and shortage of the right personnel at the right places lead into low management performances.'*

(March2, 2008 Awassa)

Dean of Arba Minch TVET suggested,

> *'Points in order to improve training quality through, income generating activities, provision of skill gap training for trainers, student selection to be followed by orientation, curriculum outcome has to be seen before changing the pre-existing ones and supportive staff workers have to be recruited as to their competency.'*

(March 23, 2008 Arba Minch)

Table: 20 ANOVA -Test on Training Environment Conduciveness

			Sum of Squares	df	Mean Square	F	Sig.
Internet access * study area	Between Groups	(Combined)	1.878	1	1.878	1.197	.275
	Within Groups		293.434	187	1.569		
	Total		295.312	188			
workshop suitability * study area	Between Groups	(Combined)	.322	1	.322	.167	.683
	Within Groups		360.545	187	1.928		
	Total		360.868	188			
workshop clothing * study area	Between Groups	(Combined)	57.239	1	57.239	25.890	.000
	Within Groups		413.427	187	2.211		
	Total		470.667	188			
provision of first aid in the workshop * study area	Between Groups	(Combined)	12.804	1	12.804	7.256	.008
	Within Groups		330.000	187	1.765		
	Total		342.804	188			
assistants availability on the workshop * study area	Between Groups	(Combined)	4.610	1	4.610	2.468	.118
	Within Groups		349.200	187	1.867		
	Total		353.810	188			

In Table 20, the result obtained shows that the mean scores of internet access is 1.68 and 1.89 in Awassa and Arba Minch TVETs respectively. All values are below the average reference. The test result revealed none existence of statistically significant difference (F=1.197, p=.2750).

Open ended question presented for teachers also re-confirmed the absence of the aforementioned service. On the same Table respondents' responses regarding workshop suitability, the observed mean scores were 2.94 in Awassa, which is below average and 3.03 in Arba Minch almost an average value. The test computed indicates the non-existence of statistically significant difference (F=.167, p=.683). Regarding workshop

clothing, respondents mean scores were 2.38(Awassa) which was below an average and 3.55(Arba Minch) more than an average outcome was observed. Hence, the test shows the existence of statistically significant difference (F=25.890, p=.000). Also, the provision of first aid item respondents mean scores were 2.20(Awassa) and 2.75(Arba Minch) which are dramatically significant (F=7.256, p=.008). The last item in the table concerning assistants availability shows the mean scores of 2.92(Awassa) which is below an average and 3.25(Arba Minch) a little higher than the average. The test employed confirmed the non-existence of significant difference at (F=2.468, p=.118).

Crosschecking with the managements competency standards, background information depicted that the vast majority of employees who were engaged in the management position were not qualified to the position of work they had been assigned. In a similar assessment, teachers were asked to respond open-ended questions on management issues and they also re-affirmed lacking of competency upon management bodies and suggested the following as a solutions and these were: good management practices, carrying out research activities on TVET quality, administrative bodies must be from TVET background, there must be conducive working environment for better learning and training process in the colleges were some of the points suggested as possible solutions to improve TVET quality and they forwarded the following: updating training for teachers, sufficient payment for teachers, good management practices , adequate supply of resources for training, selection of students based on their academic performance and interest, re-evaluating of the previous syllabus again and again, carrying out research activities on TVET quality, the curriculum has to be improved with respect to the labor market need , implementation of an appropriate trainees evaluation system, administrative bodies should be from TVET background ,workshops have to be constructed for better and conducive working environment, evaluation of teachers are necessary inputs, machineries and equipment must be fulfilled to the workshop capacity and there must be conducive working environment for good learning and training process in the college were some of the statements presented as a solutions. Teacher respondents of Arba Minch were suggested the following: trainees should get adequate orientation about every department, teachers should be motivated to conduct research on TVE quality, and the college should improve staff salary and continuous training for teachers , skill gap training has to be arranged regularly, purchasing of raw materials should be improved, financing system should

be flexible, VET program has to managed with professionals having technical background, VET teachers have to be involved in decision making process, equally qualified staffs should get balanced salary benefits, common course teachers have gotten due attention and infrastructures and necessary inputs have to be provided

Table: 21 Management Roles in Promoting Trainees Activity

Rating Scales: High=3 Moderate=2 Low=1

No	Items	Respondents			
		Awassa TVET Students		Arba Minch Teachers	
		No	%	No	%
1	Promote quality Education and Training:				
	A. High	49	40.2	23	36.5
	B. Moderate	48	39.3	31	49.2
	C. Low	25	20.5	9	14.3
2	Provide strong leadership practices				
	A. High	29	23.6	24	38.1
	B. Moderate	60	48.8	23	36.5
	C. Low	34	27.6	16	25.4
3	Conduct monitoring of Training				
	A. High	34	28.6	30	47.6
	B. Moderate	54	45	22	34.9
	C. Low	35	29.4	11	17.5
4	Support students' effect in the college				
	A. High	36	29.8	15	23.8
	B. Moderate	43	35.5	25	39.7
	C. Low	42	34.7	23	36.5
5	Facilitate extra-curricular activities				
	A. High	21	17.2	9	14.5
	B. Moderate	43	35.3	24	38.5
	C. Low	58	47.5	29	46.8

The management of every training college is expected to assist the activities of trainees to facilitate quality TVET provisions.

Based on the above general principle, the first item in Table 21 was raised to obtain responses from trainees. Accordingly, 49(40.2%) and 23(36.5%) replied that promoting of quality in the

colleges education-training system were observed high. Apart from this 20(20.5%) and 9(14.3%) of respondents confirmed that efforts in promoting quality training was low. The remaining categories of respondents agreed that the activity was seen moderate. This implies that there were some shortcomings in order to achieve quality training. Item 2 in the same Table identified leadership activities in the colleges. As declared by respondents 29(23.6%) and 24(38.4) confirmed the practices of strong leadership were high. Moreover, 60(48.8%) and 23(36.5%) revealed the existence of strong leadership practices was moderate and the remaining agreed about the low practices of the system as a whole. This led to conclude that more than average respondents confirmed the existence of strong leadership. Concerning item 3 of the same Table 34(28.6%) and 30(47.6%) of trainees agreed that there were high attention in monitoring of training. In addition 54(45%) and 22(34.9%) respondents revealed that the monitoring of training was fairly moderate. Also, the respondents of 35(29.4%) and 11(17.5%) confirmed that there were low level monitoring of training. This implies that even though the colleges were attempted to monitor the training system still there was problems. As indicated in item 4 of the Table it was attempted to discover the extent that the college backing of students' endeavor. Hence, 43(35.5%) and 25(39.7%) of the respondents forwarded the existence of moderate effort in supporting them from the colleges. Also, 42(34.7%) and 23(36.5%) of the respondents who agreed upon low support were dominant than that of respondents who replied high. This indicated that students were not fully supported by the colleges. As depicted in the last item in the Table 58(47.5%) and 29(46.8%) of the respondents agreed that there was low encouragement from the colleges regarding to students' extra-curricular activities. In addition to this 21(17.2%) and 9(14.5%) of respondents confirmed that there were slightly high efforts in facilitating extra-curricular activities. In the same item 43(35.3%) and 24(38.7%) of the respondents were reflected that the aforementioned activities were high. This reflected that the extra-curricular activities in the two colleges were remained under utilized .

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The final part of this thesis report was expected to bring an overall outcome of the research as major findings, conclusions reached at, and feasible recommendations forwarded on the basis of the major findings.

5.1 SUMMARY OF THE MAJOR FINDINGS

The basic goal of this study was to identify institutional factors that affect TVET quality in government colleges of SNNP Region, Awassa and Arba Minch. Hence, quality indicators like curriculum relevancy, teachers'/trainers' qualification, financial resource allocation, students'/trainees' selection and competency of management were included in this investigation. The study utilized descriptive survey method in order to arrive at the desired objective. The researcher reviewed pertinent literature and prepared questionnaires and interview guides to collect data from the sampled groups of regional education bureau TVET sub-sector official, college deans, teachers, students, administrators, and finance heads. To increase the validity of the questionnaires and to avoid irrelevant and ambiguity pilot test was made. As a result, based on the responses secured from respondents, necessary corrections and modifications were made before distributing the paper to large groups of the respondents.

The questionnaires were composed of both close- ended, open- ended and interview question items. At the end, with the help of various statistical tools close-ended questions were analyzed quantitatively and also open-ended and interview data were interpreted qualitatively. As a result, the data analysis led to the following major findings:

1. The findings of the study pointed out that trainers at Awassa (78.3%) and Arba Minch (61.1%) were not obtained skill up-dating training.
2. The study revealed that there was insufficient orientation on curriculum reform to TVET teachers of the respective colleges.
3. The study indicated that majority of the teachers in the two colleges were de-motivated because of

their low salary reward compared to their counterparts having similar qualification and title but benefited better.

4. Majority of the respondents (94.4%) at Awassa and (98.4%) at Arba Minch disclosed that the libraries in the colleges were not well equipped.
5. It was found out that the majority of respondents asserted that there was scarce budget allocation from the government side for TVET program execution. .
6. The study indicated that for practical training, raw material provision through purchase was not only problematic but also unavailable around the colleges.
7. The respondents asserted that the overall activities of the colleges were guided through plans, but the main obstacle to carry out effective and efficient managerial tasks for quality achievement were hampered by inappropriate placement and shortage of the right human resource at various levels.
8. The respondents confirmed that in all study areas there were no machine maintenance schedule as an important part of training program .
9. The study revealed that the majority of teachers (78.3%) at Awassa and (88.9%)at Arba Minch had no opportunities to conduct research to improve TVET quality in the colleges.
10. TVET curriculum with regard to its responsiveness to labor market, flexibility, efficiency and modularization in the two colleges was found to be relevant.
11. From the finding it was observed that teachers at Awassa (83%) and Arba Minch (94%) confirmed about timely pay of their salary.

5.2 CONCLUSIONS

In light of the major findings that the study indicated in the summary part, the following conclusion is drawn.

The researcher attempted to investigate the level of quality TVET in the study areas vis-à-vis to a set of clearly defined TVET quality indicators like relevance curriculum, teachers' qualification level, financial resource allocation, students' selection and competency of management. Accordingly, the aforementioned TVET quality indicators in the study areas were lacking good performances and thus:

1. Lack of adequate orientation concerning curriculum reform to teachers had a negative impact on the TVET quality training performance of the colleges.

2. Dissatisfaction of teachers on the current levels of their salary created certain differences on their quality work initiation in the TVET colleges.
3. Insufficient training budget allocation hampers the provision of quality TVET in the colleges.
4. Material provision and delay on arrival to the regular training program and intended purpose was identified as a problem of training quality . Likewise, all the study areas report suggested that training colleges were lacking shared responsibility in utilizing the existing resources and hence the impact lies on the extraction of new and extra budget from government treasury.
5. The absence of appropriate personnel in the management hierarchy in the TVET colleges has negative impact on the provision of quality training.
6. Lack of adequate equipment as well as inadequate maintenance services for the existing machines hampers the practical learning of the trainees in the colleges.
7. Teachers' inadequate involvement in research activities leads to poor quality of the teaching-learning process in the TVET colleges.

5.3 RECOMMENDATIONS

In order to alleviate the identified problems, the researcher forwarded the following points as feasible recommendations:

1.In a time of continuous economic, social and technological changes, skills and knowledge become obsolete quickly. Hence, it is necessary to provide updating training for teachers in the colleges through providing educational visit to various modern technology centers, inviting skilled professionals from different organizations, searching funding organizations and other strategies should be assessed.

2.As TVET quality is a global agenda, it is mandatory to improve provision of quality indicators not only at the national level but also at the regional level. These could be done by improving quality pillars at institutional level using need assessment, diversifying sources of finance through income generating activities of production unit, renting idle machineries, assembly halls, arrangement of short-time training programs and updating training for teachers and so on. As much as possible the regional government has to allocate balanced budget in order to improve the quality of TVET system in the colleges.

3.In order to retain qualified professionals, it is essential to improve the working conditionsand environment. To this end the colleges have to undertake efforts to provide certain benefits of housing, transport, training and development and career promotion schemes.

4.In order to maintain continuous improvement of the capacity of the management staff, the colleges have to organize short time trainings, seminars and conferences. Moreover, workers placement to work positions should be on their qualification and merit bases.

5.The existence of library with insufficient material accommodation as well as unqualified personnel in the library hampers the library service of the college. Hence, corrective measures should be taken by providing materials through aid, copying from other areas, purchasing, borrowing and providing capacity training for library personnel.

6.Based on the significance and expensiveness of training machines and equipment the colleges' management have to exercise well-organized preventive maintenance through formulating maintenance teams and inviting experienced experts from outside.

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Appendix-A

ADDIS ABABA UNIVERSITY

School of Graduate Studies
College of Education
A Questionnaire

To be filled out by college-Students /trainees.

The researcher is an M.A student of Vocational Management in Education in the department of Business Education.

The objective of this questionnaire is to collect necessary information for the study entitled "Institutional Factors that Affect Quality in Government TVET Colleges of SNNP Region" and to identify and analyze problems affecting the quality of TVET at this level and to come up with some suggestions that need to be considered for better quality provision.

You are, therefore, kindly requested to fill in the questionnaire since the success of this study directly depends upon your cooperation and honest responses.

Thank you in advance for your cooperation!

General Instruction

1. No need to write your name
2. Fill in the blank space /mark(✓) / encircle your answer
3. For open-ended questions if the space is not sufficient, you can use the back side by giving number
4. The information you provide will certainly be used only for research purpose, i.e. your responses will be kept confidential.

PART ONE:

1. Name of the college----------
   Zone----------
2. Personal information:
   Sex- A) male ☐ B) fema ☐
3. Age (in years):
   A) 15-20 ☐ B) 21-25 ☐ C) 26-30 ☐ D) 31 and above ☐
4. Field of study /department----------
5. Program /level
   A) 10+1 ☐ B) 10+2 ☐ C) 10+3 ☐

PART TWO:

1. Did you have initial knowledge about TVET before joining it?

   A) Yes ☐ B) No ☐ C) partially yes ☐

2. Are you happy in joining TVET program?

   A) Yes ☐ B) No ☐

3. If your answer for questions No "2" is 'No' why? ----------
4. Are you joined TVET by your own 'interest'? A) Yes ☐ B)No ☐
5. If your answer for question No' 4' is "No", how did you join? Please specify----------
6. How did you choose your department /field of study?
   A) by choice ☐
   B) with the help of vocational counselo ☐
   C) friends convinced me ☐
   D) the college forced me ☐
   E) by department's orientation ☐
   F) specify if any others----------
7. Are you interested in your department now?

   A) Yes ☐ B) No ☐

8. If your answer for question No '7' is' No' what would you suggest to be for the future? ----
9. Is there adequate resources in your college library? A) Yes ☐ B) No ☐
10. If your answer to question No '9' is 'Yes', is it managed by qualified librarian?

    A) Yes ☐ B) No ☐

11. Are you utilizing the library properly? A) Yes ☐ B) No ☐
12. If your answer for question No 10 is 'No' what is the reason?

    ----

13. Do raw materials for practical training in the workshop arrive on time?

    A) Yes ☐ B) No ☐

14. The status of apprenticeship provision at the world of work is:

    A) High ☐ B) Moderate ☐ C) Low ☐

15. Do organizations assign qualified supervisors for apprentices?

    A) Yes ☐ B) No ☐

16. Does the college have qualified vocational councilor for apprenticeship?

    A) Yes ☐ B) No ☐

17. Does the college have vocational guidance and counseling services?

    A) Yes ☐ B) No ☐

18. Do instructors/trainers utilize learning-training time properly? (on the average)

    A) Yes ☐ B) No ☐

19. In your opinion, how do you evaluate your college officials on the following activities?

Put a tick mark (✓) in the space provided on the table

	ACTIVITIES	High	Moderate	Low
20	Promote quality education-training			
21	Provide strong leadership practice			
22	Efficiently utilize college financial resources			
23	Conduct monitoring of learning			
24	Support students' effort in the college			
25	Facilitate extra-curricular activities			

PART THREE: Rate the items mentioned in the table according to the following rating scales

Very poor=1 poor=2 moderate=3 good=4 very good=5

No	Tasks of the college	1	2	3	4	5
1	Provision of course outline					
2	Teachers /trainers preparation					
3	Internet access /e-mail					
4	The existence of adequate teachers/ trainers					
5	Level of workshop suitability					
6	More time for practical training					
7	Students' awareness to use resources economically					
8	Availability of workshop assistant on time					

9	Continuous assessment of students /trainees					
10	Provision of work shop clothing					
11	Provision of first aid in workshop					
12	Availability of play ground					
13	Availability of clubs					

Appendix-B

ADDIS ABABA UNIVERSITY

School of Graduate Studies

College of Education

A Questionnaire

To be filled out by college-Teachers /trainers

SECTION ONE: PERSONAL PROFILE

1. Name of your training college ----------
2. Sex: Male ------- Female -------
3. Age (in years):

   A. 21-24 ☐ B. 25-29 ☐ C. 30-34 ☐ D. 35-39 ☐ E. 40-44 ☐ F. 45 and above ☐
4. Major Field of study ----------Minor----------
5. Write your educational status and service years in the table.

	QUALIFICATION	SERVICE YEARS					
		1-5	6-10	11-15	16-20	21-25	Above 25
A	Diploma (10+3)						
B	Diploma (12+2)						
C	Diploma (12+3)						
D	B.A/B.Ed/B.Sc						
E	M.A/M.Sc						
F	PhD						
G	If others, specify						

Subject /course you teach /train now- ----------Program level you teach /train now----------

6. Your regular weekly teaching /training load----------

SECTION TWO:

1. Have you attended any refresher courses recently?

A. Yes ☐ B. No ☐

2. If your answer for question No."1" is yes, for how long have you attended?

A. ---------days B. ---------weeks C. ---------month

3. How do you observe the current management role in improving TVET quality in your training college? Please rate the following items based on the rating scales

Rate the following items based on the rating scales given below:

1=very poor 2=poor 3=moderate 4=good 5=very good

	MANAGEMENT PLAYS ROLE IN IMPROVING QUALITY	1	2	3	4	5
3.1	Participatory decision making culture					
3.2	Teachers' involvement in work planning					
3.3	Students' awareness on relevant field selection					
3.4	Teachers' practical skill gap training opportunities					
3.5	Incentive for role model teachers					
3.6	Continuous evaluation of teachers					
3.7	Appraisal of teachers					
3.8	Appropriate allocation of training budget on time					
3.9	Working environment facilities					
3.10	Adequacy of machines					
3.11	Equipment /tools					
3.12	Raw materials provision					
3.13	Work motivation of teachers for quality training					
3.14	Payment of salary on time					
3.15	Computer availability					
3.16	Internet /e-mail access					
3.17	Regular maintenance of machines					

Evaluate the current TVET curriculum in relation to quality delivery.

Please rate the following items based on the rating scales

1=very poor 2=poor 3=moderate 4=good 5=very good

	TVET CURRICULUM FOR QUALITY DELIVERY	1	2	3	4	5
4.1	Its responsiveness to the needs of labor market					
4.2	Its flexibility					
4.3	Its efficiency					
4.4	Modularization					

4. In your opinion, do the trainees get sufficient orientation about technical and vocational training? ☐ A) Yes ☐ B) No

5. If your answer for question No '5' is 'yes' who provides them with the necessary orientation?

A. Vocational counselor ☐ B. Department heads ☐

C. Vocational teachers ☐ D. Administrator ☐ E. Deans ☐

F. others, if any specify----------

7. Do equally qualified staffs obtain similar salary?

A) Yes ☐ B) No ☐

8. If your answer for question No '7' is 'No' what is the reason(s)? ----------

9. Does your institution retain qualified and experienced teachers?

A) Yes ☐ B) No ☐

10. If your answer to question No. 9 is 'No', what leads to attrition of qualified and experienced teachers? Explain it briefly----------

11. Are there adequate library resources in your college? A) Yes ☐ B) No ☐

12. Is there adequate infrastructure? A) Yes ☐ B) No ☐

13. Is there conducive environment to conduct research on quality improvement?

A) Yes ☐ B) No ☐

14. What would you suggest in order to improve TVET quality? ----------

DECLARATION

I, the undersigned, declare that this thesis is my original work done under the guidance of Dr.Dessu Wirtu. All sources of materials used for this thesis have been duly acknowledged.

Name _____

Signature _____

Place and date of submission _____

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

Name Dr. Dessu Wirtu

Signature _____

Date of Approval July 16, 2007