

***CHALLENGES FACING TECHNICAL AND VOCATIONAL EDUCATION AND
TRAINING GRADUATES IN PRACTICAL SKILL ACQUISITION IN BUNNO
BEDELLE ZONE OF OROMIA REGIONAL STATE***

BY

ABEBE JALETA EBBA



JIMMA UNIVERSITY

***COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES
DEPARTMENT OF EDUCATIONAL AND PLANNING MANAGEMENT***

ADVISOR: TAMIRU JOTE (PHD)

JIMMA UNIVERSITY

SEPTEMBER, 2107

JIMMA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

This is to certify that the thesis prepared by by Abebe Jaleta Ebba , entitled “*Challenges Facing Technical And Vocational Education And Training Graduates In Practical Skill Acquisition In Bunno Bedelle Zone Of Oromia Regional State,*” and submitted in partial fulfillment of the requirements for the Degree of Master of school leadership .

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Advisor Name _____

Sign _____

Date _____

Place: Jimma University

College Of Education and Behavioral Sciences Department of Educational Planning and Management

Date of Submission -----

Acknowledgements

The successful completion of this thesis would not have been possible without the support, encouragement and cooperation from many individuals who assisted me in diverse ways from the beginning to the end.

First of all, I would like to express my heartfelt and sincere gratitude to my advisor Tamiru Jote (PhD) for his professional assistance and dedication of precious time in reading and correcting this research from commencement to the end.

Moreover, I need to thank my respondents including Teachers, Graduates, Colleges' Dean, and Heads of micro enterprises under the study for their commitment to reveal the responses.

Finally, I would like to express my deepest gratitude to my honorable friend's Bayisa Teraffa, Siyum Araarso and other for their endeavor and diligent work in time of data collection and editing the overall research paper.

TABLE OF CONTENTS

<i>Acknowledgements</i>	<i>i</i>
<i>TABLE OF CONTENTS</i>	<i>ii</i>
<i>Abbreviations and Acronyms</i>	<i>vi</i>
<i>GTP: Growth and Transformation</i>	<i>vi</i>
<i>Abstract</i>	<i>v</i>
<i>CHAPTER ONE</i>	<i>1</i>
<i>INTRODUCTION</i>	<i>1</i>
1.1. Background of the Study.....	1
1.2. Statement of The Problem.....	6
1.3. Objectives of the Study	8
1.3.1. General objective	8
1.3.2. Specific Objectives	8
1.4. Significance of the Study	8
1.5. The scope of the Study.....	9
1.6. Limitations of the study.....	9
1.7. Definition Of Terms	10
1.8. Organization of the Study	11
<i>CHAPTER TWO</i>	<i>12</i>
<i>Review of Related Literature</i>	<i>12</i>
2.1. Overviews of Technical and Vocational Education and Training	12
2.2. Why TVET/Skills Development Is Important	14
2.3. <i>Role of Practical Skills Development in Poverty Reduction</i>	16
2.4. The German Model	17
2.5. The Japanese Model.....	18

2.6.	The Latin American Model	18
2.7.	Linking TVET Programs with the World of Work	19
2.8.	Relevant Stakeholders in TVET Programs Delivery	21
2.9.	TVET in Ethiopia.....	24
2.10.	The Basic TVET System Challenges in Developing Countries	25
2.10.1.	Engaging Community as Significant Players in TVET	25
2.10.2.	Systematic Professional Development of Instructors / Trainers /.....	26
2.10.3.	Keeping Pace with Technological Advancements and Using Technology Appropriates in TVET	26
2.10.4.	Encouraging Continuing TVET and Lifelong Learning	27
2.10.5.	Delivering a TVET Demand Approach	27
2.10.6.	Vocationalization of Higher Education in Developing Countries	28
2.10.7.	Funding of TVET.....	29
2.11.	Major Challenges of TVET in Ethiopia.	29
2.12.	Practical Skill Acquisitions Strategy	30
2.12.1.	Developing Flexible TVET Delivery.....	30
2.12.2.	Modularization as a Principle of TVET-Delivery	30
2.12.3.	Cooperative TVET Delivery and Apprenticeship Training	31
2.12.4.	TVET for Self-Employment	32
2.12.5.	Training Assessment for Program Delivery	33
2.12.6.	TVET Quality	34
2.12.7.	Apprenticeship-based TVET System.....	36
	<i>CHAPTER THREE.....</i>	<i>38</i>
	<i>RESEARCH DESIGN AND METHODOLOGY.....</i>	<i>38</i>
3.1.	Research Design.....	38

3.2. Research Method.....	38
3.3. Sources of Data	38
3.5. Instruments of Data Collection	39
3.5.1. Questionnaires.....	40
3.5.2. Interview	40
3.6. Methods of Data Analysis	40
3.7. Validity and Reliability Checks	40
<i>CHAPTER FOUR</i>	<i>42</i>
<i>PRESENTATIONS, ANALYSIS AND DISCUSSION OF DATA</i>	<i>42</i>
<i>CHAPTER FIVE</i>	<i>63</i>
<i>MAJOR SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS</i>	<i>63</i>
5.1. MAJOR SUMMARY OF FINDINGS.....	63
5.2. CONCLUSIONS	66
5.3. RECOMMENDATIONS	67
References	68

Lists of Tables

<i>Table1. Sample Sizes and Sampling Techniques</i>	39
<i>Table 2. Inter- Reliability of Cronbach's Alpha Results</i>	41
<i>Table 3 .General Characteristics of Respondents</i>	42
<i>Table4. Challenges Related To Teaching Practical Skill Strategy (Internal Challenge)</i>	44
<i>Table 5.The external Factors related to planning practical skill training in cooperative training (external challenges)</i>	46
<i>Table 6. Challenges Related To Trainees(Internal Challenges)</i>	48
<i>Table 7. Internal Challenges Related To Instructors In Performing Instructional Method Trainees Acquire The Necessary Practical Skills</i>	49
<i>Table 8.The Challenges related to follow up of TVET institution to provide during practical skills training</i>	52
<i>Table 9.Challenges Related To Motivating During Cooperativetraining For Teachers And Graduates (External Challenges).</i>	54
<i>Table 10.InternalChallenges related to Teaching Materials</i>	55
<i>Table 11.Independent Samples t-Test</i>	56
<i>Table4.12.T-Test For Each Of The Independent Variables</i>	57
<i>Table 13.The T-Test Teachers And Graduates For Skills Acquisition In TVET Institution For Trainees'</i>	59
<i>Table 14. Challenges Related To Implementation Of Cooperative Training</i>	60

Abbreviations

TVET: Technical Vocational and Educational Training

ESDP: Education Sector Development Program

MOE: Ministry of Education

UNESCO: United Nation Education, Scientific and Cultural Organizations

CT: Cooperative Training

ETP: Educational and Training Policy

GTP: Growth and Transformation

Abstract

This study was aimed at investigating challenges facing technical and vocational education and training graduates in practical skill acquisition in Bunno Bedelle Zone of Oromia Regional State. From the total of 527 populations 174(32.4%) respondents were participated in this study. A cross-sectional descriptive survey research design was used in this study. Both quantitative and qualitative approach was concurrently employed in this study. This study was used various sampling techniques. Hence, census sampling technique was used to get information from teachers (109), snowball sampling technique was employed to get information from graduates (55) and purposive sampling technique was used to get information from colleges deans 'and heads of micro enterprises and Civil services (10). A closed ended questionnaire in the form of a 5-point of Lickert scale was used to collect quantitative data. The data were analyzed using descriptive statistics (mean and standard deviation and inferential statistics like t-test. Both open ended and interview were analyzed qualitatively. Some of the major findings the study is majority of instructors were not dedicated in using various strategies to address different learning styles, lack of technical and vocational education and training institutions participation to come together to participate in planning of practical skill training, lack of enterprises and local industries are participating in planning of cooperative training, poor interest of trainees to learn, absenteeism of graduates was observed during practical training, lack of availability of manufacturing companies that can provide cooperative training in local, and lack of necessary materials and machineries with proper operators during cooperative training, weak follow up of the TVET institution during practical training were identified. It is recommended that: It is a crucial those TVET institutions with regional agency, zonal and Worada administrations in collaboration to fulfill training materials and machines for trainees, it is better regional TVET agency invite private investors to establish additional TVET colleges in the zone and to make positive competition with government TVET institutions, Bunno Beddelle TVET institutions are better to encourage various government and non-government to ensure internship training program. it is better deep train issued on pedagogical skills for instructors to capacitate them , it is also advisable continues creation of awareness and adequate in job training for instructors as well as to every group of the management bodies and the community at various levels about the necessity of the expected

objectives of the technical and vocational education and training institutions, it is better encourage and support in building capacity and financially the newly established enterprises and manufacturing companies. It is better to work on retaining of competent instructors.

CHAPTER ONE

INTRODUCTION

This chapter consists of background of the study, statement of the problem, objective of the study, significance of the study, scope of the study, limitation of the study, operational definition of key terms, and organization of the study.

1.1. Background of the Study

In many countries, governments are renewing efforts to promote Technical and Vocational Education and Training (TVET) with the belief that skill formation enhances productivity and sustains competitiveness in the global economy (OECD, 2005). One of the most important features of TVET is its orientation towards the world of work especially when the curriculums emphasize the acquisition of employability skills. The expectation is that TVET promote skills acquisition through competency-based training. It is recognized that technical and vocational education is an integral component of lifelong learning, and has a crucial role to play in this new era as an effective tool to realize the objectives of a culture of peace, environmentally sound sustainable development, social cohesion and international citizenship' (World of TVET Reports ,2010).

According to recent estimates by the World Bank, more than 10 million young Africans, often poorly skilled, leave the school system every year in search of jobs in local employment markets which are not expanding fast enough to create jobs. Many of these job seekers lack the requisite skills employers want. Without employment-related skills, school leavers cannot benefit from even the minimal employment opportunities that may be available to job seekers. (George , 2016).

George (2016) added that young people without jobs or hope for a better future live a daily life of frustration. Such frustration, co-mingled with desperation and loss of self-confidence, may push some of them into a life of violence and crime. Others, as we have seen in the recent past, may embark on the often perilous journey of illegal migration across the Mediterranean to Europe. Much worse is the possibility of unemployed youth becoming victims of religious and political manipulation to be used as instruments of politico-religious violence or combatants in

armed conflicts. Youth unemployment therefore poses a threat to political stability, national security and social cohesion. Supporting the young to acquire job-related skills is therefore a key development issue Growth and Transformation Plan (GDP, 2016). In this initiative, technical and vocational education and training plays a paramount role.

Technical and Vocational Education and Training (TVET) is concerned with the acquisition of knowledge and skills for the world of work to increase opportunities for productive work, sustainable livelihoods, personal empowerment and socio economic development (UNESCO MOE ,2009).

Similarly, African Union (2007) report stressed the vision of African countries in developing a new strategy to revitalize TVET in Africa. Abban and Quarshie (1996) pointed out that the paradigm shift towards practical skills training with TVET in Africa is increasingly reshaped to make it more attractive, efficient and effective. According to Bhuwanee (2006), in recent years, concerns have been raised by most African countries about the move towards making TVET complementary to post-basic education. In pursuing such policies in poorly industrialized economies greatly contributed to the serious problem of school leaver unemployment.

Technical and vocational education and training has not been a top priority for many African countries. In 2012, technical and vocational programs accounted for only 6 percent of total secondary enrollment in the region, a slight drop from 7 percent in 1999. Accordingly, the number of TVET institutions, students Enrollment and certain outputs were achieved despite of some hindering challenges. For instances in Africa the country which has better activity in TVET Education is South Africa , the enrollment of students are estimated to 201408 in Public TVET Colleges (educational statistics of South Africa 2015).Education in Africa is thus characterized by low enrolment, high drop-outs, poor-quality of teachers, inequitable access for women and rural populations, limited private sector involvement, and very inadequate budgetary allocations. In other words, technical training in Africa is neither supporting a high economic growth rate, nor expanding global markets, nor increasing employment opportunities. The whole system requires fundamental review and restructuring. (Ul-Haq&Haq, 2013)

In view of the fact that technical and vocational training is very dynamic and expensive, there is need for strong institutional co-operation. Partnership with the private sector and all beneficiaries of education, especially joint strategic planning will inevitably improve on problem

identification, prioritization of activities and, above all, achieve optimum utilization of scarce resources there is serious need to assist institutions to practically integrate business and entrepreneurship skills into technical and vocational education and build their capacity for income generation. Institutions should operate units to supplement their incomes (Elwan, D. (2000).

The government of Ethiopia has also tried to create a conducive framework for economic and social development. Accordingly capacity building and human capital formation are taken as key pillars in all these efforts (NTVET, 2008). There is an ambition to fight poverty through accelerated economic growth, to be achieved mainly through commercialization of agriculture as well as economic growth and employment creation through private sector development. TVET is expected to play a key role in this strategy for improving efficiency and cost effectiveness. Ethiopia is predominantly an agrarian economy. Levels of urbanization are very low compared to international standards. 85% of the population, and 90% of the poor, live in rural areas, most of them exclusively engaged in agriculture. Ethiopia. Like all other poor counties of Africa, is a country of young people.

Unfortunately, for many reasons largely due to poor economic condition coupled with rapid population growth, in adequate government and family support and lack of access to resources, the Ethiopian youth is confronting with massive unemployment problem which is big challenge to the country. In fact, this chronic problem aggravated by mismatch between training on one hand and the labour market on other hand (Kasaye, 2004).

In order to overcome these and other problems a policy has been issued and TVET program has been introduced to give students sufficient training towards ensuring the anticipation of the labor market and minimizing the serious shortage of skill gap problem of graduates which hinder their significant role in the development of the country.

The educational and training policy (ETP, 1994) emphasizes that the education sector should prepare motivated and competent workforce. The overall objective of the national TVET strategy (MoE, 2007) is to create a competent, motivated, adaptable and innovative workforce that plays pivotal roles in the poverty reduction and socio-economic development effort of the country. Specifically, MoE (2008) envisages TVET to provide relevant and demand-driven education and training that corresponds to the needs of economic and social sectors for employment and self-employment. The Strategy further stresses the need for an increasing role and involvement of the

private sector and non- governmental organizations, as well as community involvement, in the delivery of educational services. In order to avoid the mismatch of the available resources with increasing demands, programs should produce competent human resources required for different sectors of the economy and create employment opportunities for youth. (MOFED, 2015).

Similarly, the national TVET strategy (MOE, 2008) stressed that the quality of output of TVET delivery will be measured through competence achieved by trainees. Currently the government is placing considerable resource creating at the dispose of the vocational and education and training sector (TVET) to restructure towards a competence based agenda and has met the deficiencies that they perceive exist between the system and future national needs. The overall objective of the national TVET strategy (MoE, 2007) is to create a competent, motivated, adaptable and innovative workforce that plays pivotal roles in the poverty reduction and socio-economic development effort of the country. The system of verifying the competence of candidates needs to be formally structured and regulated. Moreover, the general directions of administering the assessment and certification system, in line with responsibilities, and accountabilities of each partner, should be clearly identified and pinpointed at all levels (MoE, 2010).

Economic development of any nation required for availability of trained and skilled labor force. Without full engagement of adequate skilled people the desired level of development cannot be fully realized. To realize developmental needs of any nation the competence of individual workforce has to be confirmed by means of occupational competence assessment. Such an assessment needs proper and planned administration and organized center for the conduct of the assessment. In order to successfully undertake specific workplace function any worker needs to have all rounded personality with regard to his/ her competence in the work place. One of the major tasks in the process of refocusing and re-orientation of the entire TVET systems of the country is to establish occupational competence assessment systems and assessment center, sharing an experiences of best practices from different role model countries to successful in skill acquisition system for students in their TVET (MOE, 2008).

In the same way the German system is popular for its “dual apprenticeship system,” focusing on center-based training and enterprise-based training system. It is an outcome of corporate culture of the German which is a traditional pattern of apprenticeship. It covers one day per week of theoretical training by public vocational training centers and four days of practical training provided in-enterprise. An average of three-and-a-half years of formal training is provided to the

apprentices by an enterprise under an employment contract. This happens because many nations succeeded in assuring the quality of training by administering assessment processes, certifying trainer and trainees as well based on successful achievement in the job. Two conceivable justifications could be given for using market outcomes as basis for measuring the effects of vocational programs on participants. First, vocational education is designed to train individuals for gainful employment by developing entry level skills; and second, the human development theory considers schooling as an investment that develops human capital. This German experience is also imperative to practical skill acquisitions of TVET students in Ethiopia.

Furthermore, to offer flexible, market driven and demand based training periodic assessment of the contribution, current practice and improving practical skill acquisition of the graduates has paramount importance to adjust the training system in line with the changing economic context and the demand of labor market.

There were different studies conducted on practices and challenges of TVET institutions and labor market in Ethiopia (Beshir, 2007; Addisu, 2010; Amare & Tamachew, 2002).

Though there were empirical evidences on the current status of TVET in different parts of the country, no studies were conducted in the area of practical skills acquisition of graduates of BunnoBedelle TVET institutions. In this zone there was only one TVET college before 2011. Now there are four colleges in the zone. Though 1118 are enrolled in these TVET colleges, only 405 graduated between the years 2014- 2016 from 5 departments: Agriculture, IT (information technology), BEI (building electrical installation), Building construction works and furniture making respectively. Hence, there were challenges observed in this zone regarding TVET Institutions such as high dropout, problems of light to perform practical teaching, inadequate parental supports, low provision of updated materials or equipment, employability of TVET graduates, poor apprenticeship, absence of training need assessment and other related problems. Therefore, this study explores the status and challenges of practical skill acquisition of TVET graduates in BunnoBedelle Zone of Oromia regional states.

1.2. Statement of the Problem

Goel (2010) stated that practical skills and knowledge are most significant elements of the social development of any nation and thus play vital role in economic growth of a country and also it is the leading cause to sustainable development. However, at present most TVET graduates in Ethiopia do not meet the expectations of the service and production sectors. This is due to three reasons: TVET concentrates on institution-based training; further training and continuous upgrading for the existing workforce are only partially in place. A meaningful structure for steady adaptation to workforce demand and life-long learning is still missing and Ongoing formal and informal non-public and private company-based training is closer to people and to the world of work (ESDP, 2010).

The quality of TVET of Ethiopia in practical skills acquisition is remain poor because the co-operation of industries and companies were very low to realize the 70 % of teaching practical skill (Federal TVET, 2016). The other study conducted by Tolla (2016) show that the implementation of cooperative training in technical and vocational education and training colleges of Oromia was weak.

To reverse this, the industry extension as well as cooperative training performance need to be supported with a legal document and the House of Peoples representative will ratify the TVET proclamation soon (six months work evaluation report, 2016). Without this, the country risks not only missing the EFA goal, but more importantly, failing to equip its citizens to support inclusive economic growth and development objectives, exposes graduate workers for an unreliable work made them reliance (EFA National Review, 2015).

Ethiopia has committed in promoting TVET education MoE (2010). The numbers of TVET institutions in Ethiopia are 825 having the enrolment of 717,603 students, with 15,943 teachers whereas graduated students from these colleges were 5803 in the same way in Oromia regional state the total enrolment of students were 45593 up to 2015 academic year. Among these students, graduates were 23598. This indicates graduates are very less. The training has not been offered as per the strategy that is 30 per cent of the content of the training at the training institution and 70 per cent at the industry with a kind of internship training with practical.

Ontopof this, trained trainers turn over to the industry is remained unsolved and unhappily TVET policy has not yet ratified to solve the existing problems (MoE TVET report, 2016).

However, recently firms and researches have some reservations on the quality of recent TVET graduates in Ethiopia (Amare and Tamachew, 2002). MoE (2005) reported employers are dissatisfied with recent TVET graduates due to lack of practical skill. Similarly research done by Betelhem (2007) in her master's thesis pointed out that the TVET institution programs are not responsive to the requirement of the labor market and world of work. Furthermore, an assessment conducted by MoE (2008) indicated that TVET institutions lack effectiveness and efficiency and in turn many TVET graduates were remaining unemployed. This report also added that TVET trainers were short of capacity and competency to implement new strategy of TVET and lack of practical work experiences to expose the trainees to practical training were among the chronic problems. Furthermore, Beshir (2007) conducted a research on the factors which affects the employment of TVET graduate in East showa, and mainly identified that there was a gap between competencies acquired at TVET and requirements of the employers.

In addition Addisu (2010) studied practices of government TVET in implementing labor-driven programs in Addis Abeba city administration, and came up with the findings that there was a provision of TVET program without assessing labor market requirement and the situations leads to poor employment opportunities and wastage of resources. Again, in the same area of study Teferi (2015) conducted a study on occupational standards of government TVET colleges and revealed that occupational competency assessment did not create real change due to different reason. These empirical evidences are clear indicator that the training programs fail to address the requirements of the employers.

Despite the various interventions to ensure that technical institute graduates are well equipped with the requisite practical skills for the job market and the campaign about the benefits of technical and vocational education, but it has not attracted the youth in the region to move into technical and vocational training at all, because of most technical graduates have not been able to enter into employment in their respective fields of training and even graduates those are employed in different sectors weren't well performed satisfactory work as practically observed in Beno Bedelle zone. Therefore, the study aimed at addressing in scientific methods

those challenges confronting TVET graduates in practical skills acquisition in the Bunnoo Bedelle Zone as report indicated lack of practical skills training of graduates and TVET instructors. Hence, the study answered the following basic questions:

1. What are the internal challenges of TVET Institution provide graduates to acquire practical skills?
2. What are the external factors that hamper TVET institution to provide practical skills training ?
3. What should be done to alleviate the challenges of TVET's graduates in practical skills acquisitions?

1.3. Objectives of the Study

1.3.1. General Objective

The general objective of the study was to identify the major challenges that hindered the practical skills acquisitions in the TVET institution and out of the TVET institutions in BunnoBedelle Zone OromiaRegional State.

1.3.2. Specific Objectives

Specifically the study was endeavored:

- 1) To describe The Internal challenges of TVET Institution in providing graduates to acquire practical skills
- 2) To defineThe external factors that hamper TVETInstitution in providing graduates with practical skills.
- 3) To describe the challenges related to teachers/ Instructors in teaching practical skills.
- 4) To describe the remedies to alleviate the challenges of TVET institutions in practical skills acquisitions.

1.4. Significance of the Study

It is known that the practical skills acquisitions prepare graduates for the world of work and makes them creative, self-employed and use the information from their environments and other resources to make a better life for themselves, families and society. Based on this notion assessing the challenges of TVET institutions on practical skills acquisitions and identifying the major factors that hinder or facilitate the application of practical skills acquisitions is very important.

. Therefore, the result of this study may have the following implications:

- It will enable the concerned TVET officials and teachers to gain valuable information on the actual practical skills training and application of practical skill acquisitions.
- it also helps the available TVET institutions to draw practical institutional decisions and for further planning and management of the program and used as source of information to set effective skill acquisition strategies of TVET students.

1.5. The scope of the Study

The concern of this study is to point out some of the major problems that make Technical and Vocational Education and Training graduates failed to acquire relevant practical skills in their field of study. To make the study manageable the student researcher had decided to delimit the study on public TVET institutions which are found in BunnoBedelle Zoe. Namely Bedelle poly technic school which is found in Bedelle, Didessa TVET college located in Didessaworeda Dembi, Choraand Dega TVET College which is found in Dega Woreda. Furthermore, from graduates (trainees) those who participated in the study were under regular who graduated from above mentioned institutions between the years 2014-2016, up on completion of their level 10 +1 and 10 +2 program. The reason researcher decided to conduct this study in this zone due to long time work experiences in selected zone then, researcher can easily communicate with concerned respondents and manage the study than others area. This study mainly focus in only five departments: Agriculture, Information Technology, Building Electrical Installation, Building construction works and furniture making respectively.

1.6. Limitations of the Study

The researcher faced some challenges including: lack of research studies and availability of sufficient current literature on the topic particularly in Bunno Bedelle Zone., due to the limitation of meeting time it was difficult to get the interviewees in time. The other problems that the researcher encountered were Reluctance of some trainers to fill out the questioners. They complain that “many researches have been conducted but no progress”. Finally, the other limitation was obtaining of respondents answering on time especially those respondents selected through snowball sampling technique. However, the researcher managed these limitations with continuous follow up and negotiation.

1.7. Definition Of Terms

The following technical terms were used in this paper as defined here under:

TVET: the term TVET combines theory and practice elements of education, such as specific calculation, knowledge about certain materials, working methods and also practical training through instruction in the workshop of an institution or practical work in an enterprise (MOE, 2002), viewed as a tool for productivity enhancement and poverty reduction in the given area. In addition TVET is the sources of different skills. Occupational skills and job skills (African Union, 2007) as cited in Masresh, 2004. Most recently, the Federal Republic of Nigeria (FRN, 2013) defined (TVET) as a comprehensive term referring to those aspects of educational process involving, the study of technologies and related sciences, the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life in addition to general education.

Skill: Ability to perform a given work in the specialization of field. It allows a person to complete a designated task in a real. (African Union, 2007) run escape.

Apprenticeship: Employer based or in company training. Formal apprenticeship training refers to structured and recognized in company training schemes, which lead to formal certificate. The term informal or traditional apprenticeship is used to describe an informal learning situation in the business sectors (MoE, 2005)

Labor market: interaction between demand for and supply of labor. Employers and work places in need of apparently skilled and qualified workers represent the demand side and workers with their specific competences the supply side of the labor Market. Hence, labor market demands may emerge from skills needs in companies as well as from workers, school leavers and other supplies of labor in need of building occupational competences (MoE, 2006)

Stakeholders : All role players at different levels in the TVET system including training providers, Training institutions, Trainers, Employers (trade union), Trainees, parents, policy makers (Government), NGOS and other institutions involved (MoE, 2005).

TVET institution: Location and Organizational set up in which Technical and vocational Education and training is supplied (MoE ,2006,P.50).

1.8. Organization of the study

The organization part of this research is consists of five main parts .The first part of study , consists of the background of the study, statement of the problem, objectives of the study, significance of the study, scope of the study, operational definition of key terms and organization of the study.

The second chapter deals with review of related literature. The third chapter is concerned with research design and methodology. The fourth chapter contains the presentation and analysis of the data. The final chapter presents the summary, conclusion and recommendation of the study.

CHAPTER TWO

Review of Related Literature

2.1. Overviews of Technical and Vocational education and Training

There are various contemporary definitions given to the term “Technical, Vocational Education and Training” (TVET) , UNESCO (2009) , viewed (TVET) as learning, aims at developing skills in the practice of certain trades, as well as learning, aims at preparing students for entry into the labor market in general. The organization maintained that in both cases, learning may be geared towards direct access to the labor market or lay the foundation for access to higher education and training with joining specific trades in view. The organization added that TVET encompasses programs that provide participants with skills, knowledge and aptitudes that enable them to engage in productive work, adapt to rapidly changing labor markets and economies, and participate as responsible citizens in their respective societies.

Most recently, the Federal Republic of Nigeria (FRN, 2013) defined (TVET) as a comprehensive term is referring to those aspects of educational process involving, the study of technologies and related sciences, the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life in addition to general education. FRN (2013) listed the goals of (TVET) to include among others: provision of trained manpower in the areas of applied sciences, technology, business, advanced craft as well as providing training and related skills for self-reliant and employment. Indeed, (TVET) is a potent means for fast-tracking technological progress, citizens’ capacities, economic growth and national development (Akhuemonkhan&Raimi, 2013). It is designed to train skilled and entrepreneurial workforces that are needed to create wealth that would help reduce the menace of poverty and unemployment (Maigida, 2014).

According to UNESCO (2006), (TVET) is classified into three categories: formal, non-formal and informal TVET. Formal TVET refers to organized vocational education programs provided within an approved public or private educational or training institution and it is structured (in terms of curriculum, learning objectives and learning time) in such a way that it constitutes a

continuous “ladder” where one level leads to the next and finally leads to certification. In a nutshell, formal TVET covers vocational education programs provided within approved public institutions. It is intentional from the learner’s perspective, it is school based, it has a rigid curriculum, and the entry qualifications of trainees are fixed. Moreover, teachers in the formal TVET delivery system are required to be trained technical teachers with relevant vocational teachers ‘qualifications.

Non-formal TVET is the type of vocational education and training which takes place outside the formal school system either on a regular or intermittent basis. It has the advantage of a short-term training period; it is occupation-specific; the main emphasis is on the acquisition of practical skills for self-reliance or direct employment in a related field. For this reason, skilled craftsmen with some pedagogical training may be engaged as instructors.

Informal TVET is the type of vocational education that is provided by craftsmen of different trades in the informal sector of the economy. It is more appropriately often referred to as vocational training or experience based learning and is usually carried out in form of apprenticeship system. Thus, the informal TVET is characterized by the non-existence of any curriculum or structure as there is no well-designed scheme and the method of training is not always sequential. The master craftsman decides out of his experience what the apprentice should learn.

TVET is the institution provides training on market oriented programs based on the demand of industry for various target groups such as graduates of Grade 10 as well as school leavers, people who are in employment, school drop outs, and marginalized groups in the labor market. As was been stipulated in ESDP IV, the main objective of TVET sub-sector is to train middle level human power and transfer demanded technologies and by doing so to contribute to GTP as well as towards the realization the country’s vision of becoming a middle income country (EFA,2015).

Technical and vocational education and training is defined as the source of practical skill acquisition and knowledge forth world of work and the place where practical competencies, know-how, and attitudes necessary to perform a trade or occupation in the labor market (ADB ,2009).

Lauglo and Lillis (1988) posited that TVET leads to ‘specific human capital and has the advantage of imparting specific job-relevant skills which make the worker more readily suitable for a given job and more productive. One of the important components of HD is the technical vocational education and training (TVET) that is gaining tremendous popularity in recent literature. Finch and Crunkilton (1999) refer this subject to education and training that prepares people for an employment and makes them more productive in various economic fields.

Mclean and David (2009) refer to TVET as the attainment of knowledge and skills to enhance opportunities for socioeconomic development in consonance with rapidly changing work environment. Uwaifo (2010) spells out TVET as the training of technical personnel who are in lead to initiate, facilitate and implement the technological development. The goal of TVET is quite plausible in the sense that it equips people not only with technical and vocational skills, but with a wide range of awareness that are obligatory for meaningful participation in working place and daily life.

Jallah (2004) opines that TVET is a “*master key*” for sustainable development and plays significant role in Education for Sustainable Development by producing artisans, craftspeople, or journeymen who have acquired the full qualifications to perform a recognized trade or occupation and Technicians have acquired both the general theoretical principles and relative practical understanding, or high level mastery of technique, in a technological field.. Therefore in current global scenario, the TVET is one of the key strategic options for the development of education in all sets of countries.

2.2. Important of TVET/Skills Development

At its simplest, practical skills development is important for two reasons: it helps raise productivity (and consequently incomes), and it helps reduce poverty. The two, of course, are interrelated. TVET contributes to economic growth and competitiveness by enhancing productivity—individual, enterprise, and national.

The benefits to societies from higher individual and enterprise productivity manifest themselves in increased competitiveness and employment, or in a shift of employment from low to higher productivity sectors. Skills development makes up a vital ingredient in productivity growth, but

it is only one of several factors necessary for productivity growth. Skills development alone cannot raise enterprise and national productivity. By the same token, other factors and policies are insufficient if they are implemented in isolation of skills. Skills are critical in the structural adjustment of economies. Economic development at its most basic is a process of structural adjustment.

As economies move from relative dependence on agricultural production to the manufacturing and service industries, workers and enterprises must be able to learn new technical, entrepreneurial, and social skills. Inability to learn new skills because of lack of opportunity slows the transfer of all factors of production from lower to higher value-added activities. In the long term, productivity is the main determinant of income growth. Productivity gains increase real income in the economy, which can be distributed through higher wages. A low-wage, low-skill development strategy is unsustainable in the long term and incompatible with poverty reduction. Investment in education and skills helps to “pivot” an economy towards higher value-added activities and dynamic growth sectors (ILO, 2008a, p. 3).

Four factors explain the increased practical skill demands in both advanced and developing Countries: Physical capital and human capital skills are complementary. Increased investment in physical capital across countries is partly a function of absorptive capacity, which in turn depends on the availability of human capital and other institutional factors. First New technologies are knowledge and skill intensive. Technological change therefore shifts the relative demand toward skills in the labor force. Specifically, strong associations exist between the use of new information and communication technology (ICT) and the rise in skill and educational requirements. Second Increased competition and the introduction of ICT have prompted many firms to undertake fundamental changes in their internal organization and work practices. New forms of work organization require greater responsibility and skills from the workforce, including problem-solving and communications skills as well as multitasking. Third trade openness causes a demand shift in skills through induced capital deepening or technological change.

In short, the practical skill level of the workforce provided by TVET provides the cutting edge for successful competition in the global economy. Alternatively, skill shortages hinder productivity,

increase wages, and often require expatriate labor. An increase in the demand for skilled workers as a result of trade openness, technological change, and changes in work organization can translate into greater income inequalities when and where skills are in short supply. However, increased wage premiums provide greater incentives to individuals to invest in education and skills development and thus support the virtuous circle of technology and skill upgrading from the supply side of skill accumulation (Johanson, 2004).

2.3. Role of Practical Skills Development in Poverty Reduction

Skills development is an important instrument for those in the informal economy to raise their productivity, production, and incomes. Acquiring the right skills can reduce poverty. Human capital development is a vital step toward proper growth. Investing in the productivity and skills of people is essential to raise the incomes of economically vulnerable groups and to reduce poverty. Basic education is not enough to prepare people for sustainable livelihoods. Skills development is an essential ingredient in creating capacities for increased income generation and for poverty reduction. Basic education and skills development are not alternatives: they should be complementary.

As Asian development Bank, overall strategy features “inclusive economic growth” ensuring that the disadvantaged and impoverished have access to participate in, and to benefit from, economic growth through, among other things, investments in education and training. (ADB, 2008d, p. 11). “Investments in and access to education and vocational training are necessary for more inclusive growth.... ADB will increasingly direct its attention to expanded, more accessible...and high quality technical and vocational education and training” In short, TVET is an avenue to close skills gaps and to increase productivity and incomes for the individual (in both the formal and informal economies), for enterprises, and for the economy as a whole “Productivity is a relationship between outputs and inputs (ADB, 2008d, p. 20).

It rises when an increase in output occurs with a less than proportionate increase in inputs, or when the same output is produced with fewer inputs....Productivity can be measured either in terms of all factors of production combined (total factor productivity) or in terms of labor productivity, which is defined as output per unit of labor input, measured either in terms of the

number of persons employed or the number of hours worked” (ILO, 2008b, pp.1–2). Productivity improvements can also be understood at different levels. The productivity of individuals may be reflected in employment rates, wage rates, stability of employment, job satisfaction, or employability across jobs or industries.

Productivity of enterprises, in addition to output per worker, may be measured by market share and export performance. An increase in productivity at any level can be attributed to various factors, for example, new capital equipment, organizational changes, or new skills learned on or off the job. Productivity is affected by factors at the individual level such as health, education, training, core skills, and experience; by factors at the enterprise level such as management, investment in plant and equipment, and occupational safety and health; and by factors at the national level such as supportive national macroeconomic and competition policies, economic growth strategies, policies to maintain a sustainable business environment, and public investments in infrastructure and education. (ILO, 2008b, pp. 5–6)

Being in these views, it is not difficult to estimate the importance of practical skill development. All countries invest in TVET in fact, correlations indicate that the higher the level of country income, generally the higher the proportion of students enrolled in TVET institutions (ADB 2008). They must know something. Successful countries have invested heavily in skills development as a key instrument for growth e.g., policy-led development as in the Asian Tigers Republic of Korea; Singapore; Taipei, China; etc. (Ashton et al., 1999).

Moreover, practical skill development is not only for trainees benefits. Society benefits as well from a skilled workforce (for example, a sufficient critical Mass skills pool can attract foreign investment, as in Republic of Korea and Taipei, China). Well-trained workers teach good skills and discipline to their colleagues. Contrariwise, poorly trained workers teach bad habits, perpetuating the inadequate quality of the workforce (Castro, 2009).

2.4. The German Model

The German system is popular for its “dual apprenticeship system, focusing on center-based training and enterprise-based training system. It is an outcome of corporate culture of the German which is a traditional pattern of apprenticeship. It covers one day per week of theoretical

training by public vocational training centers and four days of practical training provided in-enterprise. An average of three-and-a-half years of formal training is provided to the apprentices by an enterprise under an employment contract.

The trainer is supervised by a certified master. A fixed allowance is also given by the enterprise to the apprentices that are covered under the agreement and a nationally recognized diploma is given to the graduates after the completion of each type of training within the prescribed period of time. The turnover remains about 70% of school leavers in Germany and usually very few quit from this training once enter into the "Contract". The diploma serves the purpose for qualifying the apprentices to get the right of entry into more advanced levels of training.

Notwithstanding, the system has been criticized for overspecialization. Although, considerable consolidation took place in the 1980s and 1990s, insufficient theoretical training, and cumbersome procedures in revising training curricula. Still, the dual system is widely supported by all social sectors however high esteem for manual occupations and close coordination among employers' associations, labor unions, and public administration are prerequisite (Calloids, 1994).

2.5. The Japanese Model

In Japan, the training programs are ranged from short introductory courses for workers joining the firm to full-fledged university degrees which are organized by big enterprises. The enterprises actually conduct training programs on need basis on each skill as per requirement of the market. Although, the regular schools in Japan have an independent vocational tracks

However the main players of skill formation are the big corporations.

Japan is unique from other countries in skill formation of its workers as it keeps plentiful provision of in-service training and the training is a continuous process that continues throughout the life of the worker. A variety of courses are offered that cover immediate and specific needs of workers thus producing a work force that is committed, regimented, stretchy, and adaptable. There is a low mobility of labor due to in-plant training based on the lifetime employment commitment of large firms. Nevertheless, small and medium-sized firms are totally dependent on school based training (ILO, 1998).

2.6. The Latin American Model

Most Latin American countries focus their training Programme on working people as well as school students during their leave-period. The training centers for this specific purpose are run by autonomous training agencies that maintain close links with industry through strong representation of employers on their governing bodies. Their financing is based on a payroll tax (about 1%) paid by employers. These organizational features have enabled them to provide high quality training and respond dynamically and flexibly to changing demands of the labor market (Calloids,1994). The systems are separate from academic schools, thereby sheltering training for trades from the prejudices against manual occupations and the attractions of higher education. The training levy provides financial stability and a long-range planning horizon. Their financial and institutional arrangements have allowed the institutions to survive economic crises and fend off political interference. However, it has also allowed some to become heavily bureaucratic (ILO, 1998) nevertheless Argentina and Mexico are exceptional as they have in-built vocational school-system within their education system.

It is stated that previous TVET environment in developing countries was characterized by fragmentation and lack of coordination between the different delivery systems. And also the linkages of TVET and the world of work were weak. in promoting practical skill development the following crucial ideas are mentioned by (MoE, 2008)

2.7. Linking TVET Programs with the World of Work

Labor market-oriented technical and vocational education and training programs follow economic demand. Formal public technical and vocational education programs at the middle levels focus mainly on pre-employment training typically need to respond to the changing needs of the labor market. Strong linkages between the training system and the labor market require the government to examine its own internal structures and operations. Changes in demography, business environments, and technology are some of the factors that affect the quantitative and qualitative need of labor. The rapid changes in labor demands require TVET institutions to respond fast. Therefore, implementing of TVET programs require analysis and forecasting of labor requirements.

It is important to TVET institutions to develop realistic estimates of the demand for skilled labor and to avoid overestimating the level of skills required for entry in to various fields of

employment. The critical problem facing vocational education and technical training programs is how to relate these programs effectively and efficiently with the rapidly changing skill needs of the labor market. The answer for this critical problem lies on the collection of Labor market information (LMI).

In relation to this, vocational education, National Society for the study of education (1965) underlined that labor market information must be available, including details on type of occupational demand and available skills supply, both currently and prospective. For maximum reliability and value, the information should be drawn from, and with the cooperation of, all parts of the employer, labor, and educational community.

ILO (1991, p.87) also defined labor Market information (LMI) as “the information a free economy relies on the operate efficiently. LMI encompasses the collecting, analyzing, reporting, and publishing of information about economic conditions and trends such as the unemployment rate, job growth and wage levels. Information is also provided on the types of jobs and how they are changing, the workers available and their characteristics”.

The collection of LMI is a strategy in improving the quality of TVET. The purpose of such information is to match the provision of training with the needs of the labor market. LMI helps TVET institutions to understand and follow current labor market demand and trends to reflect and act according to industry needs and requirements lack of this decisive instrument makes training programs difficult to produce a liable projection of the labor market demand and trends to reflect and act according to industry needs and requirements lack of this decisive instrument in institution makes training programs difficult to produce a liable projection of the labor market demand and supply. “A systematic and coordinated approach of continuous labor market Monitoring (LMM) need to be developed in order to enable training providers to offer appropriate training programs in the needed skills and occupational fields, and to avoid an unnecessary duplication in the training offers” (MOE,2005,p.19).

With the proper labor market analysis, i.e., the processes whereby LMI is reviewed, manipulated, and related to other sources of information in order to identify trends, direction and related to other sources of information in order to identify trends, direction and needs of socio-economic conditions, and the corresponding response from the TVET system in terms of relevance of the

training, the unemployment and underemployment of the TVET graduates can be reduced to a great extent. Provision of TVET program without adequate LMI taking in to account makes it supply driven training which almost result in giving to many trainees the wrong (unemployable) skills, and thus result in training for unemployment, which not only is wasting students time, but also an inefficient use of government funding. However, according to The World Bank study (2008, p.54)

Formal public technical and vocational programs at the secondary level have focused mainly on pre-employment training but typically have been slow to respond to the changing needs of the labor market. Many have neglected the informal sector and have become supply driven and insulated from employers' expectations. An efficient training system is not achieved if trained persons do not use and benefit from their skills.

2.8. Relevant stakeholders in TVET Programs Delivery

In our rapidly changing technological age it seems obvious that TVET operates at the interface of different sectors of society. Preparing youngsters for the realities of earning a living is a responsibility shared by many different groups of people both inside and outside the education and training sector. It is vital to ensure that the trainees gain the best possible academic or vocational qualifications in order to provide realistic chance of succeeding in today's highly competitive job market.

The success of TVET institutions by which the heart of them centered on pre-employment programs is heavily dependent on the relationship between education employers, and social partners. According to Addis Ababa city Government TVET strategy (2005, P. 10)

In order to increase the quality and demand responsiveness of TVET in Addis Ababa, all relevant stakeholders shall be partners in all aspects of planning and implementation of TVET. Stakeholders are city government bodies and employers, the private sector including MSE, public and private training providers, the beneficiaries of training, the community, NGOs and others, appropriate arrangements have to be made establish and further develop true partnerships.

Although governments carry the primary responsibility for public technical and vocational education, in a modern market economy, it is expected that all major stakeholders must throw in

the design of the curriculum, development of standards and assessment and vilification of learners with in institutions, communities or enterprises in addressing issues of relevance. The most common problem in training is the constant mismatch between supply and demand. The supply side cover, as is well known, such sources as the various levels and fields of formal and non- formal education and training systems including TVET whereas the demand side concerns the labor market that absorbs graduates for wage or self-employment. One possible solution for this incidence is to put employers in charge of the system.

It is imperative to involve all the necessary sectors to ensure relevance and updated knowledge and availability of modern equipment and machinery for programs technical and vocational education and training. To this end, Struck (1958, p.135) briefly recommended the participation of stakeholders as: Vocational schools need community contacts. In agricultural education, there must be extensive contacts with farmers: in distribution education with distributors in home making with house wives in trade and industrial education with employers, labor unions, and workers. Parents and parents' organizations and other groups and individuals can be helpful in making the schools of maximum service.

Enterprises need to be actively involved in the theoretical land practical training of those preparing for occupations in particular sector. This relationship needs to be strengthened and formalized so that industry will assume ownership of the approach to TVET and invest in terms of continued support and on its reliance to provide with trained work force.

In this partnership educational and training institutions benefitted from the physical facilities, machinery and equipment, offered for “on-the-job” training at their premises, or assisted to equip training institutions with valuable equipment and machinery, along with providing the expertise of their specialists for technical advice on curriculum contents or the design of training programs, development of instructional material. Some specialists are also involved in part-time teaching and assist in vocational guidance, counseling, testing and evaluation. The other benefit that TVET institutions gain from this relationship is opportunities for industrial attachment for their trainees. Several studies commented the closeness between TVET institutions and employers.

Resnick and Wirt (1996) confirmed that in creating transition-to-work system employers play a role in the employment preparation for youth through the use of the work-site for contextual learning (apprenticeship), occupational training, and experience. In addition, UNESCO (2004) also briefed companies can participate both technically, through training and apprenticeship and through financing.

Linklater (1987) still stated as in many countries, cooperation between employers and education has widened in scope and begun to cover all sectors and levels of education. Representatives from firms are participating in the educational process at all stages, from primary to tertiary. This partnership also extends benefitting various enterprises from the training facilities offered by vocational and technical training institutions which provided further education and upgrading of their employers through full-time short-courses or other instructional materials developed by teaching personnel at technical and vocational educational and training.

By participating in work-based learning opportunities, employers who provided youth apprenticeship opportunities can expect to experience benefits like obtaining an expanded pool of qualified applicants, gain a direct chance to recruit and screen potential employees, evaluate potential employees in work settings prior to hiring, influence curriculum development to meet industry requirements, reduce turnover of entry-level employees, improve the quality of life and skills in the community, develop a quick, reliable source of skilled labor.

Some technical teachers and instructors are offered opportunities to participate in the research work of industrial enterprise, using their high-tech laboratories: or to work on industrial machinery in the production process so as to upgrade their knowledge and skills and keep side by side with new technological developments. From a teaching and learning perspective, placing students in the workplace also benefit them to link theory and practice, gaining work experience generally and within a particular function, gaining personal insight including job preferences, entering in to a professional role, gaining knowledge of a particular organization, exercising skills of thinking in a practical context and developing personal maturity.

2.9. TVET in Ethiopia

The main objective of the TVET sub-sector is to train middle level human power and transfer demanded technologies, and by doing so, to contribute to poverty reduction and sustainable development. In this respect, under the past ESDP I, II, and III significant achievement was made in increasing trained middle level human power. Under ESDP III, but the quality was poor and the TVET sector has not benefited from significant policy and strategy development as expected (MOE, 2005). One major milestone was the development of the nationwide TVET strategy, which stipulated that the vision for Technical and Vocational Education and Training (TVET) in Ethiopia is to create competent and self-reliant citizens and transfer of demanded technologies to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty. Furthermore, a major shift from a system based on input to outcome orientation has been done other major recent events providing policy direction were the TVET focus direction, the nationwide education conferences and the reports on capacity building and manufacturing extension. Nevertheless, the implementation of the activities foreseen in the TVET strategy is well underway (MoE, 2011).

The TVET program in Ethiopia is primarily supply driven. Even though TVET strategy stresses the importance of ensuring that TVET is flexible enough to accommodate the demand for, the allocation of students to TVET institutions, as well as the curriculum and the specialization offered are determined by government. This is in contrast to market-driven TVET systems, where the demand for particular specialization, as well as the fields of study is governed by the “invisible hand”. In the literature the appropriateness of the first versus the second approach has not been consistently settled, and the best approach may indeed depend on the particular contextual and institutional setting. In recent years, there has been considerable expansion in TVET institutions in Ethiopia, both in terms of public spending and increased provision by private institutions. Number of TVET institutions in Ethiopia is also provided by non-governmental organizations (NGOs). During this time the enrolment of students in regular, evening, summer and distance programs was 717,603 in Ethiopian TVET. The number of TVET Institutions were 825 in Ethiopia with the number of 15,943 teachers (ESDP IV).

As can be seen in the above statement, TVET has a long way to go to meet the nation's aspirations for skilled labor. Its enrollment is still low. Although the moment enrollment increased by 31.5 from the previous academic year at 371,347 (MoE, 2011), it was only a little higher than half of the target 723,062 (MOE, 2010). The target and achievement demonstrated a very significant gap in the growth of training institutions and trainers, too. While the plan was to raise the number of TVET institutions from to 888 in 2013 (MOE, 2010), it ended up with 505 institutions during the plan period (MoE, 2013). In a similar vein, the number of trainers increased by a little more than a quarter of the target (MoE, 2011). Meeting the target set for 2014/15 might face a challenge if progress continues with the same pace.

2.10. The basic TVET System Challenges in Developing Countries

2.10.1. Engaging Community as Significant Players in TVET

In order to develop a nation's economy and society in different Developing Countries, it is important to note, that in average two thirds of the population in most of the Developing Countries generally work in jobs that require a skill level which is usually associated with vocational education and training. It has been always a challenge to change the mindset of parents, the community and stakeholders about vocational education being second choice to academic education. People tend to view TVET in a negative way, as education and training meant for those who have failed in the society. Most parents (even the ones with TVET background) want to see their children becoming engineers, doctors, lawyers, etc. just because they believe this will give them better job opportunities. This challenge is vital to development of TVET and it is apparently one of the major obstacles to improve the social status of TVET.

If students who received a vocational education routinely earned better incomes than those who choose the academic route, then parents would factor this in their decision making. The challenge is to create vocational programs in Developing Countries that deliver professionally successful graduates. When we rise to this challenge, the brightest students will be fighting for a place on TVET schemes. In contrary to what is happening in Developing Countries, the employers and enterprises in most of the Developed Countries are queuing up to hire graduates of TVET programs and there are more requests from employers and enterprises each year than there are graduates. This means graduates of TVET institutions in Developed Countries earn income better than graduates from other high institutions. This in turn means parents in Developed Countries are fighting to get their children into those TVET institutions – even

though TVET institutions are normally considered to be a dead-end option for the least bright vs. regular institutions. The high status / low status debate is perhaps a false one. If employers don't value TVET graduates then there's a more fundamental problem with these TVET institutions.

Another negative image of TVET in Developing Countries is the social class. A plumber can be making as much money as an engineer but at the end of the day, he is still a plumber with a lower social status. Money does not always equal higher social status. Apparently in some circles, a university degree is still the ticket to social mobility even if it does not lead to employment or more money. How do we change that perception so that parents use a different yardstick to measure their success as parents is an important issue? This is an interesting question and part of the answer to the question is that better quality of TVET will lead to higher performance and productivity of TVET trained graduates and hence higher wages and more job chances.

2.10.2. Systematic Professional Development of Instructors / Trainers /

: Teachers There are many challenges for TVET in Developing Countries in terms of systematic professional development of instructors / trainers / teachers demands. Instructors / trainers / teachers are posed with problems on how to use new technology and keep up with teaching methods of various vocational training. This topic is one of the most important issues when dealing with Quality Assurance of TVET as one of the major objectives for TVET Reforming in Developing Countries.

2.10.3. Keeping Pace with Technological Advancements and Using Technology Appropriates in TVET

There are many challenges for establishment of appropriate infrastructures, upgrading existing material and training resources available. There is need for proper tools, equipment's to be used in vocational training and be used by instructors / trainers / teachers to keep up with the skills with changing times. Developing Countries are still overly focused on science and technology-based curricula and training programs but they need to spend as much effort on transformative critical pedagogy.

2.10.4. Encouraging Continuing TVET and Lifelong Learning

There is a challenge for putting in place a truly coherent and comprehensive continuing TVET and lifelong learning strategies in Developing Countries. Such strategies should be actively encouraged and actions at all levels of continuing TVET and lifelong learning should be developed

2.10.5. Delivering a TVET Demand Approach

Unfortunately many In-company Based and Outside-company Based TVET Institutions / Centers in Developing Countries are concentrating their efforts on “Curriculum Mandates” and “Training Programme Writing” without sufficient understanding of “Delivering a TVET Demand Approach”. TVET Institutions /Centers’ Instructors / teachers must take the time to fully appreciate and understand the practicalities of teaching and planning on the basis of a demand approach before engaging in lesson or unit writing.

Links between education and training and the employment sector should be improved through researching the needs and competences that are on demand or will be required in the future by the labor market. In this context, emphasis is to be given to the enhancement of the vocational training status and on establishing lifelong approaches, counseling and guidance to vocational training. A special interest should be given to training programs that are promoting equal opportunities, thus enabling all to have access to the labor market.

The infrastructure and systems for TVET Institutions (Institutes, Centers and Schools) in Developing Countries and the skills delivered cannot be static. The market requirements are changing with such great pace that the TVET Institutions have to be constantly in reconstruction. This is specially the case with training curricula, infrastructure, trainers’ skills, market linkages, etc. The outcome based approach in this regards seems to be the most appropriate. A TVET Institution should build its credibility by effectively training the candidates and contributing to a career development of the persons rather than act as an institution for rolling training programs.

2.10.6. Vocationalization of Higher Education in Developing Countries

Considering that workforce-development is one key-issue for the overall development of Developing Countries, it is necessary that the best brains, which usually gather in academic communities, also care for education and training at that intermediate level. There are not many Developing Countries, where “vocational disciplines” are implemented through respective academic subjects at universities. During the last few years some Developing Countries started to build up such university subjects.

Even though vocational disciplines are of such great importance to society, decision makers often are reluctant to the implementation of a high number of them because still, vocational disciplines are not regarded as full academic disciplines even in countries where they exist for a longer time. The academic communities fear to damage their high status if too many low quality subjects exist at their universities. Therefore it might be wise, not to start with a too big number of vocational disciplines, which will have to build up their own profile and thus compete with already established academic disciplines. The lack of appropriately trained TVET personnel in the Developing Countries and the rigid curriculum requirements of TVET courses and programs generally limit the ability of training providers to accept sustainable vocational education as evaluable education. Therefore such barriers provide challenges for the TVET sector in Developing Countries that should be resolved and areas where Higher Education HE can contribute should be identified.

There are some areas where HE and TVET could improve their collaboration in Developing Countries: 1) Contribution of HE sector towards re-development and interpretation of TVET Packages (Curriculum & Training Programme), 2) Contribution of HE sector towards Training of TVET Trainers / Instructors / Teachers 3) , Research and Shared Vision between HE & TVET in Contribution to Sustainable Development SD and 4) Joint development of resources and pedagogy that promotes SD and encourages a culture of sustainability in TVET. Taking consideration of the above, the TVET in Developing Countries should develop close interfaces with HE and other education sectors to facilitate seamless pathways for learners with an

emphasis on relevant work experience and allow learners to enter gainful employment or pursue HE opportunities.

2.10.7. Funding of TVET

: Studies show that, in Developing Countries, funding towards TVET is ad hoc and arbitral, TVET Institutions have been neglected or overtaken by institutions concentrating on purely academic education without any practical training (On-the-Job Training OJT).

One major constraint that TVET is facing in Developing Countries, is the limited budget and this becomes the core issue as to why TVET Institutions are not able to employ trained trainers, assessors and verifiers, support them in updating and upgrading their skills, purchase most appropriate training facilities, aids and technology for practical training (On-the-Job Training OJT) and accordingly are not able to market themselves effectively, etc.

Application of the modern training methodologies implies budgets, which may not be constant along time. During the initial stage of establishing a TVET System / Project, costs are high because the design, development, edition and validation of the full Training and Assessment Matrix take time and effort and it is a costly project. Costs go down as the TVET Institutions / Enterprises appropriate the methodologies and the models become consolidated. Another peak in costs occurs when the training materials and facilities have to be reproduced

2.11. Major Challenges of TVET in Ethiopia.

ESDP IV listed out that low awareness about the benefit of TVET, inadequate stakeholders' participation in the management and delivery of TVET, lack of capacity and competence of trainers and experts to train and implement the new TVET strategy, inadequate monitoring and evaluation systems, low capacity to adopt and transfer technology, inadequate labor market information system to assess labor market demand, weak information sharing and coordination system, shortage of teaching materials, and inefficient utilization of resources and equipment, are among the challenges facing TVET in Ethiopia. To overcome these challenges and enable the delivery to meet TVET's goal (creating "competent, motivated, adaptable and innovative workforce"), a set of strategies have been developed (ESDP IV 2010:7). The series of activities and their accomplishment periods are documented in ESDP IV. This paper attempts to analyze the progress of TVET against this governing document. Focusing on the gaps observed in the sub-sector, it pinpoints concerns that need immediate deliberations for future improvement.

2.12. Practical Skill acquisitions strategy

2.12.1. Developing Flexible TVET Delivery

Outcome-based TVET provides high flexibility in the way TVET can be delivered. In the future, individual TVET institutions can, in principle, decide how best to organize TVET to their target groups and according to occupational requirements. The new system will also facilitate the emergence of modern teaching and learning methodologies, which are learner-centred and geared towards empowering trainees to assume responsibility for their own learning. The only benchmark stipulated by the TVET system will be the outcome, i.e. the desired competences defined in the occupational standards. The TVET authorities should provide all necessary assistance to TVET providers to develop curricula and TVET programs in accordance with the needs of their target groups (EthiopianNTVET , 2008).

2.12.2. Modularization as a Principle of TVET-Delivery

Programmed should be organized in a modular fashion to meet the requirements as defined in the occupational standards. In this way, each module or combination of modules describes an employable set of competences. Successful completion of each training module shall be dependent on assessment and certification in conjunction with the assessment specifications stipulated in the occupational standards. The modularization of TVET is a central mechanism of making TVET delivery flexible and providing for flexible entry and exit points. Different TVET modules can be combined into long-term programs representing the entire teaching, training and learning necessary to achieve an occupational qualification. Through this modularization, a trainee may, for personal reasons, exit a long-term Programme prematurely while having acquired competences that would allow her/him to successfully perform certain jobs in the labour market. S/he may re-enter the TVET Programme at a later stage, continue with the missing modules and thus complete her/his qualification. Individual modules or a number of modules may also be delivered in short programs. In this case trainees either acquire an important set of competences (equivalent to a partial qualification) valuable in the labor market, and/or achieve the first steps of a potentially longer TVET career that may eventually lead to a comprehensive occupational competence. In the course of their individual career, trainees may

attend different TVET modules over time, if necessary by different providers, to finally master a comprehensive competence.

Modular TVET organization is a fairly new concept in the Ethiopian TVET environment. TVET providers need new skills to develop modularized curricula, and management skills for TVET institution managers to re-organize their training plans accordingly. The TVET executive bodies will therefore render necessary support to TVET institutes by developing curriculum guides, further training technical teachers and capacity building in the organization of modular training.

2.12.3. Cooperative TVET Delivery and Apprenticeship Training

The flexibility of TVET delivery also allows for a strengthening and further development and deepening of cooperative TVET (including apprenticeship training). Cooperative TVET is a mode of TVET provided in partnership between enterprises and TVET institutions. Usually, the bulk of practical training takes place in an enterprise, while theory and initial practical exposure is provided by the TVET institution. In more advanced TVET systems – for instance in many European countries – cooperative TVET schemes are organized as formal apprenticeship training, implying a work or apprenticeship contract between the trainee and the company.

The major advantage of apprenticeship training (and more generally cooperative TVET delivery forms) is its vicinity to the world of work. Trainees are systematically exposed to the world of work and learn the occupational practice in a real life situation. Experience shows that this leads to significantly better training outcomes, practical skills, work attitudes and theoretical comprehension of the occupational requirements. Furthermore, enterprises get to know the trainees, which often lead to employment after graduation. Through cooperative TVET schemes companies can also contribute to the further development of TVET system. Finally, apprenticeships and other forms of cooperative training tend to be more cost effective than school-based TVET, as TVET institutions need not invest in sophisticated machinery and training periods in the institutions will be shorter.

At the moment, elements of cooperative TVET are included in the formal TVET programs in the form of workplace internships of several months. This represents an important step forward in making the TVET system more relevant. However, cooperative training should be deepened to fully utilize its advantages for the TVET system. To this end, maximum flexibility is given to

TVET providers to negotiate and develop relationships with individual employers, groups of employers or business/sector associations about the organization of cooperative delivery schemes. TVET providers will also be encouraged to venture into more agreements with small companies and the micro enterprise sector as these companies represent the target labour market for a large group of trainees. As a rule, providers will have the freedom to develop cooperative TVET programs in accordance with specific needs and potentials of companies and trainees, as long as the training is oriented on the occupational standards and will enable trainees to achieve the necessary competences of a qualification or part of a qualification.

The TVET executive bodies will explore possibilities to encourage large companies and micro and small enterprises to cooperate with TVET institutions and to introduce apprenticeships, e.g. through advertising, rewarding participating companies or financial incentives.

2.12.4. TVET for Self-Employment

Self-employment represents an important route into the labor market, especially in per-urban and rural areas. However, self-employment requires more than being technically competent in a certain occupational field. In order to become successful, entrepreneurs 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, access to necessary permits and licensing, and access to land or structures to operate from.

Against this background, basic entrepreneurial and business management training will be incorporated into all relevant TVET programs. The TVET authorities will provide assistance to TVET providers to develop appropriate training packages, drawing on the magnitude of international experience in this field. TVET providers are also encouraged to consider the work environment in the local micro and small business sector when designing their training program. This includes, for example, the introduction and use of appropriate technologies and the organization of internships or cooperative training programs with micro and small enterprises. The TVET executive bodies will also undertake initiatives to strengthen and raise quality in traditional apprenticeship training, as this mode of TVET delivery is particularly effective in preparing youth for self-employment. TVET institutions shall serve as centers of technology

capability, accumulation and transfer. They shall closely cooperate with the private sector in undertaking problem-solving research programmers.

2.12.5. Training Assessment for Program Delivery

TVET is expensive and its development takes time and leadership efforts. To achieve TVET purpose using and financial and human resources efficiently, training assessment is a very practical tool. TNA is defined as the process of identifying the type of training programs should be offered that to fulfill the purpose of TVET programs (Sommers, 2002). The TNA should be based on clear understanding of the role TVET is to play in the nation's economy and educational system, and policy decision on what are driving forces for making program decisions. TNA helps to ensure that training is related to opportunity in the economy and is not wasted training resources for occupational fields where jobs will not be available or that will not bring economic growth. TNA also ensure that graduates from TVET programs will have the skills and Knowledge employers are seeking in their workers.

White et al. (1988) indicated that 'the main objective of training needs assessment and monitoring to work towards the ideal situation where the right worker is provided for the right jobs at the right place at the right time'. In matching the supply workforce from TVET providers and the demand from the labor market comprehensive information on training needs as well as the structure to collect this information on regular basis by institutions is highly important. In the absence of mechanisms to link training supply to actual demand in the labor market and without adequate on training needs, training programs needs tends to be largely supply driven. This means that programs are conditioned more by the available skills profiles of existing teachers (or lack of such skills) and rely on often obsolete training equipment and training materials. such supply driven training may result in poor employment outcomes and mean a waste of scarce training resources. To this end, According to Ritcher (1986), using need assessment and monitoring requires the building of a real partnership between man power planners and vocational training planners '.

TVET Quality

There are as many theories of quality as there are writers. These different views of quality are often confusing and contradictory (Amare, 2005, P. 2). For instance, Middlehurst (1997, P. 46) viewed quality as a spectrum between two polar establishing acceptable criteria and standards of good performance. This definition focuses on performance-based and accepted criteria. Inputs, processes and outputs are the major educational elements to address quality issues. The relationship between inputs and outputs is influenced by various factors, and processes and outputs are also numerous and complex. However, quality in higher education is divergent and controversial. The definition given by Mosha (1998, P.38) is that quality in higher education is the level of excellence in performance which can be measured by establishing acceptable criteria and standards of good performance. This definition focuses on performancebased and accepted criteria. Inputs, processes and outputs are the major educational elements to address quality issues. The relationship between inputs and outputs is influenced by various factors and processes and outputs are also numerous and complex. Today, nobody questions the importance of quality. Assuring and enhancing the quality of teaching and learning in higher education is a major objective.

In an attempt to address TVET Education, Reddan and Harrison (2010) argued that TVET institutions need to restructure their programmes to increase quality and to be responsive to the needs of the job market, especially the industry. To achieve this goal, TVET curricula must focus on outcomes in terms of the skills, knowledge and attitudes required industry. That is, TVET provision should be responsive to the demands of industry. TVET institutions, according to Atchoarena and Esquire (2002), continued to attract a great deal of criticism.

First, they were unable to train skilled workers to meet the requirements of enterprises and were unaware of the need for continuing education. Second, they were extremely costly. Often, the graduates of these institutions joined the ranks of the unemployed, an indication that the training provided did not match the jobs available. In many countries, including Ethiopia, public TVET institutions have not been able to adapt to the new structure of the labor market and the new skill requirements of companies in both the formal and informal sectors. Quality is a crucial challenge of the Era at higher education level: due to the rapid expansion of this sub sector, there is now an increased need to focus on quality improvement with regard to human and material resources as well as reform processes. Regarding TVET Quality Notwithstanding major investments in

improving the numbers and the qualifications of teachers and the availability of equipment, student achievement has not sufficiently improved. The gains in access are of little meaning if they are not accompanied by improved student learning. If students do not acquire significant knowledge and skills, Ethiopia will not be able to compete within a global economy. It is necessary therefore to shift attention to quality concerns in general and to those inputs and processes which translate more directly into improved student learning and which help change the school into a genuine learning environment (such as: quality-focused school supervision, internal (ESDP IV).It is also verified by different researchers the quality education TVET is under questions.

Amare and Temechegn (2002, P. 27) pointed out that the profile of graduates from different training programs had come under attack by employers and researchers. They added that graduates who may be taken as problem solving ones were rarely observed in the Ethiopian context. As a solution to this problem, Zenawi (2007,P.54) suggested that higher education, including TVET institutions, in Ethiopia needs to have an acceptable quality assurance system to evaluate whether they are working towards achieving their main objectives of producing qualified professionals for the workplace. In addition, Ahmed (July, 2007, P. 83) indicated that a considerable number of graduates remained unemployed and were reluctant to see self-employment as an alternative. This is due to the competency that the trainees acquired during the training and the colleges produce trainees that could not satisfy the market demand.

To produce the manpower the country needs, the Ethiopian government established and organized a number of technical and vocational training institutions throughout the country. Also the number of TVET graduates increases year by year, the quality of training being provided and the competency of graduates from the institutes have not met the expectations of employers or the general public. The institutes have not been able to satisfy the skilled manpower demands of the labor market since they began offering training in 2001/2002 in line with the 1994 Education and Training policy of Ethiopia. This mainly seems to have been a result of the quality and type of training offered and it is not unusual for graduates of these institutes to be roaming the streets of the capital out of work (MOE, 2007, P.11).

The fact that large numbers of young people are graduating from these institutions only to swell the ranks of the unemployed suggests there is a need to isolate the causes of these problems and

seek solutions before they worsen and start challenging the very existence of the training institutions. The question of quality has now become a burning issue in the Ethiopian technical and vocational training system. If training institutions cannot provide the quality training that produces competent young graduates, and if the training provided cannot equip trainees with marketable skills, then TVET institutes in Ethiopia might no longer be accepted by society, thereby endangering the country's overall education system (Evaluation EFA goal , 2015).

2.12.6. Apprenticeship-based TVET system

Apprenticeship is the back bone of TVET institution And TVET provision in different countries differs by the amount of time spent in the classroom gaining general skills, versus time spent in the enterprises gaining job-specific skills. In German-style “dual” system the theory is taught in educational institutions and practical skills are acquired through the apprenticeship in a company. The German system has long been admired internationally. It is typically observed that such a system is correlated with lower rate of youth unemployment. This correlation need not be because of the causal link from the type of system to the employability of the graduates, but it is often interpreted to have such a causal link. Few countries have been able to successfully emulate the German system, notably Switzerland, Austria and Denmark (Piopiunik& Ryan, 2012).

The challenge in implementing the dual system is that a company has to be convinced that participating in the apprenticeship scheme is ultimately to its own benefit. In reality, the firm may resist the apprenticeship arrangement because training is expensive. Trainees need to be supervised and have to operate expensive equipment. In addition, trainees may be poached by other employers after they graduate. This presents a classic coordination problem, where every firm could possibly benefit if the entire labor force is more skilled as a result of the training. However every firm prefers that the training is done by somebody else. Therefore the total amount of training offered is less than socially optimal. Coordination problems of this type are of course at least part of the justification why separate TVET institutions exist, as opposed to the training being done by the employer. Institutional or public provision of TVET attempts to tackle this coordination problem, but cannot entirely escape it if the firm based training is desired – the coordination problem re-emerges in a different guise. German-style dual programs demand very strong participation by employers.

In practice, German apprenticeship involves four major sponsoring parties – the employer, the public authority, the trainee and the trade union (Streeck, Hilbert, van kevelaer, Maier, &Wber, 1987). German apprenticeship system is a descendant of the mediaeval institution of apprenticeship within the merchant guilds. It appears that in Germany the institutions have emerged that are able to solve the coordination problems that are inherent in the cooperative training arrangements. For an in-depth discussion on the economics of the apprenticeship systems, as well as the policy debate on school based versus apprenticeship based training, refer to (Smith &Stromback, 2001).

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This chapter consisted of research design, research method, target population and source of data, sample and sampling techniques, instruments and data collection, method of data analysis, and ethical consideration.

3.1. Research Design

Research designs are plans and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2011). In supporting this idea, Creswell and Plano (2011, p.168) defined “a research design as the scheme, outline or a plan that is used to generate answer to research problems.” Accordingly, the researcher adopted a cross sectional survey research design. Under this design, more quantitative methods were used. A cross sectional design was considered ideal given the limited time in which the study was conducted on time .

3.2. Research Method

The method employed in this research was both quantitative and qualitative methods. As rated by Creswell (2011) mixed method approach has particular importance to come up with well validated and substantiated finding as a matter of the fact that the weakness of one approach is recovered by strength of other approach. Since, the research was survey method; it more emphasizes quantitative research approach. Moreover, the qualitative approach was employed and incorporated in the study.

3.3. Sources of Data

The study was used a primary source of data. Hence, the data were collected from TVET teachers, graduates of (2014-2016), deans of college, heads of civil service & micro enterprise coordinators.

3.4. Population, Sample and Sampling Techniques

The Target Population of this study was BunnoBedelle TVET institutions. These include 4 government TVET colleges namely (Bedelle poly Technic, Didessa TVET College, Chora TVET College and Degga TVET College) that provide the formal training from level 1 to 4.

The study was used various sampling techniques. Accordingly, TVET colleges were selected by using purposive sampling technique. The instructors from each college were selected by using a census sampling technique because of manageable in size that means from total, 112 (109). Snowball sampling technique was employed graduates of total 405 (2014-2016) 55 because of they were scattered in the world of work, and majority of them are unemployed. Those graduates 42 of them were maintained their own enterprises in different firms and construction sector and 13 graduates were employed in different government's sectors.

The other samples for qualitative data (interview) are College Deans, Civil service heads and micro enterprise coordinators which are selected by using purposive sample technique and totally, 10 respondents (*Bedelleworeda, Didessa Woreda and Gechi Woreda*) were participated in the study. Generally, from 527 target population 174 (32.4%) respondents were participated in study. Generally sampling techniques were precisely summarized in table 1.

Table 1. Sample Sizes and Sampling Techniques

	Name of TVET College	Wereda	TVET instructors		Graduates		College Deans		Civil service heads		micro enterprise		Total population	Total Sample
			total teachers	Sample TVET teachers	Total	Sample	Total	Sample	Total	Sample	Total	Sample		
1	Bedelle	Bedelle	82	79	184	31	1	1	1	1	1	1	269	113
2	Didessa	Didessa	12	12	111	12	1	1	1	1	1	1	126	27
3	Chora	Chora	6	6	0	0	1	1	1	1	1	1	9	9
4	Degga	Dega	12	12	110	12	1	1	-	-	-	-	123	25
Total			112	109	405	55	4	4	3	3	3	3	527	174
Sampling Technique	Purposive		97.3% Census Method		13.6% Snowball		Purposive Sample Technique						32.4%	

3.5. Instruments of Data Collection

3.5.1. Questionnaires

Questionnaires were developed based on the basic questions under study to collect data from sample respondents. Closed ended and open-ended questionnaire was prepared for both trainers and graduates. The questionnaires were originally constructed in English language because it was not a major problem for respondents and the medium of instruction and their level of qualification at the TVET institutions.

3.5.2. Interview

The researcher was conducting interviews with 4 TVET deans, 3 human resource managers and 3 coordinators of small and micro enterprises. Interview was conducted to collect more supplementary opinion from deans, employers and Small and micro enterprise coordinators, so as to substantiate the responses obtained by questionnaire. A semi-structure and self-developed interview was employed, because this type of interview allows for more flexibility and new question can be forwarded (Kothari, 2005).

3.6. Methods of Data Analysis

Depending on the nature of the data collected and the type of questions asked, the following statistical tools were used. Respondents were grouped in two categories, i.e. the teachers, and graduates. The purpose of this grouping was to make comparison among group of respondents on the major challenges that hindered the practical skills acquisitions in the TVET institution and out of the TVET institutions in Bunno Bedelle Zone Oromia Regional State. The quantitative data was analyzed using SPSS version 20 through descriptive statistics (percent, mean and standard deviation) and inferential statistics (t-test) was measured a significance difference of respondent's opinion and the qualitative data was analyzed by explaining and interpretation of their ideas

3.7. Validity and reliability checks

The validity and reliability of this research was checked by pilot study. However, before conducting the main study, the draft questionnaires were first administered to 10 teachers and 6 graduates were participated in pilot study. These three *districts* which was not part of the study sample. It was done to achieve the relevance of the questionnaires and to improve the questions based on the feedback. Based on the pilot test, the reliability coefficient of the instrument was found to be 0.71 to 0.96 for all items. Hence, it was reliable because the alpha reliability

indicates that the scale showed good and very good reliability and this confirmed an alpha of 0.70 or above is considered as satisfactory (Howitt & Cramer, 2008). In short this was summarized in Table 2.

Table 2. Inter- reliability of Cronbach's alpha results

Generally, the pilot test result did not show any defect on the developed questionnaires. Hence, only few amendments were made on some questions before the main study was conducted and

	Cronbach's alpha results	Items
The internal challenges TVET graduates to acquire practical skills	0.72	7
The external challenges that hamper TVET graduates acquisitions of practical skills	0.79	5
Challenges related to trainees (Graduates)	0.71	10
The practices of teachers/ Instructors with collaboration TVET institution to alleviate the Challenges to acquire the necessary practical skills	0.80	8
The practices of TVET institution to provide the practical skills through instructional methods	0.73	10
The extent of Motivation during cooperative training for teachers and graduates	0.75	7
Challenges of Related to teaching materials	0.82	9
Challenges related to implementation of cooperative training	0.96	10
Total	0.79	66

preceded to the main study.

CHAPTER FOUR

PRESENTATIONS, ANALYSIS AND DISCUSSION OF DATA

This chapter consists of the characteristics of the respondents and analysis and interpretation of the data.

4.1. Characteristics of The Respondents

This part of the analysis was to assess the characteristics of the respondents' in TVET institutions in Bunno Bedelle Zone Oromia Regional State. To this end, the characteristics of the respondents have been presented by sex, age, qualification and work experience as follows:

Table 3 .General Characteristics of respondents

Items	Instructors=109		Graduates=55		
		N	%	N	%
Sex	Male	103	94.5	48	87.3
	Female	6	5.5	7	12.7
	Total	109	100.0	55	100
Age	< 20	10	9.1	5	9
	21-30	90	82.6	42	76.4
	31-40	9	8.3	5	9
	>40	-	-	3	5.6
	Total	109	100.0	55	100
Qualification	BA/ BSC	1	0.9	-	-
	MA / MSC	-	-	-	-
	Level	108	99.1	55	100
	Others	-	-	-	-
	Total	109	100.0	-	-
Work experiences	1-5	98	89.9	44	80
	6-10	9	8.3	11	20
	Above 10	2	1.8	-	-
	Total	109	100.0	55	100

As it shown in table 3, regarding sex wise of instructors, the majority of the respondents were males 103 (94.5%) and only 6 (5.5%) were females. Next concerning age wise, the majority of the respondents' age 90(82.6%) ranged 21-30yrs and the reaming 13(7.9%), were ranged less than 20yrs and 98.3% were ranged 31-40 yrs. Regarding educational qualification, almost all of respondents' had level 1-4 graduated 108 (99.1%) and only 1 (0.9%) was BSC degree holder. Concerning work experiences similar to the results of qualification almost all respondents' 98(89.9%) of work experiences was range 1-5 yr. and the reaming 6-10yrs 9(8.3%), and 2(1.8) above 10yr respectively.

Similarly, regarding sex wise graduates, the majority of the respondents 48 (87.3%) were males and only 7 (12.7%) were females. Next concerning age wise, the majority of the respondents' age 42 (76.4%) ranged 21-30 yrs and 5 (9%) were ranged less than 20 yrs and 5 (9%) were ranged 31-40 yrs. The remaining 3 (5.6%) were ranged above 40 yrs.

Regarding educational qualification, all respondents' were level graduated 55 (100%) and concerning work experiences the majority of respondents' 44 (80%) of work experiences was range 1-5 yrs. and the remaining respondents were ranged 6-10 yrs 11 (20%), respectively.

Table4. Challenges related to teaching strategy (Internal Challenge)

Items	Current position	N	M	SD
1. During practical teaching trainers use much more practical than explanations (lecture method)	Teachers	109	1.66	0.670
	Graduates	55	1.60	.735
2. While teaching the instructors use problem solving method.	Teachers	109	1.78	0.750
	Graduates	55	2.20	0.621
3. During teaching instructors use discovery methods	Teachers	109	1.51	0.765
	Graduates	55	1.64	0.754
4. During practical teaching instructors use inquiry methods	Teachers	109	2.08	0.783
	Graduates	55	2.24	0.860
5. During practical teaching instructors use project methods	Teachers	109	1.51	.765
	Graduates	55	1.64	.754
6. During practical skill training instructors involve group working	Teachers	109	2.08	.783
	Graduates	55	2.24	.860
7. During practical skill training instructors use role playing methods to attract their attentions	Teachers	109	2.06	1.416
	Graduates	55	2.60	1.422
Overall average		164	1.91	0.852

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, $2.51-2.74$ = disagree, $2.75-3.50$ = undecided, $3.51-3.99$ = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated.

As depicted in table 4 among the seven items, the teachers and graduates were rated lowest/disagree/in all items regarding the challenges related to teaching practical skill strategy with mean and standard deviation 1.66(0.670),1.60(.735),1.78(0.750),2.20(0.621),1.51(0.765),1.64(0.754),2.08(0.783),2.24(0.860),1.51(.765),1.64(.754),2.08(0.783),2.24(.860),2.06(1.416), &2.60(1.422) respectively. During practical teaching trainers use much more piratical than explanations (lecture method), while teaching the instructors use problem solving method, during teaching instructors use discovery methods, during practical teaching instructors use inquiry methods, during practical teaching instructors use project methods, during practical skill training instructors involve group working, during practical skill training instructors use role playing methods to attract their attentions.

Generally, as shown in the table4, TVET institution has very low activities in performing practical skills teaching strategies to provide graduates to acquire practical skills with mean and

standard deviation 1.91 (0.852). This indicates that less technical proficiency and less experiences of instructors, this research finding has concurrence with the view of Desalegn (2014) who posited in his finding that proficiency of teaching TVET staffs was not appreciated in transmitting enough knowledge to trainees and also harmony with the views of Anyakwo (2012) who stated that inadequate teaching TVET strategy and inappropriate teaching method employed. This implies that graduates were not processing adequate competencies. As Simeny, Ashenafi, Yitbarik and Tilahun responses, Most of the instructors are C levels who haven't satisfactory pre-training to manage trainees' training

Table 5. The External Factors related to planning practical skill training in cooperative training

Items			N	M	SD
1)	Lack of enterprises and local industries are participating by planning of cooperative training	Teachers	109	3.51	1.754
		Graduates	55	3.20	1.947
2)	Lack of employers participate in planning of practical skill training by setting criteria to avoid the mismatch between training and world of work	Teachers	109	4.07	1.501
		Graduates	55	4.38	1.063
3)	Enterprises and local industries participate in preparation of practical skill curriculum	Teachers	109	4.14	1.384
		Graduates	55	2.76	1.186
4)	Lack of participation in setting rules and regulations regarding cooperative training or guide line	Teachers	109	3.88	1.536
		Graduates	55	3.64	1.393
5)	Lack of availability of manufacturing companies that can provide CT in local (surroundings).	Teachers	109	3.55	1.437
		Graduates	55	3.57	1.386
Overall Average			164	3.64	1.458

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, $2.51-2.74$ = disagree, $2.75-3.50$ = undecided, $3.51-3.99$ = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated

As shown in table 5, both teachers and graduates rated at high level regarding the external factors that hamper TVET graduates acquisitions of practical skills both indicated for all items both respondents rated at high level of agreed that the problem has existed in this TVET institution that means: lack of enterprises and local industries are participating by planning of cooperative training, lack of employers participate in planning of practical skill training by setting criteria to solve the mismatch between practical training and world of work, lack of government and non-government organization were participating in planning of practical skill training by setting criteria to between practical training and world of work, lack of participation in setting rules and regulations regarding supportive training or guide line and lack of availability of manufacturing companies that can provide supportive training in local (surroundings) with mean and standard deviation ranged, 3.20(1.947) to 4.14(1.384). on item 3 graduate respondents' were undecided as the major problem of enterprises and local industries participate in preparation of practical skill curriculum with mean and standard deviation, 2.76(1.186) but teachers respondents agreed at high problems regarding this item with mean and

standard deviation 4.14 (1.384). Generally this finding is agreed with finding (2014) stated that the involvement of companies in Planning of TVET education in off the job training was low.

Table 6. Challenges related to trainees (internal Challenges)

	respondents	N	M	SD
1. Poor interest of trainees to learn	Teachers	109	3.56	1.287
	Graduates	55	3.38	1.434
2. Irregular attendance is observed during practical training	Teachers	109	3.79	1.395
	Graduates	55	3.51	1.275
3. Poor parents' support and follow up	Teachers	109	3.98	1.209
	Graduates	55	3.55	1.336
4. Low ability of understanding English Language	Teachers	109	4.05	1.505
	Graduates	55	4.44	1.014
5. Disobedience to school regulation and rules such as lateness to school of trainees	Teachers	109	3.63	1.625
	Graduates	55	3.84	1.424
6. Peer group influences are observed	Teachers	109	4.10	1.472
	Graduates	55	4.38	1.063
7. Trainees are influenced by unemployment graduates	Teachers	109	4.21	1.299
	Graduates	55	3.76	1.261
8. Being dependent of daily income for satisfaction of daily life	Teachers	109	3.84	1.256
	Graduates	55	3.71	1.356
9. Trainees considered TVET as has low value	Teachers	109	4.25	1.081
	Graduates	55	4.35	1.058
10. Poor entry qualification for TVET programs	Teachers	109	3.67	1.313
	Graduates	55	3.84	1.424
<i>Grand Mean</i>		<i>164</i>	<i>3.67</i>	<i>1.121</i>

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, 2.51-2.74 = disagree, 2.75-3.50 = undecided, 3.51-3.99 = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated

As it depicted in table 6, regarding challenges related to trainees (Graduates) both respondents for all 10 items indicated at high and very high level of the exist of problems in TVET during training (poor interest of trainees to learn , irregular attendance is observed during practical training, poor parents' follow up , disobedience to school regulation and rules such as lateness to school of trainees, peer group influences are observed, trainees are influenced by unemployment graduates, being dependent of daily income for satisfaction of daily life, trainees considered TVET as has low value and poor entry qualification for TVET programs)with mean and standard deviation ranged 3.51(1.275) to 4.44(1.014)respectively. ThisResearch is in line with the view of International Vocational Education and Training Association (IVETA) 2013who stated that students can make or mar quality in teaching. This is true because when the students are not interested in a subject and do not possess learning materials such as text and exercise books,

quality teaching is jeopardize especially for technical and vocational education programs which contribute significantly to economic growth and self-reliance. As the report of Anachuna and Nwachukwu (2012) agree with the findings of this study when they reported that it is the militating factors to quality of practical assurance include disobediencies. To sum up, as simeny, Tilahun and Ashenafi the deans of TVETS trainees are influenced by the above factors.

Table 7. Internal challenges Related to instructors in performing instructional method trainees acquire the necessary practical skills

<i>Items</i>	<i>Respondents</i>	<i>N</i>	<i>M</i>	<i>SD</i>
1. Instructors participate the trainees in each and every activities done during practical skill training	Teachers	109	1.35	0.946
	Graduates	55	2.20	0.621
2. Instructors play decisive role in motivating trainees during practical skill training	Teachers	109	2.09	0.783
	Graduates	55	1.91	0.800
3. Trainees are given assignments on issues that are new to the trainees.	Teachers	109	3.41	0.398
	Graduates	55	2.36	0.778
4. Instructors identify trainee's prior knowledge to now trainee's capacity for the new topic	Teachers	109	3.44	0.299
	Graduates	55	2.38	.850
5. Trainees are assigned with the group members to perform group work to strengthen training	Teachers	109	3.03	1.004
	Graduates	55	1.89	0.994
6. Trainees are express freely their ideas during practical skill training to enhance their understanding	Teachers	109	3.35	0.937
	Graduates	55	1.82	0.819
7. The Instructors facilitate or guide the learning environment during practical skill training	Teachers	109	2.43	0.917
	Graduates	55	2.33	0.721
8. The practical skill training is related to the world of work.	Teachers	109	2.06	0.980
	Graduates	55	1.51	0.767
Overall Average		164	2.31	0.740

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, 2.51-2.74 = disagree, 2.75-3.50 = undecided, 3.51-3.99 = agree, ≥ 4.00 = strongly agree. Strongly

disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated

As shown in table 7, regarding the challenges related to instructors in performing instructional method to acquire the necessary practical skills, almost all respondents were agreed at low level of practices have taken by teachers/ instructors in performing instructional method to acquire the necessary practical skills with mean and standard deviation ranged 1.35(0.946) to 3.44(0.299).

Generally both respondents' replied: lack of instructors participate the trainees in each and every activities done during practical skill training, lack of instructors play decisive role in motivating trainees during practical skill training, trainees are given assignments on issues that are new to

the trainees, lack instructors to identify trainee's prior knowledge to now trainee's capacity for the new topic, lack of trainees are assigned with the group members to perform group work to strengthen training, lack of trainees are express freely their ideas during practical skill training to enhance their understanding, the instructors facilitate or guide the learning environment during practical skill training, and lack of the practical skill training is related to the world of work were the challenges to obstacle to instructors in performing instructional method trainees acquire the necessary practical skills. As Simeny, Ashenafi, Yitbarik and Tilahun responses "There are very chronic problems regarding TVET instructors' competency. For example, the competency needed by trainees would be changed yearly in line with market change, but the teachers have no adequate on-job training so that they couldn't manage properly the yearly changed competencies. In addition the instructors do not had enough-training and have no the competency to organize and prepare module to teach theoretical as well as practical. They are 10 completers plus levels, so that it is difficult to them to understand and organize training. On top of these, Most of the teachers of TVET Colleges did not take pedagogical courses to manage trainees in the class room. For instance, in Didessa TVET colleges 9(75%) instructors are teaching without taking pedagogical course, in Dega TVET college all are levels also without pedagogical training. The same is true in Chora TVET. Teachers have no guide books to follow;

Table 8. The Challenges Related to follow up of TVET Institution to Provide during Practical Skills Training

Items			N	M	SD
1)	TVET institution facilitate unique program for trainees to support them.	Teachers	109	1.66	.670
		Graduates	55	1.60	.735
2)	The institution facilitate trainee's centered method to share experiences and to learn from each other during practical skills training	Teachers	109	1.78	.750
		Graduates	55	2.20	.621
3)	TVET institution provided the necessary materials for practical skill training and placed before the day's lesson started	Teachers	109	1.72	.682
		Graduates	55	1.98	.623
4)	TVET institution carry out 30% theoretical and 70% practical during training	Teachers	109	1.51	.765
		Graduates	55	1.64	.754
5)	TVET institution follow participation of the trainees in each and every activities done during practical skill training	Teachers	109	2.08	.783
		Graduates	55	2.24	.860
6)	TVET institution play decisive role in motivating trainees during practical skill training	Teachers	109	1.66	.670
		Graduates	55	1.60	.735
7)	The institution follow trainees are assigned with the group members to perform group work to strengthen training	Teachers	109	1.78	.750
		Graduates	55	2.20	.621
8)	The institution advice trainees to express freely their ideas during practical skill training to enhance their understanding	Teachers	109	1.72	.682
		Graduates	55	1.98	.623
9)	The institution follow instructors facilitate or guide the learning environment during practical skill training	Teachers	109	1.51	.765
		Graduates	55	1.64	.754
10)	The institutions devote its self in supplying instructional materials in the TVET to implement practical skill training	Teachers	109	2.08	.783
		Graduates	55	2.24	.860
Overall Average			164	1.84	0.724

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, $2.51-2.74$ = disagree, $2.75-3.50$ = undecided, $3.51-3.99$ = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated

As shown in table 8, concerning the challenges related to TVET institution to follow up during practical skills training both types of respondents replied at very low and low on all times with mean and standard deviation ranged 1.51(0.765) to 2.24(0.860) respectively. These items

include TVET institution facilitate unique program for trainees to support them, The institution facilitate trainee's centered method to share experiences and to learn from each other during practical skills training, TVET institution provided the necessary materials for practical skill training and placed before the day's lesson started, TVET institution carry out 30% theoretical and 70% practical during training , TVET institution follow participation of the trainees in each and every activities done during practical skill training , TVET institution play decisive role in motivating trainees during practical skill training , The institution follow trainees are assigned with the group members to perform group work to strengthen training , The institution advice trainees to express freely their ideas during practical skill training to enhance their understanding , The institution follow instructors facilitate or guide the learning environment during practical skill training and The institutions devote its self in supplying instructional materials in the TVET to implement practical skill training. This implies that the efforts of institution in performing managerial elements were very weak.As Sori and umata the heads of micro enterprises responses "The main barriers in implementing practical skill straining is due to the lack of experiences and inadequate management functions by the leaders of TVET institutions and incompetent instructors in line with TVET policies".

Table 9.Challenges Related to Motivating During Internship Training For Teachers and Graduates

			N	M	SD
1.	The Problem of payment(fee) for the trainees during CT	Teachers	109	3.56	1.287
		Graduates	55	3.38	1.434
2.	Lack of giving thank you letter/certificate of participation/ to companies that participated in cooperative training	Teachers	109	3.79	1.395
		Graduates	55	3.51	1.275
3.	Lack of insurance agreement for possible damages of the trainees	Teachers	109	3.98	1.209
		Graduates	55	3.55	1.336
4.	Lack of delivery of transportation services in TVET for the trainees during cooperative training	Teachers	109	4.05	1.505
		Graduates	55	4.21	1.014
5.	Lack of giving invitations to cooperative training offering companies to attend ceremonies (e.g. graduation)	Teachers	109	3.76	1.261
		Graduates	55	3.84	1.256
6.	Subsidizing cost for internship training offering companies	Teachers	109	3.71	1.356
		Graduates	55	4.25	1.081
7.	Lack of giving per dime to trainers during internship	Teachers	109	4.35	1.058
		Graduates	55	3.67	1.313
Grand mean			164	1.94	0.949

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, $2.51-2.74$ = disagree, $2.75-3.50$ = undecided, $3.51-3.99$ = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated

As shown in table 9, regarding the challenges of motivation during internship training for teachers and graduates both types of respondents rated at agree and strongly agreed on the all items (The Problem of payment(fee) for the trainees during internship training, lack of giving thank you letter/certificate of participation/ to companies that participated in cooperative training, lack of insurance agreement for possible damages of the trainees, lack of delivery of transportation services in TVET for the trainees during cooperative training, lack of giving invitations to cooperative training offering companies to attend ceremonies (e.g. graduation), subsidizing t cost for internship training offering companies, and lack of giving per dime to trainers during internship with mean and standard deviation ranged 3.51(1.275) to 4.35(1.058), respectively. This research finding is concurrent with the finding of Desalegn (2014) that stated on the above items as low and has impacts on the implementation of internship training. As Sori and umata the heads of micro enterprises responses “The TVET institutions were not working on motivation systems”.

Table 10. Internal Challenges Related To Teaching Materials

		respondents	N	M	SD
1.	There are sufficient instructional materials in your TVET to implement practical skill training	Teachers	109	1.66	0.670
		Graduates	55	1.60	0.735
2.	The available instructional materials	Teachers	109	1.78	0.750
3.	There is the sufficient laboratory center to let trainees practice what they trained theoretically.	Teachers	109	1.72	0.682
		Graduates	55	1.98	0.623
4.	There are sufficient text-book to refer the difficult they face during practical skill training	Teachers	109	1.51	0.765
		Graduates	55	1.64	0.754
5.	There are sufficient instructors guide to train practical skills.	Teachers	109	2.08	0.783
		Graduates	55	2.24	0.860
6.	Inadequate electricity supply	Teachers	108	4.10	0.896
		Graduates	55	3.76	0.637
7.	Lack of water supply	Teachers	109	3.92	1.498
		Graduates	55	4.49	0.767
8.	Inadequate workshop spaces	Teachers	109	3.45	1.437
		Graduates	55	3.65	0.886
9.	Lack of TVET machines and tools	Teachers	106	4.06	1.256
		Graduates	55	3.96	1.217
Total			164	2.76	0.879

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) $\geq 1.00-2.50$ = strongly disagree, 2.51-2.74 = disagree, 2.75-3.50 = undecided, 3.51-3.99 = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ as results indicated.

As it shown in table 10, both types of respondents were replied strongly disagree and disagree on item 1 through item5 with mean and standard deviation ranged 1.51(0.765) to 2.20 (0.621) respectively. These items are: There are sufficient instructional materials in your TVET to implement practical skill training, the available instructional materials are functional including technology materials, there is the sufficient laboratory center to let trainees practice what they trained theoretically there are sufficient text-book to refer the difficult they face during practical skill training and there are sufficient instructors guide to train practical skills. However, on items 6 to 9 both types of respondents were indicated strongly agree and agree level regarding challenges related to teaching materials. the items are :inadequate electricity supply, lack of water supply and inadequate workshop spaces with mean and standard deviation ranged 3.45 (

1.437) to 4.49 (0.767) respectively with items (Inadequate electricity supply, lack of water supply, inadequate workshop spaces and lack of TVET machines and tools). Generally this result indicated the problem has existed regarding teaching materials in TVET of Bunno Bedelle Zone. This research finding is agreed with that of Deseleny (2014) And (Asia-Pacific Journal of Cooperative Education, 2011), that depicted the exception of course guides and teachers' handouts, other curricular/instructional materials were found to be inadequate to give an effective instruction at TVET level.

Table 11.Independent Samples t-Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Teachers	Equal variances assumed	1.88	0.000	0.14	156	0.000	0.004	-0.060	0.070
	Equal variances not assumed			0.15	124.21	0.000	0.004	-0.057	0.066
Gradates	Equal variances assumed	0.51	0.000	19.44	162	0.000	0.545	0.490	0.601
	Equal variances not assumed			20.09	118.5	0.000	0.545	0.491	0.599

As shown in table 11, the results given in the first row ($t = 0.14$, $df = 156$ $p < 0.001$), under the column heading “t-test for equality of means” are those for the standard-test and assume homogeneity of variance. The conclusion from the test is that there is strong evidence of a difference in the mean teachers under the graduates. Generally as the resulted indicated, the mean difference between of both respondents has little difference of mean that means both respondents agreed the problems in TVET institution.

Table 4.12. t-test for each of the independent variables

* $P < 0.05$

	Respondents	N	Mean	Std. Deviation	t- value
Challenges related to teaching practical skill strategy	Teachers	109	2.39	0.368	-2.975*
	Graduates	55	2.55	0.247	-3.369*
Challenges related to instructional methods in the TVET institutions	Teachers	109	3.12	0.570	-0.955*
	Graduates	55	3.22	0.654	-0.913*
The Challenges related to follow up of TVET institution during practical skill straining	Teachers	109	3.12	0.570	-0.955*
	Graduates	54	3.22	0.654	-0.913*
Challenges related to instructional materials	Teachers	109	3.43	0.540	-4.821*
	Graduates	55	3.02	0.442	5.145*
Challenges related to Teachers	Teachers	109	3.16	0.253	-2.923*
	Graduates	55	2.16	0.280	-2.191*
Challenges related to trainees	Teachers	108	2.89	0.730	-2.457*
	Graduates	55	3.17	0.586	-2.637*
Factors related to Motivation during cooperative training	Teachers	109	2.03	0.450	2.793*
	Graduates	55	1.85	0.294	3.192*
Factors related to planning practical skill training in cooperative training	Teachers	108	2.39	0.368	-2.975*
	Graduates	55	2.55	0.247	-3.369*
	Teachers	106	3.02	0.526	-2.975*
	Graduates	55	2.95	0.554	-3.369*

As indicated in table 12, the mean value for each of the independent variables has been greater for teachers compared to the graduates. Besides, t-test was computed to look for any statistically significant difference as for each of the independent variables between the two groups of schools. Hence, the computed t- value for each of the independent variables were as found to be statistically significant at the alpha level of 0.05 the independent variables.

Table 13. The t-test teachers and graduates for skills acquisition in TVET institution for trainees'

Types of respondents	Mean	Std. Deviation	t- value
Teachers	2.78	0.197	-4.103*
Graduates/trainees	2.90	0.312	

* $P < 0.05$

As shown in Table 13, t-test has been used to see whether there was a statistically significant difference or not. The mean result for teachers was 2.78 with a standard deviation of 0.197. Similarly, the mean score of for skill acquisition in TVET for trainees of graduates was 2.90 with a standard deviation of 0.312. This indicates that graduate's mean (2.90) is slightly greater than teachers mean (2.78), and there is a difference between graduates and teachers in skill acquisition in TVET.

The t-test was computed in order to check whether or not the mean differences for the two groups was statistically significant. The computed value of $t = -4.103^*$ was found to be statistically significant at the alpha level of 0.05. This implies that there is statistically significant difference on skill acquisition in TVET between teachers and graduates.

Table 14. Challenges related to implementation of cooperative training

	Respondents	N	M	SD
1. Lack of collaboration between TVET college and the companies to implement internship	Teachers	109	4.06	.761
	Graduates	55	1.60	.852
2. Absence of companies and enterprises in the soundings.	Teachers	109	4.00	.943
	Graduates	55	1.95	.405
3. Lack of similarity activities during CT with the activities in the world of work	Teachers	109	3.65	1.205
	Graduates	55	4.93	.539
4. The problem of accepting trainees by companies.	Teachers	109	3.70	.833
	Graduates	55	3.91	.442
5. Availability of uncovered competency in TVET during CT.	Teachers	109	3.86	.673
	Graduates	55	3.85	.591
6. Lack of necessary Orientation for pre-preparation to the trainees during CT.	Teachers	109	3.86	.986
	Graduates	55	4.00	.010
7. Thank you letter for trainees who have had best practice during cooperative training	Teachers	109	3.62	1.145
	Graduates	55	3.91	.701
8. Shortage of budget to assign effective Supervisors	Teachers	109	3.59	.905
	Graduates	55	3.69	.791
9. Absence of service for transportation of internship training.	Teachers	109	3.99	.397
	Graduates	55	3.78	.712
10. Un willingness of companies to provide Machines	Teachers	109	4.05	.774
	Graduates	55	3.96	.270
Average		164	3.69	0.696

Note: N=Frequency, M=Mean, SD=Standard Deviation. Mean value (M) ≥ 1.00 -2.50= strongly disagree, 2.51-2.74 = disagree, 2.75-3.50 = undecided, 3.51-3.99 = agree, ≥ 4.00 = strongly agree. Strongly disagree and disagree considered as disagree level of agreement whereas agree, and strongly agree

considered as agree / high/ as results indicatedand disagree considered as disagree level of agreement whereas agree, and strongly agree considered as agree / high/ on results revealed

As shown in table14, the majority of teachers respondents replied strongly agree on items; 1, 2, &10(lack of collaboration between TVET college and the companies to implement CT, absence of companies and enterprises in the soundings, &un willingness of companies to provide machines) deviation4.06(.761),4.00(.943)&4.05(.774),respectively.

Similarly, graduate respondents also strongly agree on items; 3&6(lack of similarity activities during internship with the activities in the world of work, &lack of necessary orientation for pre-preparation to the trainees during CT) mean and standard deviation4.93 (.539) &4.00(.010), respectively.

Especially, graduates respondents were strongly disagreed on items 1&2 (lack of collaboration between TVET college and the companies to implement CT& 2, absence of companies and enterprises in the soundings) with mean and standard deviations1.60 (.852) &1.95(.405). On all the reaming items,4,5,7,8,&9), both respondents were replied at agreed level and mean and standard deviation,3.70(.833),3.91(.442),3.86(.673),3.85(.591),3.62(1.145),3.91(.701),3.59(.905), 3.69(.791),3.99(.397),&3.78(.712),respectively. These items are; the problem of accepting trainees by companies, availability of uncovered competency in TVET during internship, thank you letter for trainees who have had best practice during internship training, shortage of budget to assign effective supervisors, and absence of service for transportation of internship training.

Generally, regarding challenges related to implementation of internship training: absence of companies and enterprises in the soundings, lack of similarity activities during internship training with the activities in the world of work, the problem of accepting trainees by companies, availability of uncovered competency in TVET during internship, lack of necessary orientation for pre-preparation to the trainees during internship training, thank you letter for trainees who had best practice during cooperative training, shortage of budget to assign effective supervisors, absence of service for transportation of cooperative training, un willingness of companies to provide machines and lack of availability of manufacturing companies that can provide internship training in localities were identified in the study.in addition,Simeny, Ashenafi, Yitbarik and Tilahun deans of TVET responded that “The training of TVET is delivered in two

ways. The first one is training given in the campus, the second is training given out of the campus. Accordingly, in the study area, the cooperative training is very weak. The main reason is the absence of potential industries and Enterprises in local area. However, we are using the new established Enterprises and local industries. It is difficult to say there is the effective cooperative training in the area and they are not potential enough to support us. To take the trainees to the industries available area, the shortage of budget is another problem". Specially as simeny, Yitbarik and Tilahun (deans of Didessaa, Chora & Degga TVETs) underlined that "Because of the above reasons there is no activities in relation to CT. TVET education by this time is almost all theoretical. We can say the teachers use 30 % and 70 % theoretical, we can't say trainees are training 70 % at work place particularly in Dega, Didessa and Chora TVET Colleges

CHAPTER FIVE

MAJOR SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter consisted; the summary of the major findings, conclusions and recommendations.

5.1. Summary of Major Findings

The general objective of the study was the major Challenges that hindered the practical skills acquisitions in the TVET institution and out of the TVET institutions in BunnoBedelle Zone Oromia regional state. Hence the following two basic research questions were raised.

1. What are the internal challenges of TVET Institution providing graduates to acquire practical skills?
2. What are the external factors that hamper TVET institution provide graduates acquisitions of practical skills?
3. What should be done to alleviate the challenges of TVET graduates the necessary practical skills?

○ **Regarding the internal challenges of TVET Institution in performing practical teaching strategies.**

✚ Regarding internal challenges of TVET Institution in performing practical teaching strategies, both respondent's teachers and graduates were strongly disagree and disagree in realizing practical skills strategies. especially graduates were indicated strongly disagree and disagree on instructors use teaching practical skills strategies Like explanations and lecture method than piratical training, were not used problem solving method, discovery methods, inquiry methods, project based methods .The majority of respondents indicated though teaching the instructors. Especially graduates were strongly disagreeing on instructors use. This indicates instructors in able to use different practical training style. It is obvious that less technical skill and experience affect the quality of training greatly. Also this shows that quality of Leadership and management of government of TVET colleges was not able to create a positive working environment. Thus, there was an absence of the strong relationship between academic staff members and the management bodies that is needed to ensure

academic excellence. This resulted in a shortfall in the provision of quality teaching, learning, practical skills training.

○ **Regarding the external factors that hamper TVET graduates acquisitions of practical skills:**

Respondents(teachers and graduates) rated at high level regarding the external factors that hamper TVET graduates acquisitions of practical skills both indicated for all items agreed at high level of the problem

- ✚ Lack of enterprises and local industries are participating in planning of cooperative training.
- ✚ Lack of employers participate in planning of practical skill training by setting criteria to avoided the mismatch between training and world of work,
- ✚ Lack of Enterprises and local industries participate in preparation of practical skill curriculum
- ✚ Lack of participation in setting rules and regulations regarding cooperative training or guide line
- ✚ Lack of availability of manufacturing companies that can provide CT in local (surroundings).This indicate that training in the study area is almost all theoretical.

○ **Regarding Challenges related to trainees (Graduates) the exist of problems in TVET during training:**

- ✚ Poor interest of trainees to learn, absenteeism of graduates was observed during practical training and Poor parents' follow up graduates
- ✚ Low ability of understanding English language and disobedience to school regulation and rules such as lateness to school of trainees, peer group influences are observed,
- ✚ Trainees are influenced by unemployment graduates, being dependent of daily income for satisfaction of daily life, and trainees considered TVET institution as has low value
- ✚ Poor entry qualification for TVET programs.

Regarding Challenges Related to instructors in performing instructional method to acquire the necessary practical skills (internal challenges)

- ✚ Lackof instructors participate the trainees in each and every activities done during practical skill training,
- ✚ Instructors were not play decisive role in motivating trainees during practical skill training,
- ✚ They were not facilitate Trainees are express freely their ideas during practical skill training to enhance their understanding,

- ✚ The majority of the instructors were not facilitated or guide the learning environment during practical skill training and

- ✚ The practical skill training given for graduates were not related to the world of work.

Concerning the Challenges related to follow up of TVET institution to provide practical skills training:

- ✚ Lack of TVET institution facilitate unique program for trainees to support them .

- ✚ The TVET institutions were not follow up weather instructors facilitate trainee's centered method to share experiences and to learn from each other during practical skills training,

- ✚ Poor TVET institution follow up weather the necessary materials for practical skill training is placed before the day's lesson started

- ✚ Lack of TVET institution follow up weather prepare 30% theoretical and 70% practical carried out during training, low follow up of TVET institution weather trainees participate in each and every activities done during practical skill training

- ✚ Poor TVET institution follow up weather instructors play decisive role in motivating trainees during practical skill training,

- ✚ Poor follow up of institution weather trainees are assigned with the group members to perform group work to strengthen training,

- ✚ The institutions were not following up weather trainees to express freely their ideas during practical skill training to enhance their understanding.

- **Regarding Challenges related to implementation of cooperative training:**

- ✚ Absence of industries, companies and enterprises in the surroundings, and unwillingness of companies to provide machines

- ✚ Lack of similarity activities during CT with the activities in the world of work,

- ✚ Lack of necessary enough orientation for pre-preparation to the trainees during CT,

- ✚ Thank you letter for trainees who have had best practice during cooperative training,

- ✚ Shortage of budget to assign effective supervisors, absence of service for transportation of cooperative training

5.2. CONCLUSIONS

Based on the above findings the following conclusion is drawn:

Provision of training programs without assessing the labor requirement by employing training need assessments and other studies, these situations lead to poor employment opportunities and wastage of scarce training resources since training programs are tends to be largely supply driven than labor market driven.

Moreover, the present achievements of trainees in TVET institution were very low because of lack of trainers' practical skill and knowledge and most appropriate training techniques for certain situations to provide group instruction.

Furthermore, practical instruction may not successful in that of fact that some trainees may not have access to work on machine during the individual practical activity due to in proportionality of machines and equitable available workshops to numbers of trainees. This study also indicated that there is lack of capacity and efficiency to perform activities. Therefore, it needs continuous capacity building training for the concerned bodies.

In addition, the challenges related to trainees are include poor interest of trainees to learn, absenteeism of graduates was observed during practical training and, trainees are influenced by unemployment graduates, being dependent of daily income for satisfaction of daily life, and trainees considered TVET institution as has low value and poor entry qualification in TVET programs. This indicates that parents and students are not aware regarding TVETs' institution in advantages whereas regarding challenges related to instructors in performing instructional method include :lack of instructors participate the trainees in each and every activities done during practical skill training, lack of instructors play decisive role in motivating trainees during practical skill training, the majority of the instructors were not facilitated or guide the learning environment during practical skill training and the practical skill training is related to the world of work.

So, the overall objectives these and others ideas made in the above the labor market driven programs implementation in government TVET institutional was ineffective.

5.3. RECOMMENDATIONS

Based on the findings and conclusion of the study, the following suggestions were forwarded:

- ✚ It is better instructors supported by the pedagogical courses to use various strategies during practical training inBuno Bedelle Zone.
- ✚ It is better TVET institutions used by experienced, trained and committedcollege deans those closely work with instructors, introduces the objectives of TVET for stakeholders and create conducive atmosphere for training.
- ✚ Buno Beddelle TVET institutions are better to workin collaboration with primary schools and secondary schools better to make awareness vocational orientation and enable students informed decisions in various occupations ‘choices.
- ✚ It is good if the regional TVET bureau together with the Ministry of Education strives to attract and retain qualified and competent trainers.
- ✚ It is a crucial that TVET institutions with regional agency, zonal and Worada administrations in collaboration to fulfill training materials and machines for trainees.
- ✚ It is better regional TVET agency invite private investors to establish additional TVET colleges in the zone and to make positive competition with governmentTVET institutions.
- ✚ Buno Beddelle TVET institutions are better to encourage various government and non-government to ensure internship training program
- ✚ Lastly, Buno Beddelle TVET institutions are important to identify trainers’ skill gaps periodically to keep them with fast changing technology in the labor market

References

- Akim, O. (1998): Trends and Issues in Technical and Vocational Education Policies and Practice in Africa: Developments in Uganda and Zimbabwe
- African Union. (2007). *Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa*. Addis Ababa: Conference of Ministers of Education of the African Union.
- Akoojee, S., Gewer, A., & Simon, M. (Eds.). (2005). *Vocational Education and Training in Southern Africa: A comparative Study*. Cape Town: HSRC Press.
- Attanasio, O., Kugler, A., & Meghir, C. (2011). Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial. *American Economic Journal: Applied Economics*, 3(3), 188-220.
- Afeti, G. (2010). Technical and vocational education and training for industrialization. Retrieved from <http://www.arrforum.org/publication/occasional-papers/40/95-technical-and-vocational-education-and-training-for-industrialisation.html>. Retrieved on 12/10/2014.
- Amjad, R. (2005). Skills and Competitiveness: Can Pakistan Break Out of the Low-level Skills Trap? *The Pakistan Development Review* 44:4. Anand, Sudhir, & Martin, R. (1993). Human Development in Poor Countries: On the Role of Private Incomes and Public Services, *The Journal of Economic Perspectives*, Vol. 7, No. 1, 133-150.
- Ashton, D. & Frances, G. (1996). *Education, Training and the Global Economy*. Cheltenham: Edward Elgar.
- Atnafu, B. and M. Eshete, "Quality of Education in Private and Public Higher Education Institutions," *A Comparative Analysis*, Proceedings of the 2nd National Conferences on Private Higher Education in Ethiopia, Addis Ababa, Sheraton Addis, 2004.
- Bennell, P., & Segerstrom, J. (1998). Vocational Education and Training in Developing Countries: Has the World Bank got it right? *International Journal of Educational Development*, 18(4), 271-287.
- Betcherman, G., Olivas, K., & Dar, A. (2004). Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries. *Social Protection Discussion Paper 0402*.
- Baer, Max, F. & Edwards C, (1958) *Occupational Information* Chicago Science Research Associated, Inc.

- Card, D., Ibarrraran, P., Regalia, F., Rosas-Shady, D., & Soares, Y. (2011). The Labour Market Impacts of Youth TRaining in teh Dominican Republic. *Journal of Labor Economics*, 29(2), 267-300.
- Carneiro, P., & Heckman, J. J. (2003). Human Capital Policy. In J. J. Heckman, & A. B. Krueger, *Inequality in America: What Role for Human Capital Policies?* (pp. 77-239). Cambridge, MA: MIT Press.
- Caillods, F. (1994). Converging Trends amidst Diversity in Vocational Training Systems. *International Labor Review* 133 (2):241—257.
- Calhoun C. & Finch A. (1982). *Vocational Education: Concepts and Operations*, Wadsworth Pub. Company.
- Crow, O.D & A.Crow (1965). *Organization and conducting Guidance Service*. New York: McKay Company, Inc.
- Creswell, J. W., & Plano, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage
- Creswell, J. W. (2011). *Planning, Conducting, and Evaluating Quantitative and Qualitative Educational research* (4th edition) London: Sage.
- CSA (2000). Analytical Report on 1999 National labor force Survey
- E.Ginzberg (1951) et al., *Occupational Choice*, New York: Colombia University press.
- Craft, A. *Quality Assurance in Higher Education Proceedings of an International Conference*, Hong Kong, Falmer Press, 1992.
- Daniel N. Sifuna (2007) .*Revue International Education review*, Vol. 38, No. 1
<http://www.jstor.org/stable/3444493> Accessed: 29-12-2016 11:01 UTC
- Education Sector Development Plan IV (ESDP III) (2005) Ministry of Education Addis Ababa: Ethiopia.
- Education, V. (2011). The Role of teacher training in technical and vocational education and training (TVET) in Africa; IICBA newsletter; Vol.:13, 2; 2011, 13(2). Ethiopia_ TVET Is the Heart of GTP II - allAfrica. (n.d.).
- Education Sector Development Plan IV (ESDP III) (2005) Ministry of Education Addis Ababa: Ethiopia.

- Elwan, D. (2000). State teaching policies and student achievement. Center for the Study of Teaching and Policy [Online]
- Evans, N.R (1971) *Foundation of Vocational Education*. Ohio: Charter E.Merill publishing Company,
- Esayas Yosief (2001). *Rethinking the Existing Educational system of higher learning*: IER Flambeau Vol. IX No 1 Addis Ababa
- Elwan, D. (2000).“Uganda Hits Universal Primary Education Target” article in *The East African Newspaper*, Kampala, Uganda.Government White Paper on Education (1992)
- ETP. New Educational and Training Policy of Ethiopia: Addis Ababa, 1994.
- Goel, V. P. (2010). Technical and vocational education and training (TVET) system in India for sustainable development.Gascove Vladmir (2000), *A hand Book for Vocational Administrators* London Thomas Ltd.
- Afeti, G. (2016). Technical and vocational education and training for industrialization. Retrieved from <http://www.arrforum.org/publication/occasional-papers/40/95-technical-and-vocational-education-andtrainig-for-industrialisation.html>.
- Grierson, J. & Young, C. (2002).*Technical and vocational education and training in twenty-first century: New Roles and Challenges for Guidance and Counselling*. Division of Secondary, Technical and Vocational Education,UNESO, Paris.
- Godfrey, Martin.(1986).*Global Unemployment: The new Challenge to Economic Theory*. Sussex: Harvester press.
- Human Development Report. (2014). UNDP.<http://www.thenews.com.pk/Todays-News-4-271383-Pakistani-youth-theleast-literate-2014>.
- Implementation of National Skills Strategy.(2009-2013). GIZ, DFID and EC.Jallah, M. (2004). *UNESCO-UNEVOC-An International experts meeting “Learning for Work, Citizenship andSustainability”*. The Experts Meeting in Bonn, Germany from 25 to 28 October 2004.
- ILO.(1986) *The Challenge of Employment and Basic needs in Africa*. Nairobi: Oxford University press.

- Kassaye Tikuye (2004).The Role of PHEIS in Reducing Urban youth Unemployment St-Mary's College PP, Ethiopia
- Khan,AzizaRaman.(1994).*Overcoming Unemployment*. GenevaInternational labor organization
- Laka, W. (1998). The current status of Vocational/Technical Education in Ethiopia in Amare Asgdom (Ed), Quality education in vision for the 21st century, Proceeding of National Conference.IER, Addis Ababa, Ethiopia 1998.
- Kwebiiha, D. A. (1998): Female participation in technical and vocational education in secondary schools in Uganda: The case of Kabarole District , Uganda
- Johanson, R. K. & Arvil, V. A. (2004).Skills Development in Sub-Saharan Africa. Regional and Sectoral Studies.
- Lugujjo, E .& Manyindo, B. (October,1993) : “Pilot Project on co-operation Between MOE training Qualification system Addis Ababa, Ministry of Education Addis Ababa: Ethiopia.Technical and Vocational Education Institutions and Enterprises in Uganda.”
- Lall, Sanjay, & Weiss, J. (2004).*Industrial Competitiveness: The Challenge for Pakistan*. ADB Institute-Pakistan Resident MissionPaper, ADB Pakistan Resident Mission, Islamabad.
- Mclean, R. & David, N.W. (2009). International handbook of education for the changing world of work: Bridging academic and vocational learning.
- MOE (2010).Labor market Information system for TVET providers Manual.*Ministry of Education*.UNESCO (2010).Guidelines for TVET Policy Review: DRAFT. Paris: UNESCO. Publishers.
- WBR (2002). *Constructing Knowledge Societies. New Challenges for tertiary Education the world Band*. Washington DC.
- World Report (2007).Developing an African higher education quality rating system.
- Yimtatu.(1989) . *Community participation in Educationfor Development*. Addis Ababa University, Press:Freidrich Ebert Foundation.

Appendixes
Appendix 1
Jimma University
College of Education and Behavioral Studies
Department of Educational Planning and Management

Questionnaire to be filled by the **Instructors** of the TVET Colleges The purpose of this questionnaire is to collect relevant data for the study on “Challenges Facing Technical and Vocational Education and Training Graduates in Practical Skill acquisition in Bunno Bedelle Zone of Oromia”. Your cooperation in providing relevant and accurate information is highly important for the success of the study. Please be frank and respond to each item as accurately as possible.

Instruction: No need of writing your name. Reply to questions as per the instructions given for each parts either by putting a thick mark (X)

PART ONE: Background Information

1. Name of TVET Institution_____

2. Sex: Male Female

3. Age: < 20 21-30 31-40 41-50 > 50

4. Field of Study_____ 5. Educational Qualification MA/MSc

BA/BSc/Bed Level If others_____ 6. Teaching Experience in TVET

Institutions 1-5 6-10 >10

The Challenges related to teaching practical skill strategy (internal challenge)

S/N	Item statement	SD	D	UD	A	SA
1)	During practical teaching trainers use much more piratical than explanations (lecture method)					
2)	While teaching the instructors use problem solving method.					
3)	During teaching instructors use discovery methods					
4)	During practical teaching instructors use inquiry methods					
5)	During practical teaching instructors use project methods					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

The Factors related to planning practical skill training in cooperative training (external challenges)

S/N	Item statement	SD	D	UD	A	SA
1	Lack of enterprises and local industries are participating by planning of cooperative training					
2						
3	Lack of employers participate in planning of practical skill training by setting criteria to avoided the mismatch between training and world of work					

4	Lack of participation in setting rules and regulations regarding cooperative training or guide line					
5	Lack of availability of manufacturing companies that can provide CT in local (surroundings).					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

Challenges related to trainees (internal Challenges)

S/N	Item statement	SD	D	UD	A	SA
1)	Poor interest of trainees to learn					
2)	Irregular attendance is observed during practical training					
3)	Poor parents' follow up					
4)	Low ability of understanding English Language					
5)	Disobedience to school regulation and rules such as lateness to school of trainees					
6)	Peer group influences are observed					
7)	Trainees are influenced by unemployment graduates					
8)	Being dependent of daily income for satisfaction of daily life					
9)	Trainees considered TVET as has low value					
10)	Poor entry qualification for TVET programs					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

Challenges Related to instructors in performing instructional method to acquire the necessary practical skills (internal challenges)

S/N	Item statement	SD	D	UD	A	SA
1	Instructors participate the trainees in each and every activities done during practical skill training					
2	Instructors play decisive role in motivating trainees during practical skill training					
3	Trainees are given assignments on issues that are new to the trainees.					
4	Instructors identify trainee's prior knowledge to now trainee's capacity for the new topic					
5	Trainees are assigned with the group members to perform group work to strengthen training					
6	Trainees are express freely their ideas during practical skill training to enhance their understanding					
7	The Instructors facilitate or guide the learning environment during practical skill training					
8	The practical skill training is related to the world of work.					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

The Challenges related toTVET institution to provide follow up during practical skills training

S/N	Item statement	SD	D	UD	A	SA
1	TVET institution facilitate unique program for trainees to support them.					
2	The institution follow up weather trainee’s centered method implementing and share experiences to learn from each other during practical skills training					
3	TVET institution follow weather the necessary materials for practical skill training placed before the day’s lesson started					
4	TVET institution follow weather 30% theoretical and 70% practical carried out during training.					
5	TVET institution follow participation of the trainees in each and every activities done during practical skill training					
6	TVET institution follow weather instructors play decisive role in motivating trainees during practical skill training					
7	The institution follow trainees are assigned with the group members to perform group work to strengthen training					
8	The institution follow up in advicing trainees to express freely their ideas during practical skill training to enhance their understanding					
9	The institution follow instructors facilitate or guide the learning environment during practical skill training					
10	The institutions devote its self in supplying instructional materials in the TVET to implement practical skill training					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

The extent of Motivation during cooperative training for teachers and graduates (external challenges).

S/N	Item statement	SD	D	UD	A	SA
1	The Problem of payment(fee) for the trainees during CT					
2	Giving thank you latter/certificate of participation/ to companies that participated in cooperative training					
3	Insurance agreement for possible damages of the trainees					
4	delivery of transportation services in TVET for the trainees during cooperative training					
5	Giving invitations to cooperative training offering companies to attend ceremonies (e.g. graduation)					
6	Subsidizing recurrent cost for cooperative training offering companies					
7	Giving per dime to trainers during cooperativetraining .					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

Challenges related to teaching materials (internal Challenges)

S/N	Item statement	SD	D	UD	A	SA
1	There are sufficient instructional materials in your TVET to implement practical skill training					
2	The available instructional materials are functional including technology materials					
3	There is the sufficient laboratory center to let trainees practice what they trained theoretically.					
4	There are sufficient text-book to refer the difficult they face during practical skill training					
5	There are sufficient instructors guide to train practical skills.					
6	Inadequate electricity supply					
7	Lack of water supply					
8	Inadequate workshop spaces					
9	Lack of TVET machines and tools					
10	There are sufficient instructional materials in your TVET to implement practical skill training					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What do you suggest to improve these Challenges? _____

2.2.2.Factors related to the implementation of practical skill training during CT

No	Items	SD	D	UD	A	SA
1)	Lack of collaboration between TVET college and the companies to implement CT					
2)	Absence of companies and enterprises in the surrounding.					
3)	Lack of Capacity to operate Machines during CT					
4)	The problem of accepting trainees by companies.					
5)	Availability of uncovered competency in TVET during CT.					
6)	Lack of necessary Orientation for pre-preparation to the trainees during CT.					
7)	Absence of Thank you letter for trainees who have had best practice during cooperative training					
8)	Shortage of budget to assign effective Supervisors					
9)	Availability of manufacturing companies that can provide CT in localities (surroundings).					
10)	Absence of service for transportation of Cooperative training.					

Key: SA= Strongly Agree, A= Agree, D= Disagree, UD = Undecided SD= Strongly Disagree

What are the challenges of TVET institute to implement the practical skills teaching ?

What are the Challenges you faced at work places _____

Appendix 2

Jimma University

College of Education and behavioral science

Department of Educational Planning and Management

Interview guide for the selected deans of TVET colleges. The purpose of this interview guide is to gather additional information for the study “challenges facing TVET graduates in practical skill acquisitions in Bunno Bededelle Zone , Oromiya regional state”.

Name of the companies you are working for _____

Your position _____

Your qualification _____

Total experiences _____

What is your experiences as a director ? _____

Basic guide interview questions

Have you had training on practical skill acquisition ?

1. What are the internal major challenges to implement practical skill training in your institutions? If any Explain.

2. In your view what are the external factors that hamper TVET graduates acquisitions of practical skills?

3. What do you suggest to improve these Challenges? _

Jimma University

College Of Education and Behavioral Science

Department of Educational Planning and Management

Interview guide for the selected coordinators of Small and micro Enterprises and employers .
The purpose of this interview guide is to gather additional information for the study “challenges facing TVET graduates in practical skill acquisitions in Bunno Bededelle Zone ,Oromia Regional state”.

Name of the companies you are working for _____

Your position _____

Your qualification _____

Total experiences _____

What is your experiences as a director ? _____

Basic guide interview Questioners

1. In what kinds of activities is your Organization Participated as a client and stakeholders with TVET Institutions?
2. What are the supports your Organization provides for TVET institutions and their graduates, if any ?
3. In Your Opinion what do you think are the main barriers that your Organization to build stronger links with TVET institutions?
4. Do you have any records regarding performances of TVET graduates those are currently employed in the sectors ?
5. IS there any contribution of your Organization in proposing training fields for TVET Institutions?
- 6 .Please, suggest any comment you may think relevant to help TVET institutions to implement effective practical skill training.

Universitii Jimmaa
Colleejii Barnootaa fiarnootaa fi saayinsii amala
Muumme karoora Barnootaa

Kun Gaaffiilee Eebbifamtootaan guutamu yeroo ta'uu, kaaayyoon isaas ragaa quubsa ta'e Qorannoo mata dureen isa "Rakkoo Eebifamtoota TVETii Godina Buunoo Beddellee quunnamaa jiru " jedhu irratti funaanuuf waan ta'eef dha. Kanaafuu atoomni keessan raga sirrii argachuu irratti baayyee barbaachisaa waan ta'uuf, akkasumaas milkaa;ina Qorannoo kanaafis waan gargaaruuf itti dhimmitanii gaaffilee dhihaataniif deebii dhugaa fi sirrii ta'e hanga danda;ametti akka guuttan isin gaafanna.

Ajaja Maqaa keessan barreessuu hin barbaachisu ,gaaffiilee dhihaataniif mallattoo (X)kana kaa'uu dha.

Haal -duree

1. Maqaa Collejichaa (TVET)_____

2. Saala: dhi dha

3Umurii: < 20 21-30 31-40 41-50 > 50

4. Gosa barnootaa ittiin Eebbifaman BA/BSC/Bed 5.Level one 6.Level

two 7.Level three 8 Level four 9Level five

1.1.3. Rakkoolee Meeshaalee barnootaa TVETii wajjin walqabatan

S/N	Gaaffiilee	TIW	IW	MKH	W	BIW
A	Raawwii Barnoota prakticalaaiif meeshaaleen barbaachisan gahaatu jiru. barsiisuuf					
B	Beeshaaleedhumti jiran kunimmoo meeshaalee Teeknooloojii dabalatee kan tajaajila kennanidha					
C	Linjifamtoonni isa tihooriidhaan baratan dhugoomsuuf iddoon itti shaakalan (laboratory center ni jira.					
D	Waan rakkoo ta'e irraa hubachuuf kitaboleen addaa addaa barataa gargaaran (references)ni jiru.					
E	Leenjii praktikalaa kennuuf Leenjistoonni kan ittiin geggeeffaman kitaabolee Leenjisa ni jira.					
F	Hanqinni ibsaa ni mula'ata.					
G	Hanqinni tajaajila bishaanii ni jira.					
H	Hanqinni bakka workshooppi ni jira.					
I	Hanqinni maashinii meeshaalee harkaa (hand tools) nijira.					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliingala, TIW= Tasuma itti waliihingalu,IW= Itti walii hingalu , MKH= murtoo kennuu hindanda'u.

Raawwii barnoota piraktikaala wantoonni gufachiisan maalfai?

Rakoon bakka hojii keesaniitti isin mudate maalidha?

1.1.4 .Rakkoolee barsiisaa wajjin walqabatan

No.	gaaffiilee	TIW	IW	MKH	W	BIW
A	Leenjii gahaa dhabuun barsiisotaa barnoota piraktikalaa barsiisuu irratti dhiibbaa fideera.					
B	Leenjii waliin-waliinii irratti bobba'uu dhabuun leenjii piraktikalaa barsiisuu irratti dhiibbaa fideera					
C	Barsiisonni hamilee waan hinqabneef hojii praktikalaa shaakalsiisuu irratti rakkoon uumameera.					
D	Tooftaa filataman leenjii piraktikalaa kennuu irratti hanqinni gahumsaa barsiisota biratti ni mul'ata.					
E	Barnoota piraktikalaa raawwachuuf leenjiin hojii irraa baayyee yaraadha.					
F	Leenjifamtoota yeroo piraktikaalaa deggeruuf Leenjistoondi hunduu yaada gaarii qabu.					
G	Leenjii piraktikalaa dhugoomsuuf leenjisaan hunduu kutannoo qaba					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliingala, TIW= Tasuma itti waliihingalu, IW= Itti walii hingalu , MKH= murtoo kennuu hindanda'u.

Raawwii barnoota piraktikaala wantoonni gufachiisan maalfai?

Rakoon bakka hojii keesaniitti isin mudate maalidha?

1.1.5. Rakoolee Barataa wajjin walqabatan

No	Gaaffiilee	TIW	IW	MKH	W	BIW
A	Barachuuf fedhii dhabuu					
B	Yeroo barnoota piraktikalaa hafiitii baayyisuun ni mul'ta					
C	Hordoffiin matii hinjiru.					
D	Ga'umsi isaan afaan ingiliffaa irratti qaban gadaanaa ta'uu.					
E	Dambii fi qajeelfama colleejjichaana buluu dhabuu fkn guyyaafachuu.					
F	Hiriyyaa hintaanetti hidhachuu					
G	Warren baratani hojii dhaban ilaaluu					
H	Hojii yeroo qarshii argamsiistuun gowoonfamuu					
I	Barnoota Teehnika akka barnoota gadiitti ilaaluu					
J	Qabxii dadhabaa dhaan galmaa'uu					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliingala, TIW= Tasuma itti waliihingalu, IW= Itti walii hingalu, MKH= murtoo kennuu hindanda'u.

Raawwii barnoota piraktikaala wantoonni gufachiisan maalfai?

Rakoon bakka hojii keesaniitti isin mudate maalidha?

2.1. Rakoolee hojii piraktikaalaa karoorsuu wajjin walqabatan

No	Gaaffiilee	TIW	IW	MKH	W	BIW
A	Waldaaleen fi industriin naannoo hojii karoorsuu irratti ni hirmaatu					
B	Waldaaleenfi Industriin naannoo ulaagaa barbaachisaa ta'e baasuun hojii TVETii keessatti hirmaatu					
C	Waldaaleen fi industroonni naannoo qophii kariikulamii keessatti ni hirmaatu					
D	Waldaaleen fi Industrii naannoo dambii fi seera ittin bultoomaa leenjii waliin waliinii (CT)keessatti ni hirmaatu.					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliingala, TIW= Tasuma itti waliihingalu, IW= Itti walii hingalu , MKH= murtoo kennuu hindanda'u.

Raawwii barnoota piraktikaala wantoonni gufachiisan maalifai?

Rakoon bakka hojii keesaniitti isin mudate maalidha?

2.3. Rakkoolee hamilee wajjin walqabatan.

No	Gaaffiilee	TIW	IW	MKH	W	BIW
----	------------	-----	----	-----	---	-----

A	Kaffaltii leenjifamtootaa yeroo leenjiwaliin-waliinii					
B	Waldaalee yeroo leenjiwaliin-waliinii hirmaannaa gaarii godhaniif waraqaan galataa kennamuufii dhabuu.					
C	Yeroo leenjii meeshaale miidhamaniif waliigalteen inshuuransii dhabamuu					
D	Yeroo leenjii waliin-waliinii (CT)leenjifamtootaaf geejjibni dhabamuu					
E	Qophii eebbaa irratti Waldaalee fi goodafudhattoota afeeruu dhabuu					
F	Walitti aansuun waldaalee leenjii waliin – waliinii kennaniif deggersi qarshii godhamuu dhabuu.					
G	Yeroo leenjii waliin –waliinii leenjistoondi durgoo dhabuu.					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliingala, TIW= Tasuma itti waliihingalu, IW= Itti walii hingalu , MKH= murtoo kennuu hindanda’u.

Raawwii barnoota piraktikaala wantoonni gufachiisan maalfai?

Rakoon bakka hojii keesaniitti isin mudate maalidha?

2.1.Rakoolee tooftaa baruu fi barsiisuu irratti mul;atan

S/N	gaaffiilee	TIW	IW	MKH	W	BIW
A	Barumsa praktikalaa irratti yeroo barattan ibsa barsiisaatu caalaa mul;ata					
B	Leenjistonni yeroo leenjisan barumsa rakkoo hiiku irratti xiyyeefatu					
C	Leenjistonni yeroo leenjisan mala ittin argannoo bira gahan fayyadamanii barsiisuu					
D	Leenjistonni yeroo leenjii piraktikala kennan mala Mala xiinxala barattootaa gabbisuun barsiisu					
E	Yeroo barumsa piraktikalaa barumsa projektii fuuleffaten barsiisu					
F	Yeroo barumsa piraktikalaa leenjistonni Garedhaan Ni hirmaachisu					
G	Yeroo barumsa piraktikalaa leenjistonni Fakkeenya garaa-garaa fudhachuun akka barattoonni hubatan godhu					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliingala, TIW= Tasma itti waliihingalu,IW= Itti walii hingalu , MKH= murtoo kennuu hindanda'u.

Raawwii barnoota piraktikaala wantoonni gufachiisan maalfai?

Rakoon bakka hojii keesaniitti isin mudate maalidha?

2.1.2.Rakkoollee akkaataa barsiisa daree keessattii irratti mul’atan mulata

S/N	Item statement	BIW	W	TIW	IW	MKH
A	Leenjisaan barattoota dandeetii isaaniitiin adda baasee beekuun mata duree isa haaraa wajjin walsimsiisee kenna.					
B	Leenjisaan barnoota barattoota gid-galeeffate kennuun akka isaan wal irraa baratan godha yeroo barsiisu.					
C	Meeshaaleen deggersa barnoota dursee qophaa’a yeroo barnootni piraktikaala barsiifamuuf jedhu.					
D	Leenjistoanni yeroo barsiisan theorii persentii 30 , qabatamaan immoo persentaa 70 barsiisuu sirriitti hojii irra oolchu.					
E	Yeroo barnootaa piraktikalaa barattan hirmaannaan barataa yaraadha?					
F	Yeroo leenjii, tokkoon-tokkoon sochii barnootaa irratti leenjistoanni barattota ni hirmaachisu turan.					
G	Barattooni yaada guutuudhaan barnoota piraktikaalaa akka hordofaniif haalawwan hawwataa ta’an fi miira barattootaa kakaasan Leenjistoanni ni fayyadamu turan.					
H	Asignmentiin barattootaaf wantoota haaraa ta’an irratti akka isaan of shaakalsiisaniif ni kennamaaf ture.					
I	Yeroo Barnoota piraktikalaa barattotaa gareen qoodanii walgargaa akka baratan gochuun ni mul’ata.					
J	Leenjifamtoonni dandeettii isaanii gabbifachuuf jecha yaada isaani soda malee ibsachuu ,gaafachuu fi deebii deebisuun ni jira.					
K	Leenjisaan yeroo leenjisuun ofii isaatii baayyee dubbachuu irra barnootaaf haala mijeessuutu, barattotatti kallatti argisiisuutu mul’ata					
L	Barnoonni kolleejjii keessatti baratamuu fi bakka hojiitti hojiin hojjetamu walfakkata.					

Hiiktuu: BIW= Baayiseen itti waliigala, W= Waliigala, TIW= Tasuma itti waliihingalu,IW= Itti walii hingalu , MKH= murtoo kennuu hindanda’u.

Barnoota piraktikaala barachuu irratti wantoonni gufuu ta’an koleejjii keessatti maalfaadha?

Bakka hojiitti rakkoo gurguddaan isin quunnaman maalfaadha?

2.2.Rakkoolee raawwii hojii leenjii qabatamaa irratti mul'atan

No	Items	SD	D	UD	A	SA
A	Leenjii qabatamaa raawwachuuf rakkoon waliin hojjechuu jiraachuu					
B	Waldaalee fi dhaabbani itti bobba'an dhabamuu					
C	Yeroo leenjii qabatamaa, meeshaallee akka maashiniitti fayyadamuuf dandeetti dhabuu					
D	Waldaalee biraa simannaan dhabamuu					
E	Mata dureewwan hin haguugamin jiraachuu					
F	Leenjii qabatamatti bobba;uun dura gorsi gahaan kennamuu dhabuu.					
G	Leenjistootaaf waraqaan galataa dhabamuu					
H	Supervaayizeroota ga'umsa qaban ramaduuf bajata dhabuu.					
I	Dhaabbanni manafakcherii leenjii qabatamaaf itti bobba'an jiraachuu					
J	Leenjifamtoota bobbaasuuf geejibni dhabamuu					
K	Fedhii dhabuu dhaabbiilee leenjii qabatamaa kennuuf					

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Barnoota piraktikaala barachuu irratti wantoonni gufuu ta'an koleejjii keessatti maalfaadha?

Bakka hojiitti rakkoo gurguddaan isin quunnaman maalfaadha?
