# CHALLENGES IN THE IMPLEMENTATION OF OUTCOME BASED INSTRUCTION IN COOPERATIVES THE CASE OF ARDAITA AGRICULTURAL TECHNICAL VOCATIONAL EDUCATION AND TRAINING COLLEGE.

**BY**

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This is to certify that the thesis prepared by Geta Achenef, entitled: Challenges in the implementation of Outcome-Based TVET Instruction in Cooperatives - The case of Ardaita Agricultural Technical and Vocational Education and Training college and submitted in partial fulfillment of the requirements for the degree of Master of Arts (Management of vocational education and Training) complies with the regulations of the University and meets the accepted standards with respect to originality and quality. Signed by the Examining Committee:

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## List of Acronyms and Abbreviations

| | |
|---|---|
| ATA | Agricultural Transformation Agency |
| ATVET | Agricultural Technical Vocational Education and Training |
| AU | African Union |
| BQF | Bologna Qualification Framework |
| CAA | Cooperative Accounting and Auditing |
| COBM | Cooperative Organization and Business Management |
| CoC | Center of Competence |
| DA | Developmental Agent |
| EOS | Ethiopian Occupational Standard |
| ESDP | Ethiopian School Development Program |
| FGD | Focus Group Discussion LAP-test- Learning Activity Performance |
| LG | Learning Guide |
| LO | Learning Outcome |
| MOA | Ministry of Agriculture |
| MOARD | Ministry of Agriculture and Rural Developm |
| MOE | Ministry of Education |

| | |
|---|---|
| MOFED | Ministry of Finance and Economic Development |
| NC | National Certificate |
| NQF | National Qualification Framework |
| Sq. m | Square meter |
| TM | Training Methodology |
| OBET | Outcome Based Education and Training |
| OBI | Outcome Based Instruction |
| SAQA | South Africa Qualification Agency |
| SPSS | Statistical Package of Social science |
| TG | Teaching guide |
| TLTQF | TVET Leaders and Trainers Qualification Framework |
| TTLM | Teaching Training and Learning Material |
| *TVET* | *Technical and Vocational Education and Training* |
| UNESCO | United Nations Educational Social and Cultural Organization |
| WB | World Bank |

## *ABSTRACT*

*The main purpose of this study was to assess the challenges in the implementation of outcome based instruction in cooperatives and suggest the necessary recommendations in Ardaita Agricultural TVET college.* Descriptive survey method was used to identify the challenges *To this end, 48 teaching staff and 182 graduating class students of the colleges were selected using random sampling. In addition to the questionnaires, interviews, FGD, document review and observation had been used. Accordingly, the data obtained from different sources were analyzed using both quantitative and qualitative methods. The result obtained revealed that experience, levels and educational qualification were seen sufficient their number was not matched with the number of learners. Training should focus on new employees and level C instructors . Similarly, there was no any officer to facilitate guidance and counseling service in the college. Employed budget allocation and physical resources were insufficient. Besides, Outcome based instruction had been affected by mismatch of teaching learning process. Furthermore lack of understanding about outcome based instruction of students leads them not to accomplish their responsibility. Finally, the allocated time for each unit of competence was not enough for learners to accomplish the performance and demonstrate satisfactorily. However, in solving forgone problems existing teaching staff commitment in combination with their educational achievement and circumstances of the management in the college observed as a good opportunity to face the challenges enhance implementation of outcome based instruction. Therefore, Ministry of Agriculture should give due attention on supplying and facilitating of teaching learning resources as well as provision of short term training to support teaching learning processes. Moreover, the college needs to do in collaboration. with Ministry of Agriculture to alleviate shortage of demonstration equipment and to enhance cooperative training.*



***Key words and phrases**: competence, outcome based, cooperative and Instruction*

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

Education is the most important tool to deal with the changing social and physical environments. It is a process designed to shape the knowledge, skills and attitudes necessary for individuals to manage environment in which they live. Different organizations and individuals have indicated this fact. UNESCO (2000) describes that education is one of the most powerful instruments known for reducing poverty and inequality and for laying the basis for sustained economic growth. Derbessa (2000) also suggests that education is a basis for developing the capacity to cope up with leading, evaluating and changing society in an information era. According to Derbessa (2000) higher education institutions have greater contributions for the development of a country through supplying skilled and semiskilled man power.

Technical and Vocational Education and Training (TVET) is a part of higher education that help people to attain their full educational or professional potentials. TVET is also one of the main components of ESDP policy for increasing the trained labor force relates to the development of the country as a whole (UNESCO, 2002).

Education Sector Strategic development Program (MOE, 2011) explains that the outcome based approach facilitates the learning process in a way that students can acquire set of competences required at the workplace as defined in the Ethiopian Occupational Standards (EOS). Its focus is on performance and demonstration provision of evidence of knowledge, skills and attitude to a specific level of competence in accordance with a national occupational standard.

Similarly, the newly reformed Ethiopia TVET strategy (MOE, 2008) maintains that TVET quality and relevance should be enhanced through making the system outcome based. By “outcome based” the strategy implies that the training received in TVET

should be measurable according to the skill assessment based on the occupational standards.

The concept of outcome based approach also demands that the program design curriculum, define appropriate outcomes, contents and methods or strategies of learning. So that TVET programs facilitate learning processes which assist the students through developing the required competences.

Competence is the possession and application of knowledge, skills and right attitudes to perform work to the standard expected in the work place. It encompasses organization and planning of work, innovation and copying with non routine activities. It includes those qualities of personal effectiveness that are required in the workplace to deal with coworkers, managers and customers ( MOE, 2008).

The underlying idea is that vocational education should enable students to acquire the competencies needed in their future profession include in society as a whole. Additionally, while working as professionals, they should continue to develop their competencies, so that they are able to react and anticipate future developers in their work.

However, previous experience has indicated that TVET institutions have been facing many challenges while implementing competency based instructions because of limited competent instructors, lack of understandings about outcome based methods of instruction and assessment, lack of instructional materials and financial constraints. So the research conducted in this area would have great contribution for TVET institutions to see the challenges which faces against their objectives (Yohanis, 2012).

Specifically, this study would have its own contribution to TVET providers which are focused on cooperative fields like, cooperative accounting and auditing, cooperative organization and business management. Ardaita Agricultural TVET College is the site of the researcher in order to fill the gap in the implementation of outcome based instruction in the college.

Ardaita Agricultural Vocational Education and Training (AATVET) College is one of the federally administered colleges under the Ministry of Agriculture (MoA). The college was established in March 1984, E.c. It was formerly known as 'Yekatit 25 Cooperative Institute'. It is located in Gedeb Hssasa woreda, West Arsi Zone of the Oromiya National Regional State. In addition, it is about 305 kilo meters far away from south east of Addis Ababa and covers 1613 hectares of land out of this 1321 and 292 hectares is used for crop and livestock production respectively.(AATVET,2008)

Based on ATVET Sub-sector Strategic Document (MOE, 2008), the college is entitled to provide formal training in TVET programs, from level I-IV, in the field of cooperative for Development agents (DA) in rural area. Trainees are selected by Ministry of Agriculture from all regions in the country based on the criteria of Ministry of Education. Besides long term formal program the college has been delivering non-formal training to fill specialized skill gaps, entrepreneurial skills and provide applied technology transfer and technical advisory services to farmers, primary cooperatives ,unions and Federations which are engaged in agricultural business and the public sectors. According to the national agricultural cooperative development strategy (ATA, 2012), the college is selected to be national center of excellence in the field of cooperative to lead the country cooperative development.

Currently the college is providing formal training on level IV TVET program in Cooperative Business Management and Cooperative Accounting and Auditing fields mainly for development agents who are expected to work on government cooperative promotion office after their graduation, and this program is a three year training program. And recently, from 2013 onwards, the college in collaboration with its stakeholders starts to deliver tailor made non-formal short term training for different types of cooperatives organizations. And the college has strong desire and commitment to expand this tailor made and open non formal short term training program in the near future. The total student intake capacity of college is 1600 trainees and the college provides all accommodation services almost for all its students.

## 1.2. Statement of the Problem

It is a generally accepted fact that education is an investment and human resource development is critical to the socio economic development of any nation. However, the type of education which best contributes to the needs of the society is the big question that nation faces. Everywhere we hear that there is mismatch between what education develops in school leavers and what the world of work needs (AU, 2007)

Margery and Davis(2003) suggest that outcome-based instruction is an approach to education in which decisions about the curriculum are driven by the exit learning outcomes that the students should display competences (knowledge skill and attitude) at the end of the course.

The social logic of education defines that competence is the manner in which people mobilize their personal resources (cognitive, affective, social, etc.) to carry out a task in a given context. Competences constitute a kind of learning located between behavior and abilities. Competence involves a combination of practical skills, knowledge, motivation, ethical values, attitudes, emotions and other social and behavioral components which work together to achieve effective action. It has three main attributes; it tends towards the integration of abilities because it includes knowledge, skills and attitudes; its intention is to motivate and it is therefore geared towards action with regard to new situations; and it implies contextualization because it permits a response in different, context-based situations. In other words, defining learning in terms of competences highlights the need to acquire knowledge in a way that can be mobilized in task resolution indeed; the definition of basic learning in terms of competences underscores the importance of considering knowledge in action, and not purely as representation (Gomez, 2007 cited in Tian , Moya and Eucago*).*

Spady (1994) suggests that Outcome Based Instruction(OBI) is the combination of different interrelated theories. The theory of opportunity is linked with the philosophy that all learners can learn and succeed but not at the same time and pace. This theory maintains that everyone has a potential of learning. The theory of learning also describes

that in outcome based instruction the learner should be active participant in the teaching learning situation. Mastery learning is a method of teaching and learning that involves the student reaching a level of predetermined mastery of instruction before being allowed to proceed to the next level.

Ethiopia has been facing many problems in implementation of outcome based TVET instruction. The major challenges that are faced include poor geographical distribution of TVET institutions, negative perception of TVET, low enrolment in TVET institutions due to the high cost of technical training and lack of awareness in the implementation of outcome based education and training (MOE, 2010).

Only few researches were conducted about the challenges and implementation of outcome based education and training. Yohannes (2012) studied that there was low awareness about the concept of OBTVET. There was no consistence in understanding among the trainers and students of discussion group. The system of information sharing and dissemination between the staff members of the college were seen weak.

On the other hand Bezawork (2010) studied about the practices and challenges of outcome based training. His findings show that the education and training provided was inadequate based on the predetermined Ethiopian occupational standards. Bezawork listed out that Lack of on the job training, lack of well developed instructional material and organizational facility and the tendency of using lecture as a method were the main challenges which had influence in the implementation of outcome based instruction.

However, their studies were focused on hard skills especially automotive, machines, welding and others. Their study didn't discuss on soft skills like Business fields of Agricultural TVET colleges. They didn't investigate in detail about the challenges in the implementation of the theories, characteristics, and principles of outcome based instruction like demonstration of learners, learner center approach and availability of time and opportunities of learners for individualized learning. Therefore, this study has initiated to investigate the major challenges in the implantation of outcome based instruction, by addressing the following basic research questions:

### 1.3. Research Questions

1. What are the challenges in the implementation of outcome based instruction?
2. How do the instructors use learner centered approach based on the philosophy that all learners are achievers if allows sufficient time to do so?
3. How do learners demonstrate the integrated knowledge, skills and attitude based on the learning outcome in each unit of competence?

## 1.4. Objectives of the Study

### 1.4.1 General objective

The general objective of the study is to identify the challenges in implementing outcome based instruction in cooperative fields of Ardaita Agricultural TVET college.

### 1.4.2 Specific objectives

The general objective will have the following specific objectives:

1. To identify the challenges in the implementation of outcome based instruction.
2. To analyze the instructors' teaching /learning approach with reference to the philosophical assumption that all learners are achievers if appropriate time allows doing so.
3. To assess how learners integrate and demonstrate their knowledge, skills and attitude based on the learning outcome in classroom.

## 1.5. Significance of the Study

Global experience has shown that the mere expansion of TVET does not solve the problems of unemployment and low productivity of the economy. TVET has to respond to the competence needs of the labor market and create a competent, motivated and adaptable workforce capable of driving economic growth and development. Based on the above circumstance Ethiopian TVET strategy has amended its 2002 old strategy to shift from supply driven to demand driven(MOE,2008).

This study shall serve as a basis for decision making by planners, policy decision makers and provide to better understanding about outcome-based TVET instruction. Also findings of the study will benefit TVET colleges and other stakeholders as advanced opportunities for strengthening and improvement of outcome-based TVET instruction in identifying strategies of implementation practice of OBTVET. It may have contribution for administrative and academic staff that can benefit from the knowledge and literature of this work by using it as an input for further research on business field of studies especially cooperatives. The researcher attempted to generate data for the issue under discussion. So the research conducted in this area would have great contribution for TVET institutions to see the challenges which faces against their objectives (Yohanis, 2012).

### 1.6. Scope of the Study

This study was concerned only with Challenges of implementation of outcome-based TVET instruction in cooperative fields located in one of Federal agricultural TVET colleges called Ardaita agricultural TVET College. Its emphasis was only on the implementation of principle, premises and characteristics of outcome based instruction in classroom. Its investigation was focused on the learning environment which has influence directly or indirectly on class room instructional process in the college. It didn't examine the whole country's Agricultural TVET colleges.

### 1.7. Limitations of the Study

There are some problems faced while conducting the study. For instance; lack of adequate, sequentially listed and formally organized available data provided, there was also financial constraints to run the study according to the schedule. On the other hand unwillingness of some expected participants to fill the questionnaire, delay of responses, not to respond on request and unpunctuality of some education officers to participate on interview/discussion had wasted the scarce time. Despite, patience and friendly with respondents helped the researcher to collect the required data.

## 1.8. Operational Definition of Terms

**Assessment-** is a Process of collecting evidence and making judgments on whether competence has been achieved.

**Competency:** is the capability of someone to reach at specific achievement. Personal competencies comprise; integrated performance oriented capabilities to do things. It is the capacity to realize up to standard of the key occupational tasks (MoE, 2010)

**Cooperative - is** an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.

**Cooperative Training** Part of training TVET that is provided in cooperation between employers and a TVET institution. Cooperative training usually takes the form of training at a public or private TVET institution for part of the time and in the industry for the other part of the program duration

**Learning outcomes** are statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning.

**Occupation-** The type of work, which an individual does to earn a living, often defined in terms of the broad range of competences or duties required to achieve the desired learning outcomes.

**Occupational Standards:** It is industry focus to reflect the needs of the organization core business and the job *(MoE, 2010).*

**Outcomes:** are demonstrations of learning in such a way that it consist a group of tasks at the end of learning experience (Spady, 1994).

**Qualification** -The certification awarded to a person as recognition of achievement of cluster/group of competence that meet industry requirements for useful work and in

accordance with the title and description of the National TVET Qualifications Framework or NTQF.

**Training, Teaching and Learning Materials (TTLM)** are all types of materials suitable or specifically designed and developed to support occupational learning processes

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

The main purpose of this chapter is to explore the available literature about the challenges Implementation of outcome based instruction and form the theoretical and conceptual bases of the study. It also provides the issues of philosophical foundations, principles and Characteristics of outcome-based outcome based instruction.

## 2.1 Basic concepts

Margery H. Davis( 2003) suggests that Outcome-based education is an approach to education in which decisions about the curriculum are driven by the exit learning outcomes that the students should display at the end of the course. Outcome-Based Instruction can be summed up as results-oriented thinking and is the opposite of input-based education where the emphasis is on the educational process. Davis's suggestion implies that from outcome based education what is measured is the result rather than the process.

On the other hand OBI is a flexible, empowerment-oriented approach to learning. It aims at equipping learners with the knowledge, competence and orientations needed for success after they leave school. Hence its guiding vision is that of a competent future citizen. Success at school level is of limited benefit unless learners are equipped to transfer academic success to life in a complex, challenging, high-technology future (DOE ,1997 cited in Bezawerk).

Competencies are one of the key features of OBI. Nel (1999 as cited in Killen ), notes that Competency is understanding of knowledge and demonstration of ability to integrate.

Hallendorf (2000 as cited in Killen) also sees competency as the minimum requirements a person has to comply with in order to deliver outputs at a specified level

.According to (Nel 1999 cited in Killen ) the concept "competence" suggests that foundational competence; practical competence and reflexive competence are all necessary for the meaningful accomplishment of a task in any context which is part of reality. Foundational competence is described as an understanding of what is being done and why. On the other hand Practical competence is described as a demonstrated ability to perform a particular task or activity. The last one is Reflexive competence which is described as a demonstrated ability to integrate or connect performance with the understanding of that performance, to learn from the actions and to adapt to change and unforeseen circumstances.

MOE (2010) defines the term by combining the above definitions as competence is the possession and application of knowledge, skills and right attitudes to perform work activities to the standard expected in the workplace. Most definitions are interrelated each other the only difference is the scope.

### 2.1.1. Dimensions of competence

MOE (2008) also put competence in to four dimensions such as task skills, task management skills, contingence management skills and job/role environment skills. **Task skill** is the requirement to perform tasks. A worker needs to have the skills, knowledge and attitude to do the job. A worker is also required to understand why the job should be done in a certain way.

The second is **Task management skill** which is a requirement to manage a number of different tasks. Being competent in task management skill refers being able to do different task at the same time. The third one is **Contingency management skill** that emphasizes on the requirement to respond irregularities and breakdowns in routine. Being competent in competency management skill deals with everyday problems as they arise. The last one is **Job /Role environment skill**. It is focused on the requirement to deal with the responsibilities and expectations of work environment. Being competent in job or role management means understanding workplace policies and procedures. It

involves Working with others, Interacting with clients and suppliers, Complying with standards operating procedures Observing enterprise policy and procedures.

According to MOE (2008) being competent is having the skills, knowledge and attitudes to do the job; Understanding why the job should be done in a certain way; being able to perform different tasks at the same time, dealing with everyday problems as they arise; and understanding work place policies and procedures working with others in the workplace.

### 2.1.2. Learning Outcomes

Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning. They are usually defined in terms of a mixture of knowledge, skills, abilities, attitudes and understanding that an individual will attain as a result of his or her successful engagement in a particular set of higher education experiences. In reality, they represent much more than this. They exemplify a particular methodological approach for the expression and description of the curriculum (modules, units and qualifications) and levels (Killen, 2000).

Similarly, Spady (1994) provides a far more detailed description by saying that outcomes are clear learning results that learners must demonstrate at the end of significant learning experiences. According to spady, learning outcomes are not values, beliefs, attitudes, internal mental processes or psychological states of mind. They are what learners can actually do with the knowledge that they have learned. They are the tangible application of what has been learned. Because outcomes involve actual doing, rather than just knowing, or a variety of other purely mental processes, they must be defined according to the actions or demonstration processes being sought.

Whereas Lemmer and Bedenhorst (1997 as cited in Killen) regard this learning outcomes as model represents a shift from a content-base (objectives) approach towards a learner-based approach. What exactly are learning outcomes? Guilting (1998,as cited in Yohanis) regards learning outcomes as clear results that learners want to demonstrate

at the end of significant experiences. These outcomes include: the tangible application of what has been learned, the involvement of actual doing rather than just knowing, reflections of learner competence in using content, information, ideas and tools successfully, representation of the ultimate result at the end of the learner's career, and broad performance capabilities rather than the specific curriculum skills. To sum up all of the above theories of learning outcome supports that theories and practice should be integrated and focused on learners' demonstration.

According to learning outcomes approach, where design generally begins by establishing what competencies are needed to enable learners to be successful in life. The close attention being given to OBI in Ethiopia reflects the desire for transformation of learning outcomes not only on an individual but also on a federal and regional level. However the instructor actively assists the learner not only in his/her endeavor to achieve the outcomes but in creating sense or meaning out of the scope of facts and narratives (MOE, 2008).

## 2.2. Philosophical Foundations of Outcomes-Based Instruction

Education in any country is not a neutral phenomenon, but it is based on a particular philosophy and it is important to understand this as basis for approaching this subtopic. Every society is held together by a common faith or "philosophy" which serves its members as a guide for living a good life.

According to Widerman(as cited in Killen 1998), suggests that outcome based education has the following theories; Behaviorism, social constructivism ,critical theory and pragmatism**.**

### 2.2.1. Behaviorism

An educational philosophy focused on external human behavior or something which can be observed. There is a need for outcomes-Based Education in educational institutions to provide with alternative possibilities behavior for a new society. Since there are differences in behavior across the line, a basic means of achieving best behavior is through education and discipline. Instructors, who practice behaviorists' principles, seek to transmit the discipline heritage to learners. If a learner has a history of behavioral problem, he/she needs methods of discipline practice.

In the classroom problems with behavior usually arise when learners do not achieve their outcomes. These problems disappear as soon as learners become involved in a learning task which interests them and which they feel they can effectively carry out. Behaviorism as a philosophy therefore has to do with efficient, competent teaching. If the teacher cannot create a teaching/learning process which is conducive to learning situation for his/her class, he/she will ruin into problems with behavior.

Most of the "normal misbehavior" problems can be prevented following a rich and stimulating program which keeps learners so busy with their own activities that they do not want to interfere with others or with smooth running of the task at hand.

Outcome based education is linked to this theory as it focuses on achievement outcomes by learners. Learners should demonstrate achievement through their behavior and actions. They should be able to apply knowledge and skills they gained on the classroom situation. Application of knowledge and skills will be reflected on behavior.

### 2.2.2. Re-constructivism

This is a philosophy that is aimed at social transformation. The philosophy of re-constructivism was developed in the twentieth century. This philosophy contains two major premises, namely Society is in need of constant reconstruction and such social change involves both a reconstruction in education and the use of education in reconstructing society. It is more concerned with the broad social and cultural fabric in which we exist. It does not seek to make detailed epistemological or logical studies. (Dewey cited in Spady, 1994).

Reconstructionism and OBI pay attention to the underlying culture and change in structure paying and importance to participation. This specifically operates by creating tension between individual and group development. Reconstructionists argue that OBI is to be genuinely progressive; it must emancipate itself from the influence of liberal-minded upper middle class, but come to grist with life in all its reality. This can help to develop a realistic and comprehensive theory that challenges a vision of human destiny. This can involve people of all races; all nations, all colors and all creeds join together in the common purpose of education. They understand that problems overlap and in solving one problem, instructors may only create new ones, however they maintain that if people can be encouraged to see problems in a broader perspective, the chances of eliminating them are greatly enhanced. . They also believed that planning and thinking about the future is as good as providing alternative societies for people to consider and they felt that this kind of thinking be promoted in educational institutions where teachers can encourage learners to become future oriented (Ozman and Craver, cited in SAQA,2005) .

Outcome Based Instruction (OBI) emphasizes the need to reconstruct Ethiopian TVET instruction in order to bring change to the society. Learners are encouraged to work together in outcome based instructional process in the classroom. One of the critical outcomes is that learners should be able to successfully demonstrate their ability to work effectively as a member of a team, group, organization and community (MOE, 2010).

### 2.2.3. Critical Theory

Critical theory started in Germany in the 1930's. It made a great deal of influence on all the human sciences, including education. Higgs & Smith etal(1997) regard the basic principle on critical theory as the fact that all human societies are structured on certain power relationship. These relationships then dominated the production of all forms of knowledge including moral and normative knowledge. Critical theory has influenced OBI in the sense that OBI supports freedom of choice which gears up independent thinking and development of skills using partnership as the way of solving problems.

Freedom of choice starts from group work (participative) when they are making personal inputs in the topic they are given. Vanderhorst and Donald (1999) list the following advantages: Learners will know what is expected of them and they will be able to assess their own progress. This is made possible by the stated outcomes and the assessment criteria. In doing so, learners can take responsibility for their own learning: OBI also provides the learner with greater learning support than in the past practices. Co-operative learning techniques, self-and peer-assessment are only a few examples of the learner support that must be an integral part of learning. In addition, Permanent failure is eliminated; i.e. learners who do not achieve the required standard will be granted further opportunities to do so: further more Rote learning is reduced consequently, understanding of content is more important than merely being able to reproduce knowledge. The absorption of miscellaneous, discrete facts is eliminated. Understanding of the context is emphasized.

As a result the learner's ability to deal with real life situations like those they will encounter after school is increased. The emphasis is on the knowledge, values and skills of real life situations, and not on contrived classroom activities.

However, Smith(1997) pointed out that critical theory most definitely has advantages, but also limitations: to encourage freedom of choice in learners requires hard work, a lot of planning towards the learning process and resources, learners should collect, analyze and critically evaluate information, learners should pose questions about the learning content i.e. they should not accept anything in the learning process without asking or analyzing it.

### 2.2.4. Pragmatism

It is a philosophy which emphasizes usefulness while under playing the value principles. Learning is in a central position within a pragmatic framework. Since pragmatism aims at translating useful knowledge of real-life problems into action, people must constantly acquire new knowledge and skills. The goal of learning is to create constantly new competence to fit the contemporary situation.

Pragmatism does not see education only as an academic exercise to increase general knowledge, but also as an answer to why and what should one learn, and what the student will use learning for. Pragmatic learning is vocationally directed, so every learning situation should lead toward increased practical competence. This view is held in all types of learning situations, from deep science to very practical skills.

The requirements on the teacher in a pragmatic context are enormous. It is not sufficient to know the subject matter, but to be able to focus on the individual growth of the students, and to be able to ‘teach’ in open situations to solve problems with no fixed amount of variables.

A teacher must master a large number of different methods to support learning, and be able to vary them according to situational needs still; the teacher is not the most important individual in a pragmatic learning process. The learner is most important. All

learning takes place within the student. No amount of given support, instructions and facts can force her to learn if she actively opposes learning. In the pragmatic approach the student must be placed within the situation to personally experience the problems (McLellan & Dewey, 1908).

In pragmatists view whatever work in practice, as well as what is useful is the most important. The emphasis is on achievements outcomes by learners. Learners should be able to practically apply what to learn in the classroom.

## 2.3. Forms of Outcomes-based Instruction

The norms and values of a community often influence the curriculum since the school and community are inseparably bound. Other influences such as teacher training in OBET and resource availability may determine the curriculum. Various works by Spady (1991), and other educators , there are basically three forms of OBI, namely traditional, transitional and transformational OBI.

### 2.3.1 Traditional Outcome Based Instruction

Traditional OBE is characterized by pre-existing subject content development of learning outcomes and defined as instructional aims based on the content syllabus. Therefore, it is guided by curriculum-based objectives. This means the curriculum remains constant and the focus is on the content outcomes. These outcomes are elicited from the syllabus. In this regards, mastering subject matter of the content is at the center of the outcomes. And outcomes are specific not holistic and often not linked to skills that the learner would need in the working environment and general life (Spady,1998)

Spady(1994) also argue that in traditional forms of OBE schooling is considered as calendar and time table controlled and organized into subject or course to be covered in specific time.

Thus, traditional OBE is limited to small sections of instruction which makes an end by itself. It is focused on bringing clear criteria and flexible time tables to the traditional time-based schools and it does not challenge the conventional nature of the school day.

### 2.3.2 Transitional Outcome Based Instruction

Transitional OBE moves away from traditional OBE to identify outcomes that reflect high order competencies. This means, it is regarded as the development of complex unstructured task performance. This approach sets out the outcomes that will be required by students when they graduate and stresses on critical thinking and problem solving. However, it does not allow total change to take place. Therefore, transitional OBE lies between traditional and transformational OBE. It incorporates traditional OBE for planning the curriculum and transformational OBE for orienting the learner towards their future role (Alderson, 2007).

### 2.3.3 Transformational Outcomes-based Instruction

Transformational OBE is the most sophisticated evolution of the outcomes-based concept. It moves away not only from the traditional curriculum, but also from the prescribed structures of schooling. None of the features of the traditional curriculum however, are considered untouchable. Curriculum development and resource allocation reflect the scope and nature of the outcomes. The curriculum is designed by starting with future-driven outcomes. The intention is to equip all learners with the knowledge, competence and orientation needed for success after they leave school (Brady 1992).

Transformational OBI requires that the learner and the curriculum should integrate totally with a view to giving meaning to the latter. It is also characterized by strong humanistic and social adaptation, as well as a high level of involvement by both the teacher and the learner (Olivier 1998).

Now it stands to reason that transformational OBI answers to the question: "what should learners be prepared for and how is it structured to accomplish broader results?" Life-role responsibilities are part of this curriculum. The outcomes encompass complex

life-role performances and from these learning experiences, processes and contexts, exit outcomes are derived.

To sum up among the forms of outcome based instruction transformational outcome based instruction is the basis for outcome based instruction.

## 2.4. Characteristics of OBI

According to Adedoyin and Acharya cited in Yohannis (2012) outcome-based instruction is a form of education that restructures conventional education system which requires students to demonstrate what they know and they are able to do after some learning process. In relation to this, anticipated demonstration is defined by setting benchmarks for each level of the program and supposed to include the entire student in the program. However, proposed benchmarks are different in every level of study and able to address and define the goals of the curriculum at each level of learning. Given that, it establishes ways to assess whether students have reached these goals at that level of study. It also ensures commitment in providing an opportunity of education and enables to reach at the required learning.

Outcomes for improvement as described by Killen (2000), one of the most important attractive characteristics of OBET is that it support administrators in providing with some level of control

over the outcomes of education and at the same time provide teachers with a large degree of freedom to select the content and methods through which they will help their students to achieve intended outcomes.

Pretorius (1998) refers to them as reasons for selecting OBI as a classroom approach they are as OBI aims at demonstrations of significant learning as reflected in the outcomes: it is a learner-centered approach based on the philosophical assumption that all learners are achievers if allowed sufficient time to do so. There is freedom and flexibility for self-motivated learners to engage in enriching activities in order to attain the required outcome: time and opportunities are provided for each learner to achieve

his/her ultimate potential: learners are focused on what is expected of them since they are exposed to the outcome right from the onset. learners become accountable for their own learning when having to attain and outcome; an opportunity for flexible teaching strategies is offered to teachers since the emphasis is not only on whether the learner attains the selected outcome, but also on procedure. The implementation of outcome based instruction is measured in relation with the characteristics of outcome based instruction. These characteristics are reflected on the performance of learners through reflection.

## 2.5. The Principles of Outcomes-based Instruction

Spady (1998) in turn offers only four principles to guide the teacher in the development and implementation of OBI: All of them are derived from the theories and characteristics of outcome based instruction.

### 2.5.1 Design Down

Teachers begin their curriculum development at the point where they want learners to ultimately end up – the learning outcomes. In other words, they design down; starting from learning outcomes, to determine what it is that has to be learnt. Teachers must be willing to eliminate traditional, favorite and unnecessary curriculum details. Curriculum design must be consistent, systematical and creative

### 2.5.2 Clarity of focus

There is a distinct focus on learning outcomes to guide curriculum implementation. A clear focus on learning outcomes provides teachers with a clear picture of the learning they wish to demonstrate. Learner success therefore becomes a top priority. The envisaged outcome is the point of departure for teaching and learner evaluation. During teaching, the teacher shares, explains and models the outcome so that they and the learners can work together towards attaining the outcome.

### 2.5.3 Expanded opportunities

More opportunities and learner support is provided for successful learning. There are four ways in which this is accomplished: The timetable is restructured to suit the requirements for OBI; a variety of teaching and learning methods increases opportunities for successful learning; There is a balance between comparative or competitive assessment else, this may inherently limit some learners' chances for success even if their actual performance potential is high. Criteria based assessment clearly defines and applies the same standard for all learners and does not impose limits on performances; Learners are able to engage in learning activities and have access to resources Learning Program are developed to facilitate this learning (Killen, 2000).

### 2. 5. 4. High expectations

Not only are opportunities for learning increased, but the levels of expectations to which learners are exposed, are also increased. Standards of acceptable performance for knowledge and skills are raised for learning while working towards outcomes. Assessment is based on criteria and not tied to norm-referencing which presupposes the number of learners who are successful. A challenging curriculum is therefore provided (Spady 1994).

## 2.6. Teaching and learning Methods in Outcome Based Instruction

According to Killen (1998), there are two approaches of teaching learning process; ***Teacher-centered approaches*** are referred to as direct instruction, deductive teaching or expository teaching which is focused on lectures and demonstrations. In these methods of teaching, the teacher controls what is to be taught and how students are presented with the information they are to learn.

***Student-centered approaches*** (also referred to as discovery learning, inductive learning, or inquiry learning) place a much stronger emphasis on the learners' role in the learning process—examples are co-operative learning and student research projects.

When you are using student-centered approaches to teaching, you still set the learning agenda but you have much less ***direct*** control over what and how students learn.

## 2.7. Assessment in Outcome□Based Instruction

Different educators define the term assessment differently. Erasmus et.al. (2006) define assessment as a process by means of which the quality of a learner's achievements can be judged, recorded and reported. SAQA (2005) also defines assessment as the structured evaluation of the outcomes of a program of learning that leads to awarding of a qualification. Kenwright (2003) agrees with the definition of SAQA, that assessment is a structured process for gathering evidence about a candidate's achievement in relation to specific learning outcomes.

Meyer (2002) reports that an outcomes-based assessment system means that evidence has to be collected and that judgments have to be made against the predetermined standards whether the assessment criteria have been met or not.

According to Ethiopian TVET system as described from its Training, Teaching and Learning Material Development (TTLM) guide that Assessment is the Process of collecting evidence and making judgments on whether competence has been achieved. Thus, assessment deals with the learner's ability to achieve the outcomes and requirements of a learning program. Judgments are made about evidence that is provided by learners. Evidence refers to the outcomes of learning in relation to very clearly specified Criteria.(MOE,2008).

### 2.8.1. Differences between traditional assessment and outcomes-based assessment

Assessment in traditional education is norm referenced. According to Du Toit (199, as cited in Killen) norm referenced assessment is associated with grading and ranking of learners by comparing learners and averaging scores or grades of learners. Olivier (1998) states that assessment within traditional education and training environments consists mainly of written tests and exams.

Competency tests with set memoranda and criteria are passed or failed according to how well students master the knowledge. Erasmus *et.al* (2006) describes that the key word in outcomes-based assessment is "demonstration". It implies that learners have to demonstrate their knowledge, ability and competence and those assessors have to judge the quality of the demonstration and decide whether the demonstration is satisfactory in order to award a certificate or qualification.

The assessment of outcomes-based learning is a continuous activity. Assessment is based on assessment of knowledge, skills and adherence to specific processes as well as the achievement of outcomes.

**Reassessment** involves a student who is assessed as 'not yet competent' seeking another assessment in order to demonstrate competence in the unit of competence. Students may file for re-assessment of the whole unit or only those parts where they failed to meet the requirements specified in the relevant unit of competence. The students will again undergo the same process as when they first requested for taking the LAP Test or Students Activity Performance Test

The teacher must provide the following information to the student who wishes to be reassessed: schedule of the next assessment, place /venue of assessment and preparation that must be done (Killen, 2000).

### 2.8. Agricultural Technical and Vocational Education and Training (ATVET) in Ethiopia

In order to raise the capacity of development agents the Ministry of Agriculture and Rural Development established Agricultural Technical and Vocational Education and Training (ATVET) colleges. These colleges are considered as a timely and appropriate response to solve the problem of both the number and capacity of development agents (MOARD, 2005). The main objective of ATVET training program is to produce middle level skilled competent motivated agricultural practitioners who would be potential

teachers (for the junior level school leavers) and development agents at each farmers training center (WB,2007)

Moreover, Farmer Training Centers are being established to transfer improved agricultural technologies and give adequate services within individual farmers reach .(MoFED, 2006). ATVET was first introduced in 2000 by the Ministry of Agriculture in 28 ATVET colleges. In 2001 the number of colleges reduced to 25 (MOFED, 2006). Today there are twenty five ATVET colleges in the country. Among these only five ATVET colleges are governed by MOA at federal level. The remaining 20 are administered by regional governmental states. In 2006 a total of 23,378 students have graduated. It was planned to increase the number to 55,000 by 2008. The training program at ATVETs was planned to give 30% theoretical and 70% practical training to the students (MoARD, 2005).

The training program of ATVET focuses on students who have completed the tenth grade education and existing development agents who are working at grass root level. The training program is carried out on boarding basis and lasts for three years. The students will be awarded a diploma in five disciplines. The five major areas that offered by the training program include: Animal Science; Animal Health; Plant Science; Natural Resources; and Cooperatives (MOFED,2006).

In spite of the designing and implementing of such an elaborate nationwide project there is a growing dissatisfaction and concern about the practicality of it. According to Berhanu et al. (2006) the ATVET program is suffered from many interacted problems. The most notable of all the problems, among others, include the inability of ATVET colleges to attract motivated and capable candidates; shortage of demonstration facilities; and misappropriate selection criteria. Therefore, it is crucial to study these problems by collecting empirical evidences. Based on reviewed literatures and the research method data collected about the curriculum, the teaching learning process, the practicum that is being implemented currently, in all ATVET colleges, the level of awareness of the trainees about their environment, and the physical facilities of the selected colleges

## 2. 9. Outcome Based Education and Training in Ethiopian Context

The goal of TVET providers is to create the necessary skills, knowledge and attitudes of trainees, so that they are able to perform according to occupational standards, and hence receive certification. Thus TVET providers have developed curricula that are based on the National Occupational Standards and are appropriate to the relevant learning process. Curricula emphasize specific requirements of the target groups and specific local labor market requirements. As a consequence, the outcome-based quality management system is fully established. (MOE, 2008).

Competences are described in National Occupational Standards to be developed by people knowledgeable on and experienced in the world of work. As such, the National Occupational Standards define the outcome of all training and learning expected by the labor market, and has the benchmark of all quality management within the TVET system. Output quality of TVET delivery can be measured through a process of learner's achieved competence. This is done through occupational assessment, which is based on the occupational standards (MOE.2008).

### 2.10. National TVET Qualification Framework (NTQF).

The NTQF is thus designed with a view to of eventually being integrated into an overarching National Qualifications Framework. NQF defines qualification levels, relationships and equivalences between different qualifications for the entire education system including TVET, general and higher education. It stipulates rules and requirements to move between general education and TVET, and to move from TVET qualifications into the higher education system. NTQF is based exclusively on training outcomes, which are defined based on occupational standards which in turn reflect labor market needs.(MOE,2010).

The NTQF rationalizes all TVET in to a single nationally recognized qualification. It defines the different occupational qualification levels to be awarded, and describes the

scope and composition of these qualifications and the degree of responsibility a qualified person can assume in the workplace.

## 2.11. TVET Leaders and Trainers Qualification Framework (TLTQF)

At the very centre of quality TVET rests an effective interaction between Trainers and trainees. In fact, an overall improvement in competencies for employability can only be realized if there is an improvement in the quality, effectiveness and relevance of teaching by a competent Trainer. Though there are various definitions given by different authors, a TVET Trainer is defined as one who educates (educator, instructor, pedagogue, trainer, tutor.) young people, gives instructions and a person charged with the instruction and guidance of another. Furthermore, TVET Trainer is one who produces a fit, qualified, or proficient person and is someone who rules or guides or inspires others; with a commanding authority or influence.(MOE,2011).

In view of the aforementioned definitions and implementation of the Outcome-Based TVET, a TVET Trainer is defined as an instructor, facilitator or supervisor who is qualified to facilitate specific occupations. To be qualified as a Trainer, he / she must possess at least a Trainer qualifications level certification. This means that a TVET Trainer is a holder of a National Certification of at least Level III (NCIII) and a Trainers Methodology Certification (TMC) to prove that he / she is competent to deliver a training program(MOE,2011).

### 2.11.1. The Roles of TVET Trainers/Instructors

Since the TVET Trainer should no more practice the conventional Trainer-centered method of training delivery, it is rational that his / her role shall be shifting from *lecturing*, which only directs and controls the learning process, to training facilitator, who fosters a trainee-centered environment and portrays the following roles, among others

A trainer is leader, facilitator, facilitator, session planner , curriculum developer, instructional materials developer, advocate, counselor, coordinator, assessor, and supervisor.

Another basic characteristics expected from a TVET Trainer are the abilities to demonstrate competences through skills, knowledge and attitudes and establishing his / her credibility. It must be recognized that a TVET Trainer as per competencies specified in a TVET Trainers Qualification Framework, the overarching proficiencies may be translated to the following

:Professional Competency: Mastery of subject matter & methodology, Appropriate level of technical skills, knowledge, or attitudes in his / her area of expertise. Competency in appropriate delivery techniques and methods. Documented experience (basis of participation, completion and evaluation) - *"If it isn't documented, it didn't happen."* Updated training skills or experience related to their subject matter expertise & delivery skills. Application of adult learning principles appropriate to the target audience and the learning objectives. Social and Philosophical Stability A happy disposition and pleasing personality. Ambition for development self and others.

Positive attitudes toward teaching and a spirit of collaboration, commitment, dedication and creativity. Fitness ;Physically fit for the occupation he / she is involved. Ability to think and speak clearly and logically. Knowledge of the nature of trainees, knowledge of the aim of education / training and of the means of achieving them.

Trainers from TVET institutions so that: if the occupational field requires primarily practical skills, they should have significant experience in the exercise of these skills; if trainees are to be prepared for technician positions, Trainers should have a thorough knowledge, preferably acquired through appropriate practical experience, of the special requirements of this type of position; if the occupational field requires research and theoretical analysis, Trainers should have a background in research methods (MoE,2011).

### 2.11. 2. Guiding Principles & Requirements to be a good Instructor

Due to the fact that TVET's transformation is dynamic as a direct consequence of fundamental political, economic and social developments, efforts are being made to find suitable concept and approach how to best standardize the TVET Trainer's professional development. It is a simple but extremely important fact that quality of TVET crucially depends on the qualification and motivation of the teaching staff. Furthermore, the general agreement worldwide in relation to Trainer's development refers to the creation of an internationally benchmarked TLTQF having the following guiding principles. This is in recognition for the need of TVET Trainer to be developed, assessed and certified ( MoE,2010).

The TLTQF states that the three TVET Trainer qualification levels are **A, B, and C**. These levels shall follow the National TVET Qualification Framework. A TVET Trainer should have National Certification on the qualification level he / she is teaching. Only **A** and **B** level trainers are allowed to handle Trainers Methodology Certificate (TMC).Each trainer's qualification level is a combination of Occupational Competency and Training Methodology.( MOE,2011).

The training methodology (TM) levels shall follow the TVET Trainers' training methodology competencies as follows:

Table 2.1.. Levels of trainers' training methodology

| **Qualification Level** | | |
|---|---|---|
| | Occupation | Methodology |
| A | NC V+ | TMA |
| B | NC IV | TMB |
| C | NC III | TMC |

Source: TVET Leaders and Trainers Qualification Framework Manual, MoE, 2011

Key; NC V- National Certificate to train level five TM- Training Methodology

NC IV- National Certificate to train level IV

NC III- National Certificate to train level III

From the above table, it is shown that Workshop Trainer / Facilitator competencies (Phase I) are common to **C** Level Trainers. In addition to using developed training related materials, he / she is also expected to be competent in using multimedia equipment. Phase II of the Learning Hierarchy, Workshop Trainer / Facilitator, Developer and Implementer covers the competencies of **B** level trainers where in one need to show competency in the design and development of training related documents and materials such as curriculum, instructional materials and assessment tools. **A** Level Trainer is workshop trainer, developer, and program designer. These cover supervision, instructional materials development, instructional delivery, staff development and training facilities maintenance. These competencies will also enable the **A** Level trainer to face challenges and ensure proper implementation of TVET (MOE, 2011).

## 2.12. The Training, Teaching and Learning Materials (TTLM)

There are different instructional media, aid or tool that helps the teacher and student/student facilitate instructions and learning. They are generally categorized into two types; printed and non-printed materials. However, the most desirable are those that are most effective in terms of results and cost. And one of these is the so called training, teaching and learning materials (MoE, 2011).

The training, teaching and learning materials are teacher-made printed instructional aides that supplement the teacher's oral and visual instructions. It is a well-designed and carefully developed learning aid that provides detailed instructions to the student/student. They are self-instructions to guide the student/student in learning and progressing at a rate comfortable to them. It is also a serve a support in acquiring the learning outcomes reflecting the competence requirements of the particular occupation

addressed by the program curriculum. Generally, TTLM is instructional media that facilitates individualized learning (MoE, 2011).

There are two types of TTLM, the 'Resource-Based' and 'Self-Contained'. The resource-based uses additional materials available internally or externally of the organization or institute such as textbook, journals, periodicals, handouts or manuals to provide the needed information leading to acquisition of the intended learning outcome. While the self-contained TTLM provides all the necessary information needed to understand and acquire the identified learning outcome. The student/student does not need to access additional reference material (MoE, 2010).

The TTLM is composed of three packages that serve as learning aids in meeting the learning outcomes of the training program. The titles of the packages are teacher's guide, learning guide assessment packet. The ***Teacher's Guide*** is a companion document that guides the teacher in facilitating the learning activities in accordance with the curriculum design. There is only one teacher's guide for every TVET program and it must contain all the information and activities intended as designed by the curriculum. The information provided in this document includes: the cover page, introduction, matrix of competence, learning methods ,session plans ,assessment context List of Support /, reference materials (MoE,2011).

**The Cover page** presents the title and qualification level of the TVET program that the guide addresses and the institute logo and title. **Introduction** gives the teacher the overview of the TTLM and general introductory information about what the students are going to learn and the activities they have to perform, the mechanics of the training and how to administer the learning guides. **Matrix of Competence** provides the list of competences that the students have to acquire at the end of the training program with their corresponding learning module title and learning outcomes. **Learning Methods / Training Mechanics** explains the flow of training and learning activities or events, the learning methodologies and strategies that will be used or applied for the attainment of the overall goal of the program. **Session Plans** detail the delivery of content coverage by

learning outcome as defined in the learning module and link learning guides to the session (see Appendix B). **Assessment Context** provides the design of assessment as presented in the learning guides and includes the key to correction on the self-assessment and LAP test(see appendix C). **List of Support / Reference Materials** are the complete title and description of reference materials or textbooks that are mentioned in the learning guide, where they are located or can be obtained(MoE,2010).

The ***Learning Guide*** is either a self-contained or resource-based packet of information and learning activities. It tells the student/student what need to do, when and how to do it and what the teacher expects from him/her to know and be able to do once the learning activities are completed. It informs the student what is to be learned and mastered; it also motivates student/student to want to learn; in addition, it recalls the student/student of any pre-requisite learning or background knowledge or skills needed to master the required learning outcomes or tasks and presents instructions appropriate for the tasks for each learning outcome; and lastly, provide appropriate application or practice of what was presented(MoE,2010).

The learning guide also contains the following: ***Cover page*** presents the title and qualification level of the TVET program, the unit of competence and module title and number and the learning guide is intended, the learning guide (LG) code, the institute logo and title, and the number of the learning guide in reference to the whole program. ***Instruction sheet*** tells the student/student the objectives of the learning guide and the step by step of what to do to complete the learning activities. This portion also informs the student of what 'must need to know' and be able to do once the activity is completed, how the knowledge, attitudes and skills will be evaluated and what level of performance is expected. It also provides relation to what has already been learned, the pre-requisite knowledge attitudes or skills the student/student must have before beginning learning guide, the criticality of the task and importance to job performance. ***Information sheet*** contains the background information and cognitive or knowledge necessary to understand the subject/topic or task. Mostly the underpinning knowledge and information are in forms of concept, theories, and trade data. It also provides the

lecture notes and reading assignments that may be supplemented with audio, video, text, illustrations, drawings, etc (MoE,2011).

***Self-check sheet*** provides the self-assessment activity or sets of questions which give the student/ student a chance to apply or determine what have just learned from reading the information sheet, suggested readings or viewing a film, etc. Self-assessment questions are for the student/student own use. They are not to be checked by the teacher unless the student/student wants it. It is never used as a basis for awarding marks or grades(MoE,2011).

***Operation sheet*** is a task sheet containing a set of instructions or procedures on 'how' to perform a specific operation, process, task or skill that is required in the learning outcome. It instructs the student to do a task or series of tasks that may involve one or more operations and that may be supplemented with a video, audio, book, pictures, illustrations or text, etc. This portion of the learning guide is considered the learning step. It contains the three essential events in learning – presentation, practice and feedback. The student is presented some instructions appropriate for the learning outcome then, provides an opportunity to practice or apply the competence (KSA) presented, and finally, given the immediate feedback on the success of that practice by evaluating finished product or critique performance of procedures.(MoE,2010)

***Learning activity performance test (LAP Test)*** or sometimes called *Job sheet* is the test designed to measure what the student/student have learned from the learning guide. It is also a measure if the student can put all the information together and actually do the job. The job can be a product, service or both. This is an assessment in performing the specified learning outcome (MOE,2010).

The ***Assessment Packet*** contains the necessary information that guides the teacher in designing a teacher-made assessment tools. It can be in the form of practical simulation/demonstration with oral questioning or observation of student/student performing the actual task in the workplace. The packet also includes the assessment

tools template that can be used by the teacher to perform formative and summative evaluation. Summative evaluation is usually conducted to determine if the student/student can now apply the competences acquired during training. Generally, this type of assessment is used to measure the holistic achievement of the units of competence. While the assessments administered during and every completion of learning outcome, form part of the formative assessments. Some of them are contained in the learning guides. There is only one assessment packet for every TVET program. (Appendix D,E and F) (MoE, 2011).

## 2.13. Cooperative training system

The cooperative training system in Ethiopia is derived from the "dual training system" of Germany and refers to an instructional delivery of technical and vocational education and training that combines in-company and school training based on a curriculum collaboratively designed and implemented by industries and respective TVET institutions. Under this system, the industries companies and the TVET institutions share the responsibility of providing the trainee with the best possible job qualifications; the former through practical training and the latter by securing an adequate level of specific, general and occupation-related theoretical instruction. The word "cooperative" refers to the two parties providing instruction. The concept "system" means that the two instructing parties do not operate independently of one another, but rather coordinate their efforts. The guiding principle is that all parties involved, namely the industry, the trainees and TVET institutions, will gain immediate and long-lasting benefits (MOE, 2010).

## 2.14. Challenges in the Implementation of TVET in Ethiopia

### 2.14. 1. Awareness Problem

Ethiopia, as part African countries, TVET suffers from a relatively poor public image. TVET is usually associated with low status job, low salary and lack of personal

development opportunities, partly due to the low quality of previous TVET program that did not allow TVET graduates to successfully compete in the labor market. TVET is generally perceived as a place of last resort for those students who failed to get into higher education (Wanna,1998).

### 2.14.2. Inadequate Instructor training

The delivery of quality TVET is dependent on the competence of the teacher; competence is measured in terms of theoretical knowledge, technical and pedagogical skills as well as being abreast with new technologies in the workplace (AU, 2007).

### 2.14.3. Poor linkage of TVET to the labor market

The ultimate aim of vocational training is employment. TVET programs therefore have to be linked to the job market. In this way, the socio-economic relevance of TVET can be enhanced.

In general, the quality of training is low, with undue emphasis on theory and certification rather than on skills acquisition and proficiency testing. Inadequate instructor training, obsolete training equipment, and lack of instructional materials are some of the factors that combine to reduce the effectiveness of training in meeting the required knowledge and skills objectives. High quality skills training requires appropriate workshop equipment, adequate supply of training materials, and practice by learners (MOE,2008).

### 2.14. 4. Inadequate Resource inputs

Due to physical and financial constraints, trainings provided by TVET institutions have been mismatched with the demands of skilled manpower in the economy. Thus, by increasing resources invested in TVET, it is possible to improve the overall TVET outcomes. In this regard, the process of OBTVET implementation requires proper use of considerable expertise and resources (MoE, 2008). Hence, availability of sufficient

physical and financial resources has directly influence implementation of OBTVET instruction in the selected colleges. This means if the colleges are equipped with necessary resources the pre-designed instructional process can be implemented in appropriate way otherwise it cannot be achieved the required goals.

### 2.14.5. Inadequate number of qualified and experienced academic Staff

For proper OBTVET implementation educational qualification of the staff is obligatory. In this regard, NTQF set the overall frame for the outcome-based TVET system of the country which describes qualification levels with different descriptor (MOE, 2010). In this regard, qualification and experience of academic staffs is essential for the successful realization of educational goals and expected outcomes. Hence, to implement outcome based instruction existing staff should be equipped with appropriate educational qualification and working experiences. This means if the staff lacks adequate educational qualification instructional process can be negatively affected. This is true for Ardaita ATVET college. This college is expected to possess teaching staff with the required standard.

### 2.14.6. Fixed Time Allocation System.

Many participants discussed that in traditional education there was no appropriate time allocation for the reflection and improvement of student learning and development. Traditionally, content-based programming and activities-based programming have been dominated by time. Brady (1992), suggests a five-step approach to program development in which the first four steps are concerned with time. Such time-dominated approaches have required students to spend fixed periods of time studying certain subjects or engaging in certain activities regardless of how much there was to learn, what they knew before they started, how difficult the content was to

understand, how quickly they learned, or what they knew when the "end" came. This approach has emphasized administrative convenience, with little concern being given to student learning.

### 2.14.7. Unfavorable Teaching/learning environment

Teaching/learning environment or the learning situation is the set of resources available for implementing the teaching/learning process. These include human resources (instructors, learners, administrators and support personnel); physical resources (e.g. classrooms, library, laboratory, and workshops); material resources (teaching material, audiovisual materials and others) financial materials (operational allowances, scholarships, training grants and others); and the political and social context(AU,2007).

### 2.14.8. Using traditional Methods of Instruction and Assessment Technique

**Methods of teaching** – are ways or means by which teachers import or convey a given subject matter content to the learner and enable him or her to acquire knowledge develop skills, and form attitudes, habits, convictions, characters, and value systems. The method used by the instructor influences on the performances of learners. Learner center approaches are required to be used by the instructor in order to implement outcome based instruction effectively (Killen,2000).

Killen(2000) also defines that **Assessment** is Process of collecting evidence and making judgments on whether competence has been achieved. He describes that **Formative Assessment** provides the learners with feedback regarding success or failure in attaining learning outcomes. It also identifies learning errors that need to be corrected (the student must now their error and correct it). In addition it can reinforce successful performance that provides information to train or for making instruction and remedial work more effective. Instructor uses this formative evaluation to check the progress of the train. The results of formative assessment are expressed in the term 'satisfactory or not satisfactory.

**Summative Assessment** is given mostly when all the modules in the program have been accomplished or at the end of each unit of competence or by grouping unit of competence according to their similarity. It determines the extent to which competence have been achieved the result of summative assessment is expressed in the term ‘competent or not yet competent. It is more of more of concerned to assess the application of the skills and knowledge's required on the competence (MoE, 2010).

### 2.14.9. Diversified Learners‘ Educational and social background

Students have a variety of past experiences shaped by their language, culture, health, location, values, abilities and disabilities, and previous education .Thus teaching must, be highly adaptive, acknowledging, respecting and accommodating the diverse background experiences students bring to the classroom (AU, 2007).

Ethiopia is a country of different nation and nationalities .Specifically, Ardaita ATVET College accepts learners from the whole regional states. Understanding their background is enviable in the college.

## SUMMARY

Different scholars suggest about outcome based education. Margery H. Davis( 2003) suggests that Outcome-based education is an approach to education in which decisions about the curriculum are driven by the exit learning outcomes that the students should display at the end of the course. Competencies are one of the key features of OBI. Nel (1999 as cited in Killen ), notes that Competency is understanding of knowledge and demonstration of ability to integrate. MOE (2008) also put competence in to four dimensions such as task skills, task management skills, contingence management skills and job/role environment skills.

Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning

Educational theories and principles are the basis for implementation of outcome based instruction. According to Widerman(as cited in Killen 1998) outcome based education has the following theories; Behaviorism, social constructivism ,critical theory and pragmatism**.** According to behaviorists ,Learners should demonstrate achievement through their behavior and actions. Reconstructionists argue that OBI is to be genuinely progressive, it must emancipate itself from the influence of liberal-minded upper middle class, but come to grist with life in all its reality. Critical theory has influenced OBI in the sense that OBI supports freedom of choice which gears up independent thinking and development of skills using partnership as the way of solving problems. Pragmatism aims at translating useful knowledge of real-life problems into action, people must constantly acquire new knowledge and skills.

According to Spady (1991), and other educators , there are basically three forms of OBI, namely traditional, transitional and transformational OBI. Traditional OBE is characterized by pre-existing subject content development of learning outcomes and defined as instructional aims based on the content syllabus. Transitional OBE moves away from traditional OBE to identify outcomes that reflect high order competencies. Transformational OBE is the most sophisticated evolution of the outcomes-based

concept. It moves away not only from the traditional curriculum, but also from the prescribed structures of schooling.

Spady (1998) in turn offers only four principles to guide the teacher in the development and implementation of OBI: Design down, clarity of focus, expanded opportunity and higher expectation.

There are two approaches in teaching learning process. Teacher centered and learner centered approach.

According to Ethiopian TVET system as described from its Training, Teaching and Learning Material Development (TTLM) guide that Assessment is the Process of collecting evidence and making judgments on whether competence has been achieved. . Erasmus *et.al* (2006) describes that the key word in outcomes-based assessment is demonstration.

NTQF is based exclusively on training outcomes, which are defined based on occupational standards which in turn reflect labor market needs.(MOE,2010).

A trainer is leader, facilitator, facilitator, session planner, curriculum developer, instructional materials developer, advocate, counselor, coordinator, assessor, and supervisor. Another basic characteristics expected from a TVET Trainer are the abilities to demonstrate competences through skills, knowledge and attitudes and establishing his / her credibility.

The TLTQF states that the three TVET Trainer qualification levels are **A, B, and C**.

The training, teaching and learning materials are teacher-made printed instructional aides that supplement the teacher's oral and visual instructions. The TTLM is composed of three packages that serve as learning aids in meeting the learning outcomes of the training program. The titles of the packages are teacher's guide, learning guide assessment packet.

In cooperative training system, the industries companies and the TVET institutions share the responsibility of providing the trainee with the best possible job qualifications; the former through practical training and the latter by securing an adequate level of specific, general and occupation-related theoretical instruction.

According to the survey of AU(2007), Poor public image, scarcity of resource input , inadequate instructor training, poor linkage of TVET to the labor market, inadequate number of qualified and experienced academic staff, fixed time allocation system, unfavorable teaching/learning environment, using traditional methods of instruction and assessment technique and diversified learners‘ educational and social background are the major challenges of most TVET institutions in Ethiopia.

# CHAPTER THREE

# RESEARCH METHODOLOGY

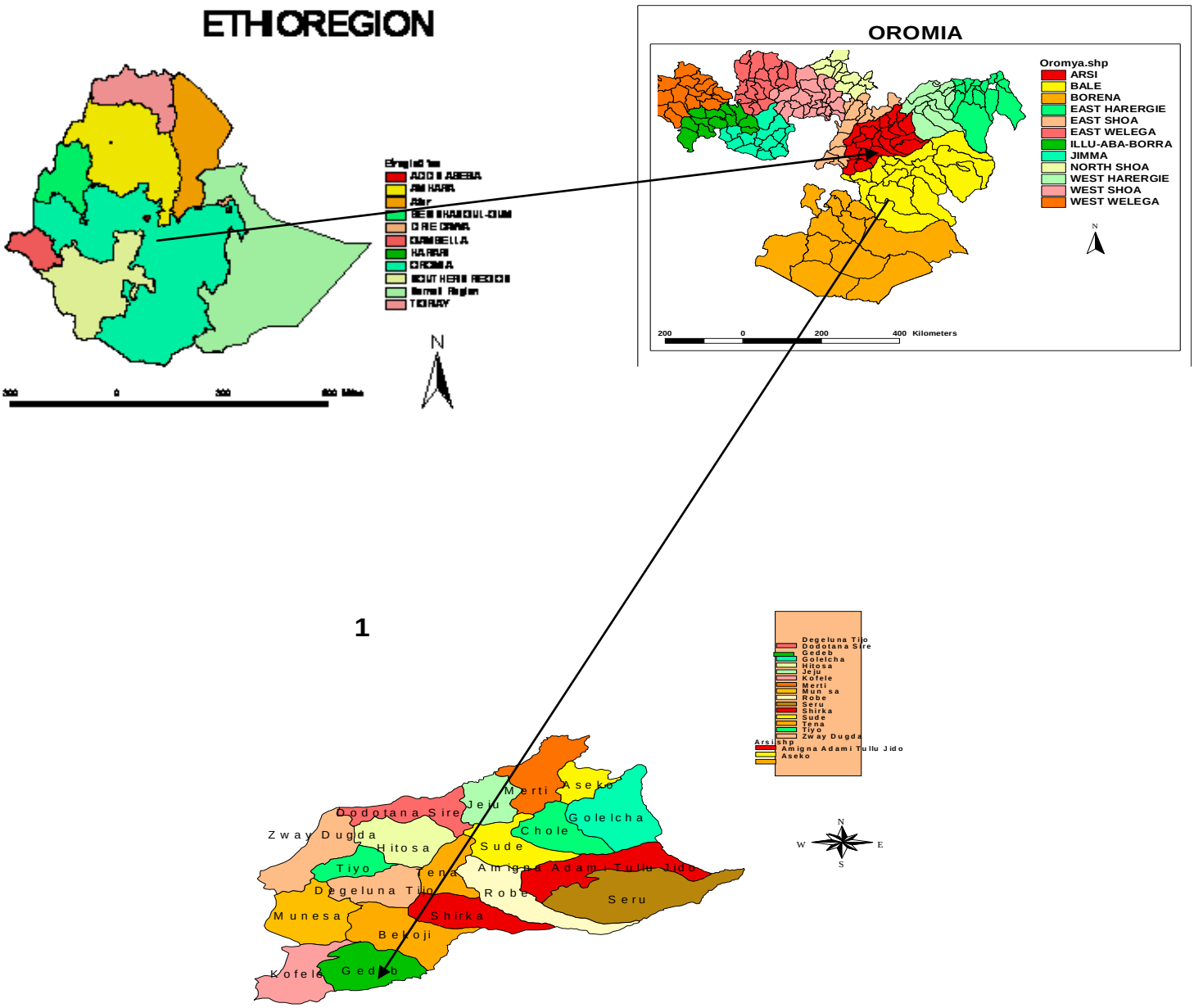
## 3.1 Description of Operational Area

**Location:** Arsi is among the twelve administrative Zones of Oromia National Region State, bordered in south by Bale, on the South West by SNNPR, North West Shewa, on North by Afar Regional State and west Hararghe. Gedeb-Hasasa district is located in west Arsi Zone of Oromia National Regional State, at about 335Kms South-East of the capital city Addis Ababa and at about 108 Kms from Assela town and at about 80 Kms and 101 Kms from Shashemane and Hawassa respectively**.** According to the information from Agricultural and Rural Development Office (2010), the district has about 32 Keble's, among these 25 of them are rural based administrative (peasants associations) which is the largest share of the administrative and 7 of them are under the town administration.

Ardaita ATVET College is located in the west Gedeb Hssasa district Ardaita Kebele. It is about 335 kilo meters far away from south east of Addis Ababa and covers 1613 hectares of land out of this 1321 and 292 hectares is used for crop and livestock production respectively.(AATVET,2008).

3.1 Maps of Ethiopia, Orimiya and location of the Study area

Figure



## 3. 2. Research Design and Methodology

Descriptive survey method was used to identify the challenges. Best and Kahn (1998) suggest that descriptive survey research helps to describe and interpret the actual event that exists now and existed in the past and that have the influence in the present and also there by it tries to make the necessary recommendation for adjustment. Both qualitative and quantitative techniques data were collected from sample learners, instructors, College officials and document review. Creswel1(2002) describes that a mixed methods design is useful to capture the best of both quantitative and qualitative approaches. David(2007) also explains that Triangulation refers to using multi method research in which a quantitative and a qualitative research methods are combined to provide a more complete set of findings than could be arrived at through the administration of one of the methods alone.

## 3.3. **Sampling** techniques

There are five ATVET colleges in Ethiopia. Three of these colleges like Alage, Gewane and Mizan ATVET colleges have been giving training in Agricultural fields like Plant science, Animal science and Natural resource. Agarfa ATVET College was providing training in both agricultural fields and cooperatives. Ardaita ATVET College has been providing only in cooperatives. So that Agarfa and Ardaita ATVET colleges were selected using purposive sampling technique. However, cooperative fields like departments of cooperative organization and business management and cooperative accounting and auditing in the college were terminated and all the instructors and students are shifted to Ardaita ATVET college.

The study used two stage purposive and random sampling techniques. At the first stage, ArdaitaATVET College was purposively selected from five Federal Agricultural TVET colleges. The sample size for the graduating class and teaching staff was estimated based on Becker(1997) that forward the procedure of drawing an adequate sample size from a given population at 5% margin of error(e) and 95 % confidence level.

This is given by e = $z\sqrt{p(1-p/n)}$ Where

n=minimum sample size to be drawn

p=the proportion that belongs to the target population out of the total population

z= the value corresponding to the 95% level of confidence.

Therefore the study applied this method to representative sample size for both the graduating class and teaching staff respectively. The total population of graduation of graduating class in COBM and CAA was 399 and 325 respectively, and the total number of teaching staff in COBM and CAA was 34 and 25 respectively. Therefore, the minimum sample size (n) for this study was calculated as :

$0.05=1.96\sqrt{0.88(1-0.88)/n}$

n=182

Here the proportion of sample size out of the total number of students in both departments was found to be 26.6%. Thus the 83 % probability of proportion size was uniformly applied to draw the predetermined sample size of teaching staff for this study.

Table 3.1. Population and Sample size determination

| No | Field of study | No. oftrainees | Sample trainees | Sampled trainees in Percentage | No. of trainer | Sample trainers | Sampled trainers in % |
|---|---|---|---|---|---|---|---|
| 1 | Cooperative organization and business management | 359 | 95 | 26.46% | 34 | 27 | 79.4% |
| 2 | Cooperative Accounting and auditing | 325 | 87 | 26.7% | 25 | 22 | 88% |
| | Total | 684 | 182 | 26.6% | 59 | 49 | 83% |

At the second stage, 95 graduating class and 27 teaching staff from COBM department and 87 graduating class and 22 teaching staff from CAA were randomly selected. A total sample size of sample graduating students and teaching staff were selected using simple random sampling technique based on the probability Proportion size of the number of students and teaching staff at each department.

## 3.3. Sources and Methods of Data Collection

### 3.3.1. Sources of data

Secondary data was gathered from report of the official documents, government policy documents, Training Manuals unpublished documents, magazines, news papers, workshop presentations and books. They were also used for the researcher to save time and money and to show the direction of primary data(Kothari, 2004). Based on the information gathered from secondary source data was gathered from primary source using variety of instruments. The primary data was obtained from supportive staff, academic staff of the college, department heads, college deans and vice deans.

### 3. 3.2 Methods of data collection

Different instruments were taken place in this study. These are: interview, questionnaire, focus group discussion, and observation check list and document review.

#### Questionnaire

The questionnaire which contains both open ended and close ended type was undertaken to gather information from sample teaching staff and graduating class. Close ended type of questionnaire was used to gather data from sample learners. This instrument enabled to collect large samples and the researcher gathered relatively standardized information from the respondents. Cr.Kothari(2004) describes that close ended questions are easy to handle, simple to answer, quick and inexpensive to analyze. They are most amenable to statistical analysis. Kothari also suggests that open ended questions allow the participants free to respond rather than limiting in certain stated alternatives.

#### Interview

Dean of the college , Academic vice deans, administrative vice-deans, department heads were interviewed using semi structured open ended questions in support of the data obtained from questionnaire. Semi structured interviews were conducted to gather information about challenges in the implementation of outcome based instruction and how these influenced their classroom instructional process. Some questions were formulated before conducting interview where as others were drawn while conducting the interview based on the responses of participants. According to Cr. Kothari (2004) structured interview is more economical, provides a safe basis for generalization and requiring relatively lesser skill on the part of the interviewer. The colleges officials were expected to show what the current challenges in the implementation of outcome based instruction and how they influence on classroom instructional process. In addition they showed how they incorporate the principles of outcome based education with the current practice.

**Focus group discussion**

Focus group discussion was conducted with selected academic staff members in each department. The discussion was taken place at the college with two groups each department consisting of 10-11 members to elicit information on the challenges in the implementation of outcome based instruction in the college. The participants were teaching staffs who represent different departments and students from each department. Discussion was taken place based on pre-designed guiding questions and additional questions were raised in order to encourage discussion from all respondents. This FGD enabled to understand the reasoning behind the views and opinions under review that are expressed by group members. Kothari(2004) suggest that through the discussion it is possible to generate more ideas and make an exhaustive argumentation among the group members.

**Document Review**

Documents were reviewed to determine how instructors and other concerned bodies record information. A review of documents helped the searcher to establish whether instructors follow outcome based education and training principles in their teaching learning principles. The way they record information could reveal whether they implement OBI or not.

The documents such as TTLMs, Session plans, Evidence plans, occupational standards, National Qualification frameworks, organizational structure, guideline documents, and Human resource management documents, and students' profiles in the registrar, Individual and group assignments progress charts, portfolios and library catalogues were reviewed. The purpose of this document

Review was to determine how the challenges of outcome based instruction have influenced the actual classroom practices. According to Marshal and Rossman (1999) a researcher could supplement observation, interviewing and questionnaire with gathering documents produced in the course of everyday events.

**Observation**

In addition to interviews observation were conducted to determine whether the responses from the questionnaires. Interviews and documents reviewed correspond with their practices. Observations were an aid to determine whether instructors incorporate OBI principles in their teaching learning process**.** Direct and participant observation was used to determine how instructors facilitated the lesson and assessed their learners in the classroom. The reason is that the researcher himself is a member of a group and has an experience on teaching learning process in the college**.** Cr. Kothari (2004) argues that the main advantage of structured observation is to eliminate subjective bias of participants in giving responses from the questionnaire and interviews. Classroom observation from two classrooms for each department were conducted using observation checklist.

## 3.4. Pilot Testing

Pilot test was conducted before the distribution of the questionnaire to the sample population of the study. Because, it is important to make necessary correction and to evaluate whether the questionnaires were appropriate to generate adequate information and to make the necessary modification**.** According to Kothari (2004) the validity of research is determined by the validity and correctness of data collected.

Pilot questionnaires were distributed to 30 students and 25 teaching staffs in Assela TVET college. Kothari (2004) also noted that before using questionnaire method, it is always advisable to conduct pilot study for testing the questionnaires .Conducting pilot survey enable to shape the questionnaire prior to final data collection. Therefore, it is underlying principle to conduct pilot test prior to official data collection to revise an instrument based on the test result. For this reason, Cronbach alpha coefficient was estimated using statistical package for social science. According to Cronbach, (1951, cited in Kothari) Cronbach alpha is a measure of internal consistency. In this regards, if coefficient values greater than or

equal to 0.7, it is acceptable as indicative of a reliable scale otherwise it is not considered as reliable.

Based on the above discussion, reliability of the item was checked using cronbach's co-efficient alpha. Accordingly, the computed reliability coefficient is 0.78 for the student and 0.89 for teaching staff (for detail see Appendix F). These values suggesting that the items have relatively high internal consistency. Therefore, no significant changes were made to the items of close ended questionnaires except some spelling, grammatical errors and other minor re-arrangement and refining.

But, some open ended items were changed and additional questions were added to make it easy for analysis and clarification. Clarifications were made in ambiguous items and corrections effected. 'The' open-ended items were however, discussed with two other senior staff who showed interest in the study. At the end improved questionnaires were distributed and administered.

## 3.5. Techniques of Data Analysis

To analyze the data collected from different sources and based on the specific nature of the data, a variety of methods were used. To manage the data easily, the raw data was organized in to different categories in accordance with the proposed objectives. The data gathered was coded, edited, and sequenced. To avoid redundancy while narrating respondent's answers, common responses are summarized. . Information not relevant to the study was omitted.

Descriptive statistics were used to analyze the quantitative data. The close ended questions of the questionnaire were entered in to the Statistical Package for Social Science computer program (SPSS) and quantitatively analyzed, interpreted and reported using frequency distribution, percentages, mean, standard deviations.

The data obtained from the open ended questions of the questionnaire and from all the other tools like observation, interview and focus group discussion were qualitatively

analyzed using textual descriptions and narration. From the analysis of both quantitative and qualitative, major findings and conclusions were made. Finally, based on the major findings and some recommendations were given. Open ended questionnaires were analyzed qualitatively. Finally, interpretation of the result was based on combination of qualitative and quantitative data.

# CHAPTER FOUR

# PRESENTATION, INTERPRETATION AND ANALYSIS OF DATA

## 4.1. Characteristics of Respondents

This section presents the demographic characteristics of respondent such as sex, age, department, reason to join the specific occupation, and educational background of graduating class. In addition to this, sex, age, department, experience, qualification, and level of the instructor were formulated for instructors.

### 4.1.1. Background information of sample graduating class

**Table 4.1.Sex,Age, education, department and reason to join the department**

| No | Variable | Category | Frequency | Percent |
|---|---|---|---|---|
| 1 | Sex | Male | 117 | 64.3 |
| | | Female | 65 | 35.7 |
| | | Total | 182 | 100 |
| 2 | Age Range | 17-20 | 102 | 56 |
| | | 21-24 | 75 | 41.2 |
| | | >=25 | 5 | 3.7 |
| | | Total | 182 | 100 |
| 3 | Education level | $10^{th}$ grade complete | 146 | 80.2 |
| | | $12^{th}$grade complete | 30 | 16.5 |
| | | Certificate | 6 | 3.3 |
| | | Total | 182 | 100 |
| 4 | Department | COBM | 95 | 52.2 |
| | | CAA | 87 | 47.8 |
| | | Total | 182 | 100 |
| 5 | Reason to join the department | Placement | 71 | 39 |
| | | Interest | 99 | 54.4 |
| | | Lack of other choice | 10 | 5.5 |
| | | Other | 1 | 1.1 |
| | | Total | 182 | 100 |

Source : Own survey result/2014

The distribution of respondents based on sex shows that about 117 (64.3%) of respondents are male and the remaining 65(35%) of them are females. This shows that, the number of respondents are male respondents are greater than female respondents. However, there is no observed gap in the college in Promoting female enrolment since selecting the trainees from different regions in a country is not the mandate of the college rather performed by the Ministry of Agriculture together with regional states to select and send trainees to the college.

Table 4.1. Also demonstrates the age of sample learners. Consequently, 102 (56%) of the respondents' age is between 17 to 20, whereas 75 (41.2%) of the respondents is between the age of 21 to 24 and the rest 5(2.7%) is 25 and above. This result shows that most of the learners are young enough in order to accept the change in strategy of learning from traditional method to outcome based method of instruction.

The majority of the respondents 146(80.2%) are completed $10^{th}$ grade. Whereas 30(16.5%) are $12^{th}$ grade complete. The rest and very small proportion of respondents 6(3.3%) have certificate and employee. This indicates that most students were 10th grade complete and above. So that they fulfilled the criteria of MOE in order to join to the college to pursue their training.

Lastly Table 4.1 describes about field of study and reason to join to the field. Among 182 respondents 95 (52.2%) of them are engaged in cooperative organization and business management department. The remaining 87(47.3%) are accounting and auditing department. Regarding the department there is no significant different in the number of students in each department. Regarding selecting the department 99(54.4%) of respondents are joined with their interest. 71(39%) are joined with placement since the selection criteria varies from region to region. The remaining 10(5%) and 2(1.1%) are joined to the department because of lack of other choice and other reasons respectively. This indicates that most learners assigned to the department with their interest. This helps them to attend the lesson and become satisfactory.

### 4.1.2..Background of teaching staff

In the process of teaching learning activity, experience and qualification of the academic staff are the most important inputs .Therefore, the data generated on these areas presented in the following table.

Table 4.2. Sex, Age, Qualification and level of teaching staff

| No | Variable | Category | Frequency | Percent |
|---|---|---|---|---|
| 1 | Sex | Male | 45 | 93.8 |
| | | Female | 3 | 6.2 |
| | | Total | 48 | 100 |
| 2 | Age Range | 20-25 | 4 | 8.3 |
| | | 26-30 | 21 | 43.6 |
| | | 31-35 | 4 | 8.3 |
| | | 35 and above | 1 | 2.1 |
| | | Total | | |
| 3 | Qualification | BA/BSC | 37 | 77.1 |
| | | MA/MSC | 11 | 22.9 |
| | | Total | 48 | 100 |
| 4 | Level | Level B | 38 | 79.2 |
| | | Level C | 10 | 20.8 |
| | | Total | 48 | 100 |

Source : Own survey result/2014

The data from table 4.2 No.2 presents that majority of the respondents 45(93.8%) are males and very small 3(6.3%) are females. This indicates that the gender enrollment selection is not encouraging.

Table 4.2 No.2 also displays about the age range of sample teaching staff. Consequently, 21 (43.8%) of the respondent age have been 26 to 30 and 4 (8.3%) of them have been the age of 20-25 and 31-35. The rest proportion 1(2.1% lies in 35 and above years old. This result indicates that, the majority instructors are young enough and productive. Therefore, the college can take it as an opportunity to create, use and transfer technology to implement outcome based instruction. More over qualification, level of instructors and experience of the teaching staff are essential for successful teaching learning process.

In addition, table 4.2 No. 3 shows that there are a total of 48 sample teaching staffs to provide teaching and trainings in the college. Accordingly, all of the teaching staff academic qualification observed more than BA/BSc. In this regard, out of the total teaching staff 37(77.1%) of them graduated with first degree and 11(22.9%) of the teaching staff got their masters degree. There is no teaching staff with the educational level more than masters' degree and less than first degree. This shows us that the qualification of instructors is based on the standard determined in the ministry of education.

It is a simple but extremely important fact that quality of TVET crucially depends on the qualification and motivation of the teaching staff. The TLTQF MOE (2011) states that the three TVET Trainer qualification levels are A, B, and C. The Trainer levels shall follow the National TVET Qualification Framework. A TVET Trainer should have National Certification on the qualification level he / she is teaching.

As described from the above table the majority of instructors 38(79.2%) are level B since they have certificate from Center of competence. The remaining 10 (20.8%) are level C instructors. Finally, there is no Level A instructor in the college due to the college's program is to train level I – level IV. The college's academic vice dean responded from the interview that only MSC/MA holders will be assessed for level V and licensed in the near future.

Table 4.3.Teaching experience of instructors

| | Range of experience | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 0.25-2 | 11 | 22.9 | 22.9 | 22.9 |
| | 3-6 | 24 | 50.0 | 50.0 | 72.9 |
| | 7-10 | 11 | 22.9 | 22.9 | 95.8 |
| | >10 | 2 | 4.2 | 4.2 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source: Own survey result/2014

As presented from the above table about half (50%) of instructors have an experience in the range of 3-6 years, but 11(22.9%) are in the range of two years and below and 7-10 years experience, the remaining 2(4.2%) have experience of ten years and above. This implies that the college has experienced instructors and that can share their experience for new comers and fully implement OBI.

## 4.2. Challenges in the implementation of outcome based instruction

### 4.2.1. Adequacy in allocation of budget

The main source of financial income for the college is allocation of the budget from MOFED. Teaching staff and student of Ardaita ATVET College were requested to rate employed budget for the implementation of outcome based instruction.

The following Table shows means of respondent rating scale. The rating scale of the response were based on research instrument with five point lickert scale and categories namely, strongly disagree, disagree, undecided, agree and strongly agree. This means

positively rated response with the mean greater or equal to 3 and negatively rated response with the mean less than 3. This means if the mean value is less than 3, it is regarded as negatively rated; and if it is greater than or equal to 3 it is regarded as positively rated responses, because the mean average score provided for the rating system is 3.

Table4.4. Adequacy of budget in the college

| No | Item of Questionnaire | Academic staff | | | Learners'' response | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No | Mean | S.d | No | Mean | S.d | No | Mean | S.d |
| 1. | There is adequacy of budget allocation | 48 | 2.375 | 1.16 | 182 | 2.7582 | 1.348 | 230 | 2.566 | 1.256 |

Source: Own survey result/2014

As can be observed from Table 4.3 above average mean and standard deviation of both respondent groups (teaching staff and student) on allocation of budget for purchasing capital goods; average mean of the response found to be 2.375 for the academic staff; which had been negatively rated response. Similarly, the response obtained from the student on the same item found to be 2.7582. Regarding to adequacy of the budget for running cost the result obtained from both group (teaching staff and student) observed comparable and rated negatively. This means there is no significant different between teaching staff and student responses. Hence, the total mean average result is 2.566. In order to clarify and communicate the result obtained through questionnaire, an interview was conducted on the same issue and all the department heads claimed that budget allocation for capital goods and running cost is inadequate to run continued and scheduled program. This financial constraint has negative impact on the day to day teaching-learning activities. Therefore, the result obtained from teaching staff with support to an interview result can address the real condition of allocated budget. The

availability of sufficient financial resource has directly influence on the implementation of OBTVET instruction in the selected colleges.

### 4.2.2. Physical Facilities in the college

Table 4.5. Adequacy of physical facilities on student respondents

| No | Item of Questionnaire | Academic staff | | | Learners'' response | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | No | Mean | S.d | No | Mean | S.d | No | Mean | S.d |
| 1. | Sufficient classroom | 48 | 3.04 | 1.25460 | 182 | 4.247 | 0.872 | 230 | 3.64 | 1.06 |
| 2 | Adequacy of training equipment | 48 | 2.6250 | 1.19618 | 182 | 3.48 | 1.12 | 230 | 3.05 | 1.158 |
| 3 | Library with sufficient books and modules | 48 | 3.4792 | 1.16673 | 182 | 3.79 | 1.05 | 230 | 3.63 | 1.108 |

Source: Own survey result/2014

As it can be seen from Table 4.4 the average mean and standard deviation of both respondent groups (teaching staff and student) on sufficiency of class room average mean of the response found to be 3.04 for the academic staff; which had been positively rated response. Similarly the response obtained from the student on the same issue found to be 4.247 which is greater than mean of teachers' responses As a result, the average mean of responses of both academic staff and learners response was comparable and had been rated positively and found to be 3.64. Regarding to adequacy of training equipment, the result obtained from academic staff the average mean of academic staff was found to be 2.625 which is rated negatively. Similarly, the result obtained from students on the same issue found to be 3. 48 which is positively rated.

The average mean of responses of teaching staff and students' response was comparable and had been rated positively and found to be 3.264. Finally, the average mean of academic staff and students found to be 3.479 and 3.63 respectively and which are positively rated and greater than instructors' response. The average mean of responses of academic staff and students' response was comparable and had been rated positively and found to be 3.63 and comparable. Thus, respondents from both sides satisfied with the adequacy of physical facilities. But the result doesn't indicate that the required physical facility can solve the whole problem due to the result is nearer to the mean.

Both observation and document review were used to know availability of physical facilities in the college. In this regard, the data obtained through document review is presented in the following tables.

### 4.2.3. Observation and document review for availability of physical facilities

Table 4.6 rooms and spaces in the college for instructional process

| No | Rooms | Area in sq. meter | Quantity |
|---|---|---|---|
| 1 | Instructional room | 50 sq. m | 38 |
| 2 | Computer lab room | 50sq. m | 2 |
| 3 | Practical room | 20 sq. m | 1 |
| 5 | Audio visual room | 20 sq. m | 1 |
| 6 | Library | 1200 sq. m | 1 |
| 7 | Offices for instructors | 12sq. m | 10 |

Source : Own survey result/2014

The above table shows that the average available theoretical instructional room and computer room has been 50 meter square. There are 45 students in average which have been learning in each class room. As a result there is 0.9 sq. m space available per student for both instructional room and computer room. This means average space

provided by the college have been below the standard of MoE. According to MoE standard space required is 1.2 meter square for instructional training, 1.7 meter square per student for computer room. Practical room and Audio visual room are similar in area. They are 0.4sq.m per student. These rooms are not giving their service properly since the area of the rooms is too small. In addition there is a library with the area of 1200 sq. m with the capacity to handle 400-500 students at once. This indicates that the size of the library is standardized and enough for students to use.

However, the location of the library is far away from female dormitories. Thus, they are afraid of reading in the library at night. To solve this problem reading space is arranged around their dormitory with the help of gender and Anti HIV club. Based on observation and document review, there are about ten offices for instructors. The area of each office is 12 sq. m in average. There is an average of four instructors placed in each office. This result indicates that there is shortage of offices for instructors.

### 4.2.4 Furniture availability for instructional rooms

For similar reason data were generated on available furniture for instructional room as presented in Table 4.7 below.

Table 4.7. Availability of furniture for instructional room

| No | Item of furniture | No. per room | Total No. |
|---|---|---|---|
| 1. | Black /white board | 1 | 38 |
| 2. | Armchair for learners | 53 | 2011 |
| 3. | Armchair for instructors in classrooms | 0.15 | 6 |
| 4. | Table for instructors in the class rooms | 0.15 | 6 |
| 5. | Notice board | - | 3 |
| 6. | LCD projector | 0.71 | 27 |
| 7. | Socket | 4.8 | 186 |
| 8. | Electric bulb for classrooms | 10 | 226 |
| 9. | Electric bulb for library | 72 | 72 |
| 10. | Computers for learners in class rooms | 0 | 0 |
| 11. | Computers for instructors | 1 | 10 |
| 12 | Computer in lab | 12 | 24 |

Source: Own survey result/2014

Table 4. 7. Presents that there is one white board in each class room. The size of the whiteboard is 1mx2m which meet the standard of MoE. There are 53 armchairs for learners in each class which is enough for them. There is shortage of table and armchair for instructors, LCD projector, PC for learners in lab and classrooms. All classrooms were observed in order to assure where the data collected from the document are reliable or not.

Even though Sockets and electric bulbs are available, most classrooms sockets are not workable since the dalliance of maintenance services.

### 4.2.5. Adequacy of guidance and counseling service

Table.4.8. Guidance and counseling service

| **No** | **Item of Questionnaire** | **Academic staff** | | | **Learners' response** | | | **Total** | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | N | Mean | S.d | No | Mean | S.d | No | Mean | S.d |
| 1. | Adequacy of guidance and counseling service | 48 | 2.1667 | 1.08 | 182 | 2.115 | 0.99 | 230 | 2.14 | 1.03 |

Source: Own survey result/2014

As shown on the above table the mean of academic staff and learner respondents found with 2,166 and 2.115 respectively which is comparable and negatively rated. The result on availability of guidance and counseling service indicated there were no sufficient guidance and counseling service with significant different among respondent groups. Similarly, qualitative data on this point indicated that there is no sufficient guidance and Counseling service in the college. Therefore, the result obtained from the qualitative survey reveals that supportive staffs in the areas of counseling service needs Improvement. Moreover, qualitative analysis from FGD discloses that there is no professional officer to provide guidance and counseling service for the college

community. The office was led by civics and ethical education instructor but now he left the college.

### 4.2.6. System of flexible time allocation

Outcome based instruction is a learner-centered approach based on the philosophical assumption that all learners are achievers if allowed sufficient time to do so. According to Spady (1994) all learners can learn but not at the same time and pace. The philosophy of critical theory also suggests that there is freedom and flexibility for self-motivated Flexible time and opportunities are provided for each learner to achieve his/her ultimate potential. Data were gathered using questionnaire, document review and observation checklist. The response of sample students and academic staff is shown in the following table. Besides these documents like teaching guide, learning guide, and curriculum guide were reviewed. Even though the time range is provided in these documents the class schedule is not flexible and not allow learners free to practice and demonstrate the required knowledge and skill.

Table 4.9 Flexible time Allocation

| Item of question | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Adequate time to demonstrate the lesson for students | 182 | 1.00 | 5.00 | 2.4176 | .98122 |

Source: own Survey result 2014

be seen from the above table 4.9 The average mean of respondents from academic staff and learners found 2.7 and 2.147 respectively. This result shows that the average mean of academic staff and learners was found 2.42 which are comparable and negatively rated. This result indicates the allocated time for each unit of competence was not enough for learners to accomplish the performance and demonstrate satisfactorily.

### 3.3. Instructors' approach in teaching learning Process

Appropriate implementation of the teaching-learning activity is the main stage for the implementation of outcome based instruction. It's emphasize on learner centered approach based on the philosophy that all learners are achievers if allows sufficient time to do so.

#### 4.3.1. Learner Respondents with respect to instructional approach

Table 4.10. Instructors' approach in teaching learning process

| | | Response | | | | | |
|---|---|---|---|---|---|---|---|
| No | Item of Questions | Yes | | No | | Total | |
| | | N | % | N | % | N | % |
| 1 | Do you get the course outline before class? | 140 | 76.9 | 42 | 23.1 | 182 | 100 |
| 2 | Do you get the learning guide before class? | 79 | 43.4 | 103 | 56.6 | 182 | 100 |
| 3 | Is teaching -learning process inviting to let you actively participate in the class? | 156 | 85.7 | 26 | 14.3 | 182 | 100 |
| 4 | Do instructors facilitate the lesson according to the learning outcome? | 161 | 88.5 | 21 | 11.5 | 182 | 100 |

Source : Own survey result/2014

The principle of expanded opportunity also describes that; variety of teaching and learning methods should be used; learners should be continuously assessed using criterion referenced assessment technique; and learners and instructors should be equipped with the appropriate resources.

Table 4.10. shows that, out of the total learner respondents those asked whether they get the course out line or not before starting the lesson 140(76.9%) replied that they get the course outline the remaining 42(23.1%) don't get it. Whereas only 79(43.4%) of respondents get the learning guide about 103 (56.6%) of them get the learning guide. In addition,156(85.7%) of sample respondents replied that their instructors let them to participate actively in teaching learning process, the remaining 26 (14.3%) respondents were not allowed to participate actively. Finally, participants were asked whether instructors follow the learning outcome or not among them about 161(88.5%) of participants replied that instructors follow the predetermined learning outcome. This result indicates that most instructors give the course outline but don't give the module before starting the lesson since shortage of budget allocated for stationary materials. The other result shows that most instructors are acting as facilitators and don't teach beyond the predetermined learning outcome.

Table 4.11. Assessment techniques

| | Item | Response | | | | | |
|---|---|---|---|---|---|---|---|
| No | Item of Questions | Yes | | No | | Total | |
| | | N | % | N | % | N | % |
| 1 | Do you get Information about method of assessment? | 161 | 88.5 | 21 | 11.5 | 182 | 100 |
| 2 | Do instructor asses and record learner's progress? | 151 | 83 | 31 | 17 | 182 | 100 |

Source : Own survey result/2014

Regarding assessment techniques most 161(88.5%) of the respondent replied learners get information about methods of assessment, only 21(11.5%) of the respondent described that they were not informed about methods of assessment. This result indicates that the majority of learners have got information about methods of assessment. Table 4.8 No.2 is about assessment of Learners progress. The majority 151(83%) of sample respondents replied that their progress was assessed the remaining 31(17%) of them replied that learners' progress was not assessed. This implies that there is availability of continuous assessment technique in the college.

Table 4.12. Individualized learning and integrating with practical training.

| | | Respo nse | | | | | |
|---|---|---|---|---|---|---|---|
| No | Item of Questions | Yes | | No | | Total | |
| | | N | % | N | % | N | % |
| 1 | Do instructors support instructional process using practical training**?** | 59 | 32.4 | 123 | 67.6 | 182 | 100 |
| 2 | Do instructors help learners individually for difficult competences? | 60 | 33 | 122 | 67 | 182 | 100 |

Source: Own survey result/2014

The philosophy of pragmatism (Dewey cited in spady, 1994) emphasizes that learners should be able to practically apply what to learn in the classroom. Vanderhorst and Mc Donald (1999) suggest that Critical theory has influenced OBI in the sense that OBI supports freedom of choice which gears up independent thinking and development of skills using partnership as the way of solving problems.

Table (4.9) No. 1 presents that among the participants 59(32.4%) of them described that there is integration of theoretical learning with practical training but the majority 123(67.6%) of respondents replied that theoretical classroom instruction was not supported by practical training.

In addition to this Participants were requested to give their response about individualized learning on table 4.9 No. 2. Among them only 60 (33%) of them replied that they were helped by their instructors for difficult competences, where as about 122(67%) described that they were not supported by their instructors individually. According to the data collected from sample learner respondents whether instructors are using variety of instructional materials the following result have been obtained.

Table 4.13 using instructional materials

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 95 | 52.2 | 52.2 | 52.2 |
| | No | 87 | 47.8 | 47.8 | 100.0 |
| | Total | 182 | 100.0 | 100.0 | |

Source : Own survey result/2014

As the information presented in table 4. 13, above 95 (62.2%) of the total sample described that instructors have been using appropriate instructional materials, where as 87(47.8%) of them replied that they do not use appropriate instructional materials. This indicates that nearly half of respondents use instructional material.

**Table 4. 14 Method of instruction mostly used**

| | Method of instruction | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | group discussion | 57 | 31.3 | 31.3 | 31.3 |
| | Lecture | 89 | 48.9 | 48.9 | 80.2 |
| | Demonstration | 7 | 3.8 | 3.8 | 84.1 |
| | using more than one method | 29 | 15.9 | 15.9 | 100.0 |
| | Total | 182 | 100.0 | 100.0 | |

Source: Own survey result/2014

Table 4.14 above shows that, out of the total respondents those requested to indicate employed teaching method 89(48.9 %) replied that lecture is the most common employed teaching method and 57(31%) replied that as group discussion is the common teaching methods. 29 (15.9%) replied that instructors use more than one method. The remaining 7(3.8%) of them replied that instructors use demonstration method. This indicates that instructors spare most of their time through using lecture method. Group discussion is mostly

used in the class next to lecture method. The principle of expanded opportunity suggests that a variety of teaching and learning methods increases opportunities for successful learning. Appropriate data were collected from sample instructor respondents.

### 4.3.2. Academic Staff

Understanding about OBI is mandatory for instructors to know what is required of them in the teaching and learning process. Their understanding can also be revealed during their classroom practices. What they do in the class room reveal whether they understand OBI or not.

**Table 4.15. Understanding about OBI**

| | Category | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Understand about OBET | 36 | 75.0 | 75.0 | 75.0 |
| | Not understand about OBET | 12 | 25.0 | 25.0 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source : Own survey result/2014

The above table 4.15 reveals that the majority 36(75%) of participant replied that instructors have awareness about principles and characteristics of outcome based education and training. Only 12(25%) of them responded that instructors have no awareness about OBI. This implies that most instructors have awareness about OBI.

Table 4.16 preparation of session plan.

| Response | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 35 | 72.9 | 72.9 | 72.9 |
| | No | 13 | 27.1 | 27.1 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Sample instructors were asked whether they prepare session plan or not. Their response is presented in table 4.16 above that the majority of respondents 35(72.9%) of them replied that they prepare session plan; whereas the minority 13(27.1%) replied that they don't prepare session plan. As the documents reviewed instructors prepare session plan but they don't it properly.

The Learning Guide is either a self-contained or resource-based packet of information and learning activities. It tells the student what need to do, when and how to do it and what the teacher expects from him/her to know and be able to do once the learning

activities are completed. Therefore the data collected from instructors presented on the table below.

Table 4.17 Students get learning guide.

| Response | | Frequency | Percent | ValidPercent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 22 | 45.8 | 45.8 | 45.8 |
| | No | 26 | 54.2 | 54.2 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source : Own survey result/2014

As can be seen from the above table more than half of the respondents 26(54.2%) responded that learners don't get learning guide. On the other hand nearly less than 22(45.8%) replied that students get learning guide before starting the lesson. When we compare with learner respondents response the result found to be comparable. In addition they were asked the reason for this most of them replied that there is no budget to copy for each learner.

**Table 4.18. Contents of the learning guide meet the learning outcome**

| Response | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 21 | 43.8 | 43.8 | 43.8 |
| | No | 27 | 56.2 | 56.2 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source : Own survey result/2014

As shown from table 4.18 above 27(56.2%) of sample instructors said that the contents of the learning guide mismatch with the learning outcome where as 21(43.8%) of them replied that the content of the learning guide is matched with the learning guide.

Table 4.19 .Using instructional materials

| Response | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 35 | 72.9 | 72.9 | 72.9 |
| | No | 13 | 27.1 | 27.1 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source : Own survey result/2014

As the information presented in Table 4.19 (72.9%) of the total sample described that instructors have been using appropriate instructional materials, where as 13(27.1%) of them replied that they do not use appropriate instructional materials. This result is comparable with response of sample learner participants.

To support the data from table 4 .15-4.19 appropriate documents were reviewed from office of registrar, library and documentation office, department and from instructors. Instructors keep the following records; session plan, student Most instructors don't use progress chart appropriately it's profiles, mark lists. But some instructors don't use progress charts appropriately due to large class size. In addition one instructor is assigned for 3-5 sections (see Appendix B and C).

Sherman cited in Maree and Fraser(2004) argue that records are used to monitor the progress made by learners and to inform decisions on strategies to be used to improve the learners' development. This implies that learners' performance should be recorded continuously not once a weak or once a month. Clear record can inform to instructors about learners 'performances and about the effectiveness of instructional and assessment strategies followed in the classroom. These can be used in formative assessment when learners are given feedback and for summative purposes whether their level of performance is judged.

Cooperative training is mandatory for any TVET college for implementing outcome based instruction.

Table 4.20 program for cooperative training

| Response | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 27 | 56.3 | 56.3 | 56.3 |
| | No | 21 | 43.8 | 43.8 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source: Own survey result/2014

Table 4.20 presents the response of participant instructors about the program of taking to industry. The majority 27(56.3%) replied that they have a program to take them to industry. The remaining 21(43%) replied that they have no program to take them to industry.

4.21. Time of Taking trainees to the industry

| Times of taking training | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Not taken | 18 | 37.5 | 37.5 | 37.5 |
| At the end of each learning outcome | 4 | 8.3 | 8.3 | 45.8 |
| At the end of Module | 5 | 10.4 | 10.4 | 56.3 |
| At the end of program | 21 | 43.8 | 43.8 | 100.0 |
| Total | 48 | 100.0 | 100.0 | |

Source : Own survey result/2014

As it can be seen from the above table the highest in number 22(43.8%) of sample instructors gave their response that they take their students at the end of the program. The second in runk18 (37.5%) replied that they don't take them to industry. The third rank of respondents 5(10.4%) replied that they take their learners to industry at the end of each module. The last in rank 4(8.3%) replied that they take learners at the end of each learning outcome. This indicates that even though the majority of instructors have the

program to take to industry they didn't implement it properly because of lack of budget for transportation service and paradigm for instructors.

According to (Nel 1999 cited in Killen ) Practical competence is described as a demonstrated ability to perform a particular task or activity. The other one is Reflexive competence which is described as a demonstrated ability to integrate or connect performance with the understanding of that performance, to learn from the actions and to adapt to change and unforeseen circumstances. Thus, learners are expected to be taken to industries and take training in order to be competent enough in working areas. Cooperative societies at different levels like primary cooperative societies and unions which are found around the college are industries for practical training.

### 4.4. Ability of learners to demonstrate the lesson

Pretorius (1998) argues that OBI aims at demonstrations of significant learning as reflected in the Outcomes. Learners are expected to demonstrate the knowledge, and skill what they have learned determined in the learning outcome. The researcher tries to investigate different ways of demonstration in the following table.\

Table 4.22. Learners' Demonstration

| | | Respon ses | | | | | |
|---|---|---|---|---|---|---|---|
| No | Item of Questions | Yes | | N o | | Tot al | |
| | | N | % | N | % | N | % |
| 1 | Do you present individual assignment in the class based on the predetermined learning outcome? | 125 | 68.7% | 57 | 31.3% | 182 | 100% |
| 2 | Do you show the group work you have done within the group? | 123 | 67.6% | 59 | 32.4 % | 182 | 100% |
| 3 | Do you present the project you have visited in the industry? | 87 | 47.8% | 95 | 52.2 % | 182 | 100% |
| 4 | Do you try to improve difficult competences based on the feedback given by the instructor? | 85 | 46.7% | 97 | 53.3 % | 182 | 100% |

Source: Own survey result/2014

The above table shows that about 125(68.7) of sample participants replied that they did their individual assignment and presented in the class. The remaining 53(31.3%) didn't present their individual assignment. On the other hand 123(67.6%) of respondents replied that they did their group work and presented it. About 59(32.4%) didn't preset their group work. This indicates that the majority of respondents did their assignment and presents it in the class. On the other hand as the researcher observed in the class among four sections from the two departments two section students presented their individual /group assignment.

But the time allocated for presenters were not enough to show properly what they have acquired and practiced. In the case of group work the responsibility of doing and presenting tasks was given to fast learners. Slow learners were dominated by fast learners. So that fast learners prefer to do assignments individually rather than with in a group where as slow learners prefer to perform tasks with in a group.

In order to integrate theoretical learning with practical training learners are expected to visit primary cooperatives, unions and federations. Among sample respondents 87(48.8%) of them replied that they presented what they had visited from different industries where as 95(52.2%) didn't present the report in the class. Similarly, 85(46.7%) replied that they tried to improve difficult competences based on the feedback given by their instructor; whereas 97(53.3%) didn't try to improve difficult competences. This indicates that nearly more than half of participants replied that they didn't attempt to improve difficult competences by themselves. To sum up !05(57.7%) of participants replied that they could demonstrate what they had learned and the remaining 77( 42.3%) could demonstrate the lesson based on the predetermined standard.

Table 4.23. Competent enough to work in the organization

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes | 171 | 94.0 | 94.0 | 94.0 |
| | No | 11 | 6.0 | 6.0 | 100.0 |
| | Total | 182 | 100.0 | 100.0 | |

Source: Own survey result/2014

In addition participant learners were asked whether they are competent enough to work in their organization based on the training they have taken in the college. The result of their response described in the above table: As shown from table 4.23 about 171 (94%) of respondent replied that they are competent enough to work in the organizations, the remaining very few respondents 11(6%) replied that they are not competent enough to work in their organization. This result indicates that the majority of respondents can perform their work if they are engaged in the industry.

After completion of institutional assessment the learners who are competent enough from institutional summative assessment they are required to take assessment from Oromiya center of competence.

Table 4. 24. Learners who took CoC assessment in level IV /2005 E.C/

| | Department | | Graduates who took COC exam (2005) | | |
|---|---|---|---|---|---|
| | | | Competent enough | Not yet competent | Total |
| 1. | cooperative accounting | Count | 135 | 34 | 169 |
| | | % within Department | 79.9% | 20.1% | 100.0% |
| | | % within Graduates who took COC exam (2005) | 75.4% | 68.0% | 73.8% |
| 2. | Cooperative management | Count | 44 | 16 | 60 |
| | | % within Department | 73.3% | 26.7% | 100.0% |
| | | % within Graduates who took COC exam (2005) | 24.6% | 32.0% | 26.2% |
| | | % of Total | 19.2% | 7.0% | 26.2% |
| | | Std. Residual | -.4 | .8 | |
| | Total | Count | 179 | 50 | 229 |
| | | % within Department | 78.2% | 21.8% | 100.0% |
| | | % within Graduates who took COC exam (2005) | 100.0% | 100.0% | 100.0% |
| | | % of Total | 78.2% | 21.8% | 100.0% |

Source; A ATVET College office of registrar 2005 E,C CoC result document

The above table 4.24 reveals on graduates with in document learners who took CoC assessment in 2005.As can be seen from table 20, among graduates who took COC assessment in Accounting and Auditing department the majority 135(79.9%) have become competent where as the remaining 34(20.1%) have become not yet competent..Similarly,

Among graduates who took CoC assessment in Cooperative organization and Business Management department 44(73.3) have found competent and the remaining 16 (26.7) found Not yet competent.

Table 4.25 Learners who took CoC assessment in level IV/ 2006 E.C

| | | | took COC exam (2006) | | |
|---|---|---|---|---|---|
| | Department | | Competent enough | Notyet competent | Total |
| Department | cooperative accounting | Count | 113 | 3 | 116 |
| | | % within Department | 97.4% | 2.6% | 100.0% |
| | | % within ook COC exam (2006) | 48.1% | 3.5% | 36.3% |
| | | % of Total | 35.3% | .9% | 36.3% |
| | Cooperative management | Count | 122 | 82 | 204 |
| | | % within Department | 59.8% | 40.2% | 100.0% |
| | | % within took COC exam (2006) | 51.9% | 96.5% | 63.8% |
| | | % of Total | 38.1% | 25.6% | 63.8% |
| Total | | Count | 235 | 85 | 320 |
| | | % within Department | 73.4% | 26.6% | 100.0% |
| | | % who took COC exam (2006) | 100.0% | 100.0% | 100.0% |
| | | % of Total | 73.4% | 26.6% | 100.0% |

Source ; A ATVET College office of registrar 2006 E,C CoC result document

In addition table 4.25 presents, among graduates who took CoC assessment in 2006 E.C, 113(97.4) of accounting and auditing department graduates have become competent enough where as 3(2.6%) have become not yet competent. On the other hand 122(59.8%) have become competent where as the remaining 82 have become not yet competent. When we compare the performance of departments in two years Department of Accounting increased in contrast Department of cooperative management have become decrease in performance.

Table 4.26.Taking short term training outcome based education and training

| | | Learners Response | | | | | | Response of Academic staff | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No | Item of Questions | Yes | | No | | Total | | Yes | | No | | Total | |
| | | N | % | N | % | N | % | N | % | N | % | N | % |
| | Do you Taking short term training about outcome based training | 23 | 12.6 | 159 | 87.4 | 182 | 100 | 37 | 77.1 | 11 | 22.9 | 230 | 100 |

Source: Own survey result/2014

Among the learners who were asked 159(87.4%) gave their response that they didn't take training, only 23(12.6%) replied that they took training about outcome based training. This indicates that most students didn't take training**.**

Table 4.27.No. of times Instructors taking training

| No of times | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | not taken | 9 | 18.8 | 18.8 | 18.8 |
| | Once | 11 | 22.9 | 22.9 | 41.7 |
| | Twice | 24 | 50.0 | 50.0 | 91.7 |
| | Three times | 4 | 8.3 | 8.3 | 100.0 |
| | Total | 48 | 100.0 | 100.0 | |

Source : Own survey result/2014

Sample instructors were also requested to give their response about short term training. The majority of respondents 37(77.1%) replied that they took training. On the other hand some participants 11(22.9%) said that they didn't take any training. Among participants who took training which is shown on table 17 more than half of respondents took training once and above. This indicates that most instructors are familiar with outcome based instruction through training.

# CHAPTER FIVE

# SUMMARYOF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with the major summaries of findings, conclusions and recommendations on the data gathered from different sources and analyzed.

## 5.1. Summary of Major Findings

The general objective of the study was to identify the challenges in implementing outcome based instruction in cooperative fields of Ardaita Agricultural TVET college. There were three research questions designed to assess the challenges in the implementation of outcome based instruction in cooperative fields of Ardaita ATVET College:

1. What are the challenges in the implementation of outcome based instruction?
2. How do the instructors use learner centered approach based on the philosophy that all learners are achievers if allows sufficient time to do so?
3. How do learners demonstrate the integrated knowledge, skills and attitude based on the learning outcome in each unit of competence?

Accordingly, this study came up with the following major findings based on analysis of both quantitative and qualitative data.

1. The qualification, the level and work experience of the existing teaching staff is Sufficient to undertake their responsibilities. This means more than 50 % of The teaching staff has bachelor degree or higher than bachelor degree.
2. Majority of the teaching staff have an experience in the range of 3- 6 years.
3. Most of the learners were $10^{th}$ grade complete when they joined to the college.
4. The majority of the learners were young and more than half of the learners chose the department with their interest.

5. Most of the instructors (79.2%) are B level instructors and they are competent enough to deliver the course. Based on qualitative data collected Instructors with MSC have been expecting to be assess will be upgraded to Level A.

6. Most instructors give the course outline before starting the lesson but they they do not give the learning guide due to the shortage of budget for duplication.

7. The majority of instructors give an opportunity to their learners to participate in the class.

8. From the questionnaire they replied that most instructors follow continuous assessment method but using document review most formats are not used by them since large class size and rigidity of time allocation.

9. Lecture method is the most commonly employed and followed by other methods

10. Most instructors have awareness about outcome education and training methods of instruction and assessment techniques.

11. The majority of Instructors have been using appropriate instructional materials available in the college.

12. More than half of instructors arrange the program to take learners to the industry to conduct cooperative training but they couldn't' implement it properly due to lack of budget for transportation service and paradigm for instructors and trainees.

13. Learners can present individual assignment and group work in the class but cannot try to improve difficult competences.

14. Most learners replied that if they are engaged in any organization related to their occupation, they are competent enough to work effectively.

15. The majority of instructors took short term training above one times about outcome based education and training.

16. All classrooms were observed in order to assure where the data collected from the document are reliable or not.Even though Sockets and electric bulbs are available, most classrooms sockets are not workable since the dalliance of maintenance services.

17. According to qualitative data gathered from officials the budget allocated was inadequate.

18. There is shortage of offices for instructors and there are average of four instructors in a single office.

19. The average mean of responses of academic staff and learners response was comparable and had been rated positively and found to be 3.63 and comparable.

**20.** This result indicates the allocated for each unit of competence was not enough for learners to accomplish the performance and demonstrate satisfactorily. As the data collected using observation check list and document review there is mismatch between number of class schedule and time allocation in each unit of competence.

21. According to the FGD, it was found that the trainers believed that their trainees were not familiar with outcome based instruction since their trend in high school was traditional method.

22. Library of the college was well observed standard in terms of accommodation capacity and physical facility.

23. There is broadband internet in all offices of academic staffs in the college. Over head projectors and notice board, necessary furniture had been available in most of the instructional rooms. This means existing furniture for instructional room was somewhat sufficient.

### 5.2. Conclusions

The major research questions were focused on the challenges in the implementation of principles of outcome based instruction. The major findings on the above summary were identified and revealed. Thus, the following challenges have been drawn from the findings.

- To facilitate such important ingredients of teaching – learning process, allocated financial budget were seen scarce. For this reason, existing services were unsatisfactory. Beyond these problems employed teaching method and assessment techniques had been inconsistent. Implication of these conclusions is that the college manpower allocation was primary based on teaching staffs and fail to address the issue of guidance and counseling services, which is an integral part of the effective functioning of OBI. However due to budget constraint they were not volunteer fully implement it and get their learners to change their attitude.
- There was no enough staff in terms of numbers to Implement OB instruction.

- There was no assigned officer that facilitates guidance and counseling services.
- The integration of theoretical learning and practical training is not satisfactory since shortage of budget and unavailability instructional material around the college.
- Learners are not supported individually due to large class size
- The time allocation system was not flexible in each class schedule and learners are engaged in more than five modules at once. Consequently they couldn't practice all of the competences using the given time.

### 5.3. Recommendations

The study discussed about challenges which impart negatively and hinder free access to outcome based instruction in Ardaita TVET college .Research findings have their own implications and the implications shall suggest possible recommendable actions. Accordingly, implementation of OBTVET requires necessary inputs, process, working principles and teaching-learning guidelines. Thus, the college need to give due attention on the issue of inputs, teaching-learning process and the occupation. From these implications the following can be possible recommendations in order to minimize the challenges for effective implementation of OBI in the college.

- A number of challenges had been identified, that hinder the implementation of OBTVET instruction in Ardaita ATVET college ; these challenges have mainly emerged from scarcity of allocated budget and lack of awareness from learners, thus the college need to allocate adequate budget for academic staff. In this regard, it is advisable to allocate enough budget to alleviate different problems, use different system to create consistent awareness on OBTVET instruction to raise learners understanding of the system.
- One of the major characteristics of outcome based instruction is individualized learning. Learners who are not yet competent should get more than two opportunities until mastering the knowledge skill and attitude before proceeding to the next competence. Large class size is a challenge for the instructor to follow up learners and record their change. In short the number of learners and number of instructors is not based on the principles of outcome based instruction. So that an instructor shouldn't be

engaged in more than one section and more than 25 learners to follow learners and record their change using progress chart. In selecting the candidates, Ministry of Agriculture and Ardaita ATVET College should work together for the improvement of quality training.

- The time allocation system was not flexible in each class schedule and learners are engaged in more than five modules at once. From each learning outcome in each unit of competence there should be time range given to practice and mastery learning. Learners should take one unit of competence at a time and proceed to the next only if they are competent. Learners who are not yet competent should be given additional time range to practice and became competent.
- As indicated under scope and limitation section of this paper, the study was only concerned to challenges in the implementation of Outcome based instruction at Ardaita Agricultural TVET college . To sum up, this research cannot identify whole challenges of outcome based instruction of Ardaita ATVET College. Hence, additional research is needed to clarify both internal and external challenges in the area of OBTVET implementation issues. More specifically, extended study is required to find out solutions for the problems attached to financial burden, improvement of teacher's and learners' awareness and ways of cooperative training in regard to industrial integrations and linkages that enhance work based training and Systems integrating with primary cooperative societies, unions and federations.
- Ardaita ATVET college is the only cooperative college at federal level.The Agricultural Cooperative sector Development strategy 2012-2016 (MoA, 2012) declared that Ardaita ATVET college would be the institution to be transformed in to the Center of Cooperative Excellence(CoCE).
- The CoCE should fulfill four main functions: Cooperative education and training, Curriculum and program development, Research, Information and Communication and regional delivery. The college' s staff members and instructors in collaboration with stakeholders should play on their role for the transformation process of the college through increasing the capacity of financial, human, physical resource of the college.

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# Appendix A

## Data Collection Instruments

## Questionnaires

## Addis Ababa University

## School Of Graduate Studies

College of Education and Behavioral Studies

M.sc. Program in Management of Technical and vocational Education At present I am engaged in a Research Project towards my Masters Degree at Addis Ababa University. The research is focused on Challenges in the implementation of outcome based instruction in cooperatives of Ardaita Agricultural Technical and vocational Educatin and Training college.I have taken the liberty of writing to you in order to seek your assistance in acquiring information about your experience relating to this research.

**General Instruction**

All information will be regarded as confidential and no personal details will be mentioned the findings, nor will any of the results be related to any particular school.

Yours sincerely

**Part I. Data Gathering Format for secondary data**

**Name of College----------**

**1.1. Available Spaces in the college for teaching learning activity**

| No. | Rooms | Area in Square meter | Square meter | Room/trainee ratio |
|---|---|---|---|---|
| 1. | Available instructional room for theoretical instruction | | | |
| 2. | ıter room | | | |
| 3. | ce Practical room | | | |
| 4. | | | | |

**Available furniture for instructional room in the college**

| N | **Item of material** | **Quantity** | Length | **width** | **Depth** | **other** |
|---|---|---|---|---|---|---|
| 1. | Black/ white board per room | | | | | |
| 2. | Desk/ armchair per room for Instructor | | | | | |
| 3. | Notice board per room | | | | | |
| 4. | LCD projector per room | | | | | |
| 5. | Personal computer per room | | | | | |

**1.3. Availability of teaching/learning materials for instructors-(TTLM)**

| No | Name of Material | Yes | No | Remark |
|---|---|---|---|---|
| 1 | Occupational Standard | | | |
| 2 | Curriculum guide | | | |
| 3 | Teaching guide | | | |
| 4 | Learning guide | | | |
| 5 | Assesment packet | | | |
| 6 | Reference book | | | |

## Part II. Questionnaire completed by the college teaching staff

### General Information

This questionnaire is designed by graduate student of Addis Ababa University college of Education and Behavioral studies to attempt/study the status of implementing outcome-based TVET instruction in Ardaita and Alage Agricultural TVET colleges.

Dear respondents, the quality of your response toward the questionnaire items determines quality of the research output. Therefore, to achieve the purposes of the questionnaire I kindly request you to fill the items with due attention. There is no right or wrong answer.

What is required from you is just to show the level of your personal opinion to each item Finally, I confirm that the data collected services only for the objectives of this study.

**Please Note that**

i. No need of writing your name and no sign in any pages of this questionnaire

ii. Please read and follow the instructions given for the questionnaires carefully.

**Thank you in advance for your kind cooperation in spending your time to fill the questionnaire!**

**Instruction: On the alternatives given please put (√) in the box and when *you are required to write specific information, write it precisely on the spaces provided*.**

**SECTION ONE: Background Information**

2.1. 1. Sex Male ☐ Female ☐

2.1.2 Age (in years

_____

2.1.3. Educational Qualification (educational level)

1) Diploma ☐ 2) BA/BSc ☐

3) MA/MSc ☐ 4) Other/Specify----------

2.1.4 Level of the instructor with Career structure

1. Level A ☐ 2. Level B ☐ 3. Level C ☐ 4. If other specify----

2.1.5. Teaching experience in years ----------

**SECTON TWO - Yes or No Questions which are related with outcome based instructional processes**

**2.**2.1. What do you know about outcome-based TVET? Write your answer briefly

---

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---

**2.2.2.** Do you think that Outcome based instruction is easy for implementation?

1. Yes ☐ 2. No ☐

If No, why

2.2.3. Do you prepare session plan for each unit of competence?

1) Yes ☐ 2) No ☐

2.2. 3. Do you think that your students get Learning guide on time?

1) Yes ☐ 2) No ☐

If No, why?----------

---

---

2.2.4. Are the contents of the learning guide appropriate to meet the learning outcome listed?

1. Yes ☐ 2. No ☐

2.2.5. Do you use appropriate instructional material/aid to deliver the course?

1) Yes ☐ 2) No ☐

If No, what is the reason?----------

2.2.6. Do you use more than one instructional method in the class?

1. Yes ☐ 2. No ☐

If yes, list them orderly1.----------

2. ---------- -------

3. _____

If No, what is the reason?---------- ----------

---

2.2.8. Do learners demonstrate the lesson individually at the end of each learning outcome?

1) Yes ☐ 2) No ☐

If No, what is the reason?

2.2.9. Do you arrange the program to conduct cooperative training?

1) Yes ☐ 2) No ☐

If yes, when do you take them to industry for practice?

1. At the end of each learning outcome
2. At the end of each module
3. At the end of the whole program

- If No, why?_____ _____

2.2.11. Have you ever taken any training on the concept of Outcome-based TVET instruction?

1) Yes ☐ 2) No ☐

- If yes, how many times_____
- If No, why_____

2.2.1 Can students communicate easily with their instructors and peers?1.

Yes ☐ 2. No ☐

If No, why?----------

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---

**Section 3. Questions which are focused on determinants that have influence on the implementation of outcome based instruction**

**Tick (√) under the appropriate figure for the following items**

1=strongly disagree 2=disagree 3=undecided 4= agree 5=strongly agree

| N | Item of questions | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1. | There is adequate budget for running cost | | | | | |
| 2. | There are sufficient class rooms to understand each student's level of perfection | | | | | |
| 3. | There are adequate training equipments in the training rooms to learn Effectively | | | | | |
| 4. | There is Library with relevant and sufficient copies of books and learning modules | | | | | |
| 5. | There is adequate Guidance and counseling service | | | | | |
| 6. | The class room is large enough for effective instructional process | | | | | |
| 7. | There are adequate instructors in the college | | | | | |
| 8. | Safety condition in every class room is conducive | | | | | |
| 9. | There is adequate time allocated for each unit of competence | | | | | |

# በቴክኒክና ሙያ መደበኛ መርሃ ግብር በመሰልጠን ላይ ያሉ ተማሪዎች የሚሞላ የመጠይቅ ቅፅ

ጥያቄው የተዘጋጀው በአዲስ አበባ ዩኒቨርስቲ ድህረ ምረቃ ት/ቤት በትምህርት ስነ ባህሪ ኮሌጅ ሲሆን ዋናው ዓላማው በግብርና ሚኒስቴር ሥር ከሚገኙ አምስት የቴክሊክና ሙያ ትምህርትና ሥልጠና ኮሌጆች ውስጥ በሚገኘው የአርዳይታ ግ/ሙ/ት/ሥ/ ኮሌጅ ውጤትን መሠረት ያደረገ የመማር ማስተማር ሒደት ትግበራን በማጥናት ጠንካራ አሰራሮችን እንዲሁም የገጠሙ ችግሮችን በመለየት የመፍትሔ ሐሳቦችን ለመጠቆም ነው፡፡ የመልሱ ትክክለኛነትና በጥንቃቄ ሞልቶ መመለስ ለጥናቱ ውጤታማነት ከፍተኛ አስተዋፅኦ አለው፡፡

## ማሳሰቢያ

1. ሥም መፃፍ አያስፈልግም
2. ትክክለኛ መልስ በምትሰጭ/ጥበት ጊዜ

ሀ. መመሪያዎችና ትዕዛዞችን በጥንቃቄ አንብቢ/ብ

ለ. ትክክለኛ መልስ ነው ባልሽው/ከው ላይ (✓) ምልክት አድርግ/ጊ

ሐ. ለክፍት ቦታዎች ተገቢውን መልስ በመፃፍ መልስ/ሽ

## ክፍል አንድ

### የመላሹ የግል ሁኔታ

1. ፆታ

ወንድ ☐ ሴት ☐

2. እድሜ_____

3. ወደ ኮሌጁ ስትገባ/ቢ የነበረህ/ሽ የትምህርት ደረጃ

3.1 10ኛ ክፍል አጠናቅቂያለሁ ☐

3.2 12ኛ ክፍል አጠናቅቂያለሁ ☐

3.3 የሥልጠና ምስክር ወረቀትአለኝ ☐

3.4 ያልተጠቀሰ ካለ ጥቀስ/ሽ _____

4. አሁን በመሰልጠን ላይ ያለሽ/ኸው ሙያ

4.1 የህብረት ሥራ አደረጃጀትና ንግደ አስተዳደር ☐

4.2 የህብረት ሥራ ሒሳብ አያያዝና ኤዲቲንግ ☐

5. ይህን ሙያ የመረጥሽበት/ክበት ምክንያት

5.1 በምደባ ☐

5.2 በፍላጐት ☐

5.3 ሌላ አማራጭ ስለሌለኝ ☐

5.4 ሌላ ያልተጠቀሰ ካለ ግለጭ/ፅ ----------

# ክፍል ሁለት

## አጠቃላይ ኢንፎርሜሽን

ከዚህ በታች ያሉት መጠይቆች ውጤትን መሠረት ካደረገ የመማር ማስተማር ሂደት (outcomes based instruction) አሰጣጥ ተሞክሮ የሚዳሰሱ መጠይቆች ናቸው። ትክክል ነው ያልከውን/ሽውን በሳጥኑ ውስጥ ✓ ምልክት በማድረግ መልስ/ሽ።

1. ትምህርትና ስልጠናው ከመሰጠቱ በፊት ስለ ሞጁሉ አሠጣጥ ቅድመ ገለፃ ተደርጎልሃል/ሻል

አዎ ☐ አይደለም ☐

2. የመማሪያ ሞጁል ትምህርት ከመጀመሩ በፊት ተሰቶሃል/ሻል

☐ አዎ አልተሰጠኝም ☐

3. ኢንስትራክተርህ/ሽ ትምህርቱን የሚሰጥበት ጊዜ እንድትሳተፍ/ሽ ያበረታታሃል/ሻል

አዎ አያበረታታኝም

4. መምህርህ/ሽ ☐ ከትምህርትና ስልጠውን የሚያከናዉ ☐ ነው ከተግባራዊ ውጤት ጋር በማጣመር ነው

አዎ ☐ አይደለም ☐

5. በቅድመ ትምህርት ገለፃው ላይ የምዘና ዘዴዎች ተገልፀዋል

6. አዎ ☐ አልተገለፁም ☐

7. ትምህርት በመሰጠት ላይ እያለ ምዘና ሳይቋረጥ ይካሄዳል

አዎ ☐ አይካሄድም ☐

8. መምህርህ/ሽ ከበድ ላሉ አህዳዊ ብቃቶች በግል ድጋፍ ያደርግልሀል/ሻል

አዎ ☐ አያደርግልኝም ☐

9. መምህርህ/ሽ የንድፈ ሃሳብ ትምህርቱን በተግባር እያስደገፈ ያስተምራል

አዎ ☐ አያስደግፍም ☐

10. መምህርህ/ሽ የትምህርት መርጂያ መሣሪያ በመጠቀም ያስተምራል

አዎ ☐ አይጠቀምም ☐

11. መምህር/ሽ ከሚከተሉት ውስጥ ብዙ ጊዜ የሚጠቀው የማስተማር ዘዴ የትኛው ነው

- የቡድን ውይይት ☐
- የክፍል ውስጥ ገለፃ ☐
- ሰርቶ በማሳየት ☐
- ሌላ ካለ ጥቀስ/ሽ _____

12. የተሰጠህ/ሽን የግል ስራ ሠርተህ/ሽ ክፍል ውስጥ በመምህርህ/ሽ እና ለተማሪዎች ታቀርባለህ/ሽ

አዎ ☐ አላቀርብም ☐

13. የተሰጠህን/ሽን የቡድን ስራ በመሳተፍ ክፍል ውስጥ ታቀርባለህ/ያለሽ

አዎ ☐ አላቀርብም ☐

14. ወደ መሠረታዊ ማህበራት እና ዮኒየኖች ጉብኝት ታደርጋለህ/ጊያሽ

አዎ ☐ አላደርግም ☐

15. ለተራ ቁጥር 13 መልስሽ/ህ አዎ ከሆነ ከጉብኝት በኋላ ሪፖርት በማዘጋጀት ክፍል ውስጥ ታቀርባለህ/ቢያለሽ

አዎ ☐ አላቀርብም ☐

16. የመስክ ስራ ተሰጥቶህ/ሽ ሠርተህ/ሽ ታውቃለህ/ቂያለሽ

አዎ ☐ አላውቅም ☐

17. በተራ ቁጥር 15 መልስዎ አዎ ከሆነ ሪፖርት በማዘጋጀት ክፍል ውስጥ ሪፖርት ታደርጋለህ/ጊያለሽ

አዎ ☐ አላደርግም ☐

18. መምህርህ/ሽ የሚጠቀመው የትምህርት እና የስልጠና ዘዴ ግልፅ ነው

አዎ ☐ አይደለም ☐

19. ትምህርት ስልጠናውን ካጠናቀቅህ/ሽ በኋላ በሙያህ/ሽ ለመስራት ንቁ ነኝ ብለህ/ሽ ታስባለህ/ሽ

አዎ ☐ አላስብም ☐

ስለ ውጤትን መሠረት ያደረገ ትምህርት እና ስልጠና አሰጣጥ አጭር የግንዛቤ ስልጠና ወስደህ/ሽ ታውቂያለሽ/ቃለህ

ወስጄ አውቃለው ☐ ወስጄ አላውቅም ☐

# ክፍል ሶስት

ውጤትን መሠረት ያደረገ ትምህርት እና ስልጠና በሚፈለገው ደረጃ እንዳይተገበር ምክንያት ሊሆኑ የሚችሉ ጉዳዮች ከዚህ በታች ተዘርዝረዋል። ይህን (✓) ምልክት በመጠቀም ስምምነትህን/ሽን በዚህ በታች በተጠቀሰው ሰንጠረዥ ላይ አስቀምጥ

5. በጣም እስማማለሁ 4. እስማማለሁ

3. እርግጠኛ አይደለሁም 2. አልስማማም 1. በጣም አልስማማም

| 1 | የመጠይቁ አይነት | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 2 | ለትምህርትና ስልጠና ዘርፍ የተመደበው በጀት በቂ ነው | | | | | |
| | በቂ የመማሪያ ክፍሎች አሉ | | | | | |
| 4 | በቂ የ የማስተማሪ ቁሳቁሶች ተሟልተዋል | | | | | |
| 5 | በቂ እ በውስጡ በቂ መፅሐፍት እና ሞጁሎች የያዘ ቤተ መፅሐፍት አለ | | | | | |
| 6 | በቂ የ በቂ የምክር አገልግሎት ይሰጣል | | | | | |
| 7 | ለልምምድ እና ልምምዱን ለማሳየት የተሰጣቸው ጊዜ በቂ ነው | | | | | |
| 8 | በቂ ቁ በቂ ቁጥር ያላቸው ብቁ መምህራን ተቀጥረዋል | | | | | |
| 9 | ከጓደኞ ከተማሪዎች ጋር ለመግባባት ባህላዊ እና ማህበራዊ ተፅእኖ አያጋጥመገኝም | | | | | |
| 10 | እንግሊዝገኛ ቋንቋን በቀላሉ መናገር፣ ማዳመጥ፣ ማንበብ፣ መፃፍ እችላለሁ | | | | | |

## APPENDEX B

### Sample Format of Session Plan

| | |
|---|---|
| Unit of Competence : | |
| Module Title : | |
| LO _ : | |
| Session Objectives: | s In this session the learners shall be able |
| | |

| Activities | Nominal Duration | Contents | Iethods |
|---|---|---|---|
| Introduction | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

# APPENDEX C

***Evidence Plan Template (Formative Assessment)***

| | |
|---|---|
| | |
| | |
| ***Learning Outcome(s) covered*** | • __<br>• __<br>• __ |

| **Ways in which evidence will be collected:**<br><br>**The evidence must show that the student** | | | **onstration with Oral Questioning** | |
|---|---|---|---|---|
| Assessment criteria | | | | |
| • | | | | |
| • | | | | |

**APPNDIX D**

**Performance Test**

*Sample Demonstration Evidence Gathering Tool (Sample for Formative Assessment)*

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| **Learning Module Title:** | | | | |
| **Learning Outcome covered:** | | | | |
| | | | | |
| | | | | |
| | | | | |
| **Instructions for demonstration** | | | | |
| | | | | |
| **Materials and equipment** | | | | |
| | | | | |
| **Demonstration of skills, did the student:** | | | | |
| | | | | |
| | | | | |
| | | | | |
| **The student's demonstration was:** | | | | |
| **Satisfactory** ❑ | | | **Not Satisfactory** ❑ | |



**Note: This document serves as the rating sheet of the teacher in evaluating the student's performance. This must be accomplished for each student.**

**APPENDEX E**

***Demonstration (Sample for Summative Assessment)***

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| **Learning Module covered:** | | | | |
| | | | | |
| | | | | |
| | | | | |
| **Instructions for demonstration** | | | | |
| | | | | |
| **Materials and equipment** | | | | |
| **During the demonstration of skills, did the student:** | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| **The student's demonstration was:** | | | | |

**Note: This document serves as the rating sheet of the teacher in evaluating the student's performance. This must be accomplished for each student.**

**Learner's Progress Chart**

**Title** Selecting and creating market linkage

| | **Assesing Learners competence** | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | rformance test | up Assignment | al Assignment | Test 1 | Test 2 | test3 | test 4 | mmative Exam | | | | NYC | Re-Exam 1 | Re-Exam 2 | Re-Exam 3 | C | NYC | Remark |
| 1 | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |

Name of Instructor _____ Department _____ Date

**Key for Symbols**

S-Satisfactory C-Competent

NYC-Not Yet Competent NS- Not Satisfactory

## APPENDEX F

### **Assessment Summary Results** (form part of the Teacher's Report)

| | | |
|---|---|---|
| | | |
| | | |
| | | |
| The performance of the student is – | Satisfactory | Not Satisfactory |
| A. Demonstration with Oral questioning | ☐ | ☐ |
| | ☐ | ☐ |
| ce meet the required evidences / standards? | ❑ Yes | ❑ No |
| | ❑ **COMPETENT** | ❑ **NOT YET COMPETENT** |
| gths / Improvements needed] | | |
| | | |
| | | |

## Appendix G

### Reliability test of the study

| | Instructors | | students | |
|---|---|---|---|---|
| | N | % | N | % |
| Cases | 48 | | 182 | 0 |
| | 0 | | 0 | |
| | 48 | | 182 | 0 |

| | Students | Instructors |
|---|---|---|
| Cronbach's Alpha | O,78 | 0.89 |

**Appendix H. Photographs**

**Instructors at Oromiya Farmers Coffee processing Union discussing with the union's Manager**

Learners Who are doing their project work in practical room

Learners who are attending the lesson in lecture room.

## Declaration

I the under signed, declare that this thesis is my original work and has not been presented for a degree in other university and that all sources of the material used for the thesis has been duly acknowledged.

Name Geta Achenef Adugna

Signature: _____

Date: _____

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

Name _____

Signature _____

Date: _____