THE ATTITUDE OF TVET STUDENTS TOWARDS SELF – EMPLOYMENT IN OROMIA REGION

Addis Ababa University School of Graduate Studies
Department of Curriculum and Teacher Professional Development Studies

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BY

Teklu Bekele Tucho

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Approval of Board of Examiners

Abdulaziz Hussein		15 July 2008
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Temesgen Feleke (PhD)		July 15, 2008
Advisor	Signature	Date
Dr. Dessu Winta		July 15, 2008
Examiner (Internal)	Signature	Date
Girma Zewdie		July 15, 2008
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List of Acronyms and Abbreviations

AU -	African Union
CSTC -	Community Skill Training Center
ESDP -	Educational Sector Development Programme
ILO -	International Labor Organization
JASPA -	Jobs and Skills Programme of Africa
MOE -	Ministry of Education
NGO -	Non – government Organization
OBFED -	Oromia Bureau of Finance and Economic Development
OEB -	Oromia Education Bureau
OECD -	Organization of Economic Cooperation and Development
OESPO -	Oromia Economic Sector Planning Office
OWUDB –	Oromia Work and Urban Development Bureau
TVET -	Technical and Vocational Education and Training
UN -	United Nations
UNESCO -	United Nations Educational, Scientific and Cultural Organization
WAO -	Women's Affairs Office

Abstract

The purpose of this study was to identify the attitude of TVET students towards self employment and also to explore the factors that may influence the attitude of the trainees towards self employment.

To this end, a descriptive survey method was employed for the study. The sample of the survey group was selected from four TVET colleges of Oromia region.

A fifty item attitudinal questionnaire based on the Likert method and eighteen supplementary items questionnaires were administered for 378 trainees and 85 trainers respectively. In addition vocational counselors, entrepreneurship teachers and apprenticeship organizers were included in the study. The data were analyzed using frequencies, chi –square and simple correlation statistics.

The result of the study revealed a non significant favorable attitude towards self employment irrespective of gender, geographical location, year level and felids of study. The study also showed that the balance of theory and practice proportion was in the right practice as well as courses were relevant to self employment/job creation. In addition the result of the study depicted that the hand tools in all TVET colleges were adequate enough in terms of preparing the trainees to create their own job. However, the machineries in some colleges as well as text book and relevant reference materials in all colleges were inadequate. Regarding self employment opportunities as a function of access to market for finished products and access to credit it was indicated by the trainers that there was high opportunities in each town.

In line with the above findings the following point were recommended. Encouraging factors that resulted in positive attitude to the trainees should be further expanded. Text books and related reference materials should be provided for all colleges. Finally, the TVET colleges should work in collaboration with other governmental or non governmental and private organizations.

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Even though modern education was introduced in Ethiopia nearly a century ago the education and training offered during these long period of time had limited positive impact on the life of the people and national development (Gizaw, 2003:19-20; MOE, 2002:1-2, and Yekunamlak, 2002:220). The education offered has not enabled to solve the problems of the majority of the people. One reason of the above problem is that up to the first half of the 20th century the development of vocational and technical education in Ethiopia is not given these much emphasis and important attention or policy support.

It was in 1941 that the need for trained manpower field strongly when many Italian technicians left the country. As a result, in order to replace the loss technicians, technical and vocational education program began to emerged parallel to the formal system of education and as a result in the same year the first Technical and Vocational school was established in Addis Ababa (Wanna ,1998:55-60; MOE ,2002:90-101 and Teklehaimanot, 2002:1-15).

Following the outbreak of the 1974 Ethiopian revolution, basic education polices had paid a great deal of attention of productivity and improvement of the living standards of the majority of the people, consequently the demand for technical personnel at all levels grew significantly. Yet, the country found itself with little success in developing TVET system. Moreover, the quality of training was not high enough and it was not given sufficient policy attention and support; as a result in 1994 there were only 16 TVET institutions in the country offering technical and vocational education and training with annual intake of not more than 1000 trainees (MOE, 2002:90-101). The 1994 Education and Training Policy has brought fundamental change in education sector in general and TVET in particular number of schools and enrollment has been considerably increased.

According to the policy statement of the New Education and Training (TGE, 1994:16) "parallel to general education, diversified technical and vocational training will be provided for those who leave school from any level of education." As a result, participation in TVET programs has been increasing in both formal and non formal form. According to the Ministry of Education 2002 official report (MOE, 2002:90-101) the TVET students enrollment has increased from a total of 4561 student in 16 governmental and 10 non – governmental technical and vocational schools in 1994 to 106, 336 student in126 governmental and 91 non-governmental institution in different fields of study.

As part of the preceding historical development in 1995/96 there were not more than 5 TVET institutions in Oromia region which offer training in eight specialized fields of studies (OESPO, 1999:26;OBEFD, 2002:42).

Recently the Oromia regional TVET Agency has organized 39 TVET institutions to offer training in more than 20 trades in 10+1, 10+2 and 10+3/ diploma level. Accordingly in 2006 about 17, 754 trainees were enrolled in the 39 TVET institutions and colleges (OEB, 2006:35-36). This scheme of expanding TVET has been also implemented in the year 2007/2008 as the Oromia Education Bureau plan shows.

Additionally, large number of community skill training centers (168 CSTCS) are now a days offering training, on non-formal basis, for more than 1500 dropouts and adults in a variety of fields in the region (OEB, 2006:36-37).

The main objective of the TVET system in Ethiopia as well as in Oromia region is to develop skilled middle level manpower who can create job instead of job seeking. That is encouraging towards self employment. Therefore, the purpose of this study is to investigate the attitude of TVET trainees towards self-employment in Oromia.

1.2 Statement of the Problem

Employment provides a sense of confidence in people and contributes more to positive mental health (ILO, 1978:13). It also increases social interactions at work, greater sense of personal identity and greater structure to the day (Rojewski and Sheng, 1993:65; Middlton, 1993:19-20). Unemployment has bad psychological effect on people especially on those trained but could not

find employment. Hence, it becomes normal for students tend to enroll in types of education/ training that expected to bear them immediate employment after training and reject other that thought to have poor/ no employment opportunities (Kalleberg and Witte, 1995:247).

On the other hand, the effectiveness of TVET depends fundamentally on the extent to which trained persons use their skills in employment. Thus, objective of the training should be geared to enable the young people both for salary employment as well as for self-employment in which they could positively value the program (Agarwal 1997:27 ; Norton 1999:241).

Self- employment in TVET system represents an important route in the labor market, especially in urban and rural areas. However, self employment requires more than being technically competent in certain occupational field. In order to become successful entrepreneurs people need self confidence, creativity, a realistic assessment of the market basic business management skills and openness to risks starting a business, furthermore, requires access to finance/credit, access to necessary permits and licensing are the major prerequisite for self-employment (Lecompe 1993:63).

Bose et.al. (1983:348) in their study about possible degrees of effectiveness of some suggested methods to reduce the extent and effect of unemployment in West Bengal state, 49.1% of the respondents of vocational education indicated the effectiveness of self- employment/ job creation as the possible method for one country to reduce the unemployment problem. The study also indicated that out of the respondents who dislike self- employment about 28.9% feel that in ability to acquire necessary capital was one of the discouraging factor that prohibits self employment. Lack of training for self- employment was mentioned by 22.4% of the respondents, while 10.4% of the respondents indicated lack of leadership and industriousness was the factors for self-employment.

On the other hand Abosetegn (2000:70) in his research finding in Ethiopia indicated that the discouraging factors for self-employment was concerned for fear that there does not exist any guarantee for the enterprise in a case a condition demands as susceptible to unexpected crises. Lack of industriousness and less expansion of investment were some of the discouraging factors for self employment.

Prior to the establishment of self-employment, relevant and timely advice is required. The advice on self-employment must embody the kind of economic sectors, which is advisable to commence, a business, the possible places for securing comprehensive start-up training and means for gaining the necessary financial support for establishing a business. Any program to motivate and inspire self-employment among un employed graduates ought to take note of the factors that discourage self-employment (LeCompe, 1993:63; Leavesley, 1997:316).

Although all the issues discussed so far seem to have a diverse bearing on the future of self employment opportunities, no attempts have been made to provide the TVET trainees to understand the objective of technical and vocational education and training especially on the self employment. Therefore, the assessment of the attitude of TVET students towards self-employment is essential in identifying how the TVET students perceiving self-employment and also factors that affect motivation of students towards self-employment.

1.3 Objectives of the Study

The general objective of the study was to investigate the attitude of TVET students towards self-employment in Oromia.

The specific objectives of the study were:

- To identify whether there is significant difference between the attitude of male and female students towards self- employment.
- To identify whether there is a significant difference between the year level (10+2 and 10+3) TVET student towards self- employment.
- To identify whether there is a significant difference between the attitudes of students towards self- employment as a function of the location their institution in different places of Oromia towns/ cities.
- To examine the adequacy of the teaching materials and machineries in terms of preparing the TVET students towards self- employment.
- To examine appropriateness of the course delivery system at present in encouraging the TVET students towards self-employment.
- To analyze the role of vocational counselors in motivating the trainees towards self – employment.

Accordingly, the study tried to seek answers to the following basic questions:

1. Is there significant difference of attitude between TVET students towards self-employment as result of gender, geographical location of their college, year level and fields of studies?
2. Does the course delivery system at present is proper in preparing the trainees towards self- employment?
3. Are the teaching materials and machineries in their colleges are adequate enough to prepare the trainees towards self employment?
4. What is the role of vocational counselors in motivating the trainees towards self - employment?
5. What are the factors that influence the attitude of TVET students towards self-employment?

1.4 Significance of the Study

As indicated earlier this study is designed to investigate the attitude of TVET students towards self – employment. Thus, the study is believed to be important for the following purposes.

1. The findings of the study can have importance to take corrective measures on the negative factor that affect the attitude of TVET students towards self- employment
2. The finding of the study may help the concerned bodies to design or improve the training programs that further encourages the TVET students towards self-employment.
3. The finding of the study may become a base for vocational counselors to help TVET students to encourage towards self-employment.
4. The suggestions that forwarded may help to create conducive training situation and help the students to benefit from the program.
5. It encourages other researchers to work further on this area.

1.5 Operational Definition of Terms

- **Course Delivery system**- describes a specific course delivery system that includes the proportion of the theory, practice ratio and in school training or on – job/apprenticeship training which was set by Ministry of Education on the policy.
- **TVET System**- describes the system elements at policy, administrative, and operational level.
- **Informal TVET** – includes all kind of training and learning that is not structured and not following a curriculum or syllabus.
- **Formal sector** - a composition of public and private enterprises that are subjected to established labor and industrial regulations.
- **Informal Sector** - small scale with or without hired workers, typically operating with low level or organization and technology.
- **Favorable**-high total score above the neutral attitude/undecided (agree + strongly agree).
- **Unfavorable**-low total score below undecided (disagree + strongly disagree).
- **Self – employment**-in this paper indicates creating one own job than expecting for employment from government or private organizations.
- **Attitude**-competence that describes the appropriate way of behaving of the TVET trainees towards self employment/job creation.
- **Vocational counselor**- is a person who assigned in a TVET college to help the trainees in making their choices and understanding self direction in TVET system.

1.6 Delimitation of the Study

The researcher decided to conduct the study in Oromia Region for a number of reasons. The first and principal reason is that to conduct the research work in all TVET institutions and colleges in the country would be impractical because of the limitedness of the resources and time. Second since the researcher is familiar with the region, there may be easy access to information. Thirdly no other research on this area has been carried out in the region.

The study is further delimited to the governmental formal TVET colleges due to the very reason that the great majority of the trainees will be absorbed by governmental TVET institutions which comprise about 80% of the total number of TVET institutions in the region(OEB, 2006).

Moreover, the delimitation of the study was that the study treats only construction and industrial technology departments for the reason that almost all TVET colleges in the region offer these departments in common and also under those departments there are large number of streams / fields of studies, so that the researcher can get enough information for the study.

The coverage was also delimited to 10+2 and 10+3 levels of TVET programs on the basis of wide exposure for the program and long stay in the colleges.

1.7 Limitations of the Study

The insufficient literature on the area of TVET and Self employment in the library of Addis Ababa University was one of the major short come that the researcher encountered during the study.

1.8 Organization of the Study

This study organized under five chapters. The first chapter is the introductory part, it deals with the background of the problem, statements of the problems, significance of the study, limitations and delimitations and definitions of related terms. The second chapter is the review of related literature, chapter three deals with the research methodology, the fourth chapter is about presentation and analysis of data and the last chapter deals with summary, conclusions and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

This part of the study deals with the review of the related literatures. It consists about definition and nature of attitude, objective of TVET and employment, problems of unemployment in developing countries and factors that influence the attitude of TVET students towards self employment.

2.1. The Concept of Attitude

Different writers defined attitude in different ways. For example, Edward and Jung defined attitude from psychological point of view as "a hypothetical construct that represents an individuals like or dislike, negative or positive, desirable or undesirable". (Edward, 1957:6 ; Jung, 1966:16). Attitudes are positive, negative or neutral views of an attitude objective. Hovland (1978:126) defined it as "a predisposition to respond in a particular way toward a specified class of objects." In this regard Papalia and Sally (1985:36) also defined attitude as "a learned predisposition to respond positively or negatively to a certain object, situation or person." Similarly, Myers and McCaulley (1985:206) explained attitude in terms of "a way of responding by the individual or group involving a tendency to favor or reject ideas, issues, social institutions or any other attitude object."

According to Aiken (1988:27) attitude my also be seen as form or appearance that an individual assumes to gain or achieve an egotistic preference, whether it is acceptance, manifestation of power or other self – centered needs.

Generally, the definition that attitude is an acquired inclination to react to an attitude object favorably or unfavorably is shared by Edward, 1957,Jung (1966), Hovland (1978), Myers and McCaulley (1985), Papalia and Sally (1985) and Aiken (1988). From this point of view, the attitude of TVET students towards self employment is understood as the trainees response involving an acceptance or rejection, like or dislike and favorable or unfavorable of the program. However, in the tradition of the conceptualization of attitude, there have been two computing models of attitudes as the one-dimensional and three dimensional component models of attitude.

Thus, some consider attitude as one-dimensional entity and defined it as the individuals feeling (like- dislike) toward an object (Bem, 1970:83). On the other hand, Fishbein and Ajen (1975:240) view attitude as three dimensional referring to the individuals' knowledge and behavior toward an object. Hovland (1978:127), similarly, explained that attitudes develop on the ABC model (Affective, Behavioral change and Cognition). The affective response is a physiological response that expresses an individual's preference for an entity. The behavioral intention is a verbal indication of the intention of an individual. The cognitive response according to him was a cognitive evaluation of the entity to form an attitude.

Anderson(1983:63) explained that attitudes are part of the brains associative networks, the spider like structures residing in long term memory that consists of affective and cognitive nodes linked through associative path ways. These nodes contain affective, cognitive, and behavioral components. Lippa (1990:228) suggested that the inter-structural composition on an associative network can be altered by the activation of a single node. Thus, by activating an affective or emotion node, attitude change may be possible.

The new approach, however by integrating the two models, view attitudes as an evaluation. As reviewed by Baron and Graziano (1991:96); Payne (1992:342), have explicitly conceptualized attitude as an evaluative judgment of a particular object forming a continuum that ranges in evaluative clarity; that is, the categorization of the object along an evaluative dimensions. Similarly, Eagly and Chaiken (1995:97), by summarizing the view of many modern authors that attitude is an evaluation, defined it as "a learned evaluative response directed at specific object...."

Moreover, attitude influences behavior; hence, they mediate behavioral intensions for instance since attitude is motivational, in an educational context, the attitude of learners influences how they process of learning. Attitude is learned unlike personality, attitudes are expected to change as a function of experience. Jung (1971:43) argued that hereditary variables may affect attitudes, but believes that they may do so indirectly. For example, if one inherits the disposition to become an extrovert, this may affect ones attitude to certain object or item. Attitude can be changed through persuasion. In Hovland's view, we my understand attitude change as a response to communication. Emotion is a common component in persuasion, social influence and attitude

changes. Much of attitude research emphasized the importance of affective or emotion components (Breckler and Wiggins, 1992:409). They explained attitude as "mental and neural representation, organized through experience, exerting a directive or dynamic influence on behavior".

Generally attitude, as an evaluative judgment of labeling objects, and related aspects, as desirable-undesirable, good-bad, correct-in correct, favorable-unfavorable etc. It is an appraisal of the object positively or negatively an assessment with regard to the absence or presence of some features, characteristics, values or qualities in the object of attitude. Therefore, in order to fit the recent conception of attitude to the present study, the attitude of TVET students towards self employment in operational as the trainees evaluation of self employment in decreasing unemployment problem in a country, vocational courses, in relation to the preparation towards self employment, relevance of the courses, appropriateness of the course delivery system (theory- practical ratio, on job training/ apprenticeship, in school training etc) and the adequateness of the materials and machineries for training (row materials, hand tools, equipments, machines and etc) in their institutions in preparing them towards self employment.

2.2. Objective of TVET and Employment

According to the 1997 UNESCO international standard classification of education definition, TVET is education and training to acquire the practical skills, know how and understanding necessary for employment in a particular occupation, trade or group of occupations or trades (UNESCO, 1997:130-131, Atchoarena and Andre 2002:38). The conceptual definition of TVET cuts across educational levels (Post-primary, secondary, and even tertiary) sectors (formal or school-based, non- formal or enterprise based or in the form of traditional apprenticeship.

The controversy surrounding technical and vocational education and training (TVET) results in part from a tendency among policy makers and analysts to reach for generalizations with no limitations and expectations about highly disparate set of training institutions and programs (Middlton, 1993:28-30). World wide, terminology is a significant problems in the field of technical and vocational education (VET), technical and vocational education and training

(TVET), vocational education (VE), are often used to mean the same meaning in different countries in concepts and definitions (Atchoarena and Andre, 2002:38).

For the purpose of this study, however, our definition will be that technical and vocational education and training is designed to train and educate students in specific traditional and modern fields of vocational and technical skills for student who have completed grade 10 and show sufficient desire and inclination to be trained in the fields of their choice (MOE, 2002:97).

TVET systems in the world as well as in Africa differ from country to country and are delivered at different levels in different types of institutions, including technical and vocational schools (both public and private), polytechnics, enterprises, and apprenticeship training (UNESCO, 1997:130-131, AU, 2007:21-25). In West Africa in particular, traditional apprenticeship offers the largest opportunity for the acquisition of wage employable skills as well as self employment in the informal sector. In Ghana, for example, the informal sector accounts for more than 90% of all skills training in the country (Ghana Statistical Service, 2000:36).

In all of sub–Saharan Africa, including Ethiopia formal TVET programs are school based. In some countries, students enter the vocational education track at the end of primary school corresponding to 6-8 years of education as in countries like Burkina Faso and Kenya, or at the end of lower or junior secondary schools which corresponds to 9-12 years of what is called basic education in countries like Ghana, Nigeria, Mali and Swaziland (Johanson and Admas, 2004:240). In Ethiopia students enter TVET after their general secondary education (grade 10) in the formal TVET form and also can enter after grade four or eight in the informal TVET system (TGE, 1994:16-17).

The duration of school based technical and vocational education is between three to six years, depending on the country (AU, 2007:20-25). Some countries like Ghana, Senegal, and Swaziland in an attempt to expose young people to pre-employment skills have incorporated basic vocational skills into the lower or junior secondary school curriculum (Johanson and Admas 2004:240). However, technical and vocational education for employment is unlikely to be effective when delivered concurrently with general education in junior secondary schools. This is because employment oriented training requires inputs in human (qualified instructors) and material resources that are not available or too expensive to provide in all junior secondary schools or even in a cluster of secondary schools.

The primary objective of all technical and vocational education and training program is the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area including self employment (AU, 2007:23). The need to link training to employment either self or paid employment) is at the base of all best practices and strategies observed world wide.

According to Wanna (1998:55-60), in any well planned and organized national system of education, vocational and technical education at secondary school level will have one major objective to become terminal and prepare a student for the world of work. The training and education plays great role in increase growth and competitiveness in improving the employability of the people (UN, 1999:67). Employability has become an important issue because of changes in labor market trends and growing risk of exclusion for those with out appropriate skills; increasing employability requires the continues up dating and development of skills and the acquisition of a wider range of competences.

The acquisition of the core skills are considered essential for improving one's chances in labor market (UNESCO, 1996:135). A successful transition from school to work drives from the provision of solid , high quality educational foundation, the development of sound analytical, cognitive and behavioral skills, the ability to communicate ideas and work cooperatively, and the availability of adequate training closely linked to specific enterprise activities. Similarly, Aggarwal (1997:27) and ILO (1997:80) contended that education does not produce jobs but vocational education and training makes it more conducive and timely for an individual to secure a job or to be a master of his own either by establishing a new business or a service which may satisfy a felt and of the community.

In general, as indicated in the New Educational and Training Policy of 1994, the objective of TVET is to develop skilled middle level manpower that creates their own jobs instead of job seeking. On the other hand, according to Atchoarena (1994:39), TVET has been regarded as a tool for economic recovery and development. This was, in fact, due to the very conviction that prospects for economic growth and development are to a large extent depend up on the availability of trained labor force.

2.3 Unemployment Problems in Developing Countries

In developing countries the problem of unemployment and poverty remain severe (Turnham and Denzhan, 1990:165, Oberaia 1990:126). The majority of the labor forces in most countries remain trapped in low productivity employment that offers little relief from poverty.

> *Unemployment is not a natural disaster like a hurricane or an earth quack something that happens to us out the blue, that society then deals with badly or well, as the case may be rather, unemployment is a social phenomenon. Millions of people out of work means, quite simply, that the country have failed to organize the society in such away that full employment is secured* (John, 1994 :104).

The formal definition of unemployment, according to World Bank (1995:36) and ILO (1996:83-103), is the situation of an individual who, currently with out employment, is seeking active employment for some period of time mutually agreeable to the employee and the employer.

Creating and protecting employment is a key means of not only eradicating poverty but also of a building a just, prosperous and stable society. The growth of employment has become the highest priority for national and international economic and social policy (ILO, 1996:90, UN, 1997:67). Growth of employment will contribute more in increasing personal and national economic security, to reduce waste, increasing efficiency, improving equity and reducing poverty; and to strengthening social integration than any other economic or social achievement.

ILO (1996:92) report showed that only in Sub-Saharan Africa countries there were about 9 million urban unemployed youths between 1980 and 1987, out of these 23 percent were in Ethiopia.

In one sense it is all too easy to explain why the developing countries including Ethiopia suffer from an apparently chronic problem of mass unemployment. The conjunction of usually high rates of population growth, extremely low rates of capital accumulation and the education system of these countries increased the unemployment rate (ILO/JASPA, 1986:41-42). Rate of population growth are usually high in these countries, on the other hand, rate of capital accumulation are extremity low because poor societies find it difficulty to save a large fraction of their income. It is some times alleged that education system has been capable in the rise in youth unemployment by not providing sufficient preparation for the world of work.

Surveys of employers would appear to lend evidence to this contention. Even in the developed country for example, one study in United States showed that 25 percents of employers asked as to why they reluctant to hire youth, listed "Lack of skills" or "not qualified" as a primary reason (ILO, 1996:97-99). A related phenomenon, also maintained by employers is that the educational process may lead to rising expectations among the young and a growing un willingness among youth to accept low paying, dead end jobs or to create their own job.

The unemployment situation in sub – Saharan Africa countries is reaching very high proportions and the youth appear to be bearing a disproportionate burden of the problem (JASPA/ILO, 1986:41-42). JASPA commissioner a series of studies on the youth employment problems and programs in seven African countries (Botswana, Ethiopia, Kenya, Malawi, Mauritius, Somalia and Zambia) conducted in 1986. According to this study the formal wage employment in these seven sub-Saharan Africa countries represents approximately only 10% of the total employment and it potential for future labor absorption is thus very limited (ILO/JASPA, 1986:41-42).

The study particularly in Ethiopia showed that the unemployment problem raised from 3.8 percent in 1970 to 7.3 percent in 1980. In 1968, out of 935 graduates from the training institutions, 182 were employed by the government, 172 by private sectors and the rest 636 (about 68%) graduates remained unemployed. Out of 136 University graduates, 56 were employed by government, 40 were employed by private institutions and 40 graduates were unemployed. Graduate job seekers reported to employment offices between 1956 to 1961 were 84,135, only 15.5% were able to secure employment via the employment offices (ILO/JASPA 1986 :42).

As reported by ILO (1974:36), the Addis Ababa Employment survey (1971) estimated that the number of unemployed graduates were 21,000 (8%) of the economically active population of the Addis Ababa city.

Therefore, to reduce the problem of unemployment many African counties including Ethiopia gave their attention to the technical and vocational education which is assumed to alleviate the problems by preparing in the wage employment as well as self employment (ILO, 1993:38)

As an important part of education for the world of work, technical and vocational education (TVET) has been identified by UNESCO member states as a priority area in promoting the employment problems of the developing countries within UNESCO's range of program activities (UNESCO, 2005:97). This is to be expected since there over whelming evidence to demonstrate that TVET can play an essential role in promoting sustainable human development and economic growth, with clear benefits for individuals, their families, local communities and societies in general through job creation/self employment.

2.4 Types of Employment

All economies provide a wide range of training activities that can serve different sectors of employment or markets for diverse skills (Middlton, 1993:28-30). These provisions, in most cases, adapt duality due to the different labor needs of the two different labor markets in the economy the modern and the informal or traditional sectors. For these reasons, the education and training of the job seekers have influence on the types of employment that are open to them.

Individuals could be trained in various way to acquire different kinds of skills, vocational and technical education and training, in this respect, provides different specific skills that a trainee is expected to use on the job(Jhon,1994:104).

The extent to which the acquired skills are used effectively, however, depends to a large extent on the characteristics of different types of employment in a given economy. These are wage employment in the modern sector and self employment or employment in the informal sector (Meckenna, 1995:209).

2.4.1 Wage Employment (Government/Private) Formal Sectors

Wage–employment notably indicates employment in public (Government) or private enterprise (Middlton, 1993:30). It may be permanent or temporarily. According to (Mckenna, 1995:209), the distinction between the modern and informal sectors of the economy seems confusing at the margin. Nevertheless, the modern sector is generally considered to be a composition of public and private enterprises that are subjected to establish labor and industrial regulation such enterprises are found in agriculture, industry, commerce and services in both urban and rural

areas. However, the informal sector comprises all economic activities in urban areas except those that are illegal.

In developing countries including Ethiopia, the formal employment sector accounts for a relatively small proportion of total employment and often shows little growth potentials (ILO/JASPA, 1986:41-42). As a result, in many African economies, the majority of the labor force is heavily involved in the informal sector, and self employment. It is in this informal and not in the modern public and private sector that ever growing potential labor forces might be expected to be observed in to productive employment (Ziderman, 2003:69).

2.4.2 Employment in the Informal Sectors

> *According to the 14th International Conference of Labor Statisticians informal sector is defined as: " Small-Scale, self employed activities, with or .with out hired workers, typically operating with a low level or organization and technology, with the primary objective of generating employment and incomes for their participants: to the extent these activities are carried out with out formal approval from the authorities and escape the administrative machinery responsible for enforcing tax and minimum wage legislation and other similar instrument concerning fiscal matters and conditions of work, they are concealed"(ILO, 1972: 6).*

The limited capacity of the formal sector to absorb the expanding urban labor force has already been noted and the fact that a large proportion of the increase will need to be accommodated within the urban informal sector, including small scale manufacturing repair, service transport and trading activities (ILO/JASPA,1986:43, Tokman and Wurgaft, 1987:122).

The modern private sector which account for a substantial share of urban employment is believed to be raising rapidly because of increasing capital intensity; employment increase are less than proportionate to increases in out put (ILO, 1996:102). This is some times referred to as "Job-less growth". The incapacity of the urban " formal" sector to create employment has shifted the burden of employment generation to the urban "informal" sector consisting of a multitude of micro enterprises mostly owned and operated by single individuals with little capital and skills.

The study of ILO (1996) show that about 60 percent of all new jobs created in Africa were provided by informal sector, in 1990s, while in Latin America and Caribbean, from 1990 to

1993, 83 percent of the new jobs created were in the informal sector (ILO, 1996:102). Generally, one can simply conclude that the expansion of informal sector in one country encourages skilled people to create their own business or to be self employed.

2.4.3 Self - Employment

Self- employment plays an important role in developing and contributing to the economy of a country (Seravanaue, 1987:240). Middlton (1993:30) indicated that the growth of self-employment is one of the most pronounced changes in labor markets through the world. ILO (1996) also showed that the promotion of self-employment should be crucial components of anti –poverty programs in the developing countries. However, the emergence of self employment in all developing countries are not usually even (Mishra, 1990:219).

The lack of modern sector employment opportunities has obliged individuals in many countries to resort to the benefits of the formal sector to make a living. This has leaded, consequently, to the rapid growth of the sector and accounts for a significant percent of urban employment opportunities. Atchoarenah (1994:39) and Zidereman (2003:69) asserted that in an economic climate where the labor force has grown significantly and where there are greatly reduced opportunities for wage employment, great emphasis has been placed on the potential contribution to the economy by the self employment and informal sector.

Bose et.al,(1983:146-148), on the study about possible degrees of reducing the unemployment problem in West Bengal state, about 49.1 percent of the respondents of vocational education indicated the effectiveness of self employment/job creation as the possible method of one country to reduce the unemployment problem. However, self employment flourishes on the bedrock of creativity, decision making ability, initiative, motivation and on a number of other desirable attributes (LeCompe, 1993:63).

Seravanvel (1987:240) claims that at any particular moment of time an economy has a certain maximum potential rate of growth. This depends on the entrepreneurs and self employment opportunities available at disposal, their capability of using technology, the amount that they are prepared to invest, etc. According to the ILO (1993:37) recommendation the global economy in developing countries is in a transitional state and it requires more attention on its various facts particularly on job creation and entrepreneurship. A careful and in depth studies of

the various contributions made to the theory and practices by different researchers indicate that job-creation would give much dividend for self employment (Bhatia and Batra, 2003:86).

The structure of employment of 2007 in Ethiopia showed that, the self employment is the main source of employment. About 42 percent of workers were self employed, with government employee a distant second (18 percent) followed closely by employment in private organization (16 percent). This increase in self employment resulted with 1.3 percent decrease of unemployment in Ethiopia between the year 1999 to 2005(World Bank, 2007:73).

2.5 Factors that Influence the Attitude of TVET Students towards Self Employment.

In most countries TVET has become a very important aspect of human resource development Shyam (1986:47). Atchoarena (1994:39), indicated that TVET has a number of functions prepares for citizenship, character training, development of scholastic aptitudes and certification for entry in the work force. (ILO, 1996:89), on the other hand argued that TVET education facilitate graduates transition from school to work and provide citizens basic training which prepares them for employment (wage- employment or self employment), enhance the living standard of individuals and promotion of professional skills so as to improve status.

However, the success of such strategy is by and large depends on the existence of employment opportunities or the opportunities of job –creation of the TVET graduates and the ability of TVET institutions to discover and provide appropriate skills in order to prepare the trainees for self employment/job creation. In this regard, TVET system in most African countries including Ethiopia has contributed little to solve the prevailing employment problem (ILO, 1993:37).

Technical and vocational Education and training prepares students not only for employment in industry and business but also for self employment, especially when a great closures of manufacturing plants, self employment/ job creation could be a strategy to cope with such a crisis. The entrepreneur attitudes need to be properly managed and factors that affect the attitude of the TVET students should be identified.

In today's global environment, the contributing factors on job creations/ self-employment development have increased considerably (John, 1994:105). Identifying and analyzing more number of such factors and using them in the developmental programs are helpful. Vocational counseling and guidance, urban infrastructures, institutional facilities, the relevance of the vocational course to self- employment are thought as some of the factors which affects the attitude of TVET students towards self employment/ job creation (Bose et al, 1983:147, and Abosetugne, 2000:71).

2.5.1 Guidance and Counseling

There is no appropriate definition of Guidance and counseling. The name itself is considered unacceptable by many researchers and practitioners. According to Anderson (1969 :67), it is the process of helping students understand, accepts and use of abilities, aptitudes, interests and other traits. (UNESCO,1974:20-28) on the other hand defined guidance and counseling as "a systematic and professional process of aiding individuals in making their choices, and adjustment in understanding effective self direction and in meeting problems of personal living related to education." From these definitions one can simply understood that guidance is not imposition of one person's point of view upon an other person, it is not making decision for an individual, which he/she should make for him/her self. It is not carrying the burden of another life, rather guidance is assistance made available by qualified person.

Guidance is the systematic, professional process of helping the individual through education and interpretive procedures to gain a better understanding of his/her own characteristics and potentialities and to relate him/her self more satisfactory to special requirements and opportunities in accord with social moral value (UNESCO,1974:20-28). It is the assistance with the school gives the pupil to aid in fulfilling his potential, negotiating the fact of development and solving his/her special program.

Vocational counselors are the focal points in organizing and facilitating apprenticeships and preparing the TVET graduates towards self employment (MOE, 2006:36). According to the ILO (1986:41-42) document:

> *...counseling activity is closely linked with employment in TVET, in particular through public employment service and self employment. The main objective of this program should be: (a) provide young people not yet in the labor force with the basis for choosing a line of education or vocational training in the light of their aptitudes, abilities and interests and of employment opportunities; (b) assist people entering*

the labor force or who seek to change their activity or who are un employed, to chose an occupation and to plan related education and vocational training and (c) inform employed people of opportunities for improving their occupational development potential.

In the current period of over all job shortage, traditional counseling and guidance efforts may be limited effectiveness as a means of reducing unemployment (David, 2000:471-506). More active guidance and counseling polices could identify the needs and competencies of young people, and guide to the various options offered by the labor market, including work training schemes, training programs, work experiences in enterprises and other special programs including self –employment

The nature of vocational guidance is well described by Dugan as the:

> *... process of helping an individual to understand accurately both him/her self and the world of work particular, the specific educational and job requirements of occupational in which he/she may be interested and for which he/she may be qualified. Finally, he/she is given at the point of entrance in to further training for actual placement in the vocational field most appropriate for him/her. This dynamic and on going process of vocational guidance is based on the assumption that an individual actually reaches his/her ultimate vocational choices not at any single moment in time, but through a series of experiences and resultant decisions over a period of years...* (Dugan, 1960:289).

Brookover and Nosow (1963:40-49) revealed that the importance of vocational guidance of an individual to its importance to the national, stating that "Most position in the American occupational system now has some types of educational prerequisites." Effective occupational choice must lie in the values and goals of the individual; a basic element is the linking of present actions of future goals (Anderson, 1969:68). A major responsibility for the allocation of various persons to the various levels of occupations, therefore, rests on the educational system. As education more and more become the bridge between the individual and his work vocational guidance is important. A counseling method which consists of making people aware of the existence of relevant opportunities for education, training and work and facilitating their career planning (ILO, 1986:92).

Generally, from the vocational guidance and counseling duties explained above one can understood that, if counseling starts very soon from the field choosing up to the placement of the labor force the vocational counselor can play great role in motivating TVET students towards self employment as well as wage- employment.

2.5.2 Urban Infrastructures and Self-Employment

The expansion of investments and infrastructures in urban with out doubt increase the employment opportunities of the youth especially those with skill of vocational education and can serve as one of the primary engines of growth in all economies. However, its effectiveness rests on strong complementariness, with other elements in the growth process, most notably technological progress, skills acquisition and development of innovative capability (UN, 1999:168). The case study of ILO on six towns of African countries indicated that the potential for using urban infrastructures such as construction programs for direct and indirect creation of productive employment for the urban labor forces (ILO/JASPA, 1986:42).

When demand management polices, relying up on the use of broad base fiscal and monetary instrument were show to carry an acceptable high inflationary risk, government began to use polices with a more selective impact that could be directed towards high unemployment sectors, regions and groups (Shyam and Nigam, 1986:216). These polices have ranged from those with indirect employment creating effects such as investments initiatives and directed increases in public purchases to polices that are "directly employment creating" such as expanding public services employment, employment maintenance schemes and directed wage subsidization for net employment creation). Investment polices are the most powerful tool at the disposal of municipal authorities for job creation of self employment (ILO, 1996:88).

Housing investment gives rise to investment in other sectors because the construction sector is a significant purchaser of goods and services from other sectors. Researches show that back ward linkages in the construction sector are greater than in most other sectors. In Mexico for example, the ratio of direct to indirect employment in construction sector was 10:7, in the case of Kenya, housing construction creates large amount of direct and indirect employment (currently about 12, 000 new jobs were created) (ILO, 1996:88).

According to the MOI 2005/06 report in Addis Ababa, through housing development 20, 131 job opportunities (11,405 permanent and 8,726 temporary) jobs were created; of which 47% were women (MOI, 2005/06:142). Similarly in Oromia regional state through the expansion of investment and housing development about 22, 413 permanent and 28, 590 temporary jobs were created (p. 186).

Investment in basic infrastructure can provide cities with competitive edge required to attract new industries on the global market place. Infrastructure provides employment opportunities during its construction and maintenance (ILO, 1996:95). The link between investment and those other determinants of growth however is not an automatic process. It requires among other things a favorable macro policy environment and specific polices (National and regional) and institutions aimed at encouraging savings and attracting and directing investment to key sectors in the economy there by enhancing the contribution of investment to skills formation, technological change, competitiveness and economic growth (UN.1999:67).

The Ethiopian economy has undergone two rounds of reform which have yielded visible results in a transition formation from state driven system to a mixed public private economy, and in establishing a foundation for private sector led growth (World Bank, 2007:46). The 1991 post Derguie regime established the legal framework for private investment, market based resource allocation and privatization. A second set of reforms , articulated in 2001 national poverty reduction strategy was designed to facilitate the entry of private enterprises through a plat form of infrastructure and human capital investments, gradual privatization of state enterprises, introduction of domestic private banks, establishment of trade practices commission, revision of the investment code, focal incentives to attract foreign investment, and removal of some key administrative barriers to private sector development (MOI, 2005/06:186-187).

The Ministry of Works and Urban Development has prepared an urban strategy which has four pillars: (a)support for small and micro- enterprises and job creations; (b) integrated housing development through the construction of 100,000 units per annum), (c)improving aces to land, infrastructure and services; and (d) Promoting urban -urban and urban linkage through a small towns development program. These pillars highly support the job creation/self employment for the people with vocational skills well as the others (World Bank, 2007:46).

The study of ILO (1996) indicated that in Cote d'Ivoire, Senegal and Burkina Faso about 31%, 43% and 63% respectively of the total public investment budget went into the building and public works sector. It also indicated that there was considerable untapped potential for under taking many types of infrastructure with more wage employment and self employment. In the case of

Senegal for example the study indicated that the increase to the labor component in public works investment forms 10 percent to 25 percent, would result in creation of approximately 100, 000 new jobs (ILO, 1996:13). The national labor force surveys study showed that the urban un employment rate was decreased by1.3% between 1999 and 2005 in Ethiopia. This is due to the most employment that has been created in self employment in the informal sector as well as the expansion of investment in cities (World Bank, 2007:46).

The most important route to reducing unemployment lies in increasing productivity and growth. According to the World Bank (2007) a much better record on job creation in the private sector is central to reduce the unemployment problems and improved labor market out comes in Ethiopia.

2.5.3 Relevance of TVET Courses to Self Employment

Successful employment and self employment of TVET program usually give a great deal of emphasis to a relevance of vocational courses and delivery system to the labor market and sensitivity to the regularly changing nature of it (Midlton, 1993:31). In this regard TVET programs relevancy can be judged in terms of content as well as training that prepares the trainees towards job creation. The relevancy of any training curriculum, according to MOE (2002:90-97) it is determined heavily by the extent it meets the ultimate education and training objective and the degree it gears to wards the socio-economic needs of the country. It encompasses all aspects of appropriateness, purposefulness, sustainability and realism of training in achieving predetermined goals of a given program.

We have already noted that the objective of the technical and vocational education and training is to developed the middle level man power that creates its own job than job seeking and meant to lead to production in industry, trade and commerce . It is necessary to add here that a feature common to all forms of vocational education courses are the essentially practical and applied character of instruction and system of that courses offered.

Vocational education courses and their relevance to self employment have been criticized by different people on number of points. First and for most, its critics contained that it is narrow and shallow in scope (Atchoana, 1994:25). It consequently prepares young people for only a few possible jobs and prevents them from acquiring increased competence and understanding of job creation or self employment (Midlotn, 1993:36).

However, the above critics of vocational education courses holds the view that real preparation for self employment takes place through the socialization function of traits for different occupational groups, and then goes a head to select them. For people destined for lower level occupation, emphasis is placed on punctuality, compliance's concentration and the ability to work with others.

Improving education for the world of work can help increased the real incomes of workers in both the formal and informal sectors including self employment. It also provides citizens with more choices in their working lives, help alleviate poverty, and empowers individuals who would other wise be marginalized.

2.5.4 Apprenticeship/ On-Job Training and Self-Employment

Apprenticeship programs have long been a basic method of obtaining occupational competence. Apprenticeship involves a formal agreement covering a definite period of time which binds the employer to provide training in return for the work of apprentice (Grant, 1964:541). According to Midlton (1993:46) apprenticeship /on job training refers to a formal training programs in industry through which the inexperienced worker gains the know how from an experienced workers.

Apprenticeship training is a particular mechanism of cooperation between enterprises and TVET institutions in delivery of practical training. Apprenticeship programs aimed at achieving quality of training and exposing trainees to the real work (UNESCO, 1996:136).

Since the ultimate objective of TVET is employability and employment promotion including self employment, it is necessary to link training to the needs of labor market through apprenticeship with enterprises. Through apprenticeship one can do the promotion work of the TVET students to the enterprises and employee and the student can get the chance to be employed in campaigns or enterprises or encouraged towards self employment (UN,1999:139). It is a method through which trainees get on the job training in addition to the theoretical and basic practical training. The trainees are acquainted with the relevant skills and attitudes, which enables them to integrate easily to the work environment (OEB, 2006:37).

A good example for the on- job training is the dual system of vocational training in Germany. This system allows for learning to take pace in vocational institutions and in production facilities

or in the service industry concurrently (Husen, 1994:265-269). It differ little bit from the apprenticeship training which is practicing in Ethiopia. In the dual system the trainee receive training in a company three or four days per week and as a part time in vocational school one or two days per week. But in the case of the apprenticeship in Ethiopia TVET it offered for 312 hours per year and the offering time is at the end of the academic year or during the summer break for two months (MOE, 2003:49). The apprenticeship practice in Ethiopia is some what ineffective in enabling TVET graduates enter to wage employment as well as encouraging the students towards self employment compared to the dual system of Germany. This is because the total hours given to the on job training is very less when compared to the total training per year and also the times of offering is not appropriate because during the summer time most of the enterprises cries out inventory and also it may be closed.

It is now accepted generally that TVET programs to be good quality and relevant, they must reflect the state of the art in the world of work. To do so, it is advisable that they cooperation with the existing enterprises which have the latest technologies and production process that most TVET graduates will aspire to work with.

2.5.5 Institutional Facilities and Self-Employment

Training for high quality skills require appropriate equipment, tools, adequate supply of training materials and practice by the learners (Midlton, 1993:210-215). World Bank on the other hand confirmed that inadequate supply of equipment; very poor basic equipment lack of Laboratories and materials will make effective teaching impossible (World Bank, 1993:130-140). Other requirements includes relevant text books and training manuals and qualified instructors with experience in enterprises. Well qualified instructors with industry based and well equipped workshops in TVET are very important in preparing the training towards self employment.

The question of institutional facilities are an important issues in TVET programs, often, access to jobs that training provides depends on the nature and quality of training and job performance of graduates depends on the right kinds of skills acquired (Getachew, 2005:27).

Meeting the entire costs of functional work shops and providing up to date teaching materials is one of the relevant measures to maintain quality of training. Vocational and technical courses

usually have high development and recurrent cost (Midlton, 1993:210-215). The more highly advanced the technology taught, the more expensive the needed equipment and materials will usually be the extremely high cost of facilities makes it difficult to easily secure the latest technology (World Bank 1993:130-140).

On the other hand, Norton (1999:240) contained that government decisions about TVET are often stated in terms or quantity rather than quality. Simply replacing programs or changing size will have considerable impact on the breadth and depth of services (quality) provision. In an environment where there is more focal constituency for the quality of places than quality, it is often trouble some for institutions to enhance the quality of programs.

Taking in to account the above discussion in order to provide quality education for TVET students that prepares for wage employment as well as job creation the Ethiopia TVET strategy stipulated detailed standards regarding establishment and training equipments enumerated as, TVET institutions will have suitable library and workshops, a class room on average accommodate 25 trainees for each specialization, rooms for storing training and row materials with the regard to training materials, the strategy stipulates that there will be sufficient hand tools, machines and different equipment and materials in conformity with the number of trainee in each fields, basic and essential measurement equipments and row materials for training appropriate teaching aids and others which are essential for training in each institution (MOE, 2003: 49-51).

In sum, TVET require the allocation of adequate and quality resources in addition to the provision and utilization of tools, workshops and facilities for the intended purposes. Occupational training and education will also need sufficient resources to be able to cope with changes that will affect the expansion in the demand for jobs and the attitude of TVET students towards self employment or job creation.

2.6 Gender Differences and Self-Employment

Historical attitudes towards the role of women in society, along with stereotypical assumptions regarding women aspiration, preference, capabilities and suitability for certain jobs, have contributed to occupational sex segregation in labor market (Richard, 1997:371-375 and David 2000:471-506). As a result, certain jobs are held predominantly or exclusively by men and other by women's. These views and attitudes also tend to result in the under evaluation of "female jobs" in comparison with those of men who are performing different work and using different skills (ILO, 2007; 35). Women have traditionally found employment in the clerical, sales, light manufacturing, and services occupations (Venn, 1964:5). Many of the jobs in the service fields are too low level for the better educated.

Between 1970 and 1985, the size of female employment in the modern sector increased from less than one million to almost 4 million corresponding to annual growth rate of 10 percent during the period. The share of women in the informal sector rose from 29 percent to 35 percent during the same period (ILO, 1996:89). According to the ILO data of 2007, from 1995-2004, the women's participation in the labor force in paid employment is increasing in almost all regions of the world. Female self employment participate rates continued to rise significantly (ILO, 2007:35).

Gender inequality in self employment occurred because of segregated school, gender stereotypes and unequal access to training, which allowed or the development of different wage rates for different jobs, lower payment for women and inequality in job promotion.

The low share of women in the work force was not a reflection of lack of interest or ability but rather of massive resistance by male colleagues (ILO, 2007:36). Women were exposed to harassment, in training and at work, and hazards were some times used deliberately to frighten them. For example, women did not have equal access to informal hiving net works; they were often hived as low wage apprentices rather than at the full journey men rate; and they were less likely to be brought in the social security net work (Richard, 1997:374 and David, 2000:489). Some of these problems relating to gender equality in industry might be solved if there was a critical mass of women in the employment and if women workers on job sites came to be seen as normal and necessary.

Women's self employment is one of the avenues to improve women's employability as defined by the Beijing plat form for action (UNECE, 2004:82) in Geneva. It was indicated on this international meeting that the share of women's entrepreneurship increased in many counties of Western Europe and as well as across the 55 country UNECE region. For example, in Canada, the number of women entrepreneurs increased 20 percent between 1981 and 2001, compared with a 38% increases for men, in the United Kingdom 6.5 percent of all working age women in employment are self employed.

The type of education and training that a significant proportion of women who enter the job market have received is often inadequate, unsuitable or un adaptable to the structural changes in employment opportunities (ILO/JASPA, 1990:22). The major problems here is the tendency to push or encourage women to pursue what are considered traditionally famine occupations, whether or not new job opportunities are emerging.

According to the structure of employment of World Bank (2007:46) in Ethiopia the women are more likely than men to be self employed (44.1 percent) female and (40.2 percent) were male. On the other hand the study shows that men are much more likely than women to work for the government and private organizations. 21.2 percent male and 13.3 percent female like to work is government organization while, 19.4 percent male and 11.4 percent female were like to work in private organizations.

Women are often denied certain types of jobs for reasons that are based on culture and perceptions of social property. For example, they are under represented as subordinate staff and clerks, not because of lack of qualifications but more because these categories include jobs as grads and messengers which have been types coasted as male occupations(ILO/JASPA, 1990).

Women's employment in industries and the civil service is also lower than men (WAO, 2005); Ethiopian Women operate about 65% of micro enterprises and 26% of small scale manufacturing enterprises (ILO, 2002). In the urban setting, it was indicated that women do not benefit from existing programs because of the impact of traditional attitudes and lack of awareness on business activities, lack of customers' confidence and lack of innovation, lack of business

management skills, limited access to information and to media because of heavy work load (World Bank 2007:46).

2.7 Attitudes TVET Students and Fields of Studies

According to Richard (1997:375) and Abdelkarim (1997:675), factors that can influence people's choice of training and their decisions to join a given field of study including personal factors, such as the social background of the person and the importance given to training versus direct employment and indirect employment or self employment. The study of ILO (2001:97)showed that the number of employed in industrial technology in developed country increased nearly by 15 percent between 1995 and 2000. This resulted in more than 300 new job openings during a five year, while, the rapid growth in unlikely to increase in self employment in this section.

Bregger (1996:3-9) indicated that through out the world self employment is much more common in construction than in industrial fields. Four out of every ten construction workers are self employed, double the average for all industries in the developed countries. This means that it is relatively easy for an individual who has the know-how and the equipment required to do construction project to start up his or her own job. Construction firm tend to be some what smaller than firm in other industries. This is partly a reflection of the relatively high incidence of self employment in the construction sector. Construction sector offers more opportunities than most other industries for individuals who want to even and run their own business.

According to World Bank (2007:47), the 1.9 million self employed are un paid family workers in England in 2006 performed work directly for property owners or acted as contractors on small jobs, such as additions, remolding, and maintenance projects: The rate of self – employment varies greatly by individual occupation in the construction trades, partially dependent on the cost of equipment or structure of the work.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This part of the study presents the description of the subject of the study, methodology, procedures of instruments development, the procedures employed in the data collection, variables designation and methods of the analysis of data.

3.1. Research Method

To realize the objective of the study, descriptive survey method was employed in this study. The reason is that the descriptive survey method is appropriate to describe and interpret conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident or trends that are developing (Best and Kahn, 2003:232). Therefore, the method is particularly important for the study since it was intended to make detailed description and analysis of the attitude of TVET students and factors that may influence the attitude of TVET students towards self employment.

3.2 Sources of Data

The survey group belonged to TVET colleges in Oromia Region. Based on the geographical location four TVET colleges from three classes of Oromia cities and towns were selected. The data for the study were obtained from the respondents of these four sampled colleges trainees, major area trainers, entrepreneurship course teachers, vocational guidance and counselors apprenticeship program coordinators and from observations of workshops.

3.3 Sampling

In Oromia region there are 17 zones with more than 350 cities and small towns, which are classified as 1st class city, 2nd class (A) city ,2nd class (B), 3rd class and 4th class cities and small towns based on their number of population(e.g. above 100,000 peoples 1st class, between 45,000-100,000 as 2nd class A ,10,000-45,000 as 2nd class B, 5000-10,000 as 3rd class and below 5000 peoples as 4th class towns), Infrastructures(like road, telephone ,electric line water service etc); economic standards, investment attraction and soon (Annual Abstract of Ormoia Work and Urban Development Bureau,2005:21-23). In these five classes of Oromia regional cities and

towns there are about 39 governmental TVET Institutions and colleges which offer training in more than 20 occupations/ field of studies , under construction technology, Industrial Technology and Business Technology departments (OEB, 2006:36-37).Out these 39 TVET , twelve of them are TVET colleges(offer 10+3/diploma level), while the rest 27 are Skill Development Centers(which offer only 10+1 and 10+2).

TVET Colleges were selected for the study .The reason is that, students will be selected from all certificate programs of TVET institutions and placed in the TVET colleges to attend training at 10+3/ diploma level. Thus, selecting TVET colleges for the study of student's attitude towards self employment in the region would help to generalize the finding of the study for large population of student attending the mentioned fields of study.

The researcher used stratified sampling techniques to select the number of TVET colleges in each class of the towns, accordingly in 1st class there are two TVET colleges (Adama and Batu) , out of these Adama TVET college was selected using lottery drawing method. In 2nd class "A" there are again two TVET colleges (Assela and Nekemte) TVET colleges from which Nekemte TVET College was selected using the same method. Similarly, in the 2nd class "B" there are about eight TVET colleges and out of these Ambo and Gimbi TVET colleges were selected using lottery drawing method. In the 3rd and 4th class towns there are no TVET colleges and generally four TVET colleges were selected from each stratum. All of the four colleges offer training in Construction and Industrial technology departments. Due to this the present study focused on these two departments.

Finally students from these two departments were selected using simple random sampling techniques. Accordingly from class 1, Adama TVET college (N= 94), male (67) and female (27), from class 2A, Nekemte TVET college (N=106) out of these 70 of them were males while 36 of them were females. From class 2B, Ambo and Gimbi TVET colleges, (N=178) students were included in the study. From Ambo (N=80) male (58) and female (22) and from Gimbi TVET College (N=98) male (68) and female (30) (see Appendix H table-2).

To obtain the required number of participants, the name of students were recorded and assigned consecutive numbers in keeping their fields of study and year levels separately for male and female students in all four TVET colleges. Then by using systematic simple random

sampling and using the formula ($k=N/n$) the interval was fixed. Where as k is the interval, N is number of populations and n is the number of samples. The first number from (1-10) was chosen by lottery drawing method and the k^{th} number were selected up to the final required number was reached.

In addition 85 major area teachers were included in the study using simple random sampling technique. Similarly, four entrepreneurship teachers, four vocational guidance and counselors, and four apprenticeship coordinators were included in the study using availability sampling technique.

Out of the total sample selected of students (M=7 and F=2) and 5 major area teachers were eliminated from analysis. Because six of the students and five of the teachers did not return the instruments and three of the students were did not completely fill the instrument. Thus, the study comprised of 369 (M=256 and F=113) students and 80 major area teachers respondents.

3.4. The Measurement of Attitude and the scale used in the Study

The scientific study of attitudes requires some ways of measurement. Because attitudes are internal and unobservable, their measurement involves an inference of the individual's overt evaluation of the related object. The overt behavior can be a response in a questionnaire or actions in a structured situation. Various types of scales have been developed and employed as instruments of attitude measurement. These are Therstone technique Likert method and Semantic differential (Best and Khan, 2003:240). Likert scale of summated rating was used in the present study to measure the attitude of TVET students towards self employment in Oromia region.

3.4.1. Likert Scale

The Likert scale is one of the self report paper pencil measures of attitude as developed by Likert in 1932 as indicated in (Best and Kahn 2003:246). The scale involves a number of statements (20 or 30) on an issue of interest to which the respondents express their degree of agreement in five-point scales. The items are phrased in clearly favorable and unfavorable directions about the attitude object. The subjects respond to the items as strongly agree (SA), Agree (A), undecided (U), disagree (D) and strongly disagree (SD). The favorable and the unfavorable items are scored in an opposite directions (1,2,3,4,5, versus 5,4,3,2,1). Finally the total scores are calculated by

adding up the respondents answers to all items of the given attitude construct. While high total scores reflect favorable overall attitude, low total scores reflect unfavorablness toward the object of attitude (Best and Kahn, 2003:246-250).

The assumption underlying the Likert technique is similar with Fishbein (1969:74) Theory of Reasoned Action, according to which humans are rational animals who can systematically process and utilize the information available to them. Accordingly, attitude to ward an object is a function of the underlying belief held about the object. This theory also asserts that attitude is a function of the algebraic sum of the evaluative aspects of beliefs. Therefore, Likert scale measures attitude by assessing the positive and negative beliefs held by the respondents about the issue of the investigation (Fishbein and Ajzen, 1975:214).

The most advantageous aspect of the Likert scale is the possibility of items analysis as a check on the homogeneity of items measuring a given construct. This helps to increase the reliability of the instruments (Petty and Cacioppo, 1981:46). Moreover, since Likert. scale contains large number of items, it promotes reliability. According to Lippa (1990:228) the best way of increasing reliability is "…. to add up responses over many items. This is exactly what the Likert scale does."

Generally, the Likert scale is popular and preferable on the grounds of its directness and the use it made of graphic rating scale and its relative simplicity. In fact, many studies have demonstrated that in validity and reliability, the Likert scale compares equally well with other apparently complex and laborious methods (Burroughs, 1971:165).

3.4.2. Procedures of Instrument Development

3.4.2.1. Item collection and Adaptation

Attitude type items which supposed to measure students' attitude to wards self employment were developed based on the literature reviewed and based on the attitude test of Sudman and Bardburn (1982:232-233 and Best and Kahn,2003:246-250). Based on these pools of fifty items were collected.

Overall, about half of the items were stated positively, while the other halves were stated negatively, about the respective attitude variables. After the pool of items has been assembled, the screening and validation of the items took place through various methods. The instrument was originally developed in English and translated to Afan Oromo so that the respondents could understand very well.

3.4.2.2. Instruments of Data collection

The researcher used three types of instruments to collect data from different respondents. These were questionnaires, interview and observation of workshops

3.4.2.2.1. Questionnaire

Attitudinal questionnaire was used as a major instrument to collect data not only because it is a popular means of collecting all kinds of data in research, but also it is an appropriate instrument to obtain information about conditions, practices and problems for relatively large sample studies (Best and Khan, 2003).

3.4.2.2.2. Interview

In addition to the data obtained through questionnaire, face to face unstructured interview was also conducted with entrepreneurship teachers, vocational guidance and counselors and apprenticeship coordinators. The researcher used paper and pencil for the recording of the interview. Before starting the interview, the objective of the interview and all necessary ethical considerations explained to the interviewees for confidentiality.

3.4.2.2.3. Observation

In teaching and learning of technical and vocational education the condition of workshops and the availability of equipments, machineries, hand tools and row materials are the base, especially in preparing the TVET students to create their own job instead of seeking for job. Due to this the researcher using observation check list conducted observation of workshops in all four TVET colleges.

3.5 Pilot Study

The purpose of the pilot test was to check the over all organizational structure of the test and to generate data for the statistical items analysis procedures. The instrument for pilot study consisted of 50 items to be responded on a five point scale. This instrument was tasted on 20(M= 12 and F=8) students of Nekemte TVET college of the two departments.

The Pearson product moment correlation was calculated for the odd and even numbered items of the fifty items for reliability using split half method (Yalew, 2006:206-213) resulting a coefficient of 0.849. As regard to the internal consistency of the items, a reliability estimate was calculated using Spearman- Brown formulae resulted with an index of 0.9183 (see Appendix F). On the other hand, the spearman- Brown formula is one that empirical researches strongly support its usefulness and accuracy (Payne, 1992:342). Therefore, the researcher concluded that each of the fifty items measure their respective categories with a satisfactory validity and reliability.

3.6. Procedures of Data Collections

The administration of the main instrument took place after the pilot. Both the pilot and main study was administered during the break time and the student free time not to take their learning time. During the administration of the main instrument the section heads of each department assisted the researcher.

In the administration of the instrument, it was emphasized to the subject about the crucial importance of their frankness and objectivity in their response to the items of the test. To that effect, the identity of the respondents was made anonymous and it was made clear that individual responses will kept confidential. Moreover, it was stated that in their response to the items, there is nothing to be said right or wrong, thus, they do not need to be secretive or reserved.

The scoring of the data gathered was made following the usually procedures employed in Likert scale. The five point scales was given the scale values in such a way that strongly agree, agree, undecided, Disagree and strongly disagree were given a scale value of 5,4,3,2,1, respectively for the positive items while it was the reverse for the negative items. The total score of a subject on a single variable was then calculated by summing the scores on the items belonging to the

variable. In the categorization of the subjects on the attitude continuum, the arithmetic neutral attitude score or undecided on the variable considered as a frame of reference. That is, on a given attitude variable, the subject who were said to have a positive attitude or evaluation are those who have an attitude scores above the neutral attitude. Similarly, those who were said to have a negative attitude or evaluation on a given variable are those who have an attitude score below the neutral attitude score (Best and Kahn, 2003:250)

3.7. Variable Designation

In this study, the dependent variable is the general attitude of the technical and vocational education and training student towards self employment. The independent variables are gender, geographical location of the institutions or colleges, year level, fields of studies, course related factors (Course balance of theory and practice),entrepreneurship course),guidance and counseling, apprenticeship program, adequateness of teaching materials.

3.8. Data Analysis

The data collected through different instruments were analyzed based on the nature of the questions. Data obtained from attitudinal questionnaires and supplementary questions were organized separately.

The chi-square (X^2) analysis was employed to test the significances differences between the proportion of respondents who were favorable and those who were unfavorable towards the variables. Such a test of proportional differences was also carried out between respondents with a positive and a negative evaluation of the variables considered (Sudman and Bardburn 1982:232-233). Chi-square is a test of independence, the idea that one variable is not affected by, or related to, another variable. It is used to measure the likelihood that some factor other than chance (sampling error) accounts for the apparent relationship (Best and Kahn, 2003:357). All differences were tested for statistical significance at the 0.05 level. The 15th version of SPSS (Statistical package for social science) was used for data analysis.

In addition to the chi- square analysis simple correlation technique was used in order to measure the relationship between the independent variables. The degree of relationship was measured and represented by the coefficient of correlation (see Appendix J).

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF THE DATA

This chapter of the study consists of two parts. The first part deals with the respondent's backgrounds, while the second part deals with presentation, analysis and interpretation of the data gathered. The data obtained through questionnaires, interview and observation check list where analyzed and interpreted separately based on the characteristics of the questions.

4.1. Background information of the Respondents

The distribution of respondents of the trainees based on the geographical location of their college, gender difference, year level and different fields of study.

Table 1 Characteristics of the respondents (trainees)

Geog. location		Construction technology						Industrial technology					
		10+2			10+3			10+2			10+3		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
Class 1		27	8	35	9	2	11	24	11	35	11	2	13
Class 2 A		26	13	39	14	8	22	19	7	26	7	5	12
Class 2B		46	24	70	18	4	22	40	23	63	15	6	21
Total	No	99	45	144	41	14	55	83	41	124	33	13	46
	%	68.8	31.2	100	74.5	25.5	100	66.9	33.1	100	71.7	28.3	100

The table 1 above shows, regarding the department out of the total 369 respondents, 199(53.9%) were from construction technology department, while 170(46.1%) of them were from industrial technology department. Among total construction technology department 72.4 percents were 10+2 level (year II) while 27.6 percent of them were 10+3 level. 72.9 percent of the industrial technology department was similarly from 10+2 level where as 27.1 percent of the department were from 10+3 TVET students. As can be seen from the pattern of the distribution of table above from both departments the number of 10+3 students was very low when compared to 10+2 students. The reason is that in Oromia region the number of TVET colleges which offer 10+3/deploma levels are less in number when compared to the TVET institutions which offers only 10+1 and 10+2 (Certificate) programs. Due to this the students from certificate program of more than 39 TVET institutions will be placed in selected TVET colleges in the region to study their 10+3 (Diploma level) program.

As depicted in table 1 , one can also see that based on the geographical location of the colleges 94(25.5%) of the respondents were from class 1 (Adama TVET college), 99(26.8%) of them were from class 2A town (Nekemte TVET college), while, the rest 176(47.7%) of the respondents were from class 2B (Ambo and Gimbi TVET colleges). From this pattern it is possible to conclude that the geographical representation of each college was almost balanced.

Concerning the gender from the total respondents 113(30.6%) of them were females while, 256(69.4%) of the respondents were males. Even though the researcher used 50% of female sample from the population of the female students and 30% from the population of the male students to increase the percentage of the female students, still the total number of the female respondents was less than half of the male students (**for detail see appendix H**). This shows that the number of female students attending technical and vocational education and training college is very low.

4.2. Overall Respondents Attitude towards Self- Employment

In order to see the distribution of the respondents in to the favorable and unfavorable attitudinal directions, the survey group was dichotomized. The dichotomy was based up on the neutral attitude score of the respondents as determined from their responses to the items of the general attitude in the questionnaire. The distribution has been presented in table 2.

Table 2 Distribution of general attitude of TVET students towards self employment

General attitude	No	%
Favorable	322	87.2
Unfavorable	43	11.7
Undecided	4	1.1
Total	369	100.0

As one can see from the table 2 above, among the total respondents, 87.2 percent of the respondents showed a favorable attitude, while 11.7 percents showed unfavorable opinion to wards the general attitude towards self employment. 1.1. Percent of the respondents had a neutral attitude or undecided. That is, more than three-fourth of the trainees tended to evaluate the over all aspects of self employment/job creation positively.

In addition to this as indicated in (appendix-G, table-1) the major area teachers respondents were also asked to indicate the degree to which the self employment/job creation decreases the unemployment problem in one country on the supplementary questionnaires. As a result 30.3 percent of the respondents indicated that very highly decreases the problem, while 39.3 percent of them said highly decrease the unemployment problems. On the other hand 21.5 percent and 8.9 percent of the respondents showed that it is low and very low in decreasing the unemployment problems in one country respectively. The finding indicated that even though more than 50 percent (69.6%) of the teachers evaluated the items positively it was very less compared to the 87.2% of the favored TVET students. This indicates that the TVET students understood the objective of technical and vocational education and training and they predominantly favoring the idea that self employment decreases the unemployment problem in one country which is indicated in the literature that, self employment plays an important role in developing and contributing to the economy of one country (Seravanaue, 1987:240 and Middlton, 1993:210-215).

4.2.1. Attitude of TVET students and Geographical Location of their Colleges

Regarding the geographical locations of the TVET colleges it was observed in such away that from class 1 (Adama TVET collage (96.8 percent) of the respondents showed favorable attitude towards self employment, while 3.2 percent of them showed unfavorablness towards the items in this category. The distribution in table 3 below similarly indicates that from class 2A (Nekemte TVET college) about 89.2 percent of the respondents showed positive attitude to wards the items, 5.7% showed negative attitude and the rest 5.1 percent the respondents undecided or showed neutral attitude. 63.6 percent of class 2B (from Ambo and Gimbi TVET colleges) showed favorable attitude, 33.3 percent were evaluated the items negatively (unfavorable), where as 3.1 percent of this class showed neutral attitude.

Table 3 Attitude of TVET students as result of geographical location of TVET colleges

Geographical, location in:	Attitude's of the Trainee							
	Favorable		Unfavorable		Undecided		Total	
	No	%	No	%	No	%	No	%
Class 1 (Adama)	91	96.8	3	3.2	-	-	94	100.0
Class 2A (Nekemte)	88	89.2	6	5.7	5	5.1	99	100.0
Class 2B (Ambo and Gimbi TVET Colleges)	112	63.6	59	33.3	5	3.1	176	100.0
Total	291	78.9	68	18.4	10	2.7	369	100.0

X^2=5.977, p (4, 0.05) = 9.49 non - significant

However, the positive tendency of the three groups towards self employment was irrespective of an over all factors indicated in ILO (1996:89-103) that may affect the attitude of TVET students. It is indicated that expansion of investment and infrastructures are bases for cities to provide wage and self employment opportunities. On the contrary the finding of the table 3 above appears that there was no significant differences in attitude towards self employment in evaluating favorably or unfavorable the items in this category.

The chi –square analysis also revealed that there was no significant difference between the favorable and unfavorable groups of the thee classes at the significance levels of 0.05 and degree of freedom 4 (Appendix I table 4b). That is the calculated X^2=5.977 is less than the critical table value of P (4, 0.05) = 9.49.

One can also compare that the total percentage of the respondents which favored the items in categories of table -3 from the three classes were, (78.9%) to the general attitude of table - 2 (87.2%) which showed positive attitude. Here the figure shows that the number of the respondents who favored the items in the general attitude category decreased in the case of the geographical local category items. This indicate that there were some respondents who evaluated the items in table -2 category positively and showed negative or neutral attitude to the items in the category of table-3. The simple correlation coefficient of (appendix J) r= 0.246 between the two variables was low. Therefore, it is possible to conclude that this variation in number has no effect on the finding.

From the analysis of the supplementary questions (item no-8 of appendix-H table-1) the major area TVET teachers respondents , 23.2 percent and 42.8 percent of the responses showed that the expansion of investments in a town encourages the TVET students to create their own job very highly and highly respectively. 28.6% and 5.4% of the respondent replied that it is low and very low in encouraging the trainees. Concerning the effect of micro finance in encouraging TVET students to create their own job (item no 9 of appendix G). 19.7% of the respondents said very high in encouraging the students, 42.8% replied that highly encourages, while the rests 25.0% and 12.5% respectively said low and very low in motivating the TVET students towards self employment.

4.2.2. Year level and Attitudes of TVET Students towards Self- Employment

The intention of items in this category of the attitudinal questionnaire was to measure the attitudinal difference as a result of experience gained as result of staying in the TVET colleges. Regarding this table 4 indicates that there is no significant relations were observed in attitudinal differences. More than 50 percent of both year levels (10+2 and 10+3) TVET student showed positive attitude towards the items in this category.

The chi-square value also shows that there was no significance relation between the attitude of the trainees and year level. That is the calculated ($X^2=1.085$) is less than the critical table value at df 2 and at significance level of 0.05 P (2, 0.05) = 5.99 (Appendix I, table 2b).

Table 4 Attitude of TVET students as a result of year level.

Year level	**Attitude's of the Trainee**							
	Favorable		**Unfavorable**		**Undecided**		**Total**	
	No	**%**	**No**	**%**	**No**	**%**	**No**	**%**
10+2	216	80.6	40	14.9	12	4.5	268	100.0
10+3	95	94.1	6	5.9	-	-	101	100.0
Total	**311**	**84.3**	**46**	**12.5**	**12**	**3.2**	**369**	**100.0**

$X^2= 1.085, p(2, 0.05) =5.99$ *non significant*

The pattern of distribution of table 4 shows that 80.6 percent of 10+2 respondents favored that they developed positive attitude as a result of experience gained in staying in TVET colleges. 14.9 percent showed unfavorable towards self employment, while 4.5 percent of the respondents had neutral attitude on the relations of attitude of TVET students and year level difference. Similarly 94.1 percent of 10+3 respondents evaluated positively the items in the category of relationship between the attitude of TVET student and year level. 5.9 percent of the respondent showed negative attitude.

From this finding it is possible to conclude that the one year experience (10+1) helped both groups (10+2 and 10+3) that most of trainees from two classes evaluated the items positively.

4.2.3. Gender and Attitude of TVET Students towards Self Employment

To answer the question whether " the attitudinal difference towards self employment depends on the gender differences," the respondents were asked to indicate their degree of agreement on the items which referred to the relation between gender and attitude of TVET students. As a result table 5 below shows that 85.8 percent of females and 81.6 percent of male respondents showed favorable attitude towards the items under this category. 12.4 percent of female respondents and 14.1 percent of male respondents unfavorable that it depends on the gender respectively. The rest 1.8 percent of females and 4.3 percent of male respondent's undecided about the relation.

Table 5 Gender and attitude of TVET students

Gender	Attitude of the Trainee							
	Favorable		Unfavorable		Undecided		Total	
	No	%	No	%	No	%	No	%
Female	97	85.8	14	12.4	2	1.8	113	100.0
Male	209	81.6	36	14.1	11	4.3	256	100.0
Total	**309**	**82.9**	**50**	**13.6**	**13**	**3.5**	**369**	**100.0**

$X^2 = 1.750$, p (2, 0.05) = 5.99 non significant

As the pattern of distribution of table 5 shows there is no significant relation was observed as a function of gender difference towards self employment. Here it is indicated that greater than 80 percent of the respondents from both sex showed positive attitude to the items under this category.

The chi-square result also indicates non significance relations between the attitudes of trainees as function of gender differences. That is, the calculated $x^2=1.750$ is less than the critical table value at 0.05 level at df of 2 which is equal to 5.99 (see appendix I table 1b). Thus it is possible to conclude from the above finding that the attitude of TVET students towards self employment does not depend up on the gender difference. According to the World Bank, 2007 the structure of employment in Ethiopia, women are more likely to be self employed than men (44.1% female to 40.2% male). On the other hand the study also showed that men are much more likely than women to work in government or private organizations (21.2% male and 13.3% female) World Bank (2007: 46).

4.2.4. Fields of Study and Attitude of TVET Students towards Self-Employment

Table 6 presents the distribution of the attitudinal differences as a result of different fields of studies. Accordingly 86.4 percent of industrial technology respondents and 67.8 percent of construction technology respondents favored that their fields of study prepares them to create their own job/to be self employed, where as, 11.8 percent of industrial and 24.1 percent of the construction technology departments showed negative attitude towards the items. 1.8 percent of industrial and 8.1 percent of construction department respondents were Undecided about the relation of their departments and self employment opportunities. But on the contrary, Bregger (1996:4), in his study indicated that through out the world self employment is much more common in construction than in industrial fields. He indicated that on average four out of every ten construction workers were self employed.

Table 6- Attitudes of TVET students and fields of study

Fields of study	Attitude's of the Trainee							
	Favorable		Unfavorable		Undecided		Total	
	No	%	No	%	No	%	No	%
Construction Technology	135	67.8	48	24.1	16	8.1	199	100.0
Industrial Technology	147	86.4	20	11.8	3	1.8	170	100.0
Total	282	76.4	68	18.4	19	5.2	369	100.0

X^2= 1.877, P (2, 0.05) = 5.99 non significant

There is no significant relationship was observed as a function of difference in fields of study. The finding shows that more than half (50%) of the respondents showed favorable attitude that their departments prepares them to create their own job from both department. The chi square result also indicates that there was no significant relationship between two groups of respondents as function of difference in fields of study. That is, the calculated value of x^2=1.877 at 0.05 level of significance and df 2 is much less than the critical value p(2,0.05)= 5.99 (see appendix I table-3b).

4.2.5. Correlations between Gender, Geographical Location, Year Level and Fields of Studies

Correlation as explained by Best and Kahn (2003) is the relationship between two or more paired variables. The degree of relationship is measured and represented by the coefficient of correlation. Variables may be positively or negatively correlated Best and Kahn, (2003) and Panneerselvam, (2006). If the variable is correlated negatively, as the value of one variable increases, the other tends to decreases. Table 7 shows the correlation distribution between independent variables gender difference, geographical location of TVET institutions, class levels and fields of studies. The aim of this table is to show to what extent one variable affects the other. As indicated by Best and Kahn (2003:308) the relationship between variables and coefficient of correlation is negligible 0.00 - 0.20, low 0.20-0.40, moderate 0.40-0.60, substantial 0.60 to 0.80 and high to very high between if it is 0.80 to 1.00.

Table 7 Distributions of correlations between gender, geographical location, fields of study and year level.

	Gender difference	Geographical location	Fields of study	Year levels
Gender difference	1	0.290	0.138	0.103
Geographical location	0.290	1	0.270	0.245
Fields of study	0.138	0.270	1	0.204
Year level	0.103	0.245	0.204	1

As the distribution of Pearson's product moment coefficient of correlations shows that there is a low relationship between the two independent variables (gender and geographical locations of the colleges (r=0.290). Similarly, there was a negligible relationship between gender difference and year level of the respondents, as well as between gender and fields of study (r=0.103 and r=0.138) respectively. It is also indicated on the table 7 above that there was negligible relationship between fields of study and geographical location (r=0.270), year level and geographical locations (r=0.245) as well as between fields of study and year level (r= 0.204, for detail see appendix J). These show that in the present study the effect of one independent variable on the other variable is from low to negligible on the above four variables indicated in table-7.

4.2.6. Course Related Factors

4.2.6.1. Course Balance and Attitude of TVET Students

In this category of the items the respondents asked on the effect of the balance of the theory and practices on the attitude of students towards self employment/ job creation.

Table -8 Attitude of TVET students as function of course balance

Attitude of the Trainees	**No**	**%**
Favorable	241	65.3
Unfavorable	102	27.6
Undecided	26	7.0
Total	**369**	**100.0**

As depicted in table 8 , about 65.3 percent of the total respondents showed positive attitude that the course balance of theory and practice in their college is as set by Ministry of Education in terms of preparing them to create their own job. 27.6 percent of the respondents were unfavorable that the 30% theory and 70% practical in their college is not in practice. The rest 7 percent of the respondent showed neutral attitude on the items in this category.

In addition to this as indicated in (appendix-G table-1) the major area teacher were also asked on the balance of theory and practice in their major area they are teaching in terms of preparing TVET students towards self employment. Accordingly 26.8% and 62.5% of the respondents said that very high and high respectively that the theory and practice proportion in their colleges was balance. 7% and 3.7% of the major area respondents revealed as low and very low respectively in their institutions. The finding indicates that the TVET colleges are practicing the proportion of theory and practice in terms of giving the trainees the right skill which prepares them to create their own job.

4.2.6.2. The Relevance of the TVET Course to Job Creation and Attitude of TVET Students

Respondents were asked in this case the relevance of the TVET course to self employment/job creation. As a result 75.9 percent of the respondents showed favorable attitude that the TVET course is relevant to job creation 19.5 percent were unfavored that it is not relevant, while 4.6 percent were Undecided about the items under this category.

Table-9 Course relevance and attitude of TVET students

Attitude's of the Trainees	**No**	**%**
Favorable	280	75.9
Unfavorable	72	19.5
Undecided	17	4.6
Total	**369**	**100.0**

Similarly the teacher was also asked on the relevance of the major courses they were teaching in terms of preparing the trainees to create their own job (appendix-G table-1).

As a result about 34 percent of the teacher respondents said that very highly relevant, while 55.3 percent of them indicated that highly relevant to self employment. Only few (10.7 percent) of the respondents revealed that it is low in relation to preparing the TVET students to create their own job.

On the basis of the above discussion, thus, one might likely conclude that the TVET course are highly relevant to the world of work in terms of preparing the trainees towards self employment.

4.2.6.3. Attitude TVET Students on the relation of Entrepreneurship Course to job creations

In this part of the study the respondents were asked the role of entrepreneurship course has in preparing them to create their own job, whether they understood the objective of enter course in terms of self employment. Table 10 reveals the distribution of the attitude of the respondents.

Table-10 Attitude of TVET students on the role of Entrepreneurship course.

Attitude of the Trainees	**No**	**%**
Favorable	319	86.4
Unfavorable	42	11.4
Undecided	8	2.2
Total	**369**	**100**

As the pattern of the distribution of table 10 shows more than three fourth of the respondents (86.4 percent) revealed favorableness to the entrepreneurship course in preparing the trainees to create their own job.11.4 percent of the respondents not favorable that the entrepreneurship course has no effect in preparing the TVET students towards self employment, while 2.2 percent of the respondents were undecided.

In addition to this the entrepreneurship teachers from four sampled TVET colleges were also interviewed on the relation between entrepreneurship course and job creation. Almost all the entrepreneurship teachers agreed that the objective of this course is to prepare the TVET trainees to create their own job. Similarly four of the enter teacher share common idea on the relevance of the content of the course to the situation of their town in preparing the TVET students towards self employment.

Concerning the total time set for the entrepreneurship course most of interview explained that the time is very less especially to teach the trainees practically, while the rest very few interviewee from Nekemte TVET college respond that the time is enough. They also indicated that the total percentage (6%) given for the course in comparison to other major courses was very less.

As encouraging factors for self-employment all of the entrepreneur teachers from four colleges indicated that the small business and microfinance is playing greater role in providing credit for TVET graduates to get initial capital to start their own business or job. The housing development project (the expansion of condominium building) also created greater opportunities for TVET graduates to work in groups.

The discouraging factors they indicated that the relationship between TVET colleges and other sector is still weak. The colleges are not working in collaboration with other stakeholders and factories (industries) in their town or nearest town strongly. Guidance and counselors in their institution was also weak.

The possible solutions they forwarded as common were that the TVET colleges should work in collaboration with other stakeholders like small business micro finance other governmental and non governmental organization so that they can create good opportunities for the TVET graduates to be employed or to be self employed. Guidance and counseling should work in advance to help the students to understand the objective of the TVET system.

4.2.6.4. The Correlation of Course Related Variables

The pattern of table 11 below shows the distribution of the correlation coefficient of course related factors of independent variables (the balance of theory and practice, the relevance of the course and the entrepreneurship course).

Table -11 Correlations of course related variables

	Balance of the course	**Relevance of the course**	**entrepreneurship course**
Balance of course	1	0.211	0.230
Relevance of course	0.211	1	0.158
Entrepreneurship course	0.230	0.158	1

As the distribution of the person's produce moment coefficient of correlations of table 11 shows there is low relation or the effect of relevance of course on the balance of practice and theory is low (r=0.211) and also between balance of course and entrepreneurship is low (r=0.230) the relationship between relevance of course and entrepreneurship course is negligible (r=0.158). From this finding it is simply possible to conclude that the effect of one variable on the other in this category is from negligible to low, so that one variable can not affect the other .

4.2.7. Guidance and Counseling and Attitudes of TVET Students

In this category the respondents were asked about the role of guidance and counseling has in relation with preparing TVET students towards self employment. The pattern of table-12 distribution below reveals that about 75.1 percent of the respondents indicated favorableness that the guidance and counseling in their college was helped them to understood the objective of TVET. 21.7 percent of them showed negative attitude, while 3.3 percent of the respondents were undecided.

Table 12 Vocational guidance and counseling and attitude of TVET students.

Attitude of the Trainees	**No**	**%**
Favorable	277	75.1
Unfavorable	80	21.7
Undecided	12	3.3
Total	**369**	**100**

The interview result also shows that the relationship between the TVET students and the guidance and counseling in all four colleges was good. The counselors are working entirely in giving advice for students in understanding the objective of TVET system. The vocational guidance and counselors from four TVET colleges agreed that more than three - fourth of the trainees have interest to consult on their problem. They indicated that relatively the number of female student were less than the number of male students in consulting. The female students in all colleges feel shy to go to the office of the guidance.

Concerning the consulting programs the guidance and counselors from three TVET colleges indicated that since they are working as additional work besides the teaching they do not have fixed time to consult or counsel the students. But the Adama TVET college vocational counselor has two days per week (Wednesday morning and Friday after noon).
As encouraging factors they indicated that government is giving full attention for TVET students and also increasing the skill of vocational guidance and counselors by giving short term training.

In addition to this the major area teachers respondents asked to what extent that the guidance and counseling helps the TVET student in preparing them for self employment(see appendix-G). And about 16.1% of the respondents said that the guidance and counseling very highly helps, while 42.8 percent of them indicated that highly helps the trainees to create their own job. 32.2 percent and 8.9 percent of the respondents revealed that low and very low in helping the TVET students respectively. Similarly 8.9 percent and 26.8 percent of the major teachers indicated that the relationship between the TVET students and the vocational guidance and counselor is very high and high respectively, while 53.6 percent of the respondents complained that the relation is low and 10.7 percent of them indicated it is very low.

4.2.8 Apprenticeship Program and Attitude of TVET Students

In this section of the study the respondents were asked the relationship between the on job training/apprenticeship program and job creation /self employment. The pattern of the following table shows distribution of group of respondents between favorable and unfavorable respondents.

Table 13 Distribution of the attitude of respondents on the relationship between apprenticeships and job creation

Attitude of the Trainees	**No**	**%**
Favorable	186	50.4
Unfavorable	138	37.4
Undecided	45	12.2
Total	**369**	**100**

The distribution reveals that about 50.4 percent of the respondents showed favorableness to the relations between the apprenticeship program and job creation while 37.4 percent and 12.2 percent of the respondents reveal unfavorable and neutral attitude respectively.

The apprenticeship program coordinators from the four sampled TVET colleges indicated that the objectives of apprenticeship is to give additional practical skill for the trainees, and also it helps for the student to develop confidence to communicate with different enterprises, governmental and non governmental organizations which helps them to be employed or to be self employed after their graduation.

As far as the apprenticeship offering organization is concerned the Adama and Ambo TVET colleges on job training/ apprenticeship program organizers indicated that relatively there is sufficient apprenticeship offering organizations in their town. But Nekemte and Gimbi TVET colleges' apprenticeship coordinator indicated that they were facing problems of assigning the trainees on time for the on job training. This is, as they indicated, was due to less number of apprenticeship offering organizations in their towns or in the nearest town.

The coordinators of the program from the four colleges indicated that they are working with governmental and non governmental organization and other office as much as possible to place all trainees according to their fields of studies to get the right practice on the apprenticeship program. They indicated that the total time set (312 hrs) for this program is very less, and also they said that the apprenticeship program offering time is not convenient time. Because during the summer most of the organization carries out inventory as well as the closes for break, due to this they face problems. Also they indicated that the students work on different

areas other than their major. As discouraging factors they indicated that some institutions and organizations show reluctantness to accept the trainees to practice in their organization. The possible solutions they indicated was that government should give directions and responsibility to accept students and give right practice for the trainees.

On the supplementary questions (appendix-G) the major area teacher also questioned that, to what extent the apprenticeship program helps the trainees to create their own job. As a result 30.3% of them said that very highly, 32.2% of the total respondent replied that highly helps the TVET students to create their own job. While the rest 26.8% and 10.7% of them said respectively low and very low in helping the student.

Concerning the apprenticeship offering organizations, 12.5% of the respondents said that very high number of apprenticeship offering organizations in their town. 25% revealed that high number of offering organizations, while 37.5% and 25% of the total respondents said that less and very less number of organization in their town which offering the apprenticeship organization respectively (see appendix -G).

4.2.9. Institutional Facilities (teaching Materials) and Attitude of TVET Students

Meeting the entire cost of functional work shops and providing up to date teaching materials is one of the relevant measures of maintain quality of training (Midlton, 1993). Due to this in this part the respondents were asked on the adequateness of the machineries, hand tools and row materials in terms of preparing the trainees to create their own job.

The distribution of table 14 below shows that 59.1% of the respondents showed positive attitude that the hand tools, machineries and supply of row materials in their college adequate enough in preparing them to create their own job. 33.3% of the respondents showed unfavorable while 7.6% of them had neutral attitude (undecided) about the relation between the materials and attitude of the students.

Table 14 Attitudes of TVET student and the adequateness of materials

Attitude of the Trainees	No	%
Favorable	218	59.1
Unfavorable	123	33.3
Undecided	28	7.6
Total	**369**	**100**

In addition to this the major area teachers also indicated that about 40% of Adama TVET college, 54.5% of Nekemte TVET college and 40% of Ambo and Gimbi TVET colleges of the construction technology department teachers said that the hand tools in their college is very adequate enough in terms of giving the right practical skill to prepare the trainees to create their own job. Similarly, 40% of Adama TVET college, 33.5% of Nekemte TVET college and 20% of the Ambo and Gimbi TVET colleges industrial technology college teachers respond that the hand tools in their departments were very adequate enough. 40% and 20% of Adama TVET college, 45.5% of Nekemte TVET college as well as 50% and 10% of Ambo and Gimbi TVET colleges construction department teachers revealed that the hand tools adequate enough in their department respectively. On the other hand 60% of Adama, 67.7% of Nekemt and 60% of Ambo and Gimbi TVET college industrial department teachers indicated that the hand tools in their college were adequate enough in giving the right skill in terms of preprint the trainees towards self employment.

Concerning the machineries only 22.7% of the Nekemte TVET college construction department teachers said that the machineries in their department were very adequate enough in giving the right skill for the trainees. On the other hand 40% of Adama, 54.6% of Nekemte and 30% of Ambo and Gimbi TVET colleges of the construction departments showed that the machineries in their departments were adequate enough. In this department it was evaluated as inadequate by 40% of Adama, 13.6% of Nekemte, and 60% of Ambo and Gimbi TVET college teachers.

In industrial technology department 60% of Adama, 11.1% of Nekemte and 20% of Ambo and Gimbi TVET college teacher said that the machineries in their department adequate enough to give the right skill for the trainees, while 40% of Adama, 77.8% Nekemte and 60% of Ambo and Gimbi TVET colleges of the same department revealed that it was inadequate. The rest percentage from both department and all classes of TVET colleges evaluated as very inadequate (see Appendix - H, table 2).

From the above finding it is possible to conclude that the distribution of machineries for different college as well as different department were not uniform. As it was indicated by many respondents of the industrial technology department that the machineries in all TVET colleges under study is inadequate in terms of giving the right practical work for the trainees, so that they confidentially prepared to create their own job.

As far as the basic measuring instrument is concerned 20% of Adama, 40.9% of Nekemte and 20% of Ambo and Gimbi TVET colleges of construction department teachers indicated that it is very adequate enough. 40% of Adama, 54.6% of Nekemte and 40% of Ambo and Gimbi TVET colleges of the same department said that it is adequate, while the rest 40% of Adama, 4.5% of Nekemte and 40% of Ambo and Gimbi TVET colleges of construction technology department teachers evaluated the measuring instrument in their department as inadequate in terms of preparing the trainees to create their own job.

From industrial technology departments, 20% of Adama, 20% of Nekemte TVET college teachers said very adequate, while 40% of Adama, 55.6% of Nekemete as well as 20% of Ambo and Gimbi TVET college teacher of this department evaluated it as adequate. Similarly 40% of Adama, 33.3% of Nekemte and 40% of Ambo and Gimbi TVET colleges said inadequate, while the rest 11.1% of Nekemte and 20% of Ambo and Gimbi TVET colleges indicated as very in adequate.

Concerning the text books and relevant reference materials almost in all colleges and departments indicated as in adequate and very inadequate (by more than 50%) of the respondents (see appendix G-table 2).

In row materials provision about 60% of Adama and Nekemte TVET colleges of construction technology departments indicated that it adequate enough, while, 40% of Adama, and Nekemte TVET colleges and 20% of Ambo and Gimbi TVET colleges of the same department teacher said it is inadequate. From industrial technology department more than 50% of the respondents indicated that the provision of row materials in their college is adequate in terms of preparing the trainees to create their own job (for detail see appendix G-table 2).

In addition to the attitudinal questionnaire TVET students supplementary questions for major area TVET teachers the researcher conducted observation of the workshop in four colleges of both industrial and construction departments. As a result the conducive environment of all work shops in all colleges was good, it was well ventilated, as per standards of height and floor area. The working shops in all colleges organized separately for different streams or fields of study. The storage of row materials and hand tools were in good conditions. Every workshop had one shop keeper separately. Concerning the availability of hand tools machineries, measuring instruments and row materials, in Adama TVET College the hand tools, machineries and measuring instruments were adequate in industrial technology departments in terms of preparing the trainees to create their own job. But in construction technology departments the hand tools were inadequate in some streams like plumbing. The row materials, in their storage were less in all workshops in relation with number of students.

In Ambo TVET college the hand tools, and measuring instruments and machineries were adequate in both construction and industrial technology departments, except in surveying stream. In this stream they do not have theodolite (measuring survey instrument) which is basic for the students to carry out the practical training. In Nekemte TVET College the researcher observed that it is well organized than the three colleges. The availability of hand tools, machineries, measuring instruments and supply of row materials in both departments were adequate. The materials were as per standards set by Ministry of Education.

In Gimbi TVET College relatively the availability of machineries and basic measuring instruments like theodolite for surveying were in adequate. The supply of row materials for the two departments was inadequate in terms of preparing the TVET students to create their own job. The hand tools in this college in both departments were adequate to carry out the training by giving practical skill for the students.

4.2.10. The Correlations of None course Related Factors

Table 15 below shows the distribution of the correlations coefficient of non course related factors of independent variables (Guidance and counseling, apprenticeship program, and adequateness of materials).

Table 15 Correlations coefficient of non course related independent variables

	Guidance and counseling	Apprenticeship	Adequateness of materials
Guidance and counseling	1	0.271	0.172
Apprenticeship	0.271	1	0.177
Adequateness of materials	0.172	0.177	1

As the distribution of Pearson's product moment coefficient of correlations of table 15 shows that there was a negligible relation between guidance and counseling and adequateness of materials as well as between apprenticeship and adequateness of materials. The calculated value of their correlations coefficient was less than 0.20. So as it is indicated on Best and Kahn (2003) this category is considered as negligible. The relationship between Guidance and apprentice on the other hand is low. Their correlations coefficient was between 0.2-0.4 (r=0.271), so that the effect of one independent variable on the other is less (see appendix J).

Generally, as the correlation coefficient of the appendix J shows all the independent variables were related positively to one another. This shows us that as the value of one variable increase the value of other also tends to increase or it is directly proportional (Best and Kahn, 2003, Panneerselvam, 2006).

4.2.11. Availability of Self Employment Opportunities

In this part of the study the major area teachers were asked to indicate the degree of availability of self employment opportunities for TVET students as a result of access to credit, access to market (for finished products) and in relations to the expansion of infrastructure in their town (appendix G, table 2).

As a result in relation to access to credit, 5.4% and 46.4% of the respondents said that the opportunities of the self employment were very high and high in their town respectively. 33.9% of them indicated that the opportunity was less, while 14.3% revealed that the access of credit in preparing opportunities for TVET graduate was very less. From this it is possible to conclude that there is a sufficient access to credit in each town where the TVET colleges were located.

Concerning the self employment opportunities as a result of access to market for finished product, about 14.3% of the respondents indicated that there were very high opportunities, while 42.9% said there were high opportunities. 35.7% and 7.1% of the respondents revealed that there was low and very low, self employment opportunities in their town..

According to the data, it might be possible to conclude that in each town of the TVET colleges there is a high self employment opportunities as a result of access to market for finished product. Similarly, as a result of expansion infrastructure in their town more than 50 percent of the respondents evaluated that there was high self employment opportunities for TVET students to create their own job (12.5% very high and 44.6% high) and 35.7% of the respondents said that the expansion of infrastructures in their town is less in creating self employment opportunities, while 7.1% of them revealed that in their town the self employment opportunities as a result of expansion of infrastructure was very less (see appendix G).
The finding indicated that almost in all towns of the TVET colleges there is good self employment opportunities for TVET trainees as the result of access to credit, access to market for finished product and expansion of infrastructures.

4.2.12. Factors that Influences the Attitude of TVET Students towards Self Employment

The TVET major area teacher were asked about encouraging or discouraging factors that may affect the attitude of TVET students on the open ended supplementary questionnaire. As a result the greater majority of respondents (greater than 50%) indicated that, the expansion of investments, infrastructures (like road construction, house development projects) in their town highly encouraging the trainees to create their own job. It was also indicated by most of the respondents that the expansion of small business and micro finance enterprises in their town were highly encouraging the TVET students by giving credit for initial capital to be self employed.

As discouraging factors the TVET teachers indicated that, the weak relationship between the TVET students and vocational counselors was not as per standard of the program, so that, they said that this may become problem for TVET students in understanding the objective of TVET system. Majority of the respondents (greater than 50%) also indicated that the week relationship between their college and other organization may discourage the attitude of the trainees. They

responded that to promote the college and to create self employment opportunities the administrators of the colleges were working less. Due to this the attitude of the trainees to create their own job might be discouraged. They also indicated as discouraging factors that, the apprenticeship offering organizations were less in number and also they were reluctant to accept students for on job training and to give the right practical work according to their fields of study.

It was also indicated by most of the respondents that the problem of texts and relevant reference materials as well as the supply of row materials on time was discouraging factors in their colleges. As they said when the row materials for practical work were not available the teachers forced to teach theory than practice.

Finally the teachers indicated that the practical skill of TVET trainers needs to be refreshed from time to time. Unless they get short term training or skill gap the teachers may focus only on the theory part. As a result, this may discourage trainees' attitude towards self-employment.

As the solution for the discouraging factors they indicated that, the vocational counselors should work properly by strengthen their relation with the students to motivate the students and understand the objective of TVET system. They also forwarded as a solution that, the TVET college administrators should work in collaboration with other organizations to promote the colleges and to create opportunities for the trainees to be employed or self employed. According to their response the private and non government organizations should fully participate in TVET system.

The finding also showed that government must give responsibility for the apprenticeship offering organizations by making agreements to assign the trainees on the right practical work according to their fields of study. They also indicated that short term training or skill gap should be given for the teacher so that, the trainers give the right practical skill confidentially to motivate the students to create their own job.

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary of the Basic Findings

The purpose of the study was to assess the attitude of TVET students towards self employment in Oromia region. Particularly the study focused on TVET colleges in the region from construction and industrial technology department of 10+2 and 10+3 students. To this effect, the study tried to answer the following basic questions.

1. Do the TVET students show significant differences in attitude toward self- employment as a function of gender difference, year levels, different fields of study and geographical location of their college in different class town of Oromia?
2. Does the course delivery system at present is proper in preparing the trainees towards self- employment?
3. Are the teaching materials and machineries in their institution are adequate enough to prepare the trainees towards self employment?
4. What is the role of vocational consolers in motivating the trainees towards self – employment?
5. What are the factors that influence the attitude of TVET students towards self-employment?

The study employed descriptive survey method. To address the raised research questions, the researcher reviewed relevant literatures and prepared three sets of questionnaires. These are attitude questionnaire, interview guide questions and observation chick list.

The subjects of the study were 369 TVET students, 80 Trainees, four vocational counselors, four apprenticeship coordinators and four entrepreneurship course teachers of Adama, Ambo, Gimbi and Nekemte TVET colleges.

The data obtained through different instruments were analyzed separately. The attitudinal questions were analyzed using frequency, chi-square and correlations.
As a result of the data analysis, the following major findings were found.

1. The background information of trainees depicted that the number of female students were very less compared to male students (45-50% of female trainees were=113 while 30% of male= 256) from four TVET colleges. This indicates that the number of female students attending 10+2 and 10+3 in construction and industrial department were less.
2. As the finding of the study disclosed, the general attitude of TVET students was positive. As table -2 shows 87.2% of trainees showed positive attitude towards self employment while 11.7% of the trainees showed negative attitude.
3. It was found out by this study that there is no significant difference in attitude observed as a result of geographical locations of their colleges. As table 3 indicates regardless of their locations of their colleges, 96.8% of class 1, 89.2% of class 2A as well as 63.6% of class 2B towns showed positive attitude toward self employment. The chi-square (X^2=5.977) is less than p (4, 0.05) = 9.49. This also shows that there was no significant relation between the attitudes of TVET students and geographical location of their college.
4. The study also disclosed that, there was no significant relationship between the attitudes of TVET students as the function of their year level. As indicated in table 4, 94.1% of 10+3 and 80.6% of 10+2 TVET students showed positive attitude. The chi-square (X^2=1.085) is less than critical p value at df 2, and 0.05 level of significance. This shows that there was no significant relationship between the attitudes of TVET students as a function of year level.
5. The finding of the study also showed that the attitude of TVET students was not depending on the gender differences. It is indicated in table 5, that 85.8% of female and 81.6% of male students showed positive attitudes towards self employment. The X^2=1.750 was again less than the critical, table value, p (2, 0.05) =5.99. This indicates that there is no significance relation between the attitudes of TVET students as a result of gender differences.
6. According to the finding, there was no significant differences between the attitude of TVET students as a function of different fields of study. As table 6 shows 67.8% of construction and 86.4% of industrial technology trainees showed positive attitude that their departments prepares them to create their own job. Calculated chi-square also indicated that there was no significant difference between the attitudes of trainees of two departments.

7. The finding also disclosed that the effect of one independent variables on the other between (geographical location, gender, class level and fields of study) was from negligible to low, that is, to say that $r<0.4$(table 7page 47).
8. It was also indicated that the expansion of investments, and infrastructures were encouraged the TVET students to create their own job (indicated by more than 60% of the major area teachers).
9. The study also revealed that the balance of theory and practice was indicated by more than 50% of the respondents that it was in right truck in their colleges.
10. 75.9% (table 9) of the respondents showed positive attitude that the TVET courses in both departments were relevant to the world of work in terms of preparing the TVET trainees to wards self employment.
11. Regarding the entrepreneurship course, the finding of the study disclosed that it is a base for TVET students in motivating the trainees to create their own job.
12. Most of the entrepreneurship course teacher respondents revealed that the total time set for the course as well as the percentage (6%) given for the course was very less in terms of teaching the course practically and in terms of preparing the trainees for self employment.
13. It was found out by study that the effect of course related variables on one another was very low ($r<0.30$) as it was indicated on table 11.
14. The finding of the study also revealed that the vocational guidance and counselor helped the TVET students to understand the objective of technical and vocational education and training objectives. Further more, the finding indicated that the educational qualification of all vocational counselors were unrelated to the minimum requirements of the standards set by Ministry of Education.
15. The result of the study showed that, the apprenticeship / on job training program helped the trainees to get the right practical works. Besides, it was revealed by most respondents (50.4%, table 13) that the apprenticeship program has great role in motivating the TVET students to create their own job.
16. It was also disclosed by the finding of the study that the objective of the apprenticeship program is to give additional practical skills and also helps to develop self confidence for TVET students by introducing to the real world of work.

17. The study disclosed that the organization offering apprenticeship training was generally inadequate. It was also indicated that some organization shows reluctantness in accepting the trainees in their organizations. Moreover, as the result of the study indicated that, the total time set for apprenticeship program and the offering time was not convenient during the summer season.
18. The finding of the study also indicated that the adequateness of hand tools and machineries in terms of preparing the trainees towards self employment were adequate enough. But the result of the study on the other hand indicated that the text books and relevant reference materials as well as the distribution of some machinery and materials were not uniform in different colleges.
19. It was also indicated by the finding of the study that all the independent variables were interrelated to one another positively from negligible (r=0.38) to moderately (r=0.553).
20. Regarding the availability of self employment opportunities in terms of access to credit, access to market for finished products and expansion of infrastructures, it was indicated by more than 50% of the respondents that there was high self employment opportunities in each towns of the regions.
21. In relations to factors that could encourage the TVET students towards self employment, the great majority of the total TVET teachers respondents indicated the expansion of investment, infrastructures road construction and house development projects) as well as the establishment of small business and micro enterprises in each towns of the region were playing great role in motivating the TVET trainees towards self employment.
22. In relation to factors that might discourage the TVET students towards self employment, most of the respondent indicated that the relationship between vocational counselors and the trainees was weak, the practical skill of some teachers was less in giving the right practical work for the students to prepare to create their own job. It was also indicated that the relation between TVET colleges and other organizations was weak.

5.2. Conclusions

1. According to the New Education and Training Policy of Ethiopia of 1994, the main objective of the technical and vocational education and training system is, to develop skilled middle level manpower who create his/her own job, instead of job seeking. However, the success of such strategy highly depends on the attitude of the trainees in accepting the strategy, the availability of the self employment opportunities/job creation in relation with (expansion of investments, infrastructures, access to credit, access to market for finished products), proper guiding and counseling of the trainees, relevance of the courses to job creation, the practical skill of the trainees, the entrepreneur skill of the trainees, on job training and availability of materials for training were among the major factors the present study focused.

   As a result, here it is possible to conclude from the finding of the study that the attitude of TVET trainees was positive towards self employment without significance difference as a function of geographical location of their colleges, gender differences, year level and fields of study. This is due to that all fields of studies that have been offering in each college in different classes of Oromia towns were market oriented and also both male and female students were equally treated.
2. Regarding course related factors, it is concluded that, the balance of theory and practice, relevance of the courses to self employment/job creation and the entrepreneurship course in terms of preparing the trainees to create their own job were in the right truck. But it was indicated that the total time set for entrepreneurship course was less in teaching practically. Hence, it needs attention that such problem may affect the entrepreneurial skill of the trainees if not reconsidered by the concerned bodies.
3. In the case of vocational guidance and counseling the study showed that the relationship between the trainees and the guidance and counselor was weak, the vocational counselors in all TVET colleges under the study were doing the counseling service as additional work. It was also revealed that they were not professionals in giving full advice. Therefore, the consequence of such problem may discourage the attitude of trainees if not solved in short period of time.
4. The objective of apprenticeship/ on-job training is to give additional practical skills, to introduce the trainees to real world of work and develop their self confidence. But to

attain such objectives there should be sufficient apprenticeship offering organizations in each towns or nearest towns of the location of the TVET colleges. But it was concluded from the study that the apprenticeship offering organizations in most Oromia towns were not sufficient and also it was indicated that the existing organizations shows unwillingness in accepting the trainees for apprenticeship. The study also showed that the total time set for apprenticeship and the apprenticeship offering time was not convenient during summer season.

5. Training for high quality skills require appropriate equipment, tools, adequate supply of training materials like text books and relevant reference materials. However, the finding of the study indicated that text books and relevant reference materials were inadequate in all TVET colleges, while the distributions of machineries and other equipments were not uniform. Therefore, to give the right practical and quality training the problems indicated her above calls for attention.

In general, the present status of the attitude of TVET student towards self employment in Oromia Region was positive. Besides, some factors which need attention not to affect the attitude of the trainees in the future.

5.3. Recommendations

On the basis of the findings obtained and conclusions reached at, the following recommendations are forwarded to further improve the attitude of TVET students towards self employment in Oromia TVET colleges.

1. It is obvious that the self employment program plays an important role in developing and contributing to the economy of a country. At the same time the objective of TVET is to prepare the trainees to create their own job. To meet this objective it is the researchers' strong believe that the attitude of individuals must be positive towards such strategy. As a result the finding of the study disclosed that the attitude of the TVET students towards self employment was encouragingly positive. As it was indicated in the study this is result of some encouraging factors which helped the trainees to understand the objective of TVET or self employment. These factors were like, proper guiding and counseling, expansion of investments, infrastructures (like road construction, house development projects), establishment of small and micro finance organizations in some towns of Oromia region. Therefore, here, it is recommended that:

1.1 The encouraging factors indicated above should be further expanded in other towns of the region to motivate the trainees towards self employment in advance.

1.2 The administrators of TVET colleges should work in collaboration with the nearest private, governmental and non governmental organizations to create further opportunities for the trainees.

1.3 In view of making the implementation of self employment scheme effective, regular visits and follow ups by concerned bodies should be conducted.

2. The ability of technical and vocational training programs to attain the desired out comes largely depends on the practical skills of the trainers. Hence, as the present study showed most of the trainers in the TVET colleges were poor in the practical skill. To over come this problem it is recommendable that:

    2.1. There should be arrangements for continuous practical skills up grading through short term training or skill gap.

    2.2. Experience share should be conducted between different TVET colleges of the region as well as between other regions TVET colleges.

    2.3 Trainers should visit projects which may be under construction in their town or nearest towns.

3. As the study result revealed textbooks and related reference materials in all TVET colleges were in adequate. It was also indicated that the distributions of some machineries and equipment were not uniform between TVET colleges of the region. So that;

    3.1 Ministry of Education as well as the Regional Education Bureau need to do their best in printing and supplying text books and other reference materials.

    3.2 In the case of distribution of some machineries and equipments the Regional Government TVET Agency should follow their uniformity in all TVET colleges.

4. For apprenticeship offering organizations government (Federal or Regional) should set clear criteria in accepting and giving the right practical skill which related to their fields of study.

5. Concerning the apprenticeship offering time, it should be revised by the concerned bodies, and should be offered in between in school- training instead of offering at the end of the academic year (during the summer season).

6. Vocational guidance and counselors should be given short term training on the related topics which may help them to do their work effectively.
7. In order that TVET graduates run their own business, the Regional Government Capacity Building Bureaus and other concerned bodies need to encourage and help TVET graduates in facilitating conditions that would enable them get administrative support and credit schemes from small business and micro finance organization.
8. As the economy of one country develops, graduates of TVET will have a chance to be self employed. To this end, more attention should be given to create job openings by strengthening the private sectors. This can be achieved, in fact, by creating conducive environment for the private investors.
9. The female students should be further encouraged to attend the technical and vocational education.
10. Finally, since the study was limited to come up with all critical problems in relations to self employment prospects, it is the researchers' hope that further in depth study has to be carried out to touch questions/problems that were not touched by this study.

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APPENDIX – A

Attitude questionnaire for TVET students (English Version)

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF CURRICULUM AND TEACHER PROFESSIONAL DEVELOPMENT STUDIES

Attitude questionnaire

A Questionnaire to be field by TVET students of the sampled TVET collages and departments. The purpose of this questionnaire is to gather data on the attitude of TVET students towards self employment.

As a respondent to this questionnaire, your genuineness contributes greatly toward achieving the objective of the investigation.

General directions: Please note the following points before you start responding

1. Read each statements carefully and respond to each of items by expressing your degree of AGREEMENT or DISAGREEMENT by ticking (√) one alternative for one question that most represent your thinking and feeling as SA, A, UD, D or SD.

   Key: **SA**= strongly agree
   A= Agree
   UD=Undecided or uncertain
   D= Disagree
   SD= strongly disagree

2. Be sure that you response will be kept confidential
3. What is required is just your opinion. There is no wrong or right answer. Do not show reservation to indicate your truly opinion.
4. Your frankness is VERY IMPORTANT!
5. No need to write your name.

Thank you.

Part I. Background Information

Name of your college _____ Department _____

Year level 10+2 ☐ 10 +3 ☐ Sex _____

Part II. Indicate your degree of agreement for each item by ticking (√) in the table in front of the items.

No	Statements	SA	A	UD	D	SD
1	I think increasing self employment decreases unemployment in one country					
2	I like to be employed in private/government enterprise than to be self employed after my graduation.					
3	I joined TVET because it is the shortest path to create my own job/self employment.					
4	I do not think that self employment is the possible solution to decrease un employment problem in one country.					
5	I joined TVET by seeing my sinner self employed TVET graduates					
6	As to me there is a balance between the theory and practical work in my department in terms of self employment.					
7	TVET course delivery system is more of theoretical.					
8	I like the project/ practical work because it prepares me to create my own job after graduation.					
9	I do not want to hear the word job creation/ self employment.					
10	I dislike the practical work because it makes my hand dirty.					
11	The 30% theory and 70% practical is less practical in our institution.					
12	On job training/apprenticeship has no use in terms of preparing trainees in preparing to create their own job.					
13	The total hours set for apprenticeship is not enough in preparing the TVET students to wards self employment.					
14	I have got the right practical skill from the last year apprenticeship/on-job training which helps me to create my own job/self employment.					
15	I do not know the objective of entrepreneurship course up to now.					
16	Entrepreneurship course helps the trainees to create their own job.					
17	I think TVET courses helps me to create my own job in my department after graduation.					
18	The total time set for entrepreneurship course is not enough.					
19	I like my department because it prepares me for job creation.					
20	I jointed this department because it is the shortest path to be employed in government/ private organization.					
21	I dislike my department because I joined with out my interest.					
22	In my view this department has no relation ship with self employment.					
23	I dislike this department because it is difficult for me.					
24	As to me the delivery of row materials on time for training in our institution is good.					
25	There is no relation ship between hand tools, equipments and machineries and self employment.					
26	The hand tools in our institution (my department) are enough in preparing the trainees to the self employment.					
27	The machineries in our institution are less in giving the right skill in preparing the TVET students to create their own job.					

28	I believe that the expansion of investment in our town helps TVET students to create their own job.					
29	The expansion of micro enterprises in a town is good for TVET students to be self employed.					
30	Less expansion of infrastructure in a town has no effect on the job creation.					
31	The housing development in our town has helped the TVET graduates to create their own job.					
32	I do not know the relation ship between micro enterprise and self employment/job creation.					
33	I developed good attitude towards self employment now than before I joined TVET.					
34	In my view staying in TVET institution couldn't bring any change on the attitude of students towards self employment.					
35	As to me, as knowledge of TVET students on the vocational courses increase the attitude of TVET students towards self employment become positive.					
36	There is no relation ship between the attitude of TVET students towards self employment and vocational courses.					
37	It is difficult for female TVET students to create their own job than male students.					
38	I believe, female TVET students can also create their own job like male students.					
39	There is no relationship between gender and self employment.					
40	It is very simple for female students to create their own job than male.					
41	Guidance and Counseling in our institution helped me to understand the objective of TVET system.					
42	I believe that the vocational counselor in our institution is guiding the trainees in the proper way.					
43	I do not know the office of the vocational guidance and counselor in our institution.					
44	I don't have any information about self employment/job creation.					
45	No body told me up to know how to create my own job.					
46	I do not have any interest to consult the vocational counselor about self employment.					
47	No body told me up to know how I can get finance service to create my own job.					
48	I do not know the person who assigned as a vocational consoler in our institution.					
49	Guidance and counseling has no use in changing the attitude of TVET students to crate their own job.					
50	There is no relation ship between guidance and counseling and job creation/self employment.					

APPENDIX – B

Attitude questionnaire for TVET students

(Afan Oromo Version)

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF CURRICULUM AND TEACHER PROFESSIONAL DEVELOPMENT STUDIES

Madaallii Yaadaa

- **Waraqaa gaaffii Barattoota BLTO Kolleejjoota fi Muummewwan qoraanno kanaaf filatamaniin guutamu.**
- Faayidaan waraqaa gaaffii kana yaadaa baratootni BLTO hojjii mataa isaanii uummachuu (self employment) irratti qaban madaluuf qorannoo ***digirii 2ffaa***tiif mata duree '***Attitudes of TVET students towards self employment in Oromia Region*** ''jedhu irratti ittiin guuttachuudhaaf kan qophaa'ee dha.
- Akka yaada kennaa tokkoottii amanamummadhaan gaaffilee kana deebisuun keessan galma ga'uu qorannoo kanattiif bakka gudda qaba.

Qajeelifama Waliigalaa: Deebii kenuu osoo hin jalqabiin qabxiwwaan kanaan gadii hubadhaa.

1. Himoota dhiyatan sirrittti dubisudhaan tokkon tokkon issanittiif yaadaa deggeersa ykn mormmii keessan fuula gaaffilee durratti mallattoo (√) kana kaa'udhaan kan yaaddanif kan sinitti dhaga'ame ibsa.

   Ibsa Deebii: **A** - Yaadicha Baayeen deeggera
   B - Yaadicha nan deeggera
   C - Yaadicha hin deeggerus, Hin mormus
   D - Yaadicha nan morma
   E - Yaadicha baayeen morma

2. Deebiin keessan iccitidhaan waan qabamuuf sodaa hin qabaatiinaa.
3. Gaaffileen dhiyaatan dandeettii keessan madaaluuf kan dhiyaatan waan hintaaneef, yaada keessan isa dhugaa ta'ee fi waan isinitti dhaga'amee deebisuu irra offi hinqusatinaa.
4. Amanammumadhaan deebisuun bayee barbaachisaa dha.
5. Maqaa keessan barreessuun barbaachisaa miti.

Galatoomaa!

I. Odeeffannoo Duraa.

Maqaa Kolleejjii keetii_____

Mummee kee_____

Sadarkaa Barnoota kee 10+2 ☐ 10 +3 ☐ Salaa _____

II. Himoota dhiyaatan sirritti dubbisuudhaan tokkoon tokkoon isaanittiif yaadaa deggeerssaa ykn mormmii keessan fuula gaaffilee durratti mallattoo (√) kana kaa'udhaan kan yaaddanif kan sinitti dhaga'amee ibsa.

T.L	Himoota	A	B	C	D	E
1	Biyya tokko keessatti guddachuun hojii mataa offii umuu hoji-dhabummaa ni hirisaa.					
2	Ebba koo booda hojii mataa kootii ummachuu irra dhaabbilee mootumma/dhuunfaa keessatti qacaramee hojjeechuun barbaada.					
3	Barnootni Teekinka fi Ogummaa hojjii mataa offii ummachudhaaf karaa isaa salphaa waan ta'eefan barachuu eegalee.					
4	Biyya tokko keessatti hojii ummuun hoji-dhabummaa hirrisaa jedhee hin yaadu.					
5	Ebbiffamtoota BLTO kanaan dura hojii mataa isaanii ummataan ilaaleen Baraachuu eegalee.					
6	Akka kootti, muummee koo keessatti barumsii afoola fi gochaa (theory &practice) wal madaalaa dha.					
7	Akaataan kenniinsa korsoota BLTO kollejjii keenya keessatii afoolatti waancaaluuf hojii mataa ofii umuuf hinfayyadu.					
8	Hojii mataa kooti umuu keessatti waan nagargaruuf hojii shakallii/praktikaala nan jaalladha.					
9	Hojii mataa ofii uumuu jecha jedhuu dhaga'uu hinbarbaadu.					
10	Hojii mataa isanii ummachudhaaf waan isaan fayyaaduuf hiriyoon koo akka BLTO barataanifaan gorsa.					
11	%30 afooli fi %70 shakkalliin kolleejjii keenya keessatti hojii irra olaa hinjiruu.					
12	Akka yaada kootti, shaakkalliin hojii irratti /hojii gocha (apprenticeship) hojii mata ofii uummachuu keessatti faayidaa hin qabu.					
13	Akka kootti, sa'atiin waligalaa hojii gochaatiif ramadame hojii mataa ofii uumuuf qopheesuuf ga'aa miti.					
14	Shaakala hojii gocha kanaan dura ba'ee irra beekumisa barbaachisaa ta'e hojii mataa kooti uumuuf nagargaaru argadheera.					
15	Walitti dhufeenya ''Entrepreneurship" fi hojii mataa ofii umuu gidduu jiru hin beeku.					
16	Barumisi ''Entrepreneurship'' akka barattootni BLTO hojii mataa issn ummataniif ni fayyada.					
17	Akkan yaadutti korssiiwwaan BLTO hojii mataa kooti akkan ummadhuuf nafayyada.					

18	Sa'atiin barumisa ''Entrepreneurship'' tiif kenname ga'a miti.					
19	Hojii mataa kooti ummachuuf waan nagargaaruuf mummee koo nan jaalladha.					
20	Dhaabbilee Mootummaa/dhuunfaa keessatti qacaramuuf waan karaa salphaa ta'eefaan muummee kana galee.					
21	Feedhii kootii ala wanaan galeef muummee kiyya hin jaalladhu.					
22	Akka yaadaa kootti,mummeen kuni hojii mataa ofii ummachuu waliin quunnamtii hin qabu.					
23	Waan natti ulfaatuuf muummee koo kana nan jibba.					
24	Yeroon dhiyeesiin meeshaalee barnootaa mana barumisaa keenyaa gaarii dha.					
25	Meeshaalee harkaa fi maashinootin hojii mataa ofii uummuu waliin wal quunnamtii hin qabanii.					
26	Meeshaleen harkaa muumee koo keessa jiran barattootni BLTO akka hojii mataa isaanii ummataniif qopheesuuf gahaa dha.					
27	Maashinootni kolleejjii keenya keessaa jiran ogummaa hojii mataa ofii umuuf barbaachisuu kennuuf gahaa miti.					
28	Magaalaa keenya keessatti babalachuun investmentii baratoota BLTO akka hojii mata isanii ummataniif ni fayyada.					
29	Baballachuun mayiikroo fi daldala xixxiqaa magaalaa tokko kessatti barattoota BLTO akka hojii mataa isaanii ummataniif ni gargaaraa.					
30	Baballachuu dhabuun bu'uroota misoomaa (infrastructures) magaalaa tokko hojii mataa ofii umuu irratti dhiibaa hin qabu.					
31	Babballiin ijaarsa mana kondominiyeemi maagalaa keenya keessaa barattoota BLTOtiif hojii mataa isaanii akka ummataniif gargaree jira.					
32	Fayiidaa mayiikroon hojii mataa ofii umaachuu keessatti qabuu hin beeku.					
33	Ilaalchiin hojii mataa ofii ummachuu irratti amma qabu kan dura yeroon BLTO seene qaburaa gaarii dha.					
34	Akka yaada kootti, turttiin barattoota kolleejii BLTO keessa jijjiirama ilaalichaa hojii mataa isaanii ummachuuf qaban irratti ni fidaa jedhee hin yaaduu.					
35	Yeroo beekumsi barattoota BLTO korsoota teeknikaa fi ogummaa irratti qaban guddaachaa deemu ilaalchii baratootni hojii mataa isaanii ummachuuf qaban garii ta'a deemaa.					
36	Korsoota BLTO fi ilaalcha baratootni hojii mataa isaanii ummachuu gidduu walitti					

	dhufeenyi hin jiru.					
37	Baratootni shamarranii hojii mataa isaanii ummatanii hojjechuun itti cimaa.					
38	Baratootni shamarranii BLTO hojii mataa isaanii akkummaa warra dhiiraa ummatanii hojjeechuu nidanda'u					
39	Hojii mataa ofii uumuu fi saala (korniyaa) giddu walitti dhufeenyi hin jiru.					
40	Baratootni shamarrantiif hojii mataa isaanii ummachuun ni salphata.					
41	Gorsaa fi qajeelchi kolleejjii keenya keessa akkan kaayyoo BLTO huubadhuuf nagargaaree jira.					
42	Akka amantaa kootti, hojjetaan gorsaa fi qajeelcha kolleejii Keenya halaa sirri ta'een hojii gorsaa geggeesaa jira.					
43	Waajjira gorsaa fi qajeelicha kolleejjii keenya eessa akka ta'e hin beeku.					
44	Wa'ee hojii mataa ofii umuu odeeffanoo hin qabu.					
45	Hanga ammattii akkamitii akkan hojii mataa kootii ummadhuu namni natti himee hin jiru					
46	Wa'ee hojii ummachuu ilalcchisee gorsa fudhachuudhaaf fedhii hin qaabu.					
47	Hanga ammatti hojii mataa kooti ummachuudhaaf qarshii essaa akkan argadhu namni natti hime hin jiru.					
48	Kolleejjii keenya keessatti gorsaa fi qajeelchaan eenyuu akka ta'e hin beekuu.					
49	Gorsii fi qajeelichi ilaalicha barattootni hojii mataa isaanii umuu irratti qaban jijjiruuf faayidaa hin qabu.					
50	Gorsaa fi qajeelichaa fi hojii mataa ofii umachuu gidduu walitti dhuufeenyi hin jiru.					

APPENDIX – C

Supplementary questionnaire filled by TVET teachers of the sampled TVET colleges.

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF CURRICULUM AND TEACHER PROFESSIONAL DEVELOPMENT STUDIES

With this questionnaire, the researcher intends to assess the attitude of TVET students towards self employment. Hence, knowing that your responses will be used only for research purpose, you are kindly requested to fill the questionnaire.

For genuinely doing so by devoting your time and exerting effort, the researcher, really remains very grateful to you; meanwhile, he wishes to bring in to your attention that the out come of this study will highly depend up on your responsible, sincere and timely responses.

N.B. No need to write your name,

General Direction

The following items listed in the table below are considered as some factors that encourage/ discourage the attitude of TVET students towards self employment. Read each statement carefully and respond to each of items by expressing your degree of rating by ticking (√) one alternative for one question that most represent your thinking and feeling as very high, high, low and very low.

Name of Your College_____

Your major area (Department) _____

No	A. How do you rate:	Very high	High	Low	Very low
1	The major area course you are teaching in your department in preparing the trainees to create their own job.				
2	The extent of the theory /practice proportion in relevance with preparation of TVET students towards self- employment in your course.				
3	The self employment opportunities that your trainees have in the major area you are teaching in your town/ the nearest towns.				
4	The extent that the guidance and counseling helps the TVET students to create their own job/self- employment.				
5	The relationship between the students and vocational guidance & counselor in your institution.				
6	The extent that the apprenticeship program has in preparing the TVET				

	students to create their own job.				
7	The adequacy of apprenticeship offering governmental/ private organization in your town/ nearest towns.				
8	The extent to which the expansion of investment in a town in encouraging TVET students to create their own job in your town.				
9	The effect of micro finance in encouraging TVET students to create their own job.				
10	The extent of self employment / job creation in relation with decreasing the un employment problem in one country.				
	B. How do you access the availability of self employment opportunities in your town with the relation to:				
10.1	Access of credit				
10.2	Access to market (for finished products)				
10.3	The expansion of infrastructure in your town				

C. In the following table lists of some items (Materials) that should be available in TVET institutions are described. So how do you rate in your intuition in relation to their preparing TVET students to create their own job?

No	Items	Very adequate	Adequate	Inadequate	Very inadequate	Not available
11	Hand tools					
12	Machines					
13	Measuring instruments					
14	Text books and reference materials					
15	Row/ consumable materials					

D. What major a factors do you think that encourages/ discourages the attitude of TVET students to wards self employment in your opinion in side or out side the institution?

i. Encouraging factors

_____

_____

_____

ii. Discouraging factors

_____

_____

_____

_____

E. What do you recommend as a solution for the discouraging factors?

_____

_____

_____

Thank you!

APPENDIX –D

Interview Guide questions

1. Interview Guide questions to the Vocational Guidance and Counselors in the sampled TVET colleges

1. How do you explain the relationship between your office and the TVET students in your institution in guiding the students according to the objective of the TVET system?
2. Would you comment on the interest of the TVET students to come and get necessary guidance from your office?
3. Do you have daily, weekly or monthly program to consult the trainees to guide them specially to motivate them to create their own job?
4. In your opinion do you think that there are sufficient opportunities in your town/nearest town to create for the TVET graduates to create their own job?
5. Would you comment on the level of the student's perception of guidance as a result of their staying in the college on the job - creation?
6. To what extent your office is working with the nearest micro finance enterprises to help the students to get credit and finance support in order to create their own job after their graduation?
7. What factors do you think that encourages/discourages the TVET students to create their own job/ to be self employed?
8. What possible solutions do you recommend to further encouraging the TVET students towards self employment and alleviate the problems that you indicated above?

2. Interview Guide questions to the Entrepreneurship teachers in the sampled TVET colleges

1. How do you explain the objective of this course in relation to its preparation of the TVET students towards self employment?
2. Do you think that the content of the entrepreneurship course is relevant to the situations in your area/in your town in preparing the TVET students towards self employment?
3. How do you explain the perception level of the students as their year level increases (from 10+1 to 10+3)?
4. Do you think that the total time set and the credit hour (percentage) given to this course is appropriate in terms of preparing the students towards self employment/job- creation?

5. In your opinion do you think that there is a sufficient self employment opportunities in your town for the students in terms of access to credit, row materials, investment and so on as the per- content of this course?
6. What factors do you think that encourages/discourages the TVET students to create their own job/ to be self employed?
7. What possible solutions do you recommend to further encouraging the TVET students towards self employment and alleviate the problems that you indicated above?

3. Interview Guide questions for the apprenticeship coordinators in the sampled TVET colleges

1. How do you describe the objective of apprenticeship program in relation to preparing the TVET students towards self employment?
2. In your opinion do you think that there is a sufficient apprenticeship offering organizations in your town/nearest towns?
3. Do you think that the total time set for apprenticeship program and the offering season is appropriate in terms of preparing the students towards self employment/job- creation?
4. What factors do you think that discourages apprenticeship program not to help the TVET students the job creations?
5. What possible solutions do you recommend for further encouraging the TVET students towards self employment and alleviate the problems that you indicated above?

APPENDIX – E

Observation Checklist

The purpose of this checklist is to gather relevant information on the condition of the college facilities.

Name of the College _____

No	A. Workshop condition	Satisfactory	Not Satisfactory	More than Satisfactory
1	Enough space			
2	Height(4m)			
3	Ventilations entrances and windows)			
4	Safety precautions(first aid kit)			
5	Space for storage for tools and materials			

B. Adequacy of Workshop Facilities

		Industrial Technology					Construction Technology				
No	**Items**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
1	Hand tools										
2	Machineries										
3	Basic measuring instruments										
4	Row materials										
5	Text books and reference materials										

Note: 1=Very adequate, 2=Adequate, 3=Inadequate, 4=Very inadequate and 5=Not available

APPENDIX – F

Results of pilot try out

No	E	O	EO	E^2	O^2
1	99	90	8910	9801	8100
2	90	86	7740	8100	7396
3	83	94	7802	6889	8836
4	81	88	7128	6561	7744
5	103	113	11639	10609	12769
6	81	78	6318	6561	6084
7	113	118	13334	12769	13924
8	95	98	9310	9025	9604
9	96	87	8352	9216	7569
10	117	105	12285	13689	11025
11	96	91	8736	9216	8281
12	91	85	7735	8281	7225
13	94	97	9118	8836	9409
14	108	112	12096	11664	12544
15	51	62	3162	2601	3844
16	104	109	11336	10816	11881
17	74	86	6364	5476	7396
18	82	78	6396	6724	6084
19	92	103	9476	8464	10609
20	109	98	10682	11881	9604
	$\Sigma E=1859$	$\Sigma O=1878$	$\Sigma EO=177925$	$\Sigma E^2=177179$	$\Sigma O^2=179928$

$$r_{OE} = \frac{N\Sigma OE - \Sigma O\Sigma E}{\sqrt{[N\Sigma O^2-(\Sigma O)^2]\,[N\Sigma E-(\Sigma E)^2]}}$$

$$= \frac{20x177925-(1859x1878)}{\sqrt{[20x179928-(1878)^2]\,[20x177179-(1859)^2]}}$$

$$= \frac{67298}{\sqrt{6285913524}} = \frac{67298}{79283.7} = \mathbf{0.849}$$ (for only half part)

But since the formula is split half method this result is only for one part. To check for the whole items as indicated by Spearman Brown Prophecy formula in (Yalew, 2006).

$$\mathbf{R_{x'x'} = \frac{2r_{o\varepsilon}}{1+r_{o\varepsilon}}}$$

$$= \frac{2x0.849}{1+0849} = \mathbf{0.9183}$$

Therefore, the reliability of the whole items is 0.9183 or (91.83%).

APPENDIX - G

Table - 1 Supplementary questionnaire responded by TVET teachers

No	Items	Very high		high		low		Very low	
		No	%	No	%	No	%	No	%
1	The rate of major area course relation to self employment/job creation	27	34	44	55.3	9	10.7	-	-
2	The extent of the theory/practice proportion in relevance with preparation of TVET students towards self employment	21	26.8	50	62.5	6	7.1	3	3.7
3	The self employment opportunities that your trainees have in major area you are teaching in your town of nearest towns.	22	21.5	27	33.9	28	35.7	7	8.9
4	The extent that the guidance and counseling helps the TVET students to create their own job	13	16.1	34	42.8	26	32.2	7	8.9
5	The relations ship between the student and vocational counselors in sampled TVET colleges	7	8.9	21	26.8	43	53.6	9	10.7
6	The extent that the apprenticeship program helps the TVET students to create their own job	24	30.3	26	32.2	21	26.8	9	10.7
7	The availability of apprenticeship offering governmental/ private organizations in the towns where the TVET colleges located	20	25.0	30	37.5	20	25.0	10	12.5
8	The extent to which the expansion of investment in a town in encouraging TVET students to create their own job.	19	23.2	34	42.8	23	28.6	4	5.4
9	The effect of micro finance has in encouraging the TVET students to create their own job.	16	19.7	34	42.8	20	25.0	10	12.5
10	The extent of self employment /job creation in relations with decreasing the unemployment problem in one county	24	30.3	31	39.3	17	21.5	7	8.9
11	Access of the availability of self employment opportunities in relations to								
11.1	Access to credit	4	5.4	37	46.4	27	33.9	11	14.3
11.2	Access to market (for finished products)	11	14.3	34	42.8	29	35.7	6	7.1
11.3	The expansion of infrastructure in their/town	10	12.5	36	44.6	29	35.7	6	7.1

Table - 2 Supplementary questionnaire responded by TVET teachers on the availability of materials

No	Items	Construction technology						Industrial technology					
		Class 1		Class 2A		Class2B		Class 1		Class 2A		Class2B	
		No	%	No	%	No	%	No	%	No	%	No	%
	Hand tools												
1	Very adequate	4	40.0	12	54.5	4	40.0	4	40.0	6	33.3	2	20.0
	Adequate	4	40.0	10	45.5	5	50.0	6	60.0	12	67.7	6	60.0
	In adequate	2	20.0	-	-	1	10.0	-	-	-	-	2	20.0
	Very inadequate	-	-	-	-	-	-	-	-	-	-	-	-
	Not available	-	-	-	-	-	-	-	-	-	-	-	-
	Machines												
2	Very adequate	-	-	5	22.7	-	-	-	-	-	-	-	-
	Adequate	4	40.0	12	54.5	3	30.0	6	60.0	2	11.1	2	20.0
	In adequate	4	40.0	3	13.6	6	60.0	4	40.0	14	77.8	6	60.0
	Very inadequate	2	20.0	2	9.2	1	10.0	-	-	2	11.1	2	20.0
	Not available	-	-	-	-	-	-	-	-	-	-	-	-
3	Measuring instrument												
	Very adequate	2	20.0	9	40.9	2	20.0	2	20.0	-	-	2	20.0
	Adequate	4	40.0	12	54.5	4	40.0	4	40.0	10	55.6	2	20.0
	In adequate	4	40.0	1	4.6	4	40.0	4	40.0	6	33.3	4	40.0
	Very inadequate	-	-	-	-	-	-	-	-	2	11.1	2	20.0
	Not available	-	-	-	-	-	-	-	-	-	-	-	-
4	Text books and references books												
	Very adequate	-	-	1	4.6	-	-	4	40.0	-	-	-	-
	Adequate	2	20.0	5	22.7	1	10.0	2	20.0	4	22.2	2	20.0
	In adequate	2	20.0	11	50.0	6.	60.0	2	20.0	12	66.7	6	60.0
	Very inadequate	6	40.0	3	13.6	3	30.0	2	20.0	2	11.1	2	20.0
	Not available			2	9.2	-	-	-	-	-	-	-	-
5	Row/consumable materials												
	Very adequate	-	-	1	4.6	2	20.0	2	20.0	2	11.1	-	-
	Adequate	6	60.0	7	31.8	4	40.0	2	20.0	4	22.2	2	20.0
	In adequate	4	40.0	9	40.9	2	20.0	6	60.0	6	33.3	4	40.0
	Very inadequate	-	-	4	18.3	2	20.0	-	-	6	33.3	4	40.0
	Not available	-	-	1	4.5	-	-	-	-	-	-	-	-

APPENDIX – H

Table 1- Total population of the sampled TVET colleges

Colleges	Sex	Year level		Total
		10+2	10+3	
Adama TVET college	M	169	68	237
	F	52	6	58
	T	221	74	295
Ambo TVET college	M	129	46	175
	F	45	4	49
	T	174	50	224
Gimbi TVET College	M	160	68	228
	F	55	7	62
	T	215	75	290
Nekemte TVET College	M	150	83	233
	F	40	32	72
	T	190	115	305

Table -2 Sample from the survey group

Colleges	Sex	Year level		Total
		10+2	10+3	
Adama TVET college	M	50	20	70
	F	20	4	24
	T	70	24	94
Ambo TVET college	M	38	20	58
	F	20	2	22
	T	60	20	80
Gimbi TVET Collge	M	48	20	68
	F	25	5	30
	T	73	25	98
Nekemte TVET College	M	48	32	70
	F	20	16	36
	T	68	48	106

Table -3 Samples of major area teachers from each TVET college under study.

Colleges	Construction Technology Dep.			Industrial Technology Dep.		
	M	F	Total	M	F	Total
Adama TVET college	9	1	10	10	1	11
Ambo TVET college	10	2	12	10	-	10
Gimbi TVET College	7	1	8	9	1	10
Nekemte TVET College	11	2	13	10	1	11
Total	**37**	**6**	**43**	**39**	**3**	**42**

APPENDIX - I
Frequency Tables and Chi-Square Tests

Table- 1a Respondents' sex category Cross tabulation

Respondents' sex			Respondents' attitude			Total
				Unfavorable	Favorable	
	Male	Count	11	36	209	256
		Expected Count	9.0	34.7	212.3	256.0
		Residual	2.0	1.3	-3.3	
		% within sex category	4.3%	14.1%	81.6%	100.0%
	Female	Count	2	14	97	113
		Expected Count	4.0	15.3	93.7	113.0
		Residual	-2.0	-1.3	3.3	
		% within sex category	1.8%	12.4%	85.8%	100.0%

Table- 1b Chi-Square Tests for Respondents' sex category

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.750	2	.417
Likelihood Ratio	1.945	2	.378
Linear-by-Linear Association	1.512	1	.219
N of Valid Cases	369		

The minimum expected Chi –Square result is 5.99

Table- 2a Year level category Cross tabulation

Year level			Respondents' attitude			Total
			Undecided	Unfavorable	Favorable	
	10 + 2	Count	12	40	216	268
		Expected Count	8.7	33.4	225.9	268.0
		Residual	3.3	6.6	-9.9	
		% within year level category	4.5%	14.9%	80.6%	100.0%
	10 + 3	Count	0	6	95	101
		Expected Count	0	12.6	85.1	101.0
		Residual	0.0	-6.6	9.9	100.0
		% within year level category	0.0%	5.9%	94.1%	100.0%

Table- 2b Chi-Square Test for Year level category

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.085	2	.004
Likelihood Ratio	14.727	2	.001
Linear-by-Linear Association	10.763	1	.001
N of Valid Cases	369		

The minimum expected Chi –Square result is 5.99

Table- 3a Field of study category Cross tabulation

Department		Respondents' attitude			Total
		Undecided	Unfavorable	Favorable	
Industrial	Count	3	20	147	170
	Expected Count	8.8	31.3	129.9	170.0
	Residual	-5.8	-11.3	17.1	
	% within Field of study category	1.8%	11.8%	86.4%	100.0%
Construction	Count	16	48	135	199
	Expected Count	10.2	36.7	152.1	199.0
	Residual	5.8	11.3	-17.1	
	% within Field of study category	8.1%	24.1%	67.8%	100.0%

Table- 3b Chi-Square Test for fields of study category

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.877	2	.000
Likelihood Ratio	19.874	2	.000
Linear-by-Linear Association	18.432	1	.000
N of Valid Cases	369		

The minimum expected Chi –Square result is 5.99

Table- 4a Geographic location category Cross tabulation

			Respondents' attitude			Total
Geographic location			Undecided	Unfavorable	Favorable	
	Class 1	Count	0	3	91	94
		Expected Count	3.1	11.7	79.2	94.0
		Residual	-3.1	-8.7	11.8	
		% within Geographic location category	0.0%	3.2%	96.8%	100.0%
	Class 2A	Count	5	6	88	99
		Expected Count	3.2	12.3	83.4	99.0
		Residual	-.2	20.7	-20.4	
		% within Geographic location category	5.1%	5.7%	89.2%	100.0%
	Class 2B	Count	5	59	112	176
		Expected Count	5.7	21.9	148.3	176.0
	Residual	3.3	-11.9	8.7		Residual
		% within Geographic location category	3.1%	33.3%	63.6%	100.0%

Table- 4b Chi-Square Test for Geographic location category

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.977	4	.000
Likelihood Ratio	56.388	4	.000
Linear-by-Linear Association	29.032	1	.000
N of Valid Cases	369		

The minimum expected Chi –Square result is 9.49

APPENDIX - J
Correlations

Variables		General attitudes towards self employmen t	Gender difference and attitude	Geo. location of TVET college & attitude if students	year level and attitude of students	Relationshi p between field of study and attitude of students	Balance of the course (Theory and Practice)	Course relevance &attitude of students	Entrepreneu rship skill & attitude of students	Guidance & counseling & attitude of students	Adequate ness of machiner ies, hand tools and attitude of students	apparent ship
General attitudes towards self employment	Pearson Correlation	1	.067	.246(**)	.239(**)	.186(**)	.266(**)	.211(**)	.296(**)	.335(**)	.154(**)	.319(**)
	Sig. (2-tailed)		.197	.000	.000	.000	.000	.000	.000	.000	.003	.000
	N	369	369	369	369	369	369	369	369	369	369	369
Gender difference and attitude	Pearson Correlation	.067	1	.290(**)	.103(*)	.138(**)	.193(**)	.112(*)	.077	.208(**)	.066	.152(**)
	Sig. (2-tailed)	.197		.000	.047	.008	.000	.000	.141	.000	.208	.003
	N	369	369	369	369	369	369	369	369	369	369	369
Geographic location of TVET college & attitude if students	Pearson Correlation	.246(**)	.290(**)	1	.245(**)	.270(**)	.220(**)	.171(**)	.185(**)	.274(**)	.175(**)	.230(**)
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.001	.000
	N	369	369	369	369	369	369	369	369	369	369	369
Year level and attitude of students	Pearson Correlation	.239(**)	.103(*)	.245(**)	1	.204(**)	.080	.100	.189(**)	.381(**)	.046	.187(**)
	Sig. (2-tailed)	.000	.047	.000		.000	.126	.000	.000	.000	.382	.000
	N	369	369	369	369	369	.000	.000	369	369	369	369
Relationship between field of study and attitude of	Pearson Correlation	.186(**)	.138(**)	.270(**)	.204(*)	1	.060	.019	.233(**)	.232(**)	.036	.221(**)

	Sig. (2-tailed)	.003	.208	.001	.382	.496	.000	.001	.002	.001		.001
	N	369	369	369	369	369	369	369	369	369	369	369
Apparent ship	Pearson Correlation	.319(**)	.152(**)	.230(**)	.187(**)	.221(**)	.553(**)	.111(*)	.266(**)	.271(**)	.177(**)	1
	Sig. (2-tailed)	.000	.003	.000	.000	.000	.000	.000	.000	.000	.001	.000
	N	369	369	369	369	369	369	369	369	369	369	369
	Sig. (2-tailed)	.000	.000	.000	.126	.252		.001	.000	.000	.000	.000
	N	369	369	369	369	369	369	369	369	369	369	369
Course relevance &attitude of students	Pearson Correlation	.065	.112(*)	.171(**)	.100	.019	.211(**)	1	.158(**)	.050	.054	.111(*)
	Sig. (2-tailed)	.000	.031	.001	.054	.721	.211		.002	.337	.299	.032
	N	369	369	369	369	369	369	369	369	369	369	369
Entrepreneurs hip skill & attitude of students	Pearson Correlation	.296(**)	.077	.185(**)	.189(**)	.233(**)	.230(**)	.158(**)	1	.279(**)	.165(**)	.266(**)
	Sig. (2-tailed)	.000	.141	.000	.000	.000	.000	.002		.000	.002	.000
	N	369	369	369	369	369	369	369	369	369	369	369
Guidance & counseling & attitude of students	Pearson Correlation	.335(**)	.208(**)	.274(**)	.381(**)	.232(**)	.269(**)	.050	.279(**)	1	.172(**)	.271(**)
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.001	.000
	N	369	369	369	369	369	369	369	369	369	369	369
Adequateness of machineries, hand tools and attitude of students	Pearson Correlation	.154(**)	.066	.175(**)	.046	.036	.336(**)	.054	.165(**)	.172(**)	1	.177(**)

Declaration

I, undersigned declare that this thesis work is my original work; and has not been presented for a degree in any other university. Furthermore, all sources of materials used for the thesis had been duly acknowledged.

Teklu Bekele Tucho
Signature: _____
Place: Addis Ababa University
Date of submission June 26, 2008

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

Name Getaw Tassew
Signature _____
Date of Approval 20 June, 2008