

Training Equipment and Acquisition of Employable Skills by Trainees in Public Technical and Vocational Education and Training Institutions in Nairobi County, Kenya

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Abstract

TVET training is an avenue to empower the youth to be self-employable, to have employable skills and to boost economic development. This study investigated influence of training equipment and acquisition of employable skills by trainees in public technical and vocational education and training institutions in Nairobi County, Kenya. Three objectives guided the study: To establish the influence of availability of training equipment on acquisition of employable skills by trainees in public technical and vocational education and training institutions; to examine challenges facing the TVET institutions in producing graduates with employable skills and to determine measures to improve acquisition of employable skills by students in TVET institutions. The study adopted descriptive survey design targeting three TVET institutions in Nairobi County. The research instruments were questionnaires' for tutors and students and an interview guide for principals. Data was analyzed using both descriptive and quantitative statistics. Data was presented in frequency tables and percentages. The key study findings were that there was inadequate provision of training equipment, institutions lacked modern equipment to match those used by the industries, workshops were not well equipped, it was also established that relevance of training equipment influences acquisition of employable skills, for instruction tutors mainly used lecture, demonstration, work-based learning and discussion teaching methods due to large classes and inadequate training equipment. Challenges faced by TVETs were; inadequate trained teaching staff, rigid and exam-oriented curriculum, inadequate modern training equipment, limited industrial attachment for trainees, and limited support from the industries. The study concluded that availability of training equipment had a major influence on acquisition of employable skills by students. It was recommended that in order to achieve the desired result of developing the employable skills among trainees necessary for the world of work, government should support TVET institutions by providing modern equipment for use by trainees

Keywords

Employability, Employable skills, skills acquisition, Equipment utilization, Technical and Vocational Education and Training Institutions.

I. Introduction

Technical and Vocational Education and Training (TVET) is broadly defined as; education which is mainly aimed at leading participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations (Atchoereria, & Delluc, 2001)). Such practical skills or know-how are provided in a wide range of settings by multiple providers both in the public and private sector. In the 21st Century business people and employers in general believe that making the connection between learning and the real world is imperative for students' success. The students must be prepared on how to use knowledge and skills in the context of modern life (Atelia, Berg & Blank, 2006).

Afeti (2006) affirms that TVETs are important for their orientation towards the world of work and their curriculum emphasizing on the acquisition of employable skills. TVET delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that Africa needs to create wealth and emerge out of poverty. Nevertheless, the demand for skilled graduates in the labor market is not always matched with acquired skills.

The ultimate aim of TVET education is for the acquisition of knowledge, attitude and employable skills for sustainable development. The acquisition of life-long employable skills calls for effective and efficient teaching methods, utilization of improved and standard instructional equipment, relevant curriculum and good quality of teachers. Skills acquisition by students can be achieved when the TVET institutions are adequately funded, equipped with adequate facilities and well-staffed with competent and experienced Tutors that adopt effective and efficient teaching

methods (Dasmani, 2011). Globally, developed countries have given more attention to TVET due to its importance to the economic development. For instance, in Germany training involves dual system whereby 80% of instruction is done in industries and 20% of instruction in schools so as to equip learners with relevant employable skills. Training is largely employer driven and emphasis is on action-oriented, practice-oriented and application-oriented modes of teaching and learning (UNDP, 2010). An African Union (2007) note that in Singapore there is National Manpower Council that ensures training is relevant to the needs of the labour market. The same is noted in Australia where training curriculum is defined by industries and not the government or TVET institutions and it combines both school-based and work place training. This ensures that the training curriculum remains relevant and students are linked to the market needs.

In Africa, most of the TVET institutions are facing the challenge of producing employable graduates due to various institutional factors. In Ghana, Dasmani (2011) indicates that inadequate supply of instructional materials, large class sizes, inadequate training facilities, weak linkages with local industries for hands-on-experience for both instructors and trainees lead to ineffective and inefficient training of students while emphasizing on passing final examination in the TVET institutions. This led to inadequacy in preparation of students for the job market and brought workplace challenges to the graduates.

Udofia, Ekpo, Akpan, & Nsa (2012) revealed that there is significant relationship between teaching methods and instructional facilities and acquisition of employable skills by students. Kenya has a vast network of TVET institutions providing a wide range of

programs ranging from craft, artisan certificate and diploma levels. There is marked expansion in enrolment and number of TVET institutions in Kenya but despite this, the institutions have some marked shortcomings in terms of low allocation of funds in national budget, understaffing in technical subjects due to poor remuneration of staff and use of obsolete equipment and insufficient learning materials (Nyerere, 2009)). In addition, TVET policy by GoK (2012) indicates that the curriculum being offered in TVET institutions is majorly theory-based and not relevant to market needs due to limited link between the institutions and the industries hence there is mismatch of skills taught in the institution and those required by employers. Since TVET graduates are responsible for service delivery and production of goods in all sectors, it is essential to entrench soft skills in TVET curriculum that will enhance the graduates to secure and maintain jobs so that they can be relied upon at work place.

Availability of modern and relevant training equipment affects the relevance of employable skills acquired by students on market skills needed. Mbugua et.al (2012) expressed that there is inadequate training materials and use of inferior equipment in TVET which have compromised the relevance of skills needed by industries. In Nairobi region, Njoki (2014) revealed that most of the TVET institutions had adequate teaching and learning resources but teaching facilities were not well equipped. In addition, the TVET curriculum is rooted in a rigid supply- driven system with little or no linkage or relevance to the labour market needs hence graduates lack skills, knowledge and competencies for attaining vision 2030 (World Bank Report, 2015).

The emphasis on skill acquisition is premised on advancement in technology and challenging economy which forces employers to re-train new graduate employees in their firms and also put more emphasis on work experience when recruiting new employees. Nyerere(2009) posits that due to limited industrial attachment of students and tutors, there is mismatch of skills between the taught skills and those required by the labour market and thus weak link between the TVETs and industries. GoK (2012) has identified strategies such as increasing funding , equipping TVETs with modern equipment and linking training and labour market needs in order to improve training quality of TVET institutions. TVET education is knowledge, skill and technology driven therefore, the community, employers and government must support the TVET institutions to improve its training quality by providing funds, labour market needs information, attachments to trainees and tutors and equipping of instructional facilities.

The focus on TVETs in Nairobi County is that, there is the highest number of both private and public TVET institutions and industries where trainees are likely to get their industrial attachment so that they can have relevant skills. In addition there is a big increase in number of private TVET institutions which are competing with the public ones. Additionally, there is diversity in enrollment of students from all over the country since its located in an area with more socio-economic activities which students can engage in during and after training but on the contrary the graduate students who are mainly youth comprise the largest number of unemployed people in the county due to lack of relevant practical skills and employable skills despite holding distinct academic qualifications (World bank report, 2015).

The TVET sector is the major producer of engineers and technologists that are absorbed in the industries and the informal sector of employment. Therefore, the main objective is to train students to acquire and develop knowledge, attitude and

employable skills for salaried or self-employment which on the contrary is not being achieved due various institutional factors (GoK, 2012). Therefore it's against this big gap between acquired skills and employable skills among graduates that necessitated the need to investigate on the influence of equipment availability on acquisition of employable skills by students in public TVET institutions in Nairobi County.

A. Statement of the Problem

The jobs market is rapidly changing with new sectors emerging, changing the nature of work and the way employees perceive the workplace. Graduates will have to be flexible and have the personal capabilities to manage changing and challenging work situations. Employers are looking to recruit graduates who fit into the organizational culture and utilize their abilities and skills to transform the companies by facilitating innovative teamwork (Harvey et al., 2002). TVET training is an avenue to empower the youth to be self-employable, to have employable skills and to boost economic development. Technical skills form the basis for the realization of industrial transformation and meaningful quest for Kenya's Vision 2030. For this country to breakthrough in industrialization and technological development it must begin by ensuring that it has a critical mass of well qualified technologists and engineers. The main objective of TVET is to provide adequate and appropriate skilled artisans, craftsmen, technicians and technologists at all levels of the economy through practical training and work experience but unfortunately the graduates face mismatch of skills when they get to the labour market which forces industries to retrain them upon employment (FKE report, 2015) .

The question to be answered is whether the existing TVET institutions have the capacity to produce graduates with employable skills to fill the social need for the workforce in order to achieve the aspiration of Kenya Vision 2030 in Kenya? Little empirical evidence exists on training equipment influencing acquisition of employable skills and employability of TVET graduates in Kenya and especially Nairobi County as most studies have concentrated on challenges facing TVET in Kenya it is against this gap that the study investigated the influence of training equipment on acquisition of employable skills by trainees in TVETs in Nairobi County.

B. Research Objectives

The study focused on three objectives:

- i. To establish the influence of availability of training equipment on acquisition of employable skills by students in public technical and vocational education and training institutions.
- ii. To examine challenges facing the TVET institutions in producing graduates with employable skills.
- iii. To determine measures to improve acquisition of employable skills by students in TVET institutions.

II. Literature review

The review is presented under subsections: rationale for TVETs, Situational analysis of TVET in Kenya, Concept of employability skills, availability of training equipment and acquisition of employable skills. Theoretical and conceptual frameworks are also presented.

1. Rationale for TVET

Technical and vocational education (TVET) is broadly defined

as “Education which is mainly to lead participants to acquire the practical skills, knowhow and understanding, necessary for employment in a particular occupation, trade or group of occupations (Atchoareria, & Delluc, 2001). Such practical skills or know-how can be provided in a wide range of settings by multiple providers both in the public and private sector. The role of TVET in furnishing skills required to improve productivity, raise income levels and improve access to employment opportunities has been widely recognized (Bennell, 1999). Developments in the last three decades have made the role of TVET more decisive; the globalization process, technological change, and increased competition due to trade liberalization necessitates requirements of higher skills and productivity among workers in both modern sector firms and Micro and Small Enterprises (MSE). Skills development encompasses a broad range of core skills (entrepreneurial, communication, financial and leadership) so that individuals are equipped to undertake productive activities and employment opportunities (wage employment, self-employment and income generation activities). Several countries; developed and developing, such as Italy, Brazil, China, Sweden and Japan have given more recognition to TVET through adequate funding. As a result, students get exposed to vocational training and to a culture of scientific investigation and application to life situations at an early age.

2. Situational analysis of TVET in Kenya

The use of Technical, Industrial, Vocational and Entrepreneurship Training (TIVET) in Kenya encompasses technical training institutions, MSE training and demonstration centers, youth polytechnics and national youth service skills development centers. In Kenya there has been a deliberate effort to structure and deliver formal TVET education through establishment of TVET institutions either by the government or the private sector. However Non formal TVET sector just like the informal sector has been neglected by the government particularly in relation to the organization of systems and structures. The Government has policies for the sector but they are not effectively implemented, enabling the private sector to exploit it for cheap labour. The sector has been generally left to civil societies, religious organizations among others to intervene, which is done at program levels hence few target groups reached.

The current TVET curriculum is weak and not flexible enough to meet the technological changes and diverse needs of different clients. Furthermore the quality of TVET graduates has declined in recent years due to poor teaching methods, out modeled and inadequate training equipment and lack of meaningful work experience and supervision during attachment (Nyerere, 2009). The graduates of TVET have experienced technology shock when they finally enter the job market. Enrolment in the traditional engineering and building course is dwindling very fast while enrolment in applied sciences and business/commerce oriented courses is growing steadily. Technical teachers lack necessary industry-based technological skills updated through industrial attachment. The KENYA Technical Training College (KTTC) has shifted from its original mandate as a producer of trainers and is now competing to offer programs similar to national polytechnics. This to a great extent compromises quality of education especially when resources are lacking. It has been observed that teachers in the technical institutions rarely go for refresher courses which put them at the mercy of their students who are more exposed.

3. Concept of employability skills

Marilyn (2008) suggests that employability is about being capable of getting and keeping fulfilling work. More comprehensively employability is the capability to move self-sufficiently within the labour market to realize potential through sustainable employment. They propose that employability consists of four main elements: a) a person’s “employability assets “which consists of their knowledge, skills and attitudes, b) “deployment “which includes career management skills, and job search skills) “Presentation” which is concerned with “job getting skills”, for example CV writing, work experience and interview techniques and finally d) They also emphasize that for a person to be able to make the most of their “employability assets”, a lot depends on their personal circumstances (for example family responsibilities) and external factors (for example the current level of opportunity within the labour market)

Employability of competencies such as ability, aptitude and qualities developed in context that can be applied to an occupation or career can be identified as employability skills. These competencies might develop employability skills as a result of the teaching and learning process in training institutions or from work experience. Employers generally see a good certificate or degree as an essential entry requirement to any position. It is widely accepted for graduates to be competitive in the labour market, which is marked with massive reduction in recruitment numbers due to the economic situation; they need to have additional skills to complement their academic achievement. Surveys by AGR, an independent voice of UK-based graduate recruiters, highlighted the following deficiencies in employability skills: ‘Softer’ skills such as team-working, leadership and project management, awareness of their chosen industry sector; commercial awareness and business/organization understanding (AGR, 2007). AGR state that more than 70% of their members use competency-based selection methods. They further suggest that graduates lacking these qualities, or evidence that they have them; will find it more difficult to secure graduate jobs.

It is seen as one of the toughest challenges for employers to recruit from an increasing number of graduates, with employers realizing that the future of their organizations depend on the selection of the best candidates to add value. The Chartered Institute of Personnel and Development (CIPD) reports that since the 1980’s the number of students entering higher education has significantly increased by more than double, but further states, that even with this increase employers still have difficulty in recruiting the types of employees they need (CIPD report, 2007). It is recognized that holding a certificate or a degree will no longer be enough to get a job. There is evidence that graduate recruiters are looking beyond qualifications; they are looking for people with qualities to enable them to cope with the changing demands of the job in an uncertain and competitive world.

Employability has been used as a performance indicator for training institutions (Smith et al, 2000) and represents a form of work specific (pro) active adaptability that consists of three dimensions: career identity, personal adaptability and social and human capital (Fugate et al, 2007). Employability is seen as being influenced by four broad and inter-related components: Understanding of the subject discipline, Skillful practices in the context, Efficacy beliefs- students’ self-theories and personal qualities. Of critical importance is the extent to which students feel that they might ‘be able to make a difference’, and Meta-cognition, encompassing self-awareness regarding the student’s

learning, and the capacity to reflect on, in and for action. This is the USEM model of employability (Knight & Yorke (2004).

Nabi (2003) says that employability is about graduates possessing an appropriate level of skills and attributes, and being able to use them to gain and remain in appropriate employment. From a human resource development view, employability is a concept that emerged through the 1990s along with a growing perception among employees that they cannot count on their employers for long-term employment. Employability is a promise to employees that they will have the skills to find new jobs quickly if their jobs end unexpectedly (Baruch, 2007).

4. Availability of training equipment and acquisition of employable skills

Institutional workshops offer opportunities for practical training of students in skill acquisition in their technical trade areas for future development of the key sectors of the economy in order to meet the basic needs of electricity, roads and machinery, among others. Student's practical projects are an important part of the curriculum in TVET, but a supportive institutional environment is a fundamental requirement for the successful implementation of curriculum (Bybee & Loucks-Horsely, 2000). This aspect of the curriculum can only be implemented where workshop facilities, tools, equipment and machines are adequate and relevant. Availability of appropriate workshop facilities enhances student learning by allowing them to be involved in demonstrations, and practice which will help them to continue to build their skills. In Nigeria, Audu (2013) affirms that one of the issues of great controversy among TVET educators is the issue of the poor state of workshop tools and equipment in TVE institutions. Umar & Ma'aji (2010) stated that most of the TVE institutions in Nigeria have been forced to perform below expected standards due to non-availability, poor management or utter neglect of the required facilities in the workshops for effective skills acquisition. Therefore, provision of adequate workshop tools, equipment and machines is a prerequisite for effective implementation of TVET programs in any country. Udofia et al. (2012) confirms this by stating that there is significant relationship between workshop equipment for training and acquisition of employable skills. According to Dasmani (2011), TVETs in Ghana suffer from inadequacy in the provision of instructional materials and training equipment which leads to focusing more on theoretical teaching leading to trainees lacking proficiency in their chosen field of specialization. Since TVETs mostly rely on training, their short supply will negatively affect practical skills acquisition.

In Kenya Muthaa et al. (2012) established that most TVETs operate with inadequate workshop facilities, which do not have adequate training equipment. The lack of training facilities compromises the relevance of taught skills to market skill needs in industries and business organizations. Most of the training equipment found in TVETs is not technologically in tandem with equipment found in industries and business organizations. The training equipment are inferior to the equipment used in industries and business organizations. This state of training equipment erodes the relevance of taught skills to market skill needs. There is urgent need to modernize equipment and provided adequate facilities to ensure that graduates coming out of TVETs acquire skills relevant to the employment market skill needs in industries and business organizations. In agreement with this the TVET policy in Kenya affirms that one challenge facing TVETs in their curriculum

implementation is obsolete training equipment that leads to poor training quality and acquisition of skills leading to mismatch of skills among graduates (GoK, 2012; Nyerere, 2009).

5. Theoretical framework

The study is grounded on two theories: functional context theory by Thomas Sticht (1975) and the stimulus response learning theory by Edward Thorndike (). Functional context theory suggests that the learning of new information is facilitated by making it possible for the learner to relate it to knowledge already possessed and transform old knowledge into new knowledge. By using materials that the learner will use after training, transfer of learning from the classroom to the "real world" will be enhanced. Functional Context theory is based on four principles. First, the instructions must reach the goals of the lesson and help the student to use his/her prior information. Second, the educators have to use tools and materials that match what the students are learning. Third, educators can improve literacy by: good content knowledge, information processing skills, or design of the learning tools. Finally, new assessment of learning that requires context measurement. The stimulus response learning theory gives support to the importance of successful practice. Therefore, TVETs institutions must provide an environment of learning that is more similar to the industrial environment so that the skills acquired by students will be relevant to skills required by industries. TVET teachers should use teaching method and tools that will enhance skills acquisition by students so that they can function well in the work environment.

6. Conceptual Framework

The conceptual framework shows the relationships that exist between the dependent and independent variables under study. The conceptual framework for this study is as shown in Figure 1

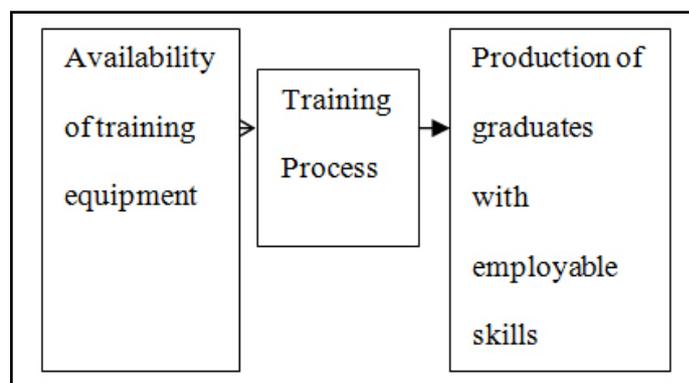


Fig. 1: Conceptual framework on interaction of variables.

The conceptual framework shows the relationships that exist between the dependent and independent variables under study. The dependent variable is production of TVET graduates with employable skills whose main indicator is the number of graduates from the TVET institutions who secure employment in industries or have self-employment. The independent variable that was investigated to establish their level of influence on the dependent variable is availability of training equipment.

III. Research Methodology

The study adopted the descriptive survey research design to

investigate the influence of availability of training equipment on acquisition of employable skills by students in public technical and vocational education and training institutions in Nairobi County, Kenya. Descriptive survey research design assisted the researcher to gather both qualitative and quantitative data on how availability of training equipment influences acquisition of employable skills by students in public technical and vocational education and training institutions. Through this design the study was able to establish the link between study variables and study problem. This is because survey research design enabled the researcher to ask the respondents about their perceptions, attitudes, behaviors and values in regard to the research topic. Survey design is also an effective vehicle to collect data from samples representing large populations. The three (3) public TVET institutions in Nairobi County were used for the study. A sample size of 198 was used for the study involving Principals, tutors and students. Proportionate Stratified random sampling procedures were used to select subjects from the different stratus. The study used questionnaires and interview guide as the data collection tools. Quantitative data was analyzed using descriptive statistics making use of Statistical Package for Social Sciences (SPSS) version 21.0 and the results presented using frequency tables, and percentages to make meaningful conclusions. Qualitative data were analyzed through content analyses by organizing data into themes and presented narratively guided by the objectives of the study.

IV. Findings

Presentation is based on the three research objectives.

A. Availability of equipment and acquisition of employable skills by trainees

The objective of the study was to find out the extent to which availability of training equipment influence acquisition of employable skills by students. The study sought tutors to rate the availability, relevance and adequacy of training equipment and their influence on acquisition of employable skills. The responses are presented in the Table 1.

Table 1 : Tutors' responses on availability of training equipment and acquisition of employable skills by students (SD=1, D=2, A=3, SA=4) (Values in %)

Item	SD	D	A	SA
There is inadequate provision of training equipment	0.0	37.5	62.5	0.0
There is well equipped workshop equipment	0.0	75.0	25.0	0.0
The training equipment are up to date/relevant to the industrial equipment	0.0	67.5	32.5	0.0
The training equipment are technologically modern	0.0	77.5	22.5	0.0
The nature and availability of training equipment influence acquisition of relevant employable skills	0.0	37.5	62.5	0.0
N=40				

Majority of the tutors (62.5%) indicated that training equipment were not adequate compared to only 37.5% of respondents who indicated that the training equipment were adequate. This implies that the tutors felt that TVETs operated with inadequate training equipment. G.O.K (2005) observes that training facilities are critical if education in Kenya is to meet the technological market skill needs and move the country to the vision 2030. The availability of training facilities is critical to quality teaching and training. These findings agree with findings of Nyerere (2012) who indicated that majority of TVET institutions operated with inadequate and obsolete training equipment. Students' opinion was sought to find out how availability of training equipment influenced their acquisition of employable skills. The students were asked to rate the adequacy, relevance and availability of training equipment. Their responses are presented in Table 2.

Table 2 : Students' responses on availability of training equipment and acquisition of employable skills. (SD=1, D=2, A=3, SA=4) (Values in %)

Item	SD	D	A	SA
There is inadequate provision of training equipment	10.0	20.0	60.0	10.0
There is well equipped workshop equipment	15.0	50.0	35.0	0.0
The training equipment are up to date/relevant to the industrial equipment	5.0	67.0	33.0	5.0
The training equipment are technologically modern	7.0	55.0	45.0	13.0
The nature and availability of training equipment influence acquisition of relevant employable skills	10.0	20.0	60.0	10.0
N=100				

The students' opinion was sought in reference to the adequacy of the training equipment. Majority of the students respondents (70.0%) indicated that the training equipment in TVETs were inadequate while 30.0% indicated that the training equipment were adequate. This implies that majority of the students felt that they are being trained using inadequate training equipment which makes the teachers to mainly use lecture method of teaching. The study also sought information on the influence of the nature and availability of training equipment on acquisition of relevant employable skills by students. Majority of tutors (75.0%) agreed that the nature and availability of training equipment had influence on the acquisition of relevant employable skills by students whereas 25.0% felt that the nature and availability of training equipment had no effect on acquisition of relevant employable skills. The study therefore sought information on the relevance of the training equipment to equipment used in industries. Respondents were asked to rate the training equipment in term of relevance to those used in industries. Majority of tutors (67.5%) indicated that the training equipment were not relevant to the equipment used in the industries whereas 32.5% of the respondents felt that the equipment were relevant. A few of the respondents agreed that the training equipment were adequate and technologically modern to the ones used in industries. The study established that

certain courses used facilities that were completely out of tune with facilities used in industries. The study also sought information on the relevance of the training equipment to equipment used in industries from students. The students opinion on the relevance of training equipment used in TVETs compared to those used in industries and was sought. Majority of students (67.0%) felt that the training equipment used were not relevant to those used in the industries while 33.0% rated the facilities were relevant. The study established that certain courses used facilities that were completely out of tune with facilities used in industries especially the technical subjects.

The study further sought information on whether the workshops are well equipped with equipment that was technologically modern. The tutors (76.5%) disagreed that the workshops were well equipped with technologically modern equipment while 24.5% agreed the workshops were well equipped. The students' respondents (53.0%) disagreed that the workshops were well equipped with technologically modern equipment whereas 40% agreed. Few of the students (11.0%) felt that the workshops were not well equipped with technologically modern equipment.

The study further sought information on the effects of availability of training equipment on acquisition of employable skills by students. Majority of tutor respondents (90.0%) indicated that the availability of training equipment especially in technical subjects influenced students acquisition of employable skills especially technical practical skills hence due to availability, relevance of training to meet market skill is eroded. Only 10.0% of respondents indicated that the availability of the training equipment did not have effect on the acquisition of employable skills to market skill needs. This data reveals that lack of training equipment compromised the acquisition of employable skills needed by industries. The students were asked to explain the effect of availability of training equipment on their acquisition of employable skills. Majority of the students (70.0%) agreed that the inadequate provision of training equipment affected them negatively in acquiring practical skills and they were not confident enough to handle machinery used in industries. A few of the respondents (30.0%) agreed that the training equipment were adequate and technologically modern to the ones used in.

The principals' opinion was sought on the extent to which availability, relevance and effect of training equipment on acquisition of employable skills. All the principals indicated that inadequacy of training equipment was one of the main challenges facing public TVET institutions. One of the main reasons given was inadequate funds from the government, limited support from the industries and donors in providing relevant training equipment to the institutions. All the principals indicated that the training equipment were not technologically modern to the ones used in industries especially in the engineering, applied science and ICT courses. The findings agree with study by Dasmani, (2011) which noted that most of the TVET institutions had inadequate training equipment and were not technologically in tandem with the ones used in industries and business organizations. The principals affirmed that there is high need for the stakeholders to support the institutions in providing technologically modern training equipment.

B. Challenges facing the TVET institutions in producing graduate with employable skills

The study sought the principals' opinion through interview on whether they were aware of the employable skills required by

the current employers. All the principals confirmed that they were aware of the employable skills required by current employers. Apart from the technical skills and interpersonal skills, each graduate should also acquire ICT skills, creativity and innovative skills, management skills, team work skills and communication skills that will enable them to secure a job. The principals were asked to explain the major challenges facing their institutions in producing graduates with employable skills. The summary of challenges is shown in Table 3.

Table 3 : Challenges of TVET institutions in producing graduates with employable skills

Challenge	Frequency	Percentage
Inadequate trained teaching staff	3	100.0
Rigid and exam-oriented curriculum	3	100.0
Inadequate modern training equipment	2	67.7
Limited industrial attachment for trainees	3	100.0
Limited support from the industries	2	67.7
N=3		

The respondents (100.0%) revealed that the institutions faced several challenges which include: inadequate trained teaching staff, rigid and exam-oriented curriculum that does not allow new changes in the market and limited industrial attachment for trainees. Majority of respondents (67.7%) indicated that they faced inadequate modern training equipment and limited support from the industries in terms of funds, market skills information and provision of training equipment challenge. All these challenges have adversely affected the quality and the relevance of the skills acquired by the TVET graduates hence leading to mismatch of skills among graduates.

C. Suggestions to improve acquisition of employable skills by students.

The researcher sought suggestions from the respondents on how to improve skills training and acquisition of employable skills among students. Majority of the respondents both tutors and principals suggested that: technology should be embedded in TVET curriculum, teachers and students should be exposed to regular industrial attachment in order to enhance career and academic development of both tutors and students respectively. On adequacy of tutors, it was suggested that the government should hire more trained tutor to solve understaffing of tutors and increase the teacher-student ratio. On availability of training equipment both tutors and principals suggested that, more technologically modern training equipment to be provided so that the workshops can be well equipped with relevant training equipment and that should embrace the work-based learning, problem-solving in addition to the lecture, discussion and demonstration methods often used.

V. Conclusion

Availability of training equipment plays a big role in influencing skills acquisition by students as preparation for the world of work. In addition, other factors such as inadequate trained teaching staff, rigid and examination oriented curriculum and limited support

from industries adversely influenced production of graduates with employable skills.

VI. Recommendations

Based on the findings of the study, the following recommendations were made:

- (i) All stakeholders; parents, industries, government and donors should contribute providing adequate training equipment that are technologically modern in order to adequately equip the training workshops.
- (ii) Industries should support TVET institutions by providing industrial attachment programs and linkages for teachers in order to enhance the professional development of teachers and gaining knowledge on new technologies and market skills needs.
- (iii) The TVET teachers should use practically-oriented teaching methods like field trip, project work, simulation and work-based teaching often in order to achieve the desired result of imparting the employable skills necessary for the world of work.
- (iv) The government should support TVET institutions in hiring of more trained teachers to curb inadequacy of teachers and merging of classes and also organize for skill upgrading and in-service programmes to help teachers cope with new technology.
- (v) There is urgent need to modernize equipment and provided adequate facilities to ensure that graduates coming out of TVETs acquire skills relevant to the employment market skill needs in industries and business organizations.
- (vi) Government should spearhead curriculum changes in order to make the curriculum flexible and work-oriented.

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