Challenges Facing Learners' Acquisition of Employability Competencies under Competency-Based Education and Training Approach in Vocational Education and Training Centres in Tanzania

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Abstract

The purpose of this article is to investigate the causes of inadequate employability competencies among vocational education and training (VET) graduates using a competency-based education and training (CBET) approach. The article identifies respondents' perspectives on the challenges of acquiring employability competencies during the civil artisans' training and learning process in VETIs under CBET and explores opinions for overcoming those challenges. Data were gathered from 126 respondents through semi-structured interviews with trainers and employers, an open-ended questionnaire for learners, and employee-focused group discussions. A qualitative exploratory approach research design was used. Thematic analysis was used to analyse documents and interview transcripts. The findings revealed that the acquisition of employability competencies is hampered by learner characteristics, insufficient training and learning resources, shortage of trainers, English language problems, training methods, and negative perception of parents and learners on VET programmes, all of which were identified in the conceptual framework and mentioned by all categories of respondents. It is likely that the challenges discovered were not novel, with the exception of a lack of internet and a scarcity of clean water and food, which were context-specific issues. As a result, the study recommends that government and VET stakeholders should ensure the availability of learning resources to enhance effective training and learning at VET. More serious English language instruction should begin in primary school, according to the government and VET stakeholders. VET trainers should improve field supervision exercises and expose trainees to the working environment where employability competencies can be imparted more easily than through classroom training alone. Trainers should also participate in workshops and industrial visits to gain skills and knowledge about labour market needs. This will improve trainers' and trainees' understanding of labour-market requirements.

Keywords: Employability Competencies, CBET and Vocational Education and

Training

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1.0 Introduction

Employability competencies mean a combination of skills, knowledge, and attributes that enhance an individual's ability to secure a job, retain employment and be flexible in the labour market (Geel, 2014; ILO, 2014). Finn et al. (2014) underscores that employment is a product of competencies acquired through training and experience. Haji (2015) indicated that training can increase the employment prospects for young people, and open up opportunities in different sectors and occupations. Glerum & Judge (2021) and Farecha et al. (2020) indicated that the acquisition of employability competencies can be obtained through work-based training in collaboration with employers. In this case, globally, vocational education and training (VET) is applied as a tool for preparing youth for employment because it emphasises on and promotes the acquisition of employability competencies through competency-based education and training (CBET) which was opted as a strategy for improving the quality of human resources, towards producing skilled workers (Ariyani et al., 2021; Smith, 2018; Dasmani, 2011; Colley, et al., 2003). It is likely to be explained that VET under the CBET approach plays a key role in building human capability in general as well as in developing employability competencies required in the labour market for improved performance (UNDP & URT, 2018). Despite CBET having been adopted in VET for almost 60 years worldwide (Deißinger, 2005) and for about 20 years in Tanzania, still it is claimed that the acquisition of employability competencies is challenging (Hakielimu, 2021; REPOA, 2020; Tambwe, 2017).

There is inclusive debate on what hinders the acquisition of employability competencies under the CBET approach in the training and learning process as studies noted that learners fail to acquire employability competencies due to the domination of theories in the training and learning process (Cornford, 2000), inadequate competencies among trainers (Smith, 2010) and assessment methods (Lockyer et al., 2017). ETF and ILO (2020), and UNESCO-UNEVOC (2013), have shown a shortage of time in imparting competencies, rigidity and out-dated centralized training content, language problems, insufficient practical sessions and absence of career counselling facilities. OECD (2018), and Cedefop (2018), indicated negative perception among VET learners and parents towards VET In developing countries, it was found that the acquisition of employability competencies was hindered by inadequate trained and motivated trainers, language problems, inadequate cooperation between firms and VETs, inadequate studies of investigation in VET, inadequate work experience among trainers and inadequate training resources (Koobonye, 2020; REPOA, 2020; Yamada and Otchia, 2020; Zinn, et al., 2019; Njati, 2015; Aderonmu, et al., 2014; Kufaine & Chitera, 2013). In the Tanzanian context it was found that the challenge emanated from incompetent trainers, inadequate training and learning facilities, unsatisfactory coordination of trainings among management structures, insufficient preparation of trainers, and inadequacy of clear guidelines among trainers (Hakielimu, 2021; Munishi, 2016; URT, 2014; Kikwasi, 2011). These challenges affected negatively acquisition of competencies to learners and hence failure to meet employers' expectations. However, Haji (2015) indicated that inadequate employability competencies had nothing to do with the learning process but with employment situations.

Despite ample evidence on the challenges facing the acquisition of employability competencies in the training and learning process, several studies have recommended the need for other studies to continue investigating the problem due to changes in time, technology and work culture (Koobonye, 2020; Zinn, et al., 2019; Njati, 2015; Aderonmu, et al., 2014; Kufaine & Chitera, 2013). Unfortunately, these studies have simply noted that graduates fail to compete in the labour market due to inadequate employability competencies, forgetting to specifically explain what are the challenges facing trainers and learners in imparting and acquiring employability competencies at VET under CBET approach. Incidentally, a number of these studies tend to be quantitative in nature. Moreover, the studies seem to have mainly concentrated on weaknesses and roles of technical institutions in producing labour market-oriented graduates, or factors affecting labour market in getting competent graduates, forgetting other factors including combination of opinions from categories of respondents from training institutions and working environment. The existing debates call for attention among researchers to assess the problem. Therefore, the current study joined the debate to explore challenges facing the acquisition of employability competencies at VET in masonry and carpentry courses which are demanded in the civil construction sector where employers are complaining about having artisans with inadequate employability competencies (ETF and ILO, 2020; Kikwasi, 2011).

Despite studies by Subramanian (2017); Njati (2015) and Kaushik (2014) indicating factors limiting the acquisition of employability competencies among VET graduates, they were conducted outside Tanzania. Basing on this contextual factor, challenges facing acquisition of employability competencies among learners may be similar or different; thus the current study is impoartant. Though a study by Tambwe (2017) studied factors affecting the implementation of CBET in the Tanzanian context it was based on tertiary institutions for social studies courses including accountancy, marketing and human resource management courses which are different from masonry and carpentry about which the current study is. The differences in nature of institutions and courses may encounter

similar or different challenges as the nature of materials for learning, methods of training and learning, nature of modules and number of learners per session may be different.

Therefore, this study intended to examine the challenges facing the acquisition of employability competencies for civil artisans (masons and carpenters) who are potential employees in the civil construction sector. The main objective and specific objectives were used to explore the opinions of trainers, learners, employers and employees about challenges facing acquisition of employability competencies and suggest strategies for curbing those challenges.

1.1 Rationale of the Study

First, there have been insufficient studies on investigating challenges facing CBET implementation at VET where the impact of CBET can be felt realistically. For instance, Tambwe (2017) focused on challenges facing implementation of CBET at higher learning institutions. Therefore, the current study bridges the knowledge gap by investigating the challenges facing implementation of CBET at VET. Second, studies by Mufuruki (2017), Wangwe et al. (2014), and Haji (2015), realized that studies on the VET training system are scarce in Tanzania. Therefore, this study is an input in future studies for making informed decisions about the challenges of CBET implementation at VET. Third, a study by Farrell (2014) applied the competence-based framework in recruitment and selection in the hospitality industry and suggested other studies to apply the competence-based framework in other fields including training and development, career progression, and promotion or reward. Therefore, the current study extended the application of the competence-based framework in the field of human resources training and development at VET by investigating the challenges facing implementation of CBET.

Fourth, conducting the study at VET instead of at primary, secondary, or higher learning education institutions was due to the main objective of VET to prepare learners for employment under CBET approach in different industries including the civil construction sector which is prioritized by Tanzania Development Vision 2025 (URT, 1999 and Technical Education Policy, 1996). Therefore, to investigate challenges for CBET implementation at VET at this level is best. By investigating the challenges of CBET implementation at VET, the study is likely to add knowledge to the existing literature on the challenges of inadequate employability competencies among VET graduates. Fifth, the findings of the study may stimulate more studies in the area of challenges facing implementation of CBET for human resource development in the knowledge economy which

demands skilled human resources who are equipped with communication skills, teamwork, honesty, and flexibility in the working environment, both in Tanzania and elsewhere in developed and developing world.

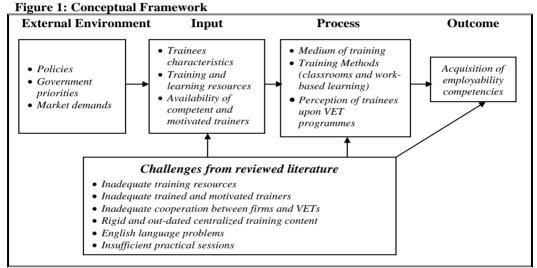
2.0 Theoretical framework

The article is grounded on the hierarchy of competency-based learning models which was developed by the U.S. Department of Education, and the National Centre for Education Statistics in 2002 and adopted by Richard Voorhees in 2014 (Voorhees, 2014). The model informs trainers on the important strategy of identifying hierarchies when implementing CBET for imparting employability competencies because they have a central role to play in the implementation process. It also insists on training methods which must be directed to the work, identifies traits and characteristics of trainees as important criteria in the learning process, and identifies skills, abilities, and knowledge required for learning. Moreover, the model insists on the benefits of industrial collaboration in the training process because skills, abilities, and knowledge are developed through learning experiences, work and participation in the labour market. Generally, the model identifies requirements of CBET implementation including trainees' characteristics, trainers' competencies, the outcome of learners, training methods and collaboration with work industries. All identified requirements are effective in CBET implementation for the acquisition of employability competencies.

Studies of Liang (2016), applied hierarchies of learning in physical education indicated that the hierarchies of learning help to promote the student's physical and mental health development. Stacey et al. (2012), in mathematics indicated that hierarchy of learning was effective in teaching and learning mathematics. Ramanauskaite and Slotkiene (2019) applied the model in E evaluation found that it was effective. Despite the benefits of the model, it is criticised by some trainers as they have failed to apply it and applied their competencies to implement it. Mistri, Patel and Pitroda (2019) applied analytical hierarchy model in identifying shortage of skills in the Indian construction sector where it was found that some competencies were missing to employees. From the reviewed studies, no study has identified the role of hierarchy of learning towards acquisition of employability competencies. Despite the benefits of hierarchy of learning in improving learning, it is challenged of causing difficulties in identifying learners' interests and evaluation process (Liang, 2016). Despite these difficulties, the model is still relevant to the current study.

For the purpose of the study, implementation of CBET for the acquisition of employability competencies depends on trainees' characteristics, measured in

terms of education attained before joining vocational education and training, training and learning resources, availability of competent and motivated trainers training, English language training methods (classroom and work–based), and perception of trainees upon training programmes. These aspects were measured through opinions from the respondents as what they experienced from learning and training processes. Also, the article focused on challenges hindering the acquisition of employability competencies. Figure 1 displays the process relationships and interaction of CBET requirements toward the acquisition of employability competencies. It also shows the challenges hindering acquisition concerning labour market needs as reviewed in the literature.



Source: Developed and modified from (Koobonye, 2020; REPOA, 2020; Zinn et al., 2019; Njati, 2015; Aderonmu et al., 2014; Voorhees, 2014; Kufaine & Chitera, 2013).

From Figure 1, the acquisition of employability competencies is a back forward plan which starts with what you want your trainees to achieve which is determined by policies, market demand, government priorities and standards as external factors. These are followed by identification of who is going to achieve it, who is going to facilitate it, and what will be applied to facilitate it. These questions are answered but are not limited to trainees' characteristics (prior education and interest), availability of training materials and competent and motivated trainers termed as inputs. The inputs are applied as seeds to be sawn in the process based on the question of how it will be implemented to meet labour demands being determined by medium for instruction, training methods, (classrooms and workbased learning). The process leads to the trainees' acquisition of employability as

an outcome which may likely to be met or not met employers' expectations. If employers' expectations are not met some interventions need to be undertaken which is the focus of the study on what are the challenges facing the acquisition of employability competencies. The question has arisen due to claims from employers that despite the existence of CBET for almost 20 years in Tanzania graduates from VET are claimed to be lacking employability competencies (Munishi, 2016; Haji, 2015; URT, 2014). The study raises issues for observation to join the debate: Why, although CBET was adopted and overemphasized in imparting employability competencies, are still graduates from VET claimed to have inadequate employability competencies to meet employers' expectations? What hinders the acquisition of employability competencies among civil artisans (masonry and carpentry courses) at VET?

3.0 Methodology

The study employed a qualitative exploratory research design to capture information from trainers, and learners at VET institutions; and from employers, and employees from civil construction companies where work-based training (field attachment) was conducted. Semi-structured interviews were used to collect data from VET trainers and employers while open- ended questionnaires were used to collect data from learners and focused group discussions were applied to employees.

Morogoro was chosen because it has four public VETs managed and governed by the government through its agency: VETA in Tanzania, all of which provide civil engineering courses, including Kihonda Regional Vocational Training Centre (RVTSC), Dakawa Vocational Training Centre (VTC), Mikumi Vocational Training Centre (VTC), and VETA Morogoro Teachers' College. In addition, one private, VET St. Joseph Vocational Training Centre (VTC-Ifakara), was included in the study because it was the first VET to be introduced in the Region and admitted students for masonry and carpentry courses. VETA controlled the distribution of VET in Tanzania Mainland, which included Arusha 3, Dar es Salaam 2, Dodoma 1, Geita 1, Iringa 1, Katavi 1, Kigoma 2, Kilimanjaro 1, Lindi 1, Manyara 3, Mara 1, Mbeya 2, Morogoro 4, Mtwara 2, Mwanza 1, Njombe 1, Pwani 1, Rukwa 1, Ruvuma 2, Shinyanga 1, Simiyu 1, Singida 1, Songwe 1, Tabora 3, Tanga 2. In the nearest regions of Pwani and Dar es Salaam only Chang'ombe RVTSC had masonry and carpentry courses (URT-MoEST, 2021, p.6). Prior to the data collection process, the anonymity of the participants' names was considered by assigning them numbers such as Trainer 01.....22 and Employers 01-20. Despite the fact that Morogoro region has several VETIs, the chosen ones were based on the availability of masonry and carpentry courses.

Civil construction companies were chosen basing on their on-going progress activities as referred to by government agencies, including Tanzania Roads Agency (TNROADS-Morogoro Region Office), Tanzania Building Agency (TBA-Morogoro Region Office) and Morogoro Municipal Council.

Sampling procedures involved two stages: firstly selecting the study area and secondly selecting the study participants. Purposive sampling was used in stage one in selecting the study areas and in stage two for selecting respondents including trainers, learners, employers, and employees. Trainers and employers were chosen because the former were responsible for imparting employability competencies under CBET training approach while the latter were responsible for supervising and training learners through field attachment. Both the trainers and employers interacted with learners and knew the challenges facing the learners in acquisition of employability competencies. This is supported by Chawla and Sondhi (2011) who explained that, under purpose/judgemental sampling experts in a particular field choose what they believe to be the best sample for the study in question. Also, the same author added that the sample size is determined by characteristics of the population and the type of information required. Therefore, based on the challenges hindering learner acquisition of employability competencies trainers, trainees, employers and employees were believed to information and experience. The sample size included 22 trainers, and 20 employers. On the other hand learners, from 3 VTCs; one VTC (St. Joseph-Ifakara) did not admit learners due to an increase in tuition fee; and employees, were selected as they knew the challenges facing them in acquiring employability competencies during the learning process. In reporting findings, respondents were coded into numbers for trainers (Trainer, 1-22), learners (Trainee, 1-58), employers (Employer, 1-20) and employees (FGDs 1-3).

Data were collected through semi-structured interviews, and focus group discussion and an open-ended questionnaire. Semi-structured interviews were used, with a few leading questions that allowed for follow-up (probing) questions to emerge during the discussion prior to the study. The researcher prepared interview questions and solicited experienced experts in the field to ensure that there are no wording questions that could lead to predetermined responses, including supervisors (pilot study in Mbeya (RSVTC) to 6 trainers and 9 employers from 3 civil construction companies, TANROADS and TBA who are not included in the article). Probing questions were used to elicit additional information and explanations from respondents who did not provide the requested information. The goal of semi-structured interviews was not to tell participants what to say, but rather to provide pathways for conceptualizing issues and making

connections that "combine into emerging responses." As a result, the purpose of using semi-structured interviews in the study was to elicit information from experienced trainers about how entry qualifications enhance or hinder academic achievement. In this case, 22 carefully chosen trainers were interviewed. Responses were directly transcribed and written down, as well as audio recorded with a voice recorder. For reporting purposes, respondents were coded as trainers 1-22 and employers 1-20.

Furthermore, the researcher conducted focused group discussions (FGDs) basing on activities which were performed in teams. FGD were conducted to twenty six (26) employees where there were 3 groups which were formed arbitrarily basing on the normal activity including 12 machine operators, and drivers were together in a resting area where the majority of them had their machines in service, 6 steel fixers working as team and 8 steel fixers and carpenters were constructing a bridge together. Through these groups they were able to express their opinions, perceptions and experiences on challenges they faced during learning process and how it affected them at work. However the researcher did not separate graduates from VET and other education system. She asked questions and anyone who were able to respond the researcher related the answer with the demand of the question and picked it.

Thematic and content analysis with the aid of MAXQDA2020 were applied to analyse interviews and open-ended responses from the questionnaire copies. Codes were created deductively and inductively in analysing data. But the deductive approach involved creating codes based on research objectives and reviewed literature and the inductive approach was based on the transcripts. In MAXQDA2020, coding was done and later analysis and interpretation of features including sub-codes statistics which were used to show occurrences of codes from trainers, learners, employers, and employees on challenges facing acquisition of employability competencies in the training and learning process and suggestions were given on what should be done to reduce those challenges. The analysis method was supported by Neuman (2014) who underscored that in qualitative analysis an investigator may assess evidence in the form of words, and images and use numbers to interpret results.

To ensure that the instrument covered all of the required components, the researchers used content validity by reviewing previous studies and assessing the adequacy and accuracy of instruments with the assistance of field experts. In addition, a pilot study with 6 trainers and 20 learners from Mbeya RSVTC, 9 VET graduates employees and 9 employers from 3 civil construction companies and

two government agencies (TANROADS and TBA) was conducted in the Mbeya region. Data triangulation, or the use of multiple instruments, was one method for ensuring reliability. In this case, the researchers used a semi-structured interview schedule that allowed them to probe for more clarification, as well as a focused group discussions and questionnaire, as their primary sources of data.

4.0 Findings and Discussions

4.1 Trainers' opinions on challenges facing learners' acquisition of employability competencies

The researcher asked trainers to explain the challenges they were facing when delivering training content under the CBET approach. The main themes which were raised by trainers included but were not limited to trainees' backgrounds, inadequate training and learning resources, English language problems, shortage of trainers, out-dated curriculum, and negative perception of VET programmes from parents and trainees, number of modules trained per semester, and field supervision problems. Other challenges included inadequate training to update competencies among trainers, a centralized examination system and examination setting challenges to mention a few. Therefore, trainers' responses were explained into themes based on conceptual framework of input, process and outcomes.

4.1.1 Trainees characteristics

The characteristics of learners enrolled in VET was challenging as per trainers' views. It was the opinion of trainers that acquisition of employability competencies was affected by low quality of learners enrolled in the VET system who were standard seven leavers, secondary school leavers and experienced "local fundis". The majority of the learners joined VET after completing basic secondary education and having failed to continue with upper secondary education due to poor performance in the final examination results as a prerequisite to join upper secondary education (form five). The minority who joined VET after completing form six were those who lacked criteria to join universities or other tertiary institutes. Such learners found it difficult to comprehend what was being trained in the learning process. The situation affected learners' performance in both theory and field practical acquisition of employability competencies. Logically, qualities of learners in terms of entry qualification and academic performance have close relationship with acquisition of employability competencies. As indicated by the learning model, learners' characteristics and interest have a process relationship with the learning process. This is because learners with prior education and interests with a certain field or profession may put more efforts on learning to meet their interests. Trainers indicated that:

Previously, at VET, selection was based on ability to read and write, but in other situations we selected even learners who were not able to read and write in order to impart vocational skills so that they could be able to perform something with their hands (Trainer 14, on 15/11/2021).

"Some learners are forced to join technical and vocational training due to failure to continue with upper secondary education (Form Five). They are not psychologically prepared to capture what is being trained in the classroom and hence fail to acquire trained employability competencies" (Trainer 3 on 2/10/2021).

Trainers' opinions complied with competency—based hierarchy of learning model which indicates that learners' characteristics and interests are important in the learning process. Also, information from documents revealed that applicants who had completed primary or secondary education were eligible to join VET in masonry and carpentry courses. However, in tourism, electricity and secretariat only form four (basic secondary leavers were eligible (VETA Revised Curriculum, 2013). URT (2014) indicates that entry qualifications for long VET courses range from primary to secondary school education, depending on a course, as well as progression within VET qualifications. This implies that learners' characteristics are essential in the acquisition of employability competencies. Therefore, it was suggested that VET institutions should consider trainees' characteristics to make sure that they will be motivated to learn and acquire the competencies imparted.

4.1.2. Training and learning resources

Works of literature including UNESCO-UNVOC (2013) and Zinn (2019) have shown that for CBET to be implemented effectively it requires adequate training and learning resources including machines, books and other teaching tools to facilitate a learner in mastering application skills. However, findings from the selected VET revealed that there were inadequate training and learning resources which influenced trainers to opt for theoretical training; hence learners were required to memorize what was taught to them to pass examinations for continuing to another level. This hindered the acquisition of employability competencies among VET learners. Despite the learning model being silent on learning resources for imparting employability competencies, it was seen important; one of the trainers had this to say:

"...in our training package, training and learning materials are identified including wood, steel, and glass materials, but here we

have only wood. Therefore, our learners fail to learn and understand how to make furniture of other materials including steel and glass materials" (Aluminium) (Interview, 1 on 30/9/2021).

"Inadequate computer labs and shortage of practical working areas force students to work in shifts and have only one session per week being done for one and a half hours (1:30) where 30 minutes are used for instruction and one hour for practical training; therefore time and session are not enough for the learner to capture competencies required in for understanding that computer needs more practice than theory" (Trainer 9 on 13/10/2021).

The findings corresponded with studies by Hakielimu (2021); Njati (2015) and Aderonmu et al. (2014) who explained that inadequate learning resources led to trainers' training theoretically and hence failure to impart work experience and problem-solving competencies which are highly demanded by the labour market. This implies that inadequate training and learning resources hinder learners' acquisition of employability competencies. Therefore trainers suggested that VET institutions should make sure that the budget for supplying these resources was available when demanded.

4.1.3 Availability of competent and motivated trainers

Competent and motivated trainers are crucial in the process of imparting employability competencies. Despite this interviewed trainers claimed that there was shortage of trainers in imparting employability competencies, available trainers were overloaded with many modules and programmes which demanded them to train learners in different sessions. Therefore they failed to be prepared well in implementing CBET to impart employability competencies to learners. Also, it was difficult for them to engage in industries to gain work experience. Some trainers had this to say,

"In this field we do not have a technician to assist a trainer, thus a trainer performs multiple activities which makes difficulties in imparting employability competencies because when a trainer is training / instructing and at the same time when a technical problem occurs it is required to solve and leave instructing hence confuse learners" (Trainer 3 on 2/10/2021).

"Shortage of trainers has led to prolonged teaching hours; we start working in the morning and finish in the evening (0800-1830PM).

This makes us tired, and we fail to impart competencies effectively (Trainer 6 on 5/10/2021)

"In our institute we have a big shortage of trainers. For instance, in masonry, I am the only trainer who is responsible to teach core modules from level 1-3 plus short courses or special programmes. This leads to overload: hence sometimes I fail to attend all sessions in these programmes. Also we have failed to admit trainees in the carpentry programme because the trainer of this programme is on a study leave" (Trainer 14 on 18/10/2021).

The findings were similar to findings of studies by Koobonye (2020), Zinn (2019) and Njati (2015) who found that a shortage of trainers had led to a negative impact on the acquisition of employability competencies as trainees were left learning by themselves without guidance from their trainers. This implies that shortage of trainers negatively affects acquisition of employability competencies as shown in the learning model that trainers should encourage learners to learn in a favourable environment. Therefore, it was suggested that government and government agencies responsible for training should ensure that there is availability of trainers at VET.

4.1.4 Medium of training

The English language was applied as the medium of learning and assessment in imparting employability competencies. Trainers claimed that imparting employability competencies was dominated by English as a medium of instruction during the entire learning process since all equipment and instruction manuals were written in English language. It was a challenge for VET learners who were familiar with Swahili language to cope with English language. This affected the performance for both theory and for practical in imparting and acquiring taught knowledge, skills and attitudes for academic achievement and understanding. For instance one trainer indicted that:

"The main challenge in imparting employability competencies is the English language; most of our students have problems of understanding and communicating in the English language. The majority of learners we have admitted did not score well in secondary education examinations due to the use of the English language as a medium of teaching and learning; yet at the same time we use the English language for imparting competencies. This negatively affects the ability of our learners to acquire competencies;

they do better in practical assignments but fail in theoretical modules" (Interview, 03 on 4/11/2021).

"... most of our students have problems of understanding and communicating in English and the majority of them did not get good passes in secondary education final examinations due to use of English as a medium of teaching and learning; yet at the same time we use English language for teaching. This negatively affects academic achievement among our learners" (Trainer, 09 on 18/11/2021).

Based on theoretical perspectives it implies that learners' characteristics particularly not being familiar with English language affected the learning process and ability to comprehend what was taught to them. The findings corresponded with the learning model assuming that trainees' characteristics help the trainee to acquire trained competencies. The findings were similar to findings of a study by REPOA (2020), which found that the shift from primary school where training was conducted in Kiswahili language to VET training was a big constraint to learners to capture trained competencies. This made it difficult for trainees in acquiring employability competencies. It was suggested that the English language should be emphasized from primary education so that learners may be proficient in it.

4.1.5 Training methods

Training methods at VET are based on class room and work-based. Class room and work-based trainings were found challenging as trainers indicated due to inadequate training and learning resources they were forced to apply lecturing methods which are effective in imparting knowledge rather than skills which are demanded by the labour market. On work based training trainers indicated that insufficient financial resources and time for meeting deadline affected negatively acquisition of employability competencies as it was difficult to engage in projects and practical. One trainer had this to say:

"Time for imparting knowledge, skills and attitudes to learners is not enough. For instance, 90 minutes twice a week may not cover activities required to impart knowledge, skills and attitudes through lecturing, demonstration, presentations and assessment. Therefore, in order to meet time frame for final assessment we apply the lecturing method which imparts more knowledge" (Trainer 21, 19/11/2021)

This implies that trainers were aware of effective training methods for imparting employability competencies but they were hindered by inadequate time and learning resources which would help them in imparting employability competencies and therefore they opted for lecturing approaches which were easier to apply without demanding resources and time.

4.1.6 Perception of trainees upon VET programmes

Negative perception of trainees upon VET programmes was challenging. Trainees perceived VET programmes as the last alternative for failures from other training paths ways. It was explained by trainers that in most cases learners join VET programmes after failing to attain other education pathways including advanced secondary education and university education. The findings were similar to findings of studies by Hakielimu (2021), and UNESCO_UNEVOC (2013) who found that negative perception of VET programmes facilitated VETs to admit low academic performers and affected negatively acquisition of employability competencies under CBET approach which demands learning to be enhanced by self-learning and creativity among the learners. This implies that majority of learners joined VET as the last alternative after failure to get opportunities in other education and training systems.

In addition to that other challenges included inadequate trainings to trainers for upgrading competencies in relation to the labour market, centralized system of examination setting affected trainers in certain areas to test their learners on acquired competencies due to differences in geographical location and availability of learning resources. From these findings, it can be concluded the challenges that the trainers mentioned were based on classroom context where knowledge was acquired. From trainers' perspectives, it can be concluded that from the conceptual framework input and process variables affected negatively acquisition of employability competencies among trainers.

4.2 Learners' opinions on challenges they faced in acquiring employability competencies

The findings from learners through an open ended questionnaire on trainee characteristics, training and learning resources, availability of competent and motivated trainers, medium of instruction, training methods and perception of trainees upon VET programmes revealed that during the learning process they encountered challenges of lack of motivation to join VET, inadequate training and learning resources, shortage of trainers, language problem, and field practical challenge. Other challenges included lack of cooperation with other institutes

and experts, higher grading system, internet problems (network cut-offs), domination of theoretical than practical learning, shortage of food, long distances from home to VET centres, inadequate practical exposure, unsatisfactory relationship between trainers and trainees, women harassment, shortage of clean water, inadequate precaution tools, negative perception on VET, long learning hours, complicated subjects and negative perception of employers upon VET graduates. Therefore, despite an array of challenges mentioned from learners, the study was guided by a conceptual framework of a few themes, mentioned earlier.

4.2.1 Trainees characteristics

Type of learners enrolled at a certain training programme has a direct impact on acquisition of employability competencies. ILO (2005) opines that previous education and training are the major factors that influence individuals' propensity to undertake further training and learning interest. In the study to capture information on the type of enrolled learners at VET examined entry qualifications and motivation as among factors which enhance acquisition of competencies, and it was done through questionnaire with open ended questions. Trainees' characteristics in the study mean entry criteria and motivation of individuals to select a certain field of study. The findings revealed that 54 (93.11%) had basic secondary education (form four) 3(5.17%) completed primary education (standard seven), and 1(1.72%) form six. This implies that the majority of candidates joined VET after completing form four (basic secondary education). The finding is connected with the learning model which assumes that trainee background is effective in acquiring employability competencies. Also, these findings were in line with empirical review by OECD (2015) and ILO (2013) who argued that individuals to join VET must complete at least basic primary education because the basic knowledge, skills, and attitudes acquired in primary school are prerequisites for further learning and academic achievement. Hategekimana (2014) underscored that an ordinary level education certificate and a pass in science subjects are required entry qualifications to improve the learning process and academic achievement at VET level.

Moreover, the findings were similar with the VETA-Tracer Study (2019), which found that 68% of candidates entered VET after completing Form IV, and Ntallima (2014) who found that 56% of VET learners were secondary school leavers. However, the findings contradicted with the VETA-Tracer Study (2010), which found that 53.2% of VET candidates were standard seven leavers, 35.1% were form IV leavers, and the remaining 11.7% were out of work. It is likely to be concluded that the increased enrolment of form four leavers is due to the establishment of subsidized ward secondary schools, which has increased the

catchment area for enrolment of standard seven leavers. As previously stated, the transition rate from primary to secondary education tripled to 60% in 2013 after remaining consistently below 25% throughout the 1990s and early 2000s (URT, 2014). From this, it is likely to be concluded that learners were likely to be able to comprehend what they were imparted by trainers in the learning process which aimed at imparting employability as they had required entry characteristics as revealed by the hierarchy–competency training model.

4.2.2 Training and learning resources

The findings from trainees revealed that inadequate learning and training resources hindered them in acquiring competencies for tools and machines application during the process of learning. Some trainees revealed that in the workshop there was one machine; thus this made learning difficult and finally hindered acquisition of employability competencies.

4.2.3 Availability of competent and motivated trainers

It was revealed, due to shortage of trainers, in most cases trainees were left alone in classroom and practical learning so a student who was somehow better on certain knowledge was demanded to impart knowledge to his/her colleagues. Also, learners indicated that sometimes there was not good relationship between trainers and trainees as trainers regarded learners as failures of secondary school education and they were not able to learn well. This discouragement made learners feel afraid to ask questions to their trainers and hence ended up without understanding what was being taught to them for employability competencies acquisition.

4.2.4. Medium of training

Students explained that due to being familiar with Kiswahili language it was difficult for them to master learning which was in English language

4.2.5 Training methods

Trainees indicated that in most cases classroom based training was based on theory domination which was difficult for them to acquire employability competencies while work-based training was another challenge to learners in acquiring work-based skills due to inadequate support from trainers in searching companies for work-based learning and supervision. Some learners claimed that they did not conduct field practical in civil construction companies due to mistrust of employers. This was indicated by a learner, who said:

"... in most cases, when we go to undergo field practical training to relevant work places where we submit a form from our VET

Centres, we are not received. In such cases, we have apprentices at street technicians for a short time, but works on which they train us get finished before we have acquired many skills; hence we have to stay home until the time of field practical training ends" (Learner 48 on 18/10/2021).

Therefore, sometimes they stayed at home without learning how to perform works so that to relate with classroom theoretical learning for acquiring employability competencies. The findings were also found by Njati (2015), and Kaushik (2014), who indicated that the lack of clear guidelines on-field practice influenced learners' failure in acquiring areas for field practicals. The challenge affected negatively learners in acquiring work experience competencies. Also, Yamada and Otchia (2020) found that trainers were applying teaching methods that influenced specialized skills while learners were motivated to acquire mixed skills. Due to trainers' inadequate work experience, they were reluctant to apply collaborative approaches which were recommended by CBET. However, this finding is contrary to findings of a study by World Bank (2014b) which showed that teaching approaches that encourage participation, group activities, and exploration more instil different mind-sets among learners than approaches that emphasize on memorization learning. Also, Chen et al. (2011) stated that a mixedmethods approach of combining theory, in order to bring the necessary knowledge, and practice, in order to bring the experience, would be the best method to impart employability competencies to learners for sustainable development. Furthermore, students can develop employability competencies with the help of trainers having academic and practical experience through illustrating examples, real life examples, and field work. The situation affected negatively the process of imparting and acquisition of soft competencies for employability among learners. Therefore, it was suggested that VET institutions should work hand in hand with learners to search for areas for field attachment and inform work supervisors of what they intended their learners to learn.

4.2.6 Perception of trainees and parents upon VET programmes

Despite the fact that the majority of learners were not motivated to join VET but failure at the previous level of education influenced them to join VET as their last alternative. This was explained by some of the learners as follows:

"I joined VET due to failure to get a chance in other institutes caused by poor form six results where I scored division four. After these results I joined VET so that I could acquire competences which would help me sustain my life although my ambition was not to become a carpenter" (Learner 14 on 30/09/2021).

"Myself I was motivated to learn at VET because in my family most of my relatives are artisans including my brothers and uncles. Even before being admitted at VET I was able to perform carpentry and masonry works by imitating my relatives. This influenced me to learn at VET to become a profession in the field and acquire a certificate to qualify for employment in the labour market" (Learner, 25 on 14/10/2021).

The findings were in line with findings of studies by OECD (2018) and Cedefop (2018) which showed that negative perception of parents and learners about VET programmes influenced good academic achievers to prefer to continue with upper secondary education rather than pursuing vocational education. In comparison to vocational education, upper secondary school education is viewed as a key to higher education and a successful career. Also, the results are similar to findings of studies by Hakielimu (2021), Subramanian (2017) and Munishi (2016) who found that VET was an option for lower prior education performers. As a result, applicants with lower entry qualifications have been admitted at VET (Andreoni, 2018; Ngure, 2013). Level of performance in previous education of learners affected them in the learning process under CBET which demands learners to participate actively. From this, it is likely to be concluded that it affects negatively acquisition of employability competencies.

4.3 Employers' opinions upon challenges facing VET learners in acquiring employability competencies

Collaboration with employers is one of the requirements in imparting employability competencies under the CBET approach (Glerum & Judge 2021; Farecha et al., 2020). Thus, VET had adopted field attachment as one of the means of collaborating with employers in imparting employability competencies to learners which should be done at each learning level for 8 weeks (VETA Curriculum, 2013). Employers were asked on challenges they encountered during field attachment training, supervision and way forward for VETIs in enhancing employability competencies. It was revealed that, although the curriculum had indicated during field attachment learners should be provided a supervisor to guide and assess the student in day to day operations, some supervisors were not aware of what they were supposed to guide learners on; hence they left the learners doing works out of their professions such as working as messengers. Employers had this to say:

"Sometimes when learners come to our work areas they fail to explain to us what they are supposed to do; thus as a work supervisor, I fail to understand what I should assign them to do" (Employer, 14 on 17/11/2021).

On the other hand, employers claimed that, during field attachment, trainers who were selected as assessors for learners at work environment were not effectively assessing the trainees; they just went once to the field and communicated with the trainees to meet in hotels or towns and verify their logbooks without even meeting with industry supervisors. Sometimes they just met with one supervisor while learners were supervised by more than one supervisor, depending to activities assigned to him/her daily, weekly or monthly. It was explained by employers that,

"Sometimes trainers call trainees doing field practical training at relevant places to town and tell them to fill in field practical training logbooks. In such cases the trainers do not go to the field practical training places. This discourages the trainees. As a result, the trainees write fake reports. Field practical training supervisors do not get feedback on progress of the learners during field attachment, and if VET based trainers of the trainees come to field practical training places to assess the trainees' progress, we just give them false information just to protect the learners" (Employer, 01 on 14/10/2021).

Another employer narrated that:

Supervision by trainers as assessment is not done properly; most supervisors, when come to assess their learners, just call learners who are learning in different sectors and meet them in one location out of the working environment and sometimes trainers do not meet even field supervisors to get feedback on progress of the learners during field attachment) (Employer 17 on 5/11/2021).

Also, VET trainers were not visiting their learners to know what they were doing, what supervisors from civil companies were guiding, and get feedback from employers on competencies that learners missed which could help them to improve the training and learning process. This implies that the field attachment which was seen important in imparting work-based and behavioural competencies was not managed effectively. Therefore, employers suggested VET trainers to meet work supervisors during field practical supervision to know what learners were doing and the competencies which they missed to improve training practices.

4.4 Employees' opinions on challenges facing learners' acquisition of employability competencies

Employees who were VET graduates were asked to identify on challenges they faced during the training and learning process. The findings revealed that VETIs had inadequate teaching and learning resources, language problem, financial problems, old technology, shortage of trainers, negative perception on VET programmes, and theory domination. Other challenges included shortage of food, negative perception of the trainer towards trainees, and a long period of learning. This implies that VET graduate employees find that the training and learning process was effective.

Employees who participated in a focus group discussion explained the challenges they faced during the learning process as follows:

"It is difficult for learners to search areas for the field practical training by themselves. For instance, I stayed at home for six months without getting a place for an internship, the reason behind this being mistrust of employers upon girls to operate heavy machines. Therefore, to reduce this challenge, VET institutions should help learners to get areas for field practical training to acquire work experience" (FGDs 02, 12/11/2021).

- "...there were different designs of cars as during learning we were taught on cars with 5 gears while in the labour market there are cars with 16 gears. This becomes a challenge for us to transfer learnt knowledge and skills from school to work" (FGDs 02 on 13/11/2021).
- "....I failed an interview in a certain company due to my English language problem; they asked me to identify working tools in the English language, but I was not able to identify some of the tools, although I had used them at my work for several years. This pained me and is still paining me because I am working with foreigners and sometimes I fail to communicate with them due to my English language problem. I insist to youth to learn and master the English language" (FGDs 03 16/11/2021).

From this situation, it also challenged learners from their backgrounds to understand different concepts which were commonly used in technical subjects. The English language challenge affected positively or negatively input, process, output, outcome and feedback because English language was found to be very

important in civil works because all maps, estimations and working tools were written in English language.

It was also found that applicants during interviews were asked in English language to identify working tools, and during an interview when selected for job during civil works sometimes they were likely to be mixed with people of different backgrounds; that situation needed a person to know simple English language to be able to identify working tools and to communicate with foreigners. Another employee narrated in Swahili language

"I was called to fix a defective machine at a company owned by Chinese, but when I got there the Chinese started asking me questions in English. I failed to answer the questions; hence I missed the piece of work. It pained me a lot; so I wish our children were well taught English and master it" (FGDs 02, on 12/11/2021)

From the two quotations, employees' failure to understand how to communicate in English language affected them negatively, and they suggested that in order to reduce this problem the government should emphasize on the English language to be taught effectively from pre-schools so that the coming generation in Tanzania will be able to master the language and work in the civil construction sector comfortably where there is a mixture of employers and employees.

6.0 Conclusion and Recommendations

The acquisition of employability competencies by learners in VET faces several challenges. However, all respondents and empirical studies from developed and developing countries, including Tanzania, mentioned insufficient training and learning resources. This had a negative impact on learners' ability to acquire desired competencies, so the government and VET stakeholders should increase the budget for providing adequate training and learning resources so that learners can apply them during the training and learning processes. Despite this, other challenges included, to name a few, the English language issue, an out-of-date curriculum, trainer competencies, learners' entry qualifications, and insufficient field attachment supervision. These obstacles hampered learners' acquisition of employability skills and, as a result, their work performance. As a result, it is suggested that VETs should ensure that training and learning resources are readily available when needed. This may aid learners in learning tools and machine applications that are similar to those found in the workplace. It is also suggested that VET take a continuous approach to empowering trainers by encouraging

training institutions to hold seminars and workshops for their trainers on CBET-compliant training methods.

In addition to that, VETA and Ministry of Science Education and Vocational Training are urged to increase time for field practical training from one month's to three months' time; this may help learners to acquire competencies in the real workplace and increase opportunities for employability. Employers are urged to encourage VET graduates in their employment opportunities thus motivate more youth to join VETA programmes. Trainers at VET should make sure that learners are trained on work ethics as demanded by the labour market. Graduates from VET should make sure they show commitment to employing companies so that employers can be motivated to employ them. VET institutions should allow their trainers to be exposed to the work environment at least once per year (exposure of trainers at workplaces so that they can gain experience on new competencies required by the labour market). Employers need to work with education and training institutions to ensure the provision of relevant skills, through apprenticeship places; provide on-the-job training to facilitate the upgrading and adaptation of skills; and adopt forms of work organization that make the most of existing skills. Moreover there is a need for VET and other stakeholders to promote VET programmes so that good secondary performers may join VET voluntarily.

Limitations of the study

The study concentrated on two courses at VET, masonry and carpentry, where 22 trainers and 20 employers were interviewed while learners filled out an open ended questionnaire and focus group discussions were held with 26 employees in 8 civil construction companies. Even though the findings were relevant to a wide range of situations, it would be dangerous to generalize them to other trainers on requirements of CBET implementation. Therefore, further studies should be conducted on other VET courses or widen the scope in other fields.

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