

ADDIS ABABA UNIVERSITY
SCHOOL OF GRATUATED STUDIES

**THE AVAILABILITY AND UTILIZATION OF INSTRUCTIONAL MATERIALS ON SOME
SELECTED TVET COLLEGES OF ADDIS ABABA CITY ADMINISTRATION.**

BY
ASMELASH SISAY

JUNE 2014

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Approved by Board of Examiner

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Advisor	Date	Signature
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Examiner (Internal)	Date	Signature
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Abstract

This study investigating the availability and utilization of IMs in selected TVET college of Addis Ababa city. The study sample contain 3 TVET institution deans, 57 trainers of TVET , 3 workshop center coordinators, 3 librarians and 200 trainees. 100 from level 1, 2, &3 and 100 from 4&5 by using random sample and purposive sampling techniques. All in all 263 respondents were selected from all sample TVETs. In order to attain the objective of the study a descriptive survey method was employed. Questionnaire, interview, and observation checklist were used as data collection instruments. The data collected were analyses using percentage and descriptive statements. The finding revealed that there is a great deficiency in the availability and utilization of instructional materials use to different factories. most were not properly used the materials in the training of in their respected departments. A number of factories for a low availability and utilization of IMs were identified among which lack of budget, lack of training and low support from Deans and concerned bodies stand out as a major ones. Teachers in the selected TVET college's were not properly used the material needed in the training of their fields. The less availability and the deficiency in the use of IMs led to less effectiveness of training process.

Finally, the researcher offers recommendations pertaining to the provision of IMs and the utilization of such IMs by teachers of TVET School.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Education develops the innate capacity of people. The ever growing and diversifying needs and aspirations of mankind at the individual, institutional, and national level necessity upgrading and exploitation of human potential. Thus, education, as a means of helping people to cultivate their potentiality so as to explore and control the changes and of natural, has undergone fast development in all its forms. In societies where formal schools are not well established, individuals are still educating via institution such as the family or tribal groups. However, as the world become more complex and interrelated, even that society will have to create more formal schooling to address the social and cultural need of their people. Certainly, schools will continues to play significant roles in modern technological, industrial, and informational society (Ornstein and Hunkins, 2004:135

As economical, social, and technological change become faster, people everywhere need to develop their knowledge and skill, on a continuous basis, so that they can live and work meaningful in the advanced society. Education and training contribute to an individual's personal development increase her/his productivity and increase at work, and facilitate everybody's participation in economic and social life. It follows that education and training can also help individuals to escape poverty by providing them with the skill and knowledge to raise their output and generate income. Investing in education and training is an investment for the future: knowledge and skills is the engine of economical growth and social development (UNESCO/ILO, 2002:2).

Developing countries including Ethiopia need to improve productivity throughout the economy if they are to successful in an era of rapid economic and technological change. This requires not only capital investment but also a workforce that has the flexibility to acquire and change occupations. The level of competence of a country's skill work and technicians enhance the quality and efficiency of productivity and maintenance, and they supervise and train workers with lesser skills. This can be attained through vocationalization of education.

As defined by UNESCO (in Aggarwal, 1997:200) vocationalization embrace those aspect of the educational process involving, in education to general education, the study of sciences and the equation of practical skills, attitudes, undertaking knowledge relating to occupation in the various sector s of economic and social life.

Education is both the result of development and its cause. In its causative role, it partakes of the nature of capital good. Vocational education is an investment to produce specific capital goods undertake well in advanced of the demand; even then, it follows demand in the sense that it is undertaken in anticipation of demand (Deshpandae 1998:82).

Historically, practice to the vocational the curriculum of school had strong political motivation representing an important part of the effort of the colonization and later, the indigenous leaders to use such program as a mechanism of social control. It was taken as a means of lowering the occupational aspiration of the youngest in these societies to more manual level. Vocationalization also conceded as a means to preparing children of the masses as a source of cheap labor for the foreign firms operating in these countries. Vocationalization of the education is to mean changing the curriculum in to practical or vocational direction, which help the students to use both their hade and their hand at the same time. This help to produce a county's skilled human power for the improvement of its economic and social conditions. Regarding this point Venn (1964:50) stated “student and their parent are impressed with the employment opportunity held out by vocational education then by the grand design of the traditionalist for a common culture...”

The primary objective of TVET is to train skilled labor force that can compete and adapt to the requirement of the labor market. Its focuses are to produce skilled worker in various modern establishments. However, it requires a very considerable amount of resources. Regarding this point, UNSESCO (1979: 87) suggest:

The achievement of goals for developing and expanding of technical and vocational will depend to a great degree o the quality of three major elements of implementation. These are (a) the student recruiting, depending in turn upon guidance, (b) equipment, method and materials used in teaching and learning process, and (c) the teaching staff.

Instructional materials (IMs) are tools that trainer use to implement a particular learning task by enriching the instructional strategy employed. In line with trainer and other professional workers, need essential tools to do their work best. (Brown ET.AL 1985). The availability and a systematic utilization of instructional materials improve the training process. Heinich et.al (1996:7) describe instructional materials are as a tools used for engaging trainee powerful in the training process. Many educator and researcher have reported the importance of instructional materials in the training. For instance, Schramn (1977) stated that IMs enrich training knowledge and reinforce training skill instruction. Abimbada (1997) cited in Sunday (2010) describe that IMs in training make trainee learn more and retain better what they have been thought and allow the trainee to discover themselves and their ability.

Training activity without IMs could not be effective. Schramn (1977) referee to instructional materials are basic channel of communication of ideas and concept in the classroom for the purpose of bringing about effective training. Rao (2005:131) farther argued that teaching aide help the trainer communicate with his/her trainee in a more desirable and effective way. Based on the advantage gained for the use of instructional materials, Aggrawal (2001:153-154) point out that audio visual aide proved significant gain in , information learning, better assimilation and personal growth and development . For the above discussion, one can deduce that IMs play a vital role in training.

IMs gate several names such as audio visual aide, audio visual materials, Medias, communication technology, educational or instructional material and media resource.

The availability and utilization of IMs influence training activity. In line with this, Oni (1995) and Mapaderum (2002) stated that the availability and adequate of IMs promote effective training activity in TVET. While,their inadequate affects the skill performance negatively and create poor training environment. Thus, trainer and trainee may create simple tools for free and inexpensive materials for effective training process. With regarding to this view, Ericson (1995) assert that even though trainer may not have the necessary IMs at their fingertip, they strive to produce or improve their own from local available material in collaboration with their trainee for the sack of quality of training. The impact of instructional materials in the training process is very high. However, many educators have suggest some constrains which can impede the proper preparation and utilization of instructional materials.

1.2 Statement of the Problem

The overall objective of the national TVET strategy is to create competent , motivated, adaptable, and innovative workforce in Ethiopia that contribute to poverty reduction social and economical development through facilitating demand – driven, high quality of technical and vocational education and training relevant to all sector of economy at all level (MoE).

In order to make training process is effective, instructional materials are quite necessary. They are both tools for training and learning clarification concepts and skills. Training in the TVET is wide in range and a complex task. It is the trainer who can make the training process effective with the help of instructional material. Heinich (1996:36) stated that “if instructional materials are to be effectively, there must be a match between the characteristics of the trainer and the concept of the lesson, methods, media and materials”. According to Aggarawal (1982:196)stated that a good trainer will create his/her own material and make training a creative experience for his/her trainee.

The Education and Training Police of Ethiopia (TGE,1994:27) stated due attention has to be given to the supply, distribution, utilization of educational materials and facility in order to promote the quality, relevance, and expansion of training institutions. This statement indicates that instructional materials play great role in improving the quality of TVET in the country. In this regard, Teshome(1998:75) states that the most central purpose of media use of training is the one that concern the improvement of training effective in term of training.

1.3 Research question

1. How adequate is the supply of IMs in the TVET colleges?
2. How often do in TVET colleges use the availability materials to make training concrete and relevant?
3. What are the major factors that affect the availability and utilization of IMs at TVET colleges?

1.4 Objective of the Study

- To check the availability of IMs in the selected TVET college for the study.
- To explore how trainer in TVET use the availability of IMs to make training effective.
- To investigate the training status of TVET college pedagogy center.

- To look in the support and encouragement provide by TVET principals and concerned bodies for the provision of IMs.
- To recognize the provision of financial and material support.

1.5 Significance of the study

The study was providing the presence reality of instructional materials with respect to the availability and utilization at TVET College. It was indicated the factors that affect the availability and utilization of IMs. It was give relevant information to the trainer, principal, and other concerned bodies on the availability and utilization of IMs for effective training situation. It helps to recognize the importance of IMs in the training process and create effective training environment by making adequate availability of instructional materials and by improving the practical utilization of IMs. It was also serve as an initial document for other researcher to conduct further study in the area.

The result of the study was serving as a ground to assist plan and policy make to find the problem of instructional materials on TVET and advice mechanism to alleviate the problems.

1.6 Delimitation of the Study

The scope of this research is delimited to one governmental organization, which is engaged in Addis Ababa TVET; the study is limited to three sites: Keftegn 20, Tegnare Edi and Entoto TVET College.

1.7 Limitation of the Study

The study is designed to contribute to the better understanding of the availability and utilization of instructional materials on selected TVET collage of Addis Ababa. However, several factors was face to the research from completing the research on time.

Most salient factors will include the serious lack of research work, financial problem and lack of optimistic view from deans and the unavailability of trainee during training season in TVET.

1.8 Organization of the Study

This study is organized in to five chapters. The first is introduction of the study. The second deals with review of related literature the third is concerned with the research design and methodology, the fourth is presented the data and its analysis and the fifth contains the summary, conclusion and recommendation of the study.

CHAPTER TWO

2. Review of Related Literature

This chapter consists of various literatures, which are assumed to have relevance to the topic under investigation. The content of this chapter is organized in the following order. The meaning of instructional material comes discussion on importance of IMs, preparation of instructional materials, availability of instructional materials, and utilization of instructional materials.

2.1. Concept of Instructional Materials

Many educators have tried to define the term of instructional materials in different ways. Brown (1983: 3) and Sharma (2995:275) define IMs as materials or device which present a body of information and large self support rather than supplementary in training process. They are not in support of instruction, but are the instructional inputs by themselves. Amare (1999:53) assert that instructional material related to all form of with which students and teachers interact for the purpose of training. Nkuuhe(1995) cited in Akalu (20001:34) describe that “instructional materials are all device and material use in the training process”.

Romisowski cited in Nkuuhe (1995:224) considered electronic communication media device such as real project, teaching made diagrams, hand out and text book, are that we use in the process of planned instruction as instructional materials.

Hass and Packer (1996:2) and Aggrawal (2001:153) tried to define “IMs as device that assist an instructor to clarify establish and co-relate concepts, to transmit learner fact, skill, and attitude. Knowledge and appreciation and enable him/her to make training more concrete, Effective, interesting and vivid “.

The above concepts of each definition indicate that IMs are very essential for training process. This means, concrete dynamic effective and meaningful learning can be achieved or gained by using IMs in the training.

2.2 Type of Instructional Materials

Many scholars have tried to classify IMs into different types. Among these, Aggrawal (1996:160) and Training main Department (TMD) (2002:18) have almost similar classification of the materials. These are audio visual and audio visual materials. Similarly, Rio, (2005:133) attempted to classify IMs as visual aide, audio aide, audio visual materials, active aide and memory aides.

Facilities are material resource provided for trainee and trainer to ease teaching learning process and optimize their productivity in teaching and learning. But for each TVET department should be fulfilled among from those heavy equipment to lower hand tools, i.e. from 20 broad department I select 9 department such as,

- A. Food and Beverage Service Department , Food preparation, Baking, Hotel management, Housekeeping and laundry service, Tour and travel operation, Tour guiding service, Tourism management, F&BSD kitchen facility oven, wall cabinet, (cupboard) kitchen knife, bread knife, toaster oven, coffee maker, dish, double boiler, (steamer), kettle, roaster, griddle, egg poacher, casserole, soup pot, soup oven, electric wane iron, meat grinder, kitchen scale, garbage cap, cutting board, etc...
- B. GMF (General Metal Fabrication)machinist, machine ration manufacturing workshop facilities: include rolling machine, binding machine, gas welding, lather machine, bench girder, welding machine, forging, seaming machine, circular shear, pedestal girder, drilling machine and heat treatment furnace. Hammer, chisel, punch, meter and tri-square...
- C. Construction department includes masonry, concrete, carpentry, painting Construction workshop facility: include harmer, shovel, pick axe, mallet, metal plot, tulle cutter, zigzag rule, trowel, hacksaw, tape rule, HCB mould, floor tile, palm bob, building model and different partitions. Square meter, shaper, hammer, mixer, vibratory, gravel, water balance, etc.
- D. Wood work shop facilities: combination machine, robed machine, Makita, saw, painting brush, smooth and round file, screw driver plat, drawing instrument, and portable hand plane machine etc

- E. Electricity Workshop facilities: including equipment and devices, distribution board, wire, switch, fuse or steelier, blast, breaker, transformer, bell, lamp, resistor, test light, plastic harmer, boll pin harmer, digital multiplier, timer, realer and Varner caliper.....
- F. Automotive workshop facilities: include driller, model car produced by students and other machines....
- G. ICT lab facilities: computer, laptop, broadband networking device, etc.....
- H. Leather fabrication facility (leather goods and garment): materials are, hide and skin, frames, salt for preservation, leather singer, and other accessories like needles cutters, papers and plastic (syntactic leather for training) etc.....
- I. Textile technology facility: singer, the materials are singer, different clothes for learners practice singer's needle papers and cloth for training etc..

In addition to these, for all TVET departments should be provide different equipment facility such as, classroom desks, classroom chairs, teacher desks and chair Blackboard, whiteboard, cupboards, open shelves, etc. Equipment, Telephone, calculators, photocopier, computer, printers, projectors, scanners, radio, TV, DVD, Science equipment, Language equipment, Art and craft, Sports equipment, etc.

Olagunju (2000:120-125) describe the existence of "...verity of instructional materials, which the teacher can ready use to enrich training ". These instructional materials are in construction department is hummer, string, helmet, glove, try square, pipe cutter, hacksaw, table vice etc. in information technology department is project, CD, software, Opret system, CD room driver, network puncher etc. They are three basic types of instructional materials: concrete objective and phenomena: and description of such objective and phenomena by means of signs, words, and sentence of natural and artificial languages. The first types of instructional materials include such objects and phenomena as minerals. Raw materials, semi finished and finished manufactured. Also including in the first group are materials and equipment for production training and for courses in drafting and the representation materials. Among such supplies, instruments, and

equipment are wood, metal, plastic, and glass objects, measuring and monitoring instrument and equipment, equipment for the assembling and finishing of various products, and machine tools.

The second type of educational materials, that representation of actual objects and phenomena, includes three dimensional materials (casting, globes, automobile chassis model, and concretes), two dimension materials (charts, maps, drawings, diagrams) and audio visual materials (project, motion pictures, records and tape recording).

The third type of instructional materials that of written descriptions, includes scientific, scholarly, reference. and methodological training materials, as well as textbook, books of problems and exercises, books for recording scientific observations, laboratory manuals for production training, and programmed textbooks.

Another type of instructional materials is technological instructional media. Among those are equipment for the transmission and assimilation of information recorded on film or on photograph recording: film projects, tape recording.

In general, different type of IMs obviously involves different since by presenting stimuli. Thus trainers can use the materials which have relation to the training objective, content and skill characteristics. This enable them achieve the intended TVET objective and effective training process.

Current educational systems in Ethiopia are showing tremendous changes at all level of education in terms of broadening education institution by building new school; vocational institution and university accommodate the facility of material fulfilling the demands of institution, both in privet and government school. But the quality, efficiency and a number of equity problems in the regional government in Ethiopia, of vocational education is not much changed because lack of modern technological equipment, lack of teacher qualification and professional development, allocation of management in the TVET without exposition of the discipline, the curriculum which provided in TVET are not market oriented, lack of financial budget for the training observed both in TVET institution and TVET college and delay of the allocated budgets offering on the due date for the training session. In addition to the above problem mentioned, Most of the problems observed only in the basic level TVET institutions are as follows no more guidance and counselor with other staff personnel which demanded in their organizational structure even the assigned person have no exposition and trained on the discipline, also at basic level of TVET institution there is no procurement and supply management

department. In both TVET College and basic level TVET institution commune courses are not offer (English, mathematics are phase-out), also business stream is phase-out in every governmental and nongovernmental organization.

Shortage of practical teaching learning place like enough laboratory, library, shed and class room, student and parent negative attitude towards vocational education, there is no proper understanding and responsible body concerning income generating activity only observed in government TVET than in privet institute, no proper material management in government TVET, in academic stream students with high academic achiever are recruited large quantity in preparatory class and they hate the system of TVET knowing and unknowingly. Youth lower work loving condition and hate hard conditions of work and also disgust work ethic of entrepreneur, Lower academic achiever also recruited large quantity, and due to this they hate vocational streams instead of understanding to be the future entrepreneur and become enterprise and big business persona. Because of these the dropout rate is also high. Redie Agedew (1977) also taught us it is better to acquaint career development at early age starting from 14 to 18 instead of identifying their talent and telling later year.

According to Redie Agedew (1977) wrote in his research work and dissertation career occupational structure more employees needed in starting from unskilled, semi skilled, skilled and middle level professional etc in the hierarchy order respectively. Ato Girma Zewdie associate professor also provides for us several teaching material and his research study concerning youth Vs adult venerability in terms of economic benefit and employment and self employment. He gave as several assignments on every issue of TVET field of study practically and theoretically, individual and group assignment accordingly,

1. Theory and practices of managements of vocational education,
2. Project planning and financial management in vocational education,
3. And the ongoing course it said to be supplies and property management in the managements of vocational education. Hence, he gave for as leadership style to overcome the above mentioned problem which existed in the TVET institutions.

When we observe the opportunity of preference from all occupation should left to the individual talent need alone in our country more people are interesting to join university forced by their family, friends and by their own choice for long term education to get knowledge rather than making money is their

moral behavior, in other words some people are interesting to join TVET programme to get testimony of practical work accreditation relatively short period of time they will become entrepreneurs can making money. Indeed the preference should left to the individual person, in order to fulfill their student demand it is better join vocational education after acquainting world of work getting income satisfy themselves and if they want, they can resume either academic field of study or engineering courses instead of recruiting university graduates obliges to join unskilled demanded possession. The government should provide a chance media coverage for social acquaintance for better self employment. The forwards of this study I will summarize in the recommendation at end parts of this study.

Currently my work at woreda level implement the new government policy it said to be Kaizen in the enterprise with the collaboration of Entoto TVET college. the enterprise (entrepreneur) which found at a grass root level kaizen mean Word Origin of KAIZEN改Kai): Change, amend, reform 善zen): Good, right, virtue the original meaning of KAIZEN is “change for the better.” KAIZEN is “a Japanese business philosophy of continuous improvement of working practices, personal efficiency, etc.” “KAIZEN is a collective term of productivity improvement, TQC, ZD, Kanban, suggestion system etc. under the thought common in philosophy, organization and problem-solving. KAIZEN is customer-oriented and stresses on continuity, process and workplace.” abstract from “KAIZEN” authored by Masaki Imai cite: Oxford Dictionary Continuous improvement is the improvement that repeatedly conducting problem-solving or issue achievement after identifying problems or issues, including tool arrangement which found in their shop and workshop, material management. Increase in profit Enhancement in competitiveness. Increase in customer satisfaction Increase in wage Job generation Increase in payable tax → Contribution to National finances Enhancement of resistibility to business depression Inter-industry synergy effect KAIZEN is an important pillar for the National Growth Strategy. The objective of Kaizen improving their production and productivity by changing their traditional forms of production to modern production flow identifying staff performance record identifying worker improvement / success staff problem within the

enterprise it includes identifying skill gape by need assessment and fill the gap what we identified, example preparing their business plan, accounting and ledger shifts, material codification which found in their stores opening file and folder cabinet i.e. filling the gap including practical skill gape example metal work, leather technology and cloth production etc...

Most Ethiopian government institutions and all private institutions like, education, hospital, factory and industries are highly look for their purchasing and materials management practices also focus on their purchasing objective and strategies to effectively run their operation despite some problems of production material handling and quality matters of purchasing material, buy from the right source, purchases quality materials, at the right time, the right quantity.

2.3 The Importance of Instructional Materials for Teaching and Learning process

The importance of instructional materials is that instructional device which is used in the class room to encourage training and thereby making it easier and interesting. The trainer has to use IMs to make the training process interesting (Nicholls, 2000, raw, 2003).

From different type of IMs, trainee gained more knowledge and skill. For example, audio materials enable training improves their listening skills. Regarding to this, Amare (1999:54) indicates that “IMs provide the training with a wide verity of experience. For Instance, listening, reading, and manipulating “.

Sharma (2005:271) states that visual materials can increase the active participation of student by copying of notes (which is relevant to lessoning spelling, writing or drawing) by asking questions on the visual content and getting students to explain the function of parts of materials.

According to Allan (1995:247) and Sharma (2005:63) using project in training process, trainee can learn about current event, scientific advance, and de expose to skill manipulation. It can also carry instruction to different classrooms. The trainer should use these materials in the training process to make trainee learning for skills. Technological Medias in training are useful in making instruction more effective and meaningful.

Supporting this idea scholars have discussed a lot on the contribution of IMs on the training process. Among them are (Starr, 1986:231, Callahan and Clark, 1988:412 and Heinich et.al 1989:24) have discussed that IMs serves as a catalyst to change in the whole instructional environment and facilitated for intellectual development. It can help to provide the training atmosphere in which trainee can actively participate in the training process. IMs can increase trainer’s involvement and interest also enables the intended objective. Ikerinwn (2000:14) who refer to IMs object or devices which help the trainer to make training meaningful to the trainee.

Most of them agree that IMs can increase interest, comprehension, retention and correctness of the training. The functions of IMs engaged the trainee motivation, skill, stimulation, and encourage appropriate practice (Derek.R, 1988:168). Integration of instructional technology in TVET curriculum is believed to foster the quality of instructional via fostering student centered workshop. (E.g. Nggarawal 1995, Nkuuhe 1995, Egorove, 2007) shows that trainers use of instructional materials sustain trainee attention, increase the meaningfulness of abstract concepts, skill performance, and encourage deep processing and booster trainer's performance.

Most important, it is argue that the advent of information and communication technology calls for modification of trainee and trainers role as it trigger a shift from teacher center to constrictive mode of class room instruction (Earle, 2002). Apparently, as educational innovation change the modes of training instruction on the wheat, the new development also left in different part of the glob including the poorest corner of the world, and Ethiopia is one of them.

Recognizing the workshop implication, the Ethiopia Education and Training Policy (ETP) promise to intensify the integration of instructional technology in school curriculum (TGE1994:MOE 2006). In view of that, ETP state that: "...due attention will be given to the supply, distribution and utilization of training materials, technology and facilities"._htt:// ro.ecu.edu.au/cgi/ viewcontent.cgi? article=1477andcontext.decem.27.2011). Amare in 1999:54) discussed that "IMs can provide the learning with many experience such as doing, observing, sketching, manipulating, discussing and speaking".

The process of training between trainers and trainee is a communication. Obviously the mission of IMs is to facilitate and ensure the creation of common meaning and understanding (Heinich,el.al, 1996).

Instructional materials serve as a channel between the trainers and trainee in deliveri9ng the instruction. They may also serve as the motion on the training process.

As Bassey (2002) cited in Omosewo (2011) describe instructional materials as a system component that used as instructional process which are used to disseminate information, message or ideas or which make communication to be possible in the training process. Hence, the communication value of instructional material is a major contribution to the instruction process.

According to Heinich,et.al (1989), the main value of instructional materials is used to improve the balance between abstract and skill training experience. Dale (1969) cited in Amare (1999:55) list the workshop uses of instructional materials as follows:

Effective training skill development encourages creative thinking, Facilitate active training, overcome the Limitation of time and space, and Create access to the invisible realities, Concretize skill experience, Relate theory with practice, Encourage responsibility, Make training more functional by increasing practice, Assistive training method

Aduwa-Ogiebaen and Imoigie (2005) state that IMS offer a verity of training experience individually or in combination to meet different training experiences. According to Pollard (2002:53) and Sharma (2005:101) using skill practice can increase both the quality and quantity of trainer's skill. It increase concentration, it enable them to practice individual and work at their own pace and they can get their own practice.

To summarize, IMs are very essential in accommodating theory with practice, and they also play a vital role in imparting and receiving the necessary information in training process. Furthermore, IMs clarify abstracted concept to communicate verbally; illustrate and simplify information that are difficult to understanding (Betsate, 2000).

2.4. Availability of Instructional Materials

The availability of instructional materials is very important issues to create effective training situation. Regarding to this, Ahmed (1953) describe that IMs is the school resource input that are used within the class room to facilitate the training process. However, the IMs provided to the classroom are sub standard in quality and less in quantity in developing countries. He said, text book, appropriate chalk board, training guidance and materials need to improvisation.

Heinich et.al (1996:46) states that "... they major of instructional materials used by trainers are ready made and available from the college district or other easily accessible source". They state that trainers have at last three options in obtaining instructional materials. First, they use materials that are ready available in the workshop center, similarly trainers and trains can have access to the community resource by organizing filed trip or by inventing materials to the class room to share their experience.

Secondly, when the materials obtained are only partly relevant to the subject of the study, then they can modify or adapted by the trainers to meet their objective.

If both the above option does not work, the third alternative is producing one's own materials. This can be done by trainers and workshop technical that have the main responsible of material producing using local available resources. According to Amare (1999), most instructional materials need to prepare by trainers, trainee and media resource center. In addition to this, Heinich et.al (1996:18) pointed out "a media resource center is housing verity of up to date materials, relaying on information". The phases a wide verity of material indicate that the availabilities of enough IMs for all department and levels is an important issue for the effective training.

Oni (1995) and Mapaderun (2002) emphasize that the adequate of IMs promote effective training activities in schools. While their inadequate affect5s the performance negatively and lead to poor training environment.

In Ethiopia TVET setting IMs are usually kept in TVET workshop centers (TWC). Thus, it is possible to infer that workshop center should contain all type of IMs to facilitate trainee training and to achieve the objectives. Based on this issue, Clark and Starr (1996:422) pointed out that the initiate trainers and trainee boundless IMs should be available to even the poorest TVET institutions and colleges.

The library is also the source of printed materials. That is textbook, trainer's guidance, hand outs, manuals and other reference books should be available in the library to support trainee training. According to Heinich et.al (1996:106) printed materials – text book, fiction, nonfiction, notification books manual guidance. Ready available on a wide verity of topics and in many different forms. (in America, not in Ethiopia).

Several literature and research finding survey that availability of IMs is influenced the training in general and trainer's effectiveness in particular. For instance Amare (1999:55) and MOE (2002:113) describe that availability of IMs determine the quality of training and trainers effectiveness. However, there is shortage of IMs in developing counties. This shortage affects the training process. Champman and mahlak (1997:6) made the significant discovery that inadequate IMs affect the training negatively.

Some of research under taking in Ethiopia indicates that most of the workshop center had not sufficient IMs. Amare (1998:289-298) reported that the most critical training problem in Ethiopia schools was in

availability of IMs followed by crowdedness of classroom. In his other study, Amare (1999:60) revealed similar shortage of IMs. In addition that, he observes that different finding of similar surveys on the issues showed serious problems in the availability provision and production of IMs.

In conclusion, the research finding indicates that there were not adequate or available were the research has been conducted and shortage of IMs affect the quality of training negatively and create poor training environment.

2.5. Preparation of Instructional Materials

The fact that instructional materials facilitate effective instruction is well documented in much educational literatures. Thus, preparation of these materials will be an important aspect for the training for effective training.

Trainers prepare instructional materials when they cannot get training materials available in their institutions or not adequate for the instructional purpose they need it. According to Aggrawal (1996:158) describe the trainers themselves should prepare some of materials from local materials.

Instructional materials are prepared by trainers themselves and trainee for training use. They can also have access to the local resource by fieldtrip or by inviting resource persons to the institution to share experience with trainers. Brown, et.al (1977) greatly stressed the importance of local media production to meet special need and production. Activities are especially beneficial as training experience for trainee. As Amare (1999), most instructional materials need to be prepared by trainers, trainee and workshop personals.

Instructional medias for a given instructional objectives may not necessary be available. thus, a need to prepared IMs that suit training. But here some are commercially or centrality produced.

2.6. Utilization of Instructional Materials

A systematical utilization of IMs help trainers and trainee achieve training objectives by enhancing IMs. Dale (1969:12) point out that the critical and systematical utilization of IMs in the training play a greater role and enable trainers to attained the ultimate goal of training, the development of independence training who need less and less assistance for the trainers. Heinich et.al (1996:48) state that the increase availability of media and the philosophical shift of teacher center to student- center

training increase the likelihood that trainee will be using the materials themselves as individual or small group rather than watching as teacher presented them to a whole class.

According to Awoboda (2000) as stated in Umunadi, K.E (2009) "... trainers utilization of relevant equipment. Materials and tools teaching in electricity facilitate training enhance trainee achievement". Aggrawal (1996: 154-155) emphasize that the importance values of proper use of

IMs as: reduce verbalism, formed clear image, a great freedom for trainee to move about, talk, and comment up on , and enable the trainer to follow the maxims of training like 'concrete to abstract,' and 'learning by doing'.

To make up with the shortage of materials the availability scarce resource should be properly utilized. The educational and training policy and its implementation MOE (2002:24) state that in order to ensure quality of education , trainee should have textbook in sufficient quantity, to have adequate workshop and laboratory equipment and proper utilization of available materials should be given a great emphasis.

The effective and efficient utilization of IMs effective and efficient helps trainee to gain usable knowledge and skill. so the school dean with his/her trainers and non trainer personnel should create a guideline to serve a mechanism for effective utilization of IMs.

Utilization of IMs in training is one of the tasks expect from all trainers. The trainer has to use IMs to make the training process interesting (Nicholls, 2000, Raw, 2003).

According to Callahan and Clark (1988) utilization of materials involves skill in four steps:

- . Selection of the right materials
- . Preparing for the use
- . Using skill fully and
- . Follow up utilization.

Aggrawal (1996:158-259) listed four different principles in the utilization of IMs.

Principle of selection – instructional materials improve effective only they suite the training objective and unique characteristics of the special group of trainees.

- .They should suit the age level, grade level and other characteristics of the trainee.
- .They should have specific educational values besides being interesting and motivating.
- . They should be the true representation of the real things
- . They should help the realization of desired training objectives.

Principle of preparation- as far as possible locally available materials should be used in the preparation of IMs.

- . The trainer should receive some training in the preparation of IMs.
- . Trainee may associate with the preparation of IMs.

Principle of proper presentation – trainers should carefully visualize the use of IMs before the actual presentation.

- . They should fully acquaint themselves with the use and implementation of the materials to be shown in the classroom.
- . The materials should be displayed properly so that all the trainee able to see it , observe it and derive maximum benefit out of it.

Principle of response – the trainer should guide the trainee to respond actively to the materials stimulate so that they derive the maximum benefit in their training.

However, the contrary inappropriate utilization of IMs can do more harms than good to the training activities (Batsate, 2000:36) he added the inappropriate utilization could take any of these forms: under use, abuse or misuse of media. These will eventually limit trainee training.

To sum up, the proper use of IMs provide different advantages in the training process. It create effective training, provide concrete and meaningful training experience by involving all sense of the training and enable both the trainers and trainee achieve training objectives and goals. But inappropriate use of IMs can create poor training environment.

2.7. Factors that Affect the Availability and Utilization of Instructional Materials

Availability, utilization and preparation of IMs can be affected by a number of factors. Some of them are:

- . Trainer’s commitment and self initiation in preparing and using IMs.

. Training statuses of workshop center coordinators

.The role of Deans and other concerned bodies at the institution provided the necessary support to encourage trainers and workshop center coordinators for the provision of IMs and the provision of finance and material support (Brhanane, 1999).

2.7.1 Trainers commitment and self initiation in preparing and using instructional materials.

One of trainers task is preparing and using of IMs for effective training process. In this case, the effective behavior of trainers is that a trainer stimulate trainee with interesting and original materials and techniques (Amare, 2000:79). Similarly, Eggen and Kauchak (2006:13) stated that effective trainers are committed to trainee and their training. They capture and sustain the interest if their student by using different IMs and instructional techniques.

Heinich et.al (1996:50) stated that some time, trainers can tolerate the problem of lack of IMs by preparing the intended IMs from locally available resource and using them. There are verity of aim at which the trainers can readily use to enrich training (Olagunju, 2000). Clark and Stare (1996:422) Pointe out that to initiate trainers and trainee, boundless IMs should be available to even the poorest institution.

Thus, a trainer is responsible to prepare and use IMs to improve the quality of training process. Aggarawal (1982:196) suggested that a good trainer will create his own materials and make learning a creative experience for his/her trainee. Similarly Carey (2001) point out that using the existing IMs can facilitate the creation of instructional unit. However, if no appropriate materials exist, then the trainer must crate the materials.

Akinsola (2000) and Omosewo (2008) cited in the Sunday (2010) considered the human factors as trainer's professional comment, create mechanical skill, initiative and resourcefulness.

The above ideas indicate that professional commitment and self initiation to the preparation and utilization of IMs is important pre condition for the effective training process.

2.7.2 Training Statues of Workshop Technicians Coordinator

It leaves no doubt that assigning trained workshop technicians coordinator make utilization of IMs effective and manageable. To this point, Ellis, et.al (1999) has strictly underlined the fact that a

workshop technician's center requires a trained person who is equipped with pertinent knowledge and skills in training technology in general. To perform their function properly, workshop technicians require committed and qualified coordinators. According to Sampath et.al (1990:94) the role of workshop technical coordinators including:

prepare and preserve IMs, Helping trainers in previewing, preparing and using IMs, providing facilities and materials asked by trainers, organizing all materials, collecting IMs by borrowing from different sources, providing professional service, and developing awareness of new and update IMs etc.

Erickson (1968), Sampath, et.al (1990), National Educational Association Survey (NEAS) cited in (Abraham, 2001:30) enumerate the duties and responsibility of workshop technical as follows:

- To assist trainers in the wise selection, utilization, evaluating and developing materials of instruction with special attention to answer new IMs.
- To work with trainers to improve utilization in the instructional program and give orientation to trainers regarding IMs.
- To arrange and give in service workshop and training in different aspect of instructional technology
- To keep an inventory of community resources.
- To be responsible for the care and maintenance and IMs equipment.
- Compile trainers' follow up sheet on monthly orders, and forward them to the instructional materials.
- Assesses the problem of trainers on instructional materials.
- Work closely with and advice the TVET Deans on all phase of IMs and arrange working hours for trainers and trainee.
- Prepare necessary IMs ordered by trainers.
- To organize a good stock of IMs equipment and materials and maintain them in a good condition.

As we have seen the above points, assigning trained coordinator in workshop center make IMs effective and manageable. But the lack of trained man power affects the availability and utilization

of IMs. In different TVET college there was a shortage of trained workshop technical coordinator. In line with is there was shortage of qualified person in workshop technical.

To sum up, the workshop technical require well trained person who can run them effectively. Hence, the importance of pre- service and in service training for workshop technical coordinator is vital.

2.7.3 The role of TVET deans and other concerned bodies

Leadership is one of the most importance factor affecting the availability and utilization of IMs. Some of the responsibility of a dean are dealing a very importance role in fulfill regarding workshop technical in their daily job duty and responsibility. Deans are more responsible in improving of thee training process in their college. In particular, their duty is to monitor instruction increase along with their responsibility to help trainers improve their training.

The TVET Deans make available to trainers main material that are in libraries, workshop technical coordinator. It is the TVET administration to facilitate the necessary materials, which would be used in the training process. A trainer alone can never do anything without being provided with the necessary materials (Educator encyclopedia, in smith, 1961:725).

Dean allocate enough budgets, support and utilization of IMs by trainer's asses the problem of trainers in preparing and use in of IMs.

These ideas indicate the professional commitment and positive attitude needed from deans towards supporting trainers and workshop technical coordinators. UNESCO (1984:9) pointed out such as text book, material equipment and other facilities are the critical resource in TVET and other non training and its management.

Furthermore, according to Abrha (1995:29)...” a good dean is one who has special skill and knowledge in assessing and guiding trainers work, development and problems”. A dean can be graded as good when ever he/she make available enough IMs to solve problems of trainers in using IMs. Responsibility is placed in deans and trainers of each college in using the availability resource so as secure the best possible trainee training (Ibid).

2.7.4. Provision of Financial and Material support

Instructional materials require financial and material support. This means, the IMs that will be produced at the TVET level need certain amount of budget allocation. According to Amare (1998:297), “training without instructional materials is tantamount to farming with the use of fingernails”. Just like any activity, the training process needs the use of appropriate technology.

Both TVET College and institution the purchasing practice will work with committees, at college level they have internal auditor department. The following purchasing when they want to purchase materials in both TVET this purchasing rules govern them i.e.

- Each department prepares their own purchasing demand plan and submit to purchasing and plan department. Their Annual plan assessed by the finance and management committee and approved and hold fiscal budget.
- The TVET college purchasing and plan department collect information needs of each department on the TVET.
- Based on the collected needs of the TVET college and institution announce “invitation for bids” for purchasing the right items from the right source.
- The tendering committees screen the suppliers (press enterprises) by considering the fair price to supply the right quality in light of ordering by title, and grade level.
- Those who won and selected as potential supplier, in this case, press enterprises’ make contractual agreement with the TVET College about when to receive and how to receive the materials.
- The received materials expected to be checked at the arrival against the invoice.
- After the received materials are checked and accepted, it is stored in the store house and latter distributed to each department based on their previous need reported to TVET finance department.

The material and equipments are handled by the store keeper receipt by model 19 and issued by model 22 and material requisition by modal 20. After all this materials and equipments are distributed to each department from the store keeper and stored in minister and finally utilized as per the principles and the regulation of the college

However, we observe failures to apply in most institutions. One of the sources of this problem is limitation of budget. Thus, it is unquestionable that financial provision for the purchase of IMs has vital importance. To this end, institution should look for resource of budgeting both for the government and non government agencies. Beside to this, the school community should also advice and in built income generating activity for such purpose. In this regard, Brown, et.al (1977:33) states that “financial and material support can be obtained from government and non-governmental organizations, parents, resource persons, and the community as a whole”.

Furthermore, research finding have showed that less amount of budget is allocate for training materials and equipment. For instance, Endalew(1994), Amare and Tassew (1996) in their survey study in some selected schools of Addis Ababa indicated that the school did not have their own budget allocation for the propose of pedagogical center or instructional materials.

From the above discussion one can conclude that financial and material support plays a great role in preparing, producing and using IMs. However, different institution did not have enough budget allocation. This implies that less availability and deficiency in the use of IMs. And the effect is less effectiveness of training process.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1. RESEARCH DESIGN

The purpose of the study is to investigate the availability and utilization of IMs and to identify the factors that affect the availability and utilization of IMs in selected TVET Colleges of Addis Ababa. To realize this objective descriptive survey was the method of study because it provides the researcher with detailed description of the existing condition about the problem under investigation.

3.2. Source of Data

In the selected TVET, the source of data was obtained from trainers of TVET colleges, Deans, Workshop coordinators, librarians and trainee of TVET colleges.

3.3. Sample Population and Sampling Techniques

There are three TVET colleges were selected to the study. The research has selected the three (Keftegna 20, Tegbareed, and Entoto) using random sampling technique. After a short visit to selected TVET College for the study, the research population included trainers, Deans, Workshop coordinators, Librarians, and Trainee of TVET colleges. The total number of trainers of Keftegna 20, Tegbareed, and Entoto were 57, 123, and 225 respectively and the total number of trainee of the Keftegna 20, Tegbareed, and Entoto were 601, 1143, and 3605 on 2005/06 academic year.

In order to select sample from the target population, the researcher used simple random sampling techniques' for both trainers and trainee respondents. Deans, Workshop coordinator and librarian being few in number were including in the study on the basis of purposive sampling.

Table.1 Sample size

No	Sample of TVET college	trainers	Trainee level 1 & 2	Trainee level 3&4	Deans	Workshop technical
1	Kefteгна 20	20(33.3%)	30(15%)	30(15%)	2(33.3%)	3(33.3%)
2	Tegbareed	20(33.3%)	30(15%)	30(15%)	2(33.3%)	3(33.3%)
3	Entoto	20(33.3)	40(20%)	40(20%)	2(33.3%)	3(33.3%)
Total	3 TVET colleges	60(100%)	100(50%)	100(50%)	6(100%)	9(100%)

Totally, 275 respondents were selected from all the sample colleges. That is, 60 trainers (twenties from each college), 6 Deans (two from each), 9 workshop technical (three from each college) and 200 trainees according to population size 60, 60, and 80 from Kefteгна20, Tegbareed, and Entoto.

Trainers respondent were selected the same number because most of the trainers were c level trainers, in order to get relevant information the researcher selected the same number of sampling.

1.8.3 Data Collection Instrument

The data for the study were collected through questionnaires, interview and observation check list. The instruments were developed by the researcher based on literature review and the basic questions.

1.8.3.1 Questionnaires

The researcher selected questionnaires as data gathering tools because of its convenient for the investigation. It is suitable for survey research and makes a research less expensive and in addition it increases the likelihood of obtaining information by providing great anonymity (Kumar, 1999:144).

The questionnaires with close ended and open ended items were developing for three type of respondent, Trainers, Principals and trainees.

The questionnaires were prepared for trainers 31 open and close end questions, for workshop center coordinators prepared 21 open and close end questions. For trainee 16 close end questions were prepared and there was prepared open end questioners for deans 11 open end questions were prepared and for librarians 6 open end questions were prepared. Prepared questions were different some of the questions that were asked for trainees and trainers 8 questions were the same. Because, it helps to get information from the trainees and trainers.

1.8.3.2 Interview

A semi Structured interview were conduct with Deans and librarian. Interview focused on the availability of IMs, support and advice on utilization of IMs, trainers' commitment toward preparation and the use of IMs, financial and material support to principals from sub city, even from Addis Ababa Educational Office.

1.8.3.3 Observation Check List

Non participative observation was used. In order to record information gain through observation a check list was employed to facilitate the observation record from classroom.

1.8.3.3 Validation of Instrument

The questionnaires were prepare in English and give to two experts. One having a qualification of M.A in English and the other with M.A in educational management were involved in assessing and comment to which the item were appropriate in secure relevant information in the research. Based on the feedback some modification was made. Like the open end questions that are relevant to the basic questions.

1.9 Method of Data Analysis

As far as data analysis was concerned, both quantitative and qualitative approaches were employed. Deans and trainee were presented in table and analyzing through percentage. While, qualitative data obtain through interview and observation check list were presented in summarization form and analyze in descriptive form together with the quantitative analysis of related questionnaire items.

CHAPTER FOUR

4. DATA ORGANIZATION, ANALYSIS AND INTERPRETATION

As stated in the previous chapters, the objective of this study was to investigate the availability and utilization of IMs and to identify the factors that affect the availability and utilization of IMs in selected TVET College of Addis Ababa. Based on this objective, this chapter detail with the organization, analysis and interpretation of the data collected through questionnaires, interview and observations. The data collected through questionnaires from trainers, workshop center coordinators and trainee were presented in table and analyzed using percentage followed by discussion. The qualitative data obtained through interview and observation check list were presented in summary form and analyzed in descriptive form together with the quantitative analyzed of related questionnaire items.

4.1. Background characteristics of respondents

By describing the characteristics of the respondents, it is possible to know some background information about the sample population who participate in the study. Thus, the sex, age, qualification and years of experience of the respondents are presented in the following table.

Table 1 Teachers Background

No	Item		Number of respondents	%
1	sex	a. Male	45	75
		b. Female	15	25
2	Age	a. 20-30	33	55
		b. 31-40	18	30
		c. 41-50	3	5
		d. 51-60	6	10
	Total		60	100
3	Qualification	a. C-level	9	15
		b. BED/BSC	42	70
		c. Masters	9	15
	Total		60	100

4	Working experience	a. 0-5	33	55
		b. 6-10	12	20
		c. 11-20	9	15
		d. Above 20	6	10
	Total		60	100

As can be seen from Table 1, with regard to sex, 45(75%) of trainers were males and 15(25%) of trainers were females. This indicates that the trainers in TVET colleges are male dominated. Looking at the age structure about 33(55%) of trainers were between 20-30 years old. This shows that majority of the trainers were adult age group. This shows that the respondents were matured enough to give their response with the feeling of self responsibility. With respect to educational statuses 42(70%) of trainers were Degree holders and 9(15%) of the trainers were M.A holders. This implies that the respondents were all qualified.

Regarding to work experience of the respondent 33(55%) of trainers have experience from 0 to 5, trainers have 6-10 are 12(20%) working experience the remaining trainers 9(15%) and 6(10%) are 11-20 and above 20 years of working experience. Half of respondent were less experienced.

Table 2 Workshop Center Coordinators Background

No	Item		No	%
1	Sex	a. Male	3	33.33
		b. Female	6	66.67
	Total		9	100
2	Age	a. 20-30	3	33.33
		b. 31-40	6	66.67
	Total		9	100
3	Qualification	a. Diploma	7	77.78
		b. Degree	2	22.22
	Total		9	100
4	Experience ³ in training	a. 0-5	7	77.78
		b. Above 6	2	22.22
	Total		9	100

5	Service as workshop center head	a. 0-5	6	66.67
		b. Above 6	3	33.33
Total			9	100

As show in Table 2, the workshop center coordinators involve in the study male 3(33.33%) and females are 6(66.67%). More of the old age group 6(66.67%) and diploma holders 7(77.78%).with regarded to educational statues of workshop center coordinators 2(22.22%) of were Degree holder respectively. This implies that most of the workshop center coordinators were Diploma holders. Qualification of workshop center coordinators subject is not problematic for the availability and utilization of IMs.

Table 3 the Trainee Background

No	Item		Number of respondents	%
1	sex	a. Male	80	40
		b. Female	120	60
Total			200	100
2	Age	a. 17-20	80	40
		b. 21-24	80	40
		c. Above 25	40	20
Total			200	100
3	Level	a. Level 1,2&3	100	50
		b. Level 4&5	100	50
		Total	200	100
4	Class size	a. 5-15	60	30
		b. 16-25	100	50
		c. 26-35	40	20
Total			200	100

As it can be seen in the Table 3, with regarded to sex 80(40%) of trainees were males and 120(60%) of trainees were females. The age structure of trainees respondent 80(40%) and 80(40%) were 17-20 and 21-24 years old. This indicates that the majority of trainees were in the right training age.

The level of the trainee involve in the study 100(50%) of trainees were level 1, 2&3 and 100(50%) of trainee were level 4&5. This enables the research to get information from both levels. Finally the number of trainees in the class 100(50%) of the respondent between 16-25, 60 (30%) of trainee respondent between 5-15. This result shows that there is small number of class size in reference to numbers of trainee in selected TVET College. The number of trainees in class falls between the ranges of 16-25 with average 21 trainees per class room which can be difficult to trainee more manpower respect with IMs.

Many researches were work on the availability and the utilization of IMs. Brhanu Arega (2006) he stated on his finding the availability and utilization of instructional materials affected by different factors. Lack of Budget allocation, lack of awareness on trainers and the Deans on IMs are some of factors lead to achieve the training and learning process.

1.2 The Availability of Instructional Materials in Terms of Quantity

The availability of IMs is very important issue to create effective training situations. Mapaderum (2002) emphasize that the availability and adequacy of IMs promotes effective training activates in schools while their inadequate affect the academic performance negatively. Table 4 indicates the results.

Table- 4. Availability of Instructional Materials in terms of Quantity.

Respo ndent	Very high available		High availabl e		Moderat ely availabl e		Really availabl e		Not availabl e		Total	
	Number of responde nt	%	Number of responde nt	%	Number of responde nt	%	Numbe r of responde nt	%	Numbe r of responde nt	%	Numbe r of responde nt	%
Trainee	-	-	9	15	33	55	12	20	6	10	60	100

rs N =60				%		%		%		%		%
Trainees N = 200	-	-	20	10%	80	40%	-	-	100	50%	200	100%

As indicated in table 4, the majority of trainers respondents 33(55%) were answered moderate and trainees 100(50%) of answer not available like brick, block, bar tray, cement, reinforcement, testing laboratory machine ,tools LCD project, printer, desktop, are CNL telescope were not facilitate at the time they need.

As far as the availability of basic needed IMs at the sample of TVET college of Addis Ababa city is concerned the finding of this study show that the basic IMs are not available inadequate quantity despite their key role in identifying interest,, communication basic fact and depending understanding.

In addition, the responses obtained from an interview agree with what is show in table 4. All the deans and librarian interviewees responded that almost all type of IMs in each department were not available. The above respondent also approves by the researcher from the interview held with the deans. For sample, during the interview, deans reported as:

The lack of some materials like CNC machine (GMF department), telescope in (constriction department), computer, internet access, projects, reference books (IT department), sewing machine, overlooked swing machine, button hold and button attach machine, switch, distribution boarded, circlet breaker, sockets, push buttons, wires in (electricity department)

On the other hand, the researcher mad classroom observation, the information gained by researcher, for example classroom condition / nature of the desk was poor. The trainers materials ratio in each department was distributed depends on the nature of the department is (1:5). The nature of black board in terms of quantity was good.

Generally, the above result shows that the supply of IMs in terms of quantity in such department was insufficient. That means most of the basic needed IMs were not enough in the required quantity. And as a researcher himself observed the condition of availability of IMs was insufficient as compared to the

number of trainees. This may lead with no doubt to the negative effect of the training process and knowledge and skill through theoretical and practical methods.

4.3 The Function of Workshop Center

The presence of workshop center in TVET College is unquestionable. The existence of workshop center is not enough for the effective training process but the availability and their functionalities can also determined the effectiveness of training process.

Trainees were asked wither workshop center at sample TVET college are fully operational or not. Table 5 shows the result.

Table 5 Function of Workshop Center and Library

	Item	Kefteгна 20				Tegbareed				Entoto			
No		Yes		No		Yes		No		Yes		No	
		No	%	No	%	No	%	No	%	No	%	No	%
1	There is workshop center	60	100%	-	-	60	100%	-	-	80	100%	-	-
2	Function of workshop center	36	60%	24	40%	42	70%	18	30%	64	80%	36	20%

All it indicted in Table 5, the majority of trainee in the three selected TVET college Keftegn 20, Tegbare ed, and Entoto (100%) of all colleges were workshop center.

In the case of functionality of workshop center in Kefteга 20 24(40), Tegbareed 18(30%), Entoto 36(20%) of respondent said not functional and this shows the problem was more serious.

4.4 The Availability of Instructional Materials used by Trainers

Utilization of the availability instructional materials in training is one of the tasks expected from trainers. Utilization of IMs effectively and efficiently helps trainees in different way, in this regarded, Nicolls (2000) and Raw (2003) point out that the trainers have to use IMs to make the training process interesting. An item in trainers, workshop center coordinators and trainees questioners asked them how much are the available IMs used by trainers.

Table 6 illustrates the responses give by trainers, workshop coordinators and trainees.

Table 6 the Availability of Instructional Materials used by Trainers

Respondent	Very high		Highly used		Moderate used		Rarely used		Not used		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Trainers N=60	6	10%	18	30%	24	40%	6	10%	6	10%	60	100%
Trainee N=200	-	-	20	10%	120	60%	40	20%	20	10%	200	100%

Table 6, indicates that response from the respondents concerning the availability of IMs used by trainers in training the course about 24(40%) of trainers, 1(33.3%) workshop center coordinators and 120(60%) of trainees responded “moderately used”. 6(10%) of trainers, 40(20%) of trainees and 2(66.7) of workshop coordinators responded “rarely used” “it is obviously that trainees learn primarily though the sense by listening, observing, feeling, doing and communicating ideas. But this become a reality only when trainers make proper use of IMs during training process.

With regarded to use of IMs the response obtained from deans interviewees is that the majority of trainers used IMs ‘rarely’ concerning this deans express his views in the following manner.

‘We are aware about the advantage gained from the use of IMs and yet the majority of trainers use rarely IMs and few of them never use IMs to make training easy for the trainees’ Jan 11/2014.

4.5 Trainers' Commitment and Self Initiation in Using IMs.

Table 7 Trainers' Commitment and Self Initiation in Using IMs.

Responsibility	High		Average		Low		Not at all		Total	
	No	%	No	%	No	%	No	%	No	%
Workshop center coordinators N =3	-	-	1	33.3%	2	66.7%	-	-	3	100%
Trainees N =200	60	30%	60	30%	60	30%	20	10%	200	100%

Regarding to trainers commitment and self initiation in using IMs 2(66.7%) of workshop center coordinators and 60(30%) of trainees answered 'Low'. The remaining 20(10%) of trainees answered 'Not at all'. this shows that few trainers were lack of self initiation and they have unconstructive commitment but most of them have commitment and self initiation in using basic needed IMs.

According to Dean's interviewees, trainer's commitment and self initiation in using IMs is low because they lack the skill in transferring industries and use the materials that produced by trainers and save the institution finance and they lack the attitude interest towards using IMs. On this issue the deans of the college's respond that;

Most of trainers are not self initiative and committed to make effective training process by using IMs. Only some trainer's use rarely the available materials that are obtain by purchased from the college.

Commitment and self initiation play a great role to use and transfer industry to the market and use as a model for training process. Because, TVET College play great role on the promotion and expansion of instructional materials for the training process. However, the respondent of dean's interviewees indicates that the majority of trainers have low self initiation and commitment in making of IMs.

4.6. The Importance of Using the Availability of IMs

Table 8 presented the importance of using availability of IMs expressed by the trainers and trainees.

Table 8 The Importance of Using The Availability IMs

Respondent	High		Average		Fair		Low		Total	
	No	%	No	%	No	%	No	%	No	%
Trainers N =60	40	66.67%	20	33.33%	10		-	-	60	100%
Trainees N =200	140	70%	40	20%	20	10%	-	-	200	100%

As it can see in Table 8, 30 (50%) of trainers and 120(60%) of trainees responded that the importance of using IMs was ‘High’. 20(33.33%) trainers and 40(20%) of trainees responded ‘Average’. This shows that the majority of the respondent answers the importance of using IMs as ‘High’.

IMs are tools that trainers use to implement a particular training task by enriching the instructional strategy employed. Table 8 revealed that more than half of trainers and trainees in the sample TVET colleges perceived IMs as importance training device.

Training can only be effective when adequate and relevant IMs are used. According to Grant (1978), training could not be effective with adequate and relevant use of IMs. The importance of using the availability IMs provide more direct form of experience to facilitate learning by doing and trying and manipulating. Using instructional materials help the trainer in capturing the attention of his trainees. Utilization of instructional materials for the instruction of any department can motivate the trainees toward knowing more and capturing what the trained. However, as indicate in table 6, the few availability of instructional materials were not utilize or used at a very low level. This could be as a result of inability to use or lack of interest.

4.7. The Training Statues of Workshop Center Coordinators

The work shop center at all level required well trained person who can run them effectively. Ellis, et al (in Birhane; 1999) have strictly underline the fact that a workshop center requires a trained person who is equipped with pertinent knowledge and skill in educational technology.

Table 9 provides the responses of trainers and workshop about the training statues of workshop center coordinators.

Table 9. The Trainer statues of Workshop Center Coordinators

Respondent	Trained		Not Trained		Total	
	No	%	No	%	No	%
Trainers N =60	45	75%	15	25%	60	100%

Table 9, indicates that 45(75%) of trainers and workshop coordinators responded there is ‘Trained’ workshop center respectively. 15(25%) of trainers respondent. This shows that there is a gap on the skill of workshop center coordinators.

In addition, the response obtained from Dean’s interviewees with reared to the statues of workshop center coordinators confirms the above fact. Due to the absence of well trained workshop center coordinators, but there is failure on the preparation of IMs.

4.8 The Activity of Workshop Center Coordinators

Table 10 the Activity of Workshop Center Coordinators

No	Activities	Trainers response						Total	
		Yes		Sometimes		No			
		No	%	No	%	No	%	No	%
1.	Workshop center coordinators	15	25%	36	60%	9	15%	60	100%

	make IMs effective and manageable.								
2.	Workshop center coordinator assists trainers in the wise utilization of IMs.	15	25%	27	45%	18	30%	60	100%
3.	Workshop center coordinators organize all IMs.	15	25%	27	45%	18	30%	60	100%
4.	Workshop center coordinators prepare and preserve the necessary IMs.	-	-	2	3.33	58	96.67	60	100%
5.	Workshop center coordinator assesses the problem of trainers on IMs and report to the concerned bodies.	10	16.67	15	25	35	58.33	60	100%

As indicate on Table 10, above that 9(15%) of trainers responded 'No' and 36(60%) said 'Some times'. This finding indicates the majority of trainers responded that workshop coordinators do not make IMs effectively.

In the case of workshop center coordinators assist trainers in the wise utilization of IMs 18(30%) of them responded 'No', 27(45%) of them responded 'Sometimes'. The remaining 15(25%) of trainers said 'Yes'. This shows the majority of trainers responded that workshop center coordinators do not assist trainers towards the wise utilization of IMs.

18(30%) of trainers responded workshop center coordinators do not organize all IMs.15 (25%) and 27(45%) of responded said 'Sometimes' and 'Yes' respectively.

With regard to preparation and preservation of the necessary IMs, 58(96.67%) of trainers answered 'No' and 2(3.33%) of trainers said 'Sometimes'. Here the majority of the trainers responded workshop center coordinators do not prepare and preserve the IMs while the majority of trainers 58(96.67%) responded 'No'.

The last point indicates 35(58.33%) of trainers respondents said 'No'.15(25%) and 10(16.67%) of respondents said 'Sometimes' and 'Yes' respectively. This finding shows the majority of the workshop center coordinators do not assess the problem of trainers on IMs and reported to the concerned bodies.

Generally, Table 10 indicates that there are no visible activities cared out at workshop center coordinators. As can be seen in table 9 that there are well trained workshop center coordinators but, there is failure in working the above activities

4.9. The Contribution of Workshop Center Coordinators in Facilitating the Training Process

In TVET of institutional or college level, IMs are kept in workshop center which are resource centers that enrich the training and enhance trainees training. Furthermore, according to Brown et.al (1977), educational media centers are regarding as laboratories', place where trainees pursue a full verity of learning experience. In line with this, opinion on the contribution of workshop center coordinators in facilitating instruction. The result is shown in table 11.

Table 11. the Contribution of Workshop Center Coordinators in Facilitating the Training Process

Respondent	Very good		Good		Poor		Not used at all		Total	
	No	%	No	%	No	%	No	%	No	%
Trainers N =60	12	20%	30	50%	12	20%	6	10%	60	100

Table 11, indicates that 12(20%) and 6(10%) trainers responded that the contribution of workshop center coordinators in facilitating the training process to be ‘poor’ and ‘Not used at all’. And 12(20%) and 30(50%) of trainers responded ‘Very good’ and ‘Good’.

When it come to the three selected TVET the Deans interviewees’ judgment, the contribution of workshop center coordinators to the enhancement of training is seen as ‘poor’ because due to lack of skilled head of workshop center coordinators , lack of budget allocation’ and material support for the workshop center coordinators. As the college Deans responded as:

‘The TVET deans and administration respond that there is lack of responsibility in allocation of budget and in using it for the purpose of workshop center coordinators’. Jan 11/2014.

4.10. The Collaboration between Trainers and the Head of the Center

Trainers were asked whether TVET coordinators collaborate with trainers or not. Table 12 describes the responses provided by the trainers.

Table 12 The Collaboration Between Trainers and the Head of the Center

Respondent	High		Average		Low		Not at all		Total	
	No	%	No	%	No	%	No	%	No	%
Trainers N= 60	12	20%	30	50%	12	20%	6	10%	60	100%

Table 12, clarify shows that 30(50%) and 12(20%) of trainers responded ‘Average’ and ‘Low’ collaboration with workshop center coordinators respectively. The remaining 12 (20%) respondent answered ‘High’ while 6 (10%) respondent ‘Not at all’. This shows the collaboration between trainers and TVET coordinators in the availability and utilization of IMs as ‘Average’ and ‘Low’.

The finding shown in table 10 indicates there are no visible activities carried out at TVET coordinators. In actual fact, this implies that the evaluation of the collaboration of TVET coordinators with trainers is ‘Low’. Most trainers respondents, judged it as ‘Low’.

In the case of availability, the researcher has observed that most of IMs were interred by purchasing. To minimize the lack of availability and from unwanted funds, both the trainers and trainees with the workshop center coordinators should create simple tools from free inexpensive materials for effective training process. The collaboration between the trainers and the head of the center that contributed to improvise their own from local availability materials for the sake of helpful training instruction.

4.11. Support from Workshop Center and Others

Deans has a very important role to accomplish in their daily job, duties and responsibilities. Trainers and TVET coordinators were asked about the necessary support to encourage trainers and workshop center coordinators. Table 13 shows the result.

Table 13. Support from Deans and other concerned bodies

Respondent	High		Average		Low		Not at all		Total	
	No	%	No	%	No	%	No	%	No	%
Trainers N =60	10	16.67	21	35%	15	25%	11	18.33	60	100%

Table 13, indicates that the majority of trainers 15(25%) and 11(18.33%) of trainers responded ‘Low’ and ‘Not at all’. 21(35%) of trainers answered ‘Average’. It is the duties of Deans to provide support and encouragement in terms of materials and money either by way of dealing with the concerned educational authorities or by way of soliciting fund or support from other organizations, be

governmental or nongovernmental. But from the above respondents Deans and concerned bodies have low support and encouragement to trainers and workshop center coordinators.

The interviewees obtained from the Deans also that they lack responsibility in supporting the workshop center and trainers by budgets and necessary materials.

4.12. Opinion of Trainers and Workshop Center Coordinators

Table 14 presented the respondents offered by trainers and workshop center coordinators.

Table 14. Opinion of trainers and workshop center coordinators towards the necessary support for the provision of TVET IMs from Deans.

No	Items	Trainers response						Total	
		Yes		Sometimes		No			
		No	%	No	%	No	%	No	%
1.	Deans make available to their trainers main materials that are in library, workshop center and laboratory.	18	30	13	21.67	29	48.33	60	100
2.	Deans allocate enough amount of budget for instructional materials.	12	20	27	45	21	35	60	100
3.	Deans give relevant advice to trainers on how to prepare and utilize instructional.	24	40	30	50	6	10	60	100
4.	Deans assess the problem of trainers in preparing and using instructional materials and provide immediate solution.	24	40	21	35	15	25	60	100
5.	Deans supervise the utilization of instructional materials by trainer's ion the class room.	18	30	30	50	12	20	60	100

As it can be seen in Table 14 the majority of the trainers 29(48.33%) and workshop center coordinators 28(66.7%) answered that Deans do not make availability to their trainers main materials that are in the library, workshop center and laboratories. As it can be seen from table 14, item 2 about budget allocation for IMs. 21(35%) of trainers and 28(66.7%) of workshop center coordinators responded deans do not allocated budget for IMs. This indicates that a large preparation of the respondents confirmed that there is no enough budget allocation for IMs.

In addition, the response obtained from Deans interviewees there is no enough budget allocation and the materials that provided depend on the nature of the department this affects the provision of materials and dislocation of materials in the market. There is also budget curb because of the policy that allowed buying IMs and also there is lack of purchasing capacity to buy some machines that are high price. Compared to the training that it give there is low budget allocation. The Dean said that workshop center coordinators and library are not provided with the necessary financial support.

With regard to the Deans giving relevant advice to the trainers on how to utilize IMs,30(50%) of trainers and 28(66.67%) of workshop center coordinators responded 'Sometimes'. 6(10%) trainers and 1(33.3%) workshop center coordinators responded 'No'. this shows the majority of respondents responded that Deans give relevant advice to trainers 'Sometimes'.

In the case of Deans assessing the problem of trainers in using IMs and providing immediate solution, the majority Of the respondents said 21(35%) and 15(25%) of the trainers and 2(66.7%) and 1(33.3%) workshop center coordinators responded 'Sometimes' and 'No'.

Regarding with Deans interviewees in assisting the problems of trainers in using IMs and providing immediate solution, there is average. They give solution by sharing materials those are similar department, using materials that are produced by trainers, and fill the gap that are materials that are not exist in the institution from the industries.

Deans supervise the utilization of IMs by trainers in the class room. In this case 15(25%) of trainers 2(66.7%) of workshop center coordinators Deans do not supervise the utilization of IMs by trainers. 30(50%) of trainers and 1(33.3%) of workshop center coordinators responded 'Sometimes'. Data gathered through classroom observation also support this result. During training process as it was observed by researcher: deans do not supervise the utilization of IMs by trainers in the class.

Generally, from Table 14, interview and class observation the result showed that there is administration problem and lack of budget allocation towards the necessary support for TVET IMs. But some department support IMs from regional governments.

4.13. Budget Allocation for Workshop Center

Collages and institution allocate enough amount of budget for the purpose of IMs. In this regard, data were gathered from trainers, workshop center coordinators and Deans through questionnaires and interviews. The result shown in table 15.

Table 15 Budget allocation for workshop center

Respondent	High		Moderately		Low		Not allocated		Total	
	No	%	No	%	No	%	No	%	No	%
Trainers N =60	-	-	21	35%	39	65%	-	-	60	100%

The finding recorded in table 15 shows that most of trainers 21(35%) and 1(33.3%) Of workshop center coordinators responded ‘Moderately’. 39(65%) and 2(66.7%) of workshop- center coordinators responded ‘Low’.

Similarly, the response obtained from Deans confirmed that there is no enough budget allocation for the purpose of workshop center. Thus, according to the majority of the respondents, there is no enough budget allocation for IMs.

Budget allocation plays a great role for the function of workshop center. If there is no enough budget allocation, it is difficult to fulfill the necessary IMs in workshop center and that affect the training process negatively as a whole.

4.14. Financial and Materials Support for Workshop Center

Trainers and workshop center coordinators were asked whether workshop centers are provided with financial and materials support or not. Table 16 indicates the result.

Table 16 financial and material support for workshop center

Respondent	Yes		No		Total	
	No	%	No	%	No	%
Trainers N =60	24	40%	36	60%	60	100%

Table 16, reveals the fact that 36(60%) of trainers and 2(66.7%) of workshop center coordinators responded workshop centre have no financial and materials support.

Furthermore, majority of Deans confirmed the same idea by saying:

‘There is no financial and materials support from workshop center from regional educational bureau and there was no independence budget allocation and restriction on purchasing guidance for workshop center to some extent libraries materials support from government’ Jan 11/2014.

Financial and materials support that contribute to the availability and utilization of IMs on effective training process. But the finding show that there is lack of financial and materials support in selected sample TVET colleges.

4.15. Factors Affecting the Availability and Utilization of IMs.

According to the above finding there were different constraints that hinder the availability and utilization of IMs. In addition, trainers, workshop center coordinators, trainees, Deans and librarians asked through questionnaires and interviews to ahead their opinion on the factors affecting the availability and utilization of instructional materials.

Table 17 provided the summary of the responses offered by trainers, workshop center coordinators and trainees.

Table 17 Factors Affecting the Availability and Utilization of IMs

No	Item	Trainers N=60			Total		trainee					
	Yes		No		No		Yes		No		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
1. Are there any factors that affect the availability of IMs?	45	75%	15	25%	60	100%						
2. Are there any factored that affect the utilization of IMs.	39	65%	21	35%	60	100%	160	80%	40	20%	200	100%

As it can be seen from Table 17, the majority of trainers 45(75%) and 2(66.7%) of workshop center coordinators responded ‘Yes’ on factors affecting the availability of IMs. This shows that the availability of instructional materials affected by different factors. According to open ended questionnaires the majority of trainers and workshop center coordinators responded the factors that affected were lack of budget allocation or financial problem. Policy about purchasing guidance, dislocation of materials in the market, problem of ordering the right materials from trainers, lack of getting the right materials to the right training course, shortage of time to produce IMs and absence of collaboration of Deans were affect the availability of IMs.

Regarding to prevalence of factors affected utilization of IMs. 39(65%) of trainers,2(66.7%) of workshop center coordinators and 160(80%) of trainees responded ‘Yes’. This shows that the majority of respondents held there are different factors that affect utilization of IMs.

Most trainers, workshop center coordinators, and trainers responded that shortage of IMs, lack of self initiative, motivation and skilled trainers in using IMs and lack of skill on workshop center coordinators at the first, lack of experience, carelessness of administrative bodies, shortage of time. Lack of know how about use of IMs, lack of awareness of trainers and trainees and absence of supervision were identified in their sequential order.

In addition, most of Deans and librarians interviewees identified the major factors that affect the availability of IMs as followed;

'Lack of budget and administrative problem are affected the availability of IMs. variance with the curriculum design the materials that it needed , lack of getting the right materials in the market, inability to buy expensive materials, lack of quality of IMs, dislocation of materials in the market, and problem of purchasing system are some of the factors that affect the availability of IMs'. Jan 11/2014.

All Deans and librarians identified the major factors affecting the availability of IMs.

Lack of knowledge and skill to prepared IMs /trainers, workshop center coordinators and Deans / for the purpose of instruction, due to curriculum change there is shortage of IMs and the absence of materials in the market, shortage of income and budget for buying the necessary IMs.

Deans and librarians identified the following major factors that affect utilization of IMs. Deans said,

'Lack of IMs, no sufficient time which means trainers assumed that using IMs take time, lack of experiences, interest, awareness and attitude in using IMs, lack of quantity for the training that it needed, lack of renewed books, lack of responsibility and accountability of trainers in using IMs are some of the factors that responded from Deans and librarians'. Jan 11/2014

Similarly, TVET outcome base training said , *lack of IMs, lack of maintenance and inadequate training in manipulating IMs affect the utilization of IMs. ' . Jan 11/2014.*

The immediate solution towards the factors affecting the availability and utilization of IMs the response obtained from Deans interviewees pointed out the following:-

'Working with industries and make training process by cooperative working with industries, avoiding wastage on the utilization of IMs by quality circle , Sharing of IMs between similar IMs that use departments, using IMs that are produced by the trainers and trainees, transferring budget to the needed department'. Jan 12/2014.

CHAPTER FIVE

2. SUMMERY, CONCLUSTION AND RECOMMENDATIONS

5.1. SUMMERY

The purpose of this study was to investigate the availability and utilization of instructional materials and identify factors that affect the availability and utilization of IMs in selected TVET college of Addis Ababa city. In order to achieve this purpose, basic questions were raised which addressed areas such as:

1. How adequate is the supply of IMs in the TVET colleges? E.g. from information technology department computer, projector, network and pc maintenance etc.
2. How often do in TVET colleges use the availability materials to make training concrete and relevant?
3. What are the major factors that affect the availability and utilization of IMs at TVET Colleges?

The study was conducted in three TVET College of Addis Ababa cities. The source of the data in the study were Deans, trainers, workshop centers coordinators, librarians and trainees. The study employed questionnaires, interview and observations as data collection tools. The collected data were, then analyzed using percentage and interpreted based on the basic research questions. Based on the analysis of data, the majority finding of the study are summarized as the following:

According to the majority of the respondents, the availability of basic needed IMs in each department at the sample TVET in Addis Ababa were not available (insufficient in the required quantity).the instructional materials were also attested by the researcher during the observation of workshop center and class room. The available of workshop centers, libraries were not well functioned. As indicates by the respondents the main reason were absence of maintenance, lack of trained person and other linked problems.

Regarding the IMs used by trainers, the finding indicates the largest proportion of trainers admitted that use rarely and few ones are not used. It was observed that most of the instructional time was devoted to give cooperative worke with industries. This leads the trainee's affected their training because most of industries do not give the chance and lack of awareness for trainees to manipulating heavy machines.

The trainer's commitment and self initiation in using IMs in training process was found 'Low' and 'not used'. The result of the interviews held with Deans also indicated that , trainer's commitment and self initiation in using IMs is low because they lack the skill in transferring industries and use the materials that produced by trainers and save the institution finance and they lack the attitude interest towards using IMs.

With reared to the importance of using available IMs the majority of the respondent answers the importance of using IMs as 'High'.

Regarding to the training statues of workshop center coordinators, the majority of trainer Table 9, indicates that 45(75%) of trainers and workshop coordinators responded there is 'Trained' workshop center respectively. 15(25%) of trainers respondent. This shows that there is a gap on the skill of workshop center coordinators.

Regarding to the contribution of workshop center in facilitating the training process

5.2. CONCLUSIONS

Based on the major finding, the following conclusions were drawn.

The availability of basic needed in each department is insufficient in the requirement of quantity or non existents. The workshop centers were not more functional due to lack of budget allocation, absence of maintenance and lack of supervision.

The availability IMs were found to be rarely used by trainer's i.e. low and few ones are not utilized at all. Similarly, trainer's commitment and self initiation in using IMs in the training process were found to be low.

The majority of the respondent viewed the importance of using the availability of IMs to be high.

Workshop center have most of them have trained workshop center coordinators. But there is lack of training on their skill and lack of initiation on workshop center coordinators. Similarly, there were no visible activities at workshop center by workshop center coordinators and the contribution of workshop center coordinators found to be poor due to lack of budget allocation and materials support.

The collaboration between trainers and workshop center coordinators was found to be average. This needs great effort for the health of training process in order to get IMs effectively by working collaboratively.

The purpose and value of IMs in the process of TVET is not given due consideration by some of the trainers in the government college because these trainers left aside the duties such as utilization, preparation and the availability of IMs. The effectiveness of the materials used in the process of training. The respective trainers due not adequate supply as a result significantly numbers of trainers were not exposing to get experience on the utilization of IMs. Evaluating the effectiveness of these materials used in the process of training and the trend affect the knowledge to be adequate by the trainer.

The support and motivation given by the dean to their respective instructors to utilize IMs is unsatisfactory and such actions affect the quality of training in the TVET. Insufficient facility of the library and department shop created no chance for the trainers to participate in the process of IMs to

learn from the materials, to develop and share experience, to exchange ideas and they could not get the necessary support that the center is expected to provide.

5.3. RECOMMENDATIONS

Based on the major conclusions made of the study, the following recommendations are forwarded.

The result of this study revealed that the availability and utilization of IMs was found to be low level due to different factories. To minimize the above mentioned factories; it would be advisable that the Addis Ababa TVET Agencies, deans, teachers of TVET school, workshop center coordinators and the concerned bodies have to implement the following recommendations.

1. Deans, teachers, workshop center coordinators, trainees and other concerned bodies should strive to play their part in order to produce IMs to avoid the lack of IMs.
2. Moreover, adequate budget should be allocated to buy and carry out maintenance of IMs.
3. The finding of this study indicates that there was low trainers commitment and self initiation in using IMs in the training process. Hence, deans and workshop center coordinators should make effort to provide the institution with enough IMs to help trainers to use different IMs from workshop centers. If the workshop center with adequate IMs, trainer's commitment and self initiation could be high in using IMs. And trainers should pay much attention using IMs to improve the quality of training process.
4. Workshop centers required skilled man power. As exhibited in the finding however, most of workshop centers are qualified in academic department. But they are not well trained in principle and practice of IMs utilization and production. Thus, the Addis Ababa TVET agency should either:
 - Assign personnel for the center who are well trained in theory and practice.
 - Give short term training in the form pf workshops and seminars.
5. The study indicates that the necessary support to encourage trainers and workshop center coordinators by deans and concerned bodies is lackeying. Hence, the deans have to develop a sense of responsibility to encourage more effort and share their experience and ply much attention in the provision of adequate IMs for the training. And continuous evaluation and supervision have to be cared out mutually by concerned bodies to assess the entire availability and utilization of IMs.

Generally, the concerned bodies should pay attention to make students training more concrete and skillful, creative and problem solving by integrating adequate IMs in the training process. This is, because the TVET students will join in different skill after they have completed their training.

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APPENDEX – A

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATIONAL PLANNING AND BEHAVIORAL STUDY

A questionnaire to be filed by trainers of TVET colleges

This questionnaire is formulated to collect necessary information about the availability and utilization of instruction materials in TVET college of Addis Ababa. Since the success of the study depends up on genuine information. You are kindly requested to respond to respond honestly and thoughtfully. The information you give will be used only for research purpose and you are assured that your respondent will be held strictly confidential.

You are not requested to write your name

Thank you for your cooperation

PART ONE

INFORMATION ABOUT THE RESPONDENTS

1. Name the institution _____
2. Sex _____
3. Age _____
4. Year of service in training _____
5. Educational qualification _____

PART TWO

INSTRUCTION: most the question given below is followed by possible alternative respondent. Pleas, indicate your respondent by selecting the appropriate alternative for each item. For item without alternative respondent, please supply short written responses as appropriate.

1. How adequate in the supply of instructional materials in items of quantity required for training TVET trainees?
A, very high available C. moderate available
B. High available D. really available E. Not available

-
-
10. How do you evaluate the contribution of workshop center coordinator in facilitating the training process?
a. Very good b. good c. poor d. not use at all
 11. How do you evaluate the training status of workshop center coordinator?
A. Trained b. not trained
 12. How do you evaluate the importance of using the available IMs in training process?
a. High b. Average c. low d. not allowed at all
 13. How do you evaluate the contribution of your TVET Dean to support the workshop center ?
a. High b. Average c. Low d. not at all
 14. The annual budget allocated for workshop center in your institution?
a. High b. moderate c. Low d. not allocated at all
 15. Is there financial and material support for your workshop center?
a. Yes b. no
 16. If your response to question number 16 is “yes” what is the source of the support?
a. Regional, or woreda education bureau
b. The community c. NGO d. all
 17. Do you use reference book from library?
a. Yes b. no
 18. How do you evaluate the collaboration between trainers and the head of the center?
a. High b. average c. low d. not at all
 19. What is the student – book ratio for the course you train at present?
a. 1:1 b.1:2 c.1:3 d. if others: specially_____
 20. How would you evaluate the adequacy of instructional materials in terms of quality at your college?
a. Adequate enough b. not adequate
 21. If you have any other ideas and suggestion regarding the availability and utilization of instructional materials, please write it on the given space.

PART THREE

INSTRUCTIONAL: indicate your agreement by writing “X” for each of the following statement on the space provided.

No	activity	yes	Some times	No
1	Deans make available to their trainers main materials that are in library, workshop center and laboratory.			
2	Deans allocate enough amount of budget for instructional materials.			
3	Deans give relevant advice to trainers on how to prepare and utilize instructional.			
4	Deans assess the problem of trainers in preparing and using instructional materials and provide immediate solution.			
5	Deans supervise the utilization of instructional materials by trainer’s ion the class room.			

PART FOUR

INSTRUCTION: indicate your agreement by writing “X” on the space provide for each of the following sentence concerning the activity of workshop centers coordinator.

No	Activity	Yes	Some times	No
1	Workshop center coordinator makes instructional materials effective and manageable.			
2	Workshop center coordinator assists trainers in the wise utilization of IMs.			

3	Workshop center coordinator organizes all IMs.			
4	Workshop coordinator assesses the problem of trainers on IMs and reports to the concerned bodies.			
5				

APPENDEX –B

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATINAL PLANINING AND BEHAVIRAL STUDY

Questionnaire to be filed by workshop center-coordinators of TVET colleges

This question is formulated to collect necessary information about the availability and utilization of IMs in TVET college of Addis Ababa city. Since the success of the study depends up on your genuine information. You are kindly requested to respond honestly and thoughtfully. The information you give will be used only for research purpose and you are assured that your response will be held strictly confidential.

You are not requested to write your name

Thank you for your cooperation

PART ONE

INFORMATION ABOUT THE RESPONDENTS

1. Name the institution _____
2. Sex _____
3. Age _____
4. Year of service in workshop center coordinator _____
5. Educational qualification _____

PART TWO

INSTRUCTION: please, indicate your response by encircling one of the letters of the alternatives, or write the answer for those which request writing answers in each of the following statements.

1. How adequate in the supply of instructional materials in items of quantity required for training TVET trainees?

- A, very high available C. moderate available
- B. High available D. really available E. Not available

2. If your answer to question number 1 is “rarely available or not available: please write 3 or 4 of the inadequate or not available instructional materials.

3. If your answer to the question number 1 is “A” or “B”, Please write 3 or 4 of the instructional materials that are available?

4. How are the availability instructional materials used by trainers in training the course in TVET?

- C. Very high used C. Moderately used
- D. Highly used D. Really used E. Not used

5. If your answer question number 4 is “not used”, please, write reason for not being using?

6. Are there any factors that affect the utilization of instructional materials?

A. Yes B. No

7. If your answer question number 6 is “yes” what are the factors that affect availability of instructional materials?

8. Are there any factors that affect the utilization of instructional materials?

A. Yes B. No

9. If your answer question number 8 is “yes “, what are the factors that affect utilization of IMs?

10. Have you had special training on instructional materials?

A. Yes B. No

11. If your answer question number 10 is “yes “for how long?

A. For a week B. For two week C. For a month D. Two and above two month

12. How do you evaluate the contribution of TVET deans to support the workshop center?

A. High B. Average C. Low D. Do not at all

13. The annual budget allocation for workshop center in your TVET College?

A. High B. Average C. Low D. Not allocated at all

14. Is their financial and material support for your workshop center?

A. Yes B. No

15. If your response to question number 15 is “ yes” from where?

A. Regional, woreda educational bureau B. The community C, NGO D. All

16. How do you observe the teachers commitment and self initiation in using IMs?

A. High B. Average C. Low D. Do not at all

PART THREE

INSTRUCTION: indicate your argument by writing “X” on the space provided each of the following statements

No	Activities	yes	Some time	No
1.	Deans make available to their trainers main materials that are in library, workshop center and laboratory.			
2.	Deans allocate enough amount of budget for instructional materials.			
3.	Deans give relevant advice to trainers how to prepare and utilize instructional materials.			
4.	Deans assess the problem of trainers in preparing and using instructional materials and provide immediate solutions.			
5.	Deans supervise the utilization of instructional materials by trainers in the class room.			

APPENDEX – C

ADDIS ABABA UNIVERSITY

COLLEGE OF EDUCATIONAL PLANNING AND BEHAVIORAL STUDY

Questionnaire to be filed by trainee of TVET colleges

The purpose of this questionnaire is to obtain relevant information about the availability and utilization of IMs and factors that affect the availability and utilization of IMs in TVET of Addis Ababa city.

The information you give will be used only for research purpose and you are assured that your respondent will be held strictly confidential.

You are not requested to write your name

Thank you for your cooperation

PART ONE

INFORMATION ABOUT THE RESPONDENTS

1. Name the institution _____
2. Sex _____
3. Age _____
4. Level _____
5. Class size _____

PART TWO

INSTRUCTION: please, indicate your response by encircling one of the letters of the alternatives, or write the answer for those which request writing answers in each of the following statements.

1. How adequate in the supply of instructional materials in items of quantity required for training TVET trainees?
A, very high available C. moderate available
B. High available D. really available E. Not available

2. If your answer to question number 1 is “rarely available or not available: please write 3 or 4 of the inadequate or not available instructional materials.

3. If your answer to the question number 1 is “A” or “B”, Please write 3 or 4 of the instructional materials that are available?

4. How are the availability instructional materials used by trainers in training the course in TVET?

A. Very high used

C. Moderately used

B. Highly used

D. Really used

E. Not used

5. If your answer question number 4 is “not used”, please, write reason for not being using?

6. Are there any factors that affect the utilization of instructional materials?

A. Yes B. No

7. If your answer question number 6 is “yes” what are the factors that affect utilization of instructional materials?_____

8. Do you prepare instructional materials as an assignment in order to learn by doing?

A. Yes B. No

9. Is their workshop center?

A. Yes B. No

10. If your answer question number 9 is “yes” does it work? A. Yes B. No
11. If your answer question number 9 is “yes” do you use it? A. Yes B. No
12. Is their laboratory in your school? A. Yes B. No
13. Your answer question number 12 is “yes” does it work? A. Yes B. No
14. If your answer question number 13 is “yes” do you use it? A. Yes B. No
15. How do you absolve the trainer’s commitment and self initiation in using IMs?
- A. High B. Average C. Low D. Not at all
16. How do you evaluate the importance of IMs in training process?
- A. High B. Average C. Faire D. Low

APPENDEX-D

INTERVIEW FOR TVET DEANS

PART ONE

INFORMATION ABOUT THE RESPONDENTS

1. Name the institution _____
2. Sex _____
3. Age _____
4. Qualification _____
5. Service years as dean of TVET _____

PART TWO

1. What is the availability IMs in term of quality in your college?
2. What is unavailability of IMs in terms of kind?
3. What are your suggestion regarding to using the availability of IMs by trainers
4. What are the major factors that affect the availability of IMs?
5. What are the major factors that affect the utilization of IMs?
6. What do you think the immediate solution towards the factors affecting availability and utilization of IMs? How?
7. What kinds of comment do you have about trainer's commitment and self initiation in using IMs?
8. What are the training statues of workshop center coordinators?
9. What do you think about the budget allocation for IMs?
10. What is the trainee materials ratio in each department?
11. What can you say about the function of library, workshop center in your college?

APPENDEX-E

PART ONE

INFORMATION ABOUT THE RESPONDENTS

1. Name the institution _____
2. Sex _____
3. Age _____
4. Qualification_____
5. Service years as librarian of TVET _____

PART TWO

1. What kinds of IMs are available in your library?
2. What kinds of comment do you have about trainer's commitment and self initiation in using IMs?
3. What are the major factors that affect the availability of IMs in your library
4. What are the major factors that affect the utilization of IMs?
5. What is the importance of availability IMs?
6. What is your suggestion about budget allocation and material support?

Example 8. Inventory of school equipment and furniture

INVENTORY OF FURNITURE AND EQUIPMENT					
1. FURNITURE			Date:.....		
Type of furniture	Quantity in use			Quantity not used	Remarks
	Total	To repair	To replace		
Classroom desks					
Classroom chairs					
Teacher desks and chairs					
Blackboard					
Whiteboard					
Cupboards					
Open shelves					
...					
...					
...					
...					
...					
...					
...					
2. EQUIPMENT					
Type of equipment	Quantity in use			Quantity not used	Remarks
	Total	To repair	To replace		
Telephone					
Calculators					
Photocopier					
Computers					
Printers					
Projectors					
Scanners					
Radio					
TV					
DVD					
Science equipment					
Language equipment					
Art and craft					
Sports equipment					
...					
...					
...					

Example 9. Inventory of teaching and learning materials

INVENTORY OF TEACHING AND LEARNING MATERIALS					
1. TEACHING MATERIAL			Date:		
Type of teaching material	Quantity in use			Frequency of use (per week)	Remarks
	Total	To repair	To replace		
Maps					
Wall charts					
Flip charts					
Flash cards					
Kits					
Scientific models					
Toys					
...					
...					
...					
...					
2. SUPPLEMENTARY LEARNING MATERIALS					
Type of supplementary learning materials	Quantity in use			Frequency of use (per week)	Remarks
	Total	To repair	To replace		
Books					
Newspapers					
Magazines					
Charts					
Kits					
Models					
Sports equipment					
Music instruments					
Visual art instruments					
Audio tapes, CD-ROM & DVDs					
Video tapes, CD-ROM & DVDs					
Access to computers					
Access to the Internet					
...					
...					
...					

Example 10. Financial Summary
FINANCIAL SUMMARY

Period:to

Source of funds	Amount	Type of expenditure	Amount
1. Government		1. Capital expenditure	
a. Central government		a. Construction	
b. Provincial government		b. Major repairs	
c. District government		c. Equipment	
d. Local government		d. Bulk purchase of books	
2. Non-governmental		e. Other capital exp.	
a. Local community		2. Current expenditure	
b. Local business		a. Teacher salaries	
c. NGOs		b. Staff salaries	
d. Agencies/associations		c. Rental of premises	
3. School revenue		d. Purchase of supplies	
a. School fees		e. Scholarships	
b. Other fees		f. School meals	
c. Renting out facilities		g. Contracted services	
d. Products/services		h. Maintenance	
e. Donations		i. Transportation	
4. Other revenue		j. Electricity	
a. Interest earned		k. Water	
b.		l. Telephone	
c.		3. Other expenditure	
TOTAL =		TOTAL =	

Name and title of responsible officer: Signature:

APPENDEX-F

OBSERVATION CHECK LIST

PART ONE

WORKSHOP CENTER OBSERVATION CHECK LIST

1. Name of the institution _____
2. Years of service _____
3. Sex _____
4. Qualification _____

Type of IMs observed in the workshop center, the quantity and quality

No	Department	Types of IMs	Quantity	Quality
1.	Food and Beverage service	-Wall cabinet(cupboard) -Kitchen knife -Toaster oven -Coffee maker -Dish -Double boiler -Steamer -Kettle -Roster -Griddle -Egg poacher -Casserole -Soup pot -Soup oven -Electric wane iron - meat grinder - kitchen scale -Garbage cap - cutting board		

2.	GMF (general metal fabrication)	<ul style="list-style-type: none"> -Rolling machine - binding machine -gas welding -lather machine - bench girder - welding machine - forging - Seaming machine - circular shear - pedestal girder - drilling machine - heat treatment furnace - hammer - chisel - punch -mater - tri-square 		
3.	Construction	<ul style="list-style-type: none"> - Harmer - Shovel - Pick axe - Mallet - Metal plot - Tulle cutter - Zigzag rule - Trowel - Hacksaw - Tape rule - HCB mould - Floor tile - Palm bob - Building model 		

		<p>and different partition</p> <ul style="list-style-type: none"> - Square mater - Shaper - Hammer - mixer - vibratory - gravel - water balance 		
4.	Wood work	<ul style="list-style-type: none"> - Combination machine - Robed machine - Makita - Saw - Painting brush - Smooth and round file - Screw driver plat - Drawing instrument - Portable hand plane machine 		
5.	Electricity	<ul style="list-style-type: none"> - Distribution board - Wire - Switch - Fuse or steelier - Blast - Breaker - Transformer - Bell - Lamp 		

		<ul style="list-style-type: none"> - Resistor - Test light - Plastic harmer - Digital multiplier - Timer - Realer - Varner caliper 		
6.	Automotive	<ul style="list-style-type: none"> - Driller - Model car produced by student - 		
7.	ICT	<ul style="list-style-type: none"> - Computer - Laptop - Broadband networking device - 		
8.	Leather fabrication	<ul style="list-style-type: none"> - Hide and skin - Frames - Salt for preservation - Leather singer - Needles cutters - Paper - Plastic - Synthetic leather 		
9.	Textile	<ul style="list-style-type: none"> - Singer - Clothes - Needle 		

		<ul style="list-style-type: none"> - Papers - 		
	For all department IMs like	<ul style="list-style-type: none"> - Classroom desk - Classroom chairs - Trainers desk - Black bored - White bored - Cupboards - Open shelves - Telephone - Calculator - Printer - Projector - Scanners - CD - Computer - photocopies 		

DECLARATION

This thesis is my work and all source of materials used for this thesis have been duly acknowledged. I formally declared that this thesis is not submitted to any other institution for the awarded of any academic degree, diploma or certificate.

Brief quotation for this thesis is allowed without special permission provided that accurate acknowledgement of the source is made.

Name _____

Signature _____

Date _____

This Thesis has been submitted for Examination with my Approval as University Advisor

Name _____

Signature _____

Date June 1/2014