

# Stakeholders' Synergy in Competency-Based Training for Vocational Education and Training: A Case Study of Carpentry and Masonry in Tanzania

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Received 19 April 2024; revised 31 May 2024; accepted 04 June 2024

#### Abstract

The study where this article is based examined the synergy of key stakeholders in competency-based training being guided by stakeholders' theory, consensus theory and competency-based learning process model at vocational education and training institutions (VETIs). Qualitative exploratory design was employed to collect data from 42 respondents, including 22 trainers from 4 VETIs and 20 employers from 8 construction companies who were purposively selected as key stakeholders because they are key stakeholders in competency-based training at VETIs. Semi-structured interviews and documentary reviews were used to collect data. Content analysis with the help of MAXQDA 2020 qualitative data analysis software was used to transcribe data into direct quotations, tables and figures. Findings revealed that trainers and employers were involved in curriculum development either directly or indirectly at the planning stage. However, trainers and employers were unsure if the suggestions were taken into consideration due to bureaucratic procedures in submitting their concerns. Therefore, it was suggested that there should be an open dialogue between VETIs and employers on what should be included in the curriculum as input for the teaching and learning process to meet the demands of the labour market.

**Keywords:** stakeholders; vocational education and training; curriculum; competency-based education and training; collaboration;

## 1.0 Introduction

Since the 1970s, Competency-Based Education and Training (CBET) has been acknowledged as an effective approach for ensuring that educational and training programmes remain relevant to the demands of the labour market and the expectations of stakeholders (ILO, 2020; Biemans *et al.*, 2004). Tekle, et al. (2024) contend that CBET emerged as a mechanism to reconcile the disparity between educational outcomes and labour market requirements. Globally, there is overwhelming evidence that the productivity of a competent workforce is becoming higher than ever, partly due to a significant shift from the knowledge, skills and attitude education and training model to the competency-based model (Audu *et al.*, 2013; Clarke & Palmer, 2011). According to Pavlova, (2019); ILO, (2016) and WEF, (2014) the competency-based model additionally captures talents and behavioural attributes. However, the quality of CBET will depend on the extent to which all key stakeholders are involved in determining what competencies must be imparted to learners and how to impart them. These call for effective synergy of all key stakeholders in the process of curriculum development, implementation and the link with the industry.

Research has indicated that synergy of stakeholders in the curriculum development process is instrumental in imparting competencies that are in demand within the labour market (ILO, 2011). Furthermore, this synergy enhances quality assurance systems, as employers are often regarded as the foremost authorities on the competencies required in the workplace (UNESCO, 2016). Additionally, Akyazi, et al. (2020) and Obwoge (2016) assert that employers and their professional associations represent the pivotal stakeholders who define the employability competencies requisite in the industry. Therefore, incorporating employers' opinions into the curriculum development process may yield valuable insights for training institutions regarding their strategies for cultivating a competent and skilled workforce, thereby enhancing graduate employability (Pang, et al., 2019). Given that vocational training is vital for ensuring an adequate supply of competent and skilled labour, it is perceived as the cornerstone of the civil construction sector (ILO, 2019a). Therefore, it is crucial for vocational education and training institutions to foster close synergy with industry stakeholders and their professional associations in the development of curricula, thereby enhancing learners' acquisition of employability competencies. Hence, collaboration with the labor market in the curriculum development process is regarded as critically important, as it ensures the dynamic evolution and customization of vocational education and training in alignment with the rapidly shifting qualification demands of trade and industry (VETA, 2013). In this context, Abas and Imam (2016) posited that a concerted focus on the development of a skilled workforce should encompass the synergy of employers, employees, training institutions, labour agencies, and policymakers to effectively address the deficiencies in employability competencies among graduates.

Stakeholders' synergy in curriculum development does not only help in identifying competencies but also help on the success training through infusing right competencies which correspond to the demands of jobs, occupation and working conditions either self or pay employment (WEF, 2019; Boahin & Boahin, 2015). Fagrell, *et al.*, (2020) indicated that due to changes in technology and work requirements synergy of external stakeholders is crucial as are the ones who know the social needs. Erjavec (2021) and Kinash et al. (2015) underscored that, stakeholders' synergy in curriculum development and implementation is likely to close the gap between the contents to be trained at learning process and labour market needs. NACTVET (2022) postulates that, synergy between public and private sectors need to draw up new curricula that match young generation with the real needs of the industry. This implies that synergy of stakeholders in curriculum development has proved to influence not only its relevance but also its effective implementation and realization of learners' acquisition of competencies for employability.

Despite these benefits, the synergy of stakeholders in curriculum development encounters challenges including a centralized system (Kopweh, 2014; Raihan, 2014), domination of academicians (Ngure, 2013), adoption from colonial government particularly Britain (Njati, 2015), little involvement of trainers (Habtamu, 2016) and little involvement of private sector (Dobbo, 2018). Bareika et al. (2021) noted that the main reason hindering employers and trainers' involvement include but not limited to lack of interest or motivation, time and/or financial motivation, sufficient knowledge or experience in the higher education teaching and learning process. The study of Tekle et al. (2024) in Ethiopia found that stakeholders' involvement in CBET assessment is necessary at TVET however the process was limited with inadequate candidate competency assessment, lack of skill gap analysis in TVET institutions for improved training, failure to maintain assessment standards, a high candidate-to-assessor ratio, and assessment tools that do not meet occupational standards.

Thus, low involvement of stakeholders in CBET has influenced the perpetual complaints from employers about graduates arriving with technical education certificates but with limited competencies needed by the labour market (Kinash, et al., 2015). This literature review impetus the importance of involving stakeholders in curriculum development. Studies have identified the benefits of stakeholders' synergy in curriculum development globally but there is scant literature on how stakeholders are involved in curriculum development under CBET approach at VET in Tanzania context. Although the study of Kopweh (2014) was conducted in Tanzania it focused on how curriculum was developed in secondary education.

Therefore, the current article examined on who are the stakeholders involved and how stakeholders were involved in curriculum development cognizant of the priority sectors mentioned herein. This could help to inform the government and other stakeholders of VET to ensure effective synergy of stakeholders in curriculum development process under CBET approach for preparing skilled and competent workforce to meet labour market demand.

This article is arranged into seven parts; the first part covers this introduction followed by theoretical and empirical reviews and methodological issues. The followed part focuses on the findings, analysis and discussions of the main issues, consensus of stakeholders and lastly conclusion and limitations of the study. It is anticipated to provide answers to two raised questions;

- a) Who are the stakeholders involved in curriculum development at VET?
- b) How stakeholders are involved in curriculum development at VET?

# 2.0 Theoretical perspective

This article is grounded on three theoretical perspectives including stakeholder's theory, consensus theory and the hierarchy of competency-based learning model. Stakeholders' theory was developed by Freeman (Brown et al., 2003). According to Freeman (1984), a stakeholder is any individual or group of individuals who can affect or be affected by the achievements of the organization's objectives. However, since each individual or group may affect or be affected by the objectives of the organization differently depending on the roles they play, the concept of key stakeholders to differentiate them has been preferred in the literature (Reed, 1999; Cohen, 1995; Clackson, 1994). Key stakeholders are those who are able to affect an organization's behaviour, direction, process or outcomes (Mitchell et al., 1997). The theory informs the training institutions, in our case VET, on the benefits of involving stakeholders in decision-making for attaining better results as stakeholders may improve the organizations' prospects for survival by helping in anticipating or preventing unforeseen problems and improving the success of vital resources (Freeman, 1984). In this study, the situation of involving stakeholders in the curriculum development process was crucial at VET under CBET as it aligns with the world of work. Therefore, its programmes start with identifying job descriptions through a labour market situational analysis process which includes stakeholders from various organizations specifically responsible for employing graduates (Mulder, 2017; Hébrard, 2013).

Consensus theory was founded by Emile Durkheim (1858-1917). The theory informs training institutions, for our case VET, that human capital injection should be done by instilling generic skills which have been agreed upon by stakeholders at the learning level to ensure the employability of graduates (Brown et al. 2003). Under the consensus view of the graduate labour market, competition is meritocratic based primarily on differences in talent, and employers look beyond the credentials, considering work histories, extracurricular experiences, soft skills, social competencies and cultural fit (Gordon, 2013). Therefore, the theory insists on CBET to identify required competencies for their learners in relation to labour needs through feedback from employers, which becomes an input for curriculum development.

The hierarchy of competency-based learning model was developed by the U.S. Department of Education and the National Center for Education Statistics in 2002 and adopted by Richard Voorhees in 2014. According to NPEC (2002), the hierarchy of the competency-based learning model has four interactive processes, which are the foundation, development of the learning process, competencies acquisition and performance assessment. The foundation of the framework lies in the premise that differences in traits and characteristics help explain why learners pursue different learning experiences and acquire different levels and kinds of knowledge, skills, attitudes and other abilities. Some of these are inborn while others are just acquired through experiential earning from the environment. This has a significant influence on the quality of students who enroll for vocational education and the learning style of each student. The second rung consists of knowledge, skills, attitudes and abilities to be developed for learners to be employable. These are developed through learning experiences, work, and participation in training and learning process as

determined by key stakeholders during curriculum development. Hence, competencies are the result of integrative learning experiences in which knowledge; skills, attitudes and other abilities interact to form learning bundles that have a direct relation to the task for which they are assembled. Finally, demonstrations are the results of applying acquired competencies. It is at this level that performance-based learning can be assessed by using the eye of the employer as the final consumer of the vocational education outcomes.

In this case the figure depicts well on the role of key stakeholders in enhancing curriculum development for learners' acquisition of competencies starting from identifying characteristics of entering the learning process and in integrating competencies to learners at the learning process and at the end assessing the outcome specifically the demonstrated competencies. This is due to reason that employers are the ones who judge on the quality of competencies demonstrated by graduates in the labour market (ILO, 2019a). Figure 1 provides the summary.

Therefore, apart from the emphasis given to solid ground in the technical aspects of the job and profession, innovation, creativity, teamwork, and problem-solving. And various sets of soft skills are some of the contributions to the potential superior performance of graduates which employers vie for (Gordon, 2013; Itika, *et al*, 2011; Spencer and Spencer 1993; Boyatziz, 1982; McClelland, 1973). The value of the personal qualities of graduates changes the learning equation from not only focusing on traditional knowledge, skills and attitudes paradigm but also much more to broad-based learning accomplishments that shape personality anchors. This is the basis of competency-based training and learning models and descriptive tools used to identify, recognize and impart knowledge, skills, abilities, and other range of personality attributes required to guide trainers in training and learning processes for imparting learners with what was agreed by all key stakeholders through their involvement mechanisms in curriculum development and implementation for vocational education.

The combination of stakeholder's theory, consensus theory and the hierarchy of competency-based learning model justifies the synergy of stakeholders in enhancing curriculum development for learners' acquisition of employability competencies for the following reasons; Stakeholders theory puts us in a position to argue that if organizations take time and effort to invest in the interests of key stakeholders will certainly do better than those which do not because based on the laws of cybernetics, the synergy will push the organization to far better heights (Scholl, 2001). From the introduction, we have considered VETA, VETIs, and employers who also constitute smaller multiple actors as key stakeholders and our point of reference here. The consensus theory emphasizes the importance of stakeholders' consensus on what they decide and do to achieve a common goal (Brown et al., 2003). It asserts that since jobs and employers are drivers of what competencies are required for efficient and effective job performance, and hence necessary for learners to be imparted the same before they graduate. That goes untold that consensus between learners, trainers and employers on who should learn what and how, cannot be avoided. This common agreement is assumed to reduce significantly the problems of inadequate necessary competencies for the employment of fresh graduates. The hierarchy of the competency-based learning model underscores the concerns of employers on the sets of quality dimensions of jobs and effective performance that must be imparted to learners to be employable.

A combined conclusion from the three theoretical frameworks tends to suggest that balancing stakeholders' interests through consensus in vocational education is logical and practical. However, the extent to which each stakeholder has a voice influences the entire learning process and ensures competency-based outcomes are realized is tricky, particularly when the provider of vocational education has enormous powers during the implementation of the curriculum on one hand and limited resources and flexibility required by the labour market on the other. The hierarchy of competency-based learning model for delivery of training provides a necessary tool for the diagnosis of the synergy between stakeholders in ensuring that learners acquire the necessary competencies for employability based on CBET.

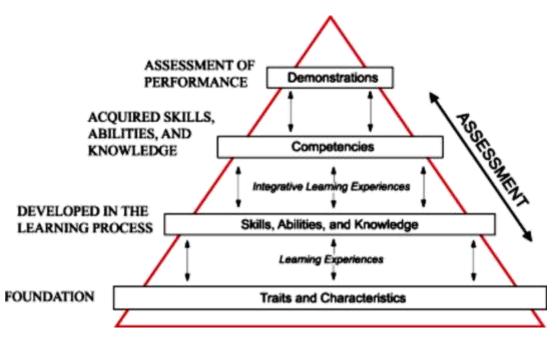


Figure 1: Hierarchy of competency-based learning process model

Source: NPEC, 2002:8)

#### 2.2. Empirical Position

Worldwide, two-thirds of skilled human resources, as one of the key inputs in the knowledge-based economy, are believed to be qualified at the intermediate level, corresponding to technical and vocational education and training (TVET) (OECD, 2012). It is well acknowledged that technical vocational education institutions (TVETIs) play a key role in building human capability in general as well as in developing the necessary competencies for employment (UNDP & URT, 2018). The need for competency-based training and development in various fields, including masonry and carpentry, has become an issue of global concern due to the shift from physical labour, which demanded manual skills, to a knowledge-based economy demanding creativity, mathematical reasoning, communication skills, teamwork, honesty, and information technology (ILO, 2019b).

The shift from manually demanded skills to a knowledge-demanded economy faced the challenge of inadequate employability competencies among VET graduates. Thus, awakened developed and developing countries to embark on a competency-based education and training (CBET) approach as a strategy to rescue the situation (Koobonye, 2020; Rutayuga, 2014). Since the 1990s onwards, CBET has become a benchmark for curriculum development, curriculum contents, training methods, training, and learning processes at VETIs (Habtamu, 2016). It was targeted to impart skills, knowledge, understanding, and wider attributes necessary to graduates' employability (ILO, 2016; Clarke & Palmer, 2011). The graduates under CBET were expected to perform better in jobs than those with traditional qualifications (Pavlova, 2019). Mkonongwa and Komba (2017) underscored that the introduction of CBET was a paradigm shift from Knowledge-based education and Training (KBET), which focused on the theory and content of learning. The shift has led to changes in stakeholders' involvement in curriculum development process as inputs for teaching and learning.

In the Tanzanian context, CBET was adopted at VETIs under Vocational Education Authority (VETA) in the early 2000s to generate equipped graduates with appropriate sets of competencies towards the

realization of Tanzania Development Vision (TDV) 2025 of becoming a middle-income economy by 2025 through strong industrial base where vocational competencies for artisans will be highly demanded as more employment opportunities flourish (Rutayuga, 2014, URT, 1999). To realize the vision, trade, mining, manufacturing, and construction sectors were prioritized, where carpenters and masons are highly demanded (VETA National Audit Office Report, 2020; COSTEC, 2016; URT, 2014). The National Five-Year Development Plan (FYDP, II) 2016/17–2020/21 (URT, 2016) indicates that the implementation of TDV-2025 dictates the intensification of the construction of tarmac roads, railways, and hydroelectric power plants. These initiatives required competent civil artisan graduates in welding, plumbing, installation, carpentry, masonry and architectural activities (URT, 2019). Also, the construction policy of 2003 indicates that the sector demands an 8-10% per annum competent workforce from technical training institutions that possess adequate competencies to meet job standards (URT, 2011).

Apart from the adoption of CBET in Tanzania, other efforts to impart employability competencies to learners were introduced including the Technical and Vocational Education Development Program (TVETDP) (URT, 2013), civil engineering curriculum adding soft competencies including communication, entrepreneurship skills, and information communication technology (VETA Civil engineering curriculum, 2013), URT, 1996; National Skills Development Strategy (NSDS 2016-2021). On the other hand, Education Sector Development Plan (ESDP) (2016/17-2020/21) focuses on fostering a sense of self-confidence, tolerance, and respect for all people, building a culture of human development through hard work, professionalism, creativity, innovation, critical thinking and problem-solving skills (URT, 2016, 2018). National Five Year Development Plan (NFYDP III) 2021/22-2025/26 indicated that the government budget for 2019/2020, allocated funds for the construction of 25 District Vocational Training Centres to impart core and functional competencies to the youth in order to fill competence gaps that will be generated by the economic transformation (Ministry of Planning and Finance, 2021) these measures were expected to meet the demand of generating a competent and skilled labour force to meet labour market demand and insisted the development of employability competencies in the teaching and learning process.

Despite CBET and other strategies used to promote a skilled workforce for the VET catchment area, for almost 20 years now, expecting to generate enough competent graduates, the gap between demand and supply is still eminent (World Bank, 2014; Mabala, 2019). It is established that Tanzania's competency-based education and training system produces 800,000 young people who enter the labour market each year (ILO, 2019b). Nevertheless, employers face a serious gap between the competencies the civil construction sector needs and the competencies the training system delivers for instance, Kikwasi and Escalante (2018) found that painting, carpentry, and masonry graduates are abundant in the civil construction sector but perform poorly due to inadequate competencies. Data show that 70% of employers had the opinion that artisans lack knowledge of construction theories and drawings (Kikwasi, 2011). Similarly, 70% of employers claim that artisans lack the behavioural attributes necessary for effective working with and through others (URT, 2014).

At least in theory, key stakeholders in VETA have a role to play when CBET expectations are not met satisfactorily. As well described by Tondi (2014) and Knan (2022), these are individuals and groups who have special interests in overseeing efficient and effective CBET in Tanzania. However, for the purpose of our discussion, stakeholders are VET training coordinators, trainers, and employers. Training coordinators are expected to provide information on how stakeholders were involved in the process of development the learning content, the learning process and assessment of the extent to which expected competencies were achieved, they play a vital role in planning, design of the learning process including quality of trainers, training and learning materials and tools, and how measurement of the learning outcomes. However, some of the trainers may have participated in the initial process of curriculum development or they just found it ready made for implementation. While it is acknowledged that employers provide information on the demanded competencies, the rubrics of delivery is under control of another stakeholder who decides amongst others the qualities of learners who join the predetermined VET programs, who should impart the competencies desired as per stakeholders' consensus and how. The synergy of the aforesaid through a

combination of stakeholder, consensus and competency model has been the interest of focus in terms of the methodological approach, presentation of the study findings and analysis.

# 3.0 Methodology

This section describes the methodology used to generate and analyse data on how stakeholders were involved in curriculum development. The study collected information from VET trainers in four Vocational Training Centres (VTCs), three of which were public and one of which was private. Also, experts from government authorities were included 1 curriculum development coordinator from Morogoro VETA Teachers Training College (MVTTC) and 1 labour analyst officers from VETA Eastern zone office. The study employed qualitative exploratory approach. VET trainers and government experts were carefully selected and interviewed. Data were also collected from employers who were involved in construction activities which were taking place at Morogoro. These were Hari Sigh and Sons Company, Umoja Kilosa JV Road Construction Company, and Reynolds Construction Company (NIG.) LTD and Yapi Merkezi Company (Foreign-SGR-Construction. Companies which had housing projects were also part of the sample from where data were collected. These are Udile road construction company (Residential building 3 storey), Alve Construction Company Limited (12 storey residential and commercial building at Masika) and OBD Construction Company Limited (6 storey residential and commercial building). Small housing projects under Morogoro municipal council engineer were also part of the study. These are Mkundi, Tungi and Maghorofani health centres and Kihonda secondary school projects. A total sample of 42 respondents was included in the sample. Data were collected from September to December 2021.

**Table 1: Category of Respondents.** 

Company/ Agency / Institute	Respondents
Trainers	
Kihonda RVTC	8 Trainers
Mikumi VTC	5 Trainers
Dakawa VTC	6 Trainers
St. Joseph VTC (Ifakara)	1 Trainer
VETA -Zonal Office (Eastern Zone)	1 Labour Market Analyst
Morogoro VETA Teachers Training College (MVTTC)	1 Curriculum Development
Employers	Coordinator
TANROADs	2 Employers
TBA	2 Employers
Municipal Building Project (Mkundi Hospital)	1 Employer
Udile construction company (Residential Building 3 storey)	1 Employer
Alve Construction Company limited (12 storey residential and commercial	1 Employer
building at Masika)	
OBD construction Company limited (6 storey residential and commercial	1 Employer
building)	
Hari Sighn and Sons Company LTD	1 Employer
Umoja Kilosa JV Road Construction Company	4 Employers
Yapi Merkezi Company Kilosa Camp. (SGR)	4 Employers
Reynolds construction company (NIG.) LTD (RCC) (Ifakara)	4 Employers
Total	42

Source: Field Data, (2021)

## 3.1 Study Context

The study where the article is based was conducted in Morogoro region Tanzania. Morogoro was chosen because of its uniqueness of having four public VETs managed and governed by the government through its agency vocational education and training authority (VETA) all of which provide civil engineering including masonry and carpentry courses. These VETs include 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 masonry and carpentry learners. The distribution of VET in Tanzania Mainland is indicated in Table 2 below. While in the nearest regions Pwani and Dar es Salaam only Chang'ombe RVTSC is having masonry and carpentry courses (URT, 2021 p.6).

**Table 2:** Distribution of VET under VETA in Tanzania mainland

Region	Number of VET	Region	Number of VET
Arusha	3	Morogoro	4
Dar es Salaam	2	Mtwara	2
Dodoma	1	Mwanza	1
Geita	1	Njombe	1
Iringa	1	Pwani	1
Katavi	1	Rukwa	1
Kigoma	2	Ruvuma	2
Kilimanjaro	1	Shinyanga	1
Lindi	1	Simiyu	1
Manyara	3	Singida	1
Mara	1	Songwe	1
Mbeya	2	Tabora	3

Source: (URT-MoEST, 2021 p.6)

# 3.2 Sampling Procedures

With the goal of answering the question, "who and how stakeholders were involved in curriculum development and what role they played?" Trainers and employers with relevant knowledge and experience were purposively selected (Neuman, 2014). Purposive sampling was used to select trainers for masonry and carpentry courses at three public VTCs and one private VTC. Despite, the fact that the Morogoro region has several VETIs; the chosen ones were based on the availability of masonry and carpentry courses. While on the side of civil construction companies were chosen basing on their ongoing progress activities as referred with government agencies including Tanzania Roads Agency (TNROADS-Morogoro Region Office), Tanzania Building Agency (TBA-Morogoro Region Office) and Morogoro municipal council. In addition to that the chosen companies were easy for respondents to provide answers based on the natural context as argued by Yin (2018) that qualitative data collects information from natural settings

**Table 3:** Trainers

Training Center	Male	Female	Total	
Kihonda RSVTC	6	2	8	
Dakawa VTC	5	1	6	
Mikumi VTC	5	-	5	
St. Joseph –Ifakara VTC	1	-	1	
Morogoro VETA Teachers Training College	1	-	1	
Curriculum Coordinator (MVTTC)				
VETA -Zonal Office (Eastern Zone)	1	-	1	
Total	19	3	22	

Source: Field Data, (2021)

**Table 4: Sampled Employers** 

Civil Companies Employers	Male	Female	Total	
TANROADs	1	1	2	
TBA	2	-	2	
Municipal Building Project (Mkundi	1	-	1	
Hospital)				
Udile construction company (Residential	1	-	1	
Building 3 storey)				
Alve Construction Company limited (12	1	-	1	
storey residential and commercial building at				
Masika)				
OBD construction Company limited (6	1	-	1	
storey residential and commercial building)				
Hari Sighn and Sons Company LTD	1	-	1	
Umoja Kilosa JV Road Construction	3	1	4	
Company				
Yapi Merkezi Company Kilosa Camp. (SGR)	4	-	4	3.3
Reynolds construction company (NIG.) LTD	3	-	3	Data
(RCC) (Ifakara				Data
Total	18	2	20	

Source: Field Data, (2021)

## **Collection Methods**

Data were collected through semi-structured interview and documentary review.

#### 3.3.1 Semi-Structured Interview

Semi-structured interviews were used, with 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 were no wording questions that could lead to predetermined responses, including supervisors and pilot study which was conducted at Mbeya RSVTC to 6 trainers and 9 civil construction employers 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 and employers about how they were involved in curriculum development. In this case, 22 trainers and 20 employers were carefully chosen and interviewed. 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. 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.

Additionally, interview was conducted to only those interviewees who agreed to take part in the research. Some of the respondent who participated in interviews but rejected voice recording the researcher was bided with note taking and those who accepted voice recording were recorded. The researcher also respected the wishes of those who agreed to participate but changed their minds during the process expressing that they were preoccupied with deadlines or their supervisors directed them to other duties thus the researcher went for them in the next day to complete the remaining part. Furthermore, no reward or incentives were given or promised to participants as noted by Creswell (2009) that the data collected does not need to be exchanged for a price as this deters or de-motivates the respondents to participate in a research study as offering incentives and gifts for seeking information is unethical and equivalent to bribing.

## 3.3.2 Documentary review

Documents including VETA curriculum of 2013 was reviewed to comply with how it states about stakeholder's involvement in curriculum development process at VET and their roles.

## 3.4 Data Analysis

In analysing who and how stakeholders were involved in competency -based training curriculum development, content analysis was used to analyse data where (i) Audio-recorded interviews were transcribed as verbatim to generate interview transcripts (ii) Then transcripts were read several times to make sense of the entire data set and note interesting phrases and concepts (iii) Codes were then assigned to specific meanings or themes in the textual data (iv) and new perspectives emerge, closely related codes were sorted and merged into themes. Descriptive statistics was used in indicating respondents' biographical information. With the help of MAXQDA2020 findings from respondents were interpreted inform of figures and quotations from employers were indicated within a Table for making summaries as evidenced by (Rädiker, & Kuckartz, 2020). After that maps were exported to the word document for presentation as seen in Figure 2 and Table 9 with quotations f for presentation. This analysis allowed the researcher to draw conclusions and formulate recommendations based on the data collected (Ndiaye & Kane, 2023). By examining the opinions expressed by trainers and employers we gained a better understanding Stakeholders' Synergy in Competency-Based Training for Vocational Education and Training for Carpentry and Masonry in Tanzania.

## 3.5 Validity and Reliability

To ensure that the instrument covered all of the required components content validity was employed 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 from Mbeya regional vocational training and service centre (RVTSC) and 9 employers from civil construction companies was conducted in the Mbeya region. Civil construction companies included Mbeya region hospital and Mbeya region commission offices (government supervision under Tanzania Buildings Agency (TBA), Tanzania Roads Construction Agency (TANROADs) and Milo Company Limited. In this case, the researchers used a semi-structured interview schedule that allowed them to probe for more clarification as their primary sources of data.

## 4.0 Findings and discussions

# 4.1 Descriptive statistic of respondents' characteristics

## a) Trainers Characteristics

Findings in Table 5 and 6 indicates the demographic characteristics of trainers' where a total number of 22 trainers who were purposively selected included 19 (86.36%) males and 3 (13.64%) females. Their education level ranged from certificate level to master's degree levels as 2(9%) pursued certificate level; 8(36%) pursued diploma level, 2(9%) pursued advanced diploma level, 7(32%) pursued bachelor degree level, 3(14%) pursued Master's Degree. Trainers working experience ranged from 2 to 32 years as, 7(31.82%) 0-4 years, 5(22.73%) 5-10 years, 5(22.73%) 11-15 years, 2(19.09%) 16-20years, 1(4.55%), 21-25 years, 1(4.55%) 26-30 years and 1(4.55%) 31-40 years. Education attained by trainers and work experience reveals that they were knowledgeable to know the synergy of stakeholders in curriculum development process at VET.

**Table 5: Gender and Education Level of Trainers** 

Gender and Education Level	Frequency	Percentage	
Gender			
Male	19	86.36	
Female	3	13.64	
TOTAL	22	100	
<b>Education Level</b>			
Certificate	2	9.09	
Diploma	8	36.36	
Advanced Diploma	2	9.09	
Bachelor degree	7	31.82	
Master's Degree	3	13.64	
TOTAL	22	100.00	

Source: Field Data, (2021)

**Table 6: Trainers' Training Experience** 

Work experience (Years)	Frequency	Percentage	
0-4	7	31.82	
5-10	5	22.73	
11-15	5	22.73	
16-20	2	9.09	
21-25	1	4.55	
26-30	1	4.55	
36-40	1	4.55	
TOTAL	22	100.00	

Source: Field Data, (2021)

# b) Employers Characteristics

The finding under Table 7 and 8 shows employer's characteristics based on gender, education attained by employers and work experience. Employers' education levels ranged from certificate level to master's degree as 5(25%) certificate, 2(10%) diploma, 11(55%) bachelor degree, 1(5%) postgraduate diploma and 1(5%) master's degree. On the side of gender were 18(80%) males and 2(10%) females. This implies that employers were elite they know what were supposed to be included in the curriculum. Work experience of employers ranged from 5(25%) 0-4 years, 6(30%) 5-10 years, 5(25%) 11-15 years and 4(20%) 16-20 years. This implies that majority of employers had adequate academic profession and work experience therefore, is likely to be concluded that they were aware with the stakeholders' synergy in curriculum development process as they have experienced changes in the labour market and implemented training to trainees through field attachment and internship.

**Table 7: Gender and Education Level of Employers** 

Gender and Education Level	Frequency	Percentage	
Gender			
Male	18	90	
Female	2	10	
TOTAL	20	100	
<b>Education level</b>			
Certificate	5	25	
Diploma	2	10	
Bachelor Degree	11	55	
Postgraduate Diploma	1	5	
Master's Degree	1	5	
TOTAL	20	100.00	

Source: Field Data, (2021)

**Table 8: Employers working Experience** 

Work experience (Years)	Frequency	Percentage	
0-4	5	25	
5-10	6	30	
11-15	5	25	
16-20	4	20	
TOTAL	20	100.00	

Source: Field Data, (2021)

## 4.2 Stakeholders' involvement in VET curriculum development

# 4.2.1 Trainers involvement in VET curriculum development

CBET approach is based on the philosophy that given appropriate instruction, time and conditions, almost all learners can and will learn most of what they are supposed to learn (NACTE, 2019). However, ability to learn and provide evidence that learning has taken place is just a fraction of the CBET success story because what is taught is the foundation of the outcome of the learning itself which is missing. This brings up the issue of key stakeholder involvement right from the beginning of curriculum design. Data shows that the learning content and the process of imparting competencies for carpentry and masonry artisans was developed in 2013 by VETA technical staff who is first line stakeholders (VETA, 2013). Interview data from programmes coordinators revealed that the process involved trainers, curriculum experts, and employers.

Trainers were the key stakeholders in curriculum development because they are the ones who deal directly with the action of imparting competencies to learners. It was found that some trainers were involved in curriculum development through reporting to training coordinators when they faced challenges on delivery of some modules or courses and suggested on what should be done to improve in order to achieve the learning objectives and outcomes. One trainer had this to say;

... Trainers are involved in curriculum development process at initial stage of collecting information from employers and learners and implementation stages because are the ones who know what is required to be taught and how to be taught to learners (Trainer 19 on 18/11/2021).

Similarly, another trainer indicated that,

...in preparing the curriculum VETA involved stakeholders from Universities, employers and other tertiary institutions experts who advised to embed competencies which will help our graduates to excel for further studies in higher learning institutions, for instance the curriculum we are applying now (VETA-Curriculum 2013) we were advised with university representative stakeholders to embed soft competencies to learners including communication skills subject and ICT so that they will help VET graduates to cope with further studies when join for NTA level four (Trainer 4 on 04/10/2021).

Although trainers would wish to improve the teaching and learning as soon as it is necessary, experience suggests that it may not be practical to be flexible enough to be able to match with constant emerging needs from the labour market because some level of stability in teaching and learning process is important, otherwise too frequent reviews will bring chaos. Sometimes lack of resources for serious review and even implementation of a revised or new curriculum becomes a serious challenge to most VETIs. This is one of the reasons why continuous learning after graduating from college through other learning options is paramount. This may explain why some trainers were not happy with the level of reactiveness in the process of taking actions on their suggestions as one trainer complained that;

...for almost three years consecutively, I have been sending my suggestions on changing arrangement of the syllabus in the module I am teaching but still then the syllabus had not changed. So, I doubt if real curriculum review management do consider trainers' inputs (Trainer 10 on 19/11/2021).

For some faith based VETIs it was claimed that the content of what learned was more based on the mission and vision of the founders of such institutions who were foreign Christian missionaries but the graduates were assessed based on VETA curriculum. Therefore, although the contents were designed by foreign VET authorities' trainers tried to improvise the contents during teaching to help pupils pass VETA exams. However, it was possible that their curriculum was better than that of VETA because of their level of development and application of science and technology. Indeed, VETA could have learned more from the faith based VETIs in the process of curriculum design, delivery and competence assessment than the other

way round. This state of affairs reflects the long-term influence of colonial dominance in education system as one interviewee made a case thus;

...the curriculum we use was adopted from Swiss missionaries and changes occurred to meet missionaries demand and when the government intervened changes were made basing on examinations set up which were done under VETA. Every year we used to look at what the examinations required and asked trainers to change contents in order to capture what was examined by VETA. Sometimes we learn from Dar es Salaam RVTSC" (VETA Chang'ombe) (Trainer 16 on 15/11/2021).

Thus, is likely to be concluded that education experts were dominated curriculum development process. The findings were different with the study of Kopweh (2014) who revealed that the curriculum applied in Tanzania was developed with trainers and education experts without considering inputs from other stakeholders. According to Kopweh (2014) the management of curriculum development process was authoritarian rather than participatory and thus the best use of other people's skills to arrive at more effective decisions was not made. Therefore, the difference between the current finding and Kopweh (2014) implies that in Tanzania curriculum of secondary education is dominated by the government while at VET is influenced by inputs from various stakeholders to meet labour market which is the best practice and is suggested to copied in all levels of education for improvement of learners' acquisition of competencies to meet labour market demands.

## 4.2.2 Stakeholders' Synergy on Competency-Based Training and Curriculum Development

The relationship between VETIs and other key stakeholders in curriculum development created using MAXDA2020 (a qualitative data analysis package) in Figure 2 below. Figure 2: A code sub-code Model The model shows all the sub codes under the main code (who are involved in curriculum development). The sub codes represent the various stakeholders who were involved in the curriculum development process including employers, trainers, curriculum specialists, education experts and missionaries. The figure shows stakeholders involved in the curriculum development process. The numbers in each sub code indicate a frequency. It is how many times a code was used to code data (coded segment(s)). The higher the number the higher the coding frequencies, and is a sign that in the article a number of respondents mentioned the idea coded. For instance, there were four respondents in this question and three respondents indicated that education experts were involved in curriculum development has highest coding frequencies. However, despite showing higher frequencies of education experts but involvement of other stakeholder particularly trainers, employers, and missionaries, were also indicated. This is because vocational education programmes are developed and shaped through interactive and synergistic fertilization of ideas, experiences, expertise and resources amongst key stakeholders. Labour market demand (represented by employers), government reforms (represented by VETA and VETIs) constitute the cooking pot in competence development for productive employment of the graduates.

Thus, is likely to be concluded that education experts and employers were dominated curriculum development process. The findings were different with the study of Kopweh (2014) who revealed that the curriculum applied in Tanzania was developed with trainers and education experts without considering inputs from other stakeholders. According to Kopweh (2014) the management of curriculum development process was authoritarian rather than participatory and thus the best use of other people's skills to arrive at more effective decisions was not made. Therefore, the difference between the current finding and Kopweh (2014) implies that in Tanzania curriculum of secondary education is dominated by the government while at VET is influenced by inputs from various stakeholders to meet labour market which is the best practice and is suggested to copied in all levels of education for improvement of learners' acquisition of competencies to meet labour market demands.

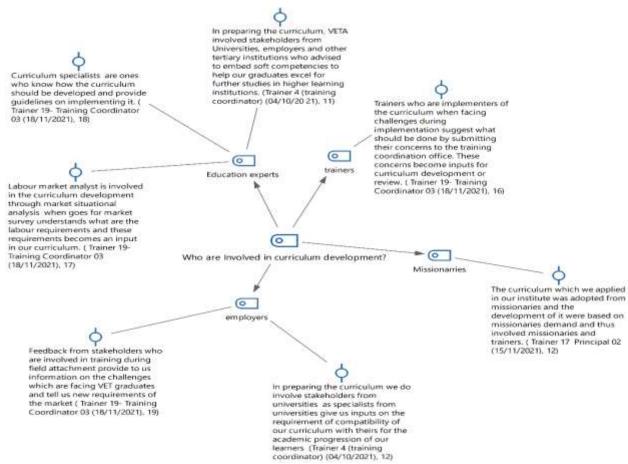


Figure 2: Code sub code model on trainers' opinion on stakeholders' involvement in curriculum development Source: Field Data, 2021

# 4.2.2 Employers opinions on involvement in VET curriculum development

The findings revealed that the role of employers in curriculum development was vivid. Some employers were appointed by VETA to review the existing curriculum or indirectly through participation in supervision and assessment of students during field attachment and internship. Through this involvement they were able to identify the competencies which were missing from their learners and report to VET supervisors who in turn take appropriate actions through the required level in VETIs. Other responses were;

...I was involved in assessing the curriculum of VETA on June 2021. I noted that the curriculum was good to meet labour market requirements for civil artisans. However, there were many modules taught at once. After assessment, the team advised VETA to reduce the learning package at all levels. In this regard we suggested some modules including auto-cards designing to be removed at National Vocational Awards (NVA) level 3 to be taught at National Technical Awards (NTA) level 6 (Employer 03 on 01/11/2021). When trainers come to assess their students during field attachment, they do ask us to give suggestions on what is required to be taught to their learners and equipment which are required to enhance learning particularly on machines operations (Employer, 10 on 11/11/2021).

The findings revealed that employers were involved in curriculum development either direct or indirect as it was identified by employers themselves. In this case is shows how employers were involved in the curriculum development either direct or indirect. The findings aligned with empirical studies including Mulder (2017) and Hébrard, (2013) who argue that VET programmes should start by identifying job descriptions through a labour market situational analysis process which includes employers and other

stakeholders from various organizations. Because employers are the key stakeholders who defines industry demanded competencies (Obwoge, 2016).

Also, Akyazi et al. (2020) noted that the evolution of competencies needed for employability starts in the work industry and its professional associations, which can be revealed by involving stakeholders, including employers, employees, and professional boards, to develop a relevant curriculum. Furthermore, involvement of employers in curriculum development was seen to strengthen the quality assurance systems because employers are arguably the primary experts on what competencies are most needed at the workplace (UNESCO, 2016). More responses on the extent to which employers were involved in curriculum design are summarized by MAXQDA2020 software and presented in Table 9.

# **Table 9:** Employers comments on their involvement in curriculum design

I can say yes because sometimes training institutions come to request inputs for improving their curriculum for instance Ardhi University came once to request on what and how machines were applied in construction sector as inputs for enhancing trainings at their institution \Employer 19 (Human Resource Officer) 13/11/2021: 28 - 28 (0)

To the moment I did not directly involve in the process of curriculum development may be indirectly if VETs consider feedback from field attachment reports and discussions during field supervisions. During this session trainers ask field supervisors on the challenges facing in supervising students and measures to be taken for improving training at their institutions \Employer 07 (Site Manager) 04/11/2021: 47 - 47 (0)

Yes, when trainers come to assess their learners during field attachment they do ask us on feedback on what is required to be taught to their learners and equipment which are required to facilitate learning. Employer 10 (Civil Engineer) 11/11/2021: 34 - 34 (0)

Not involved. Employer 05 (Site Manager) 02/11/2021: 11 - 11 (0)

To the moment not involved may be if VETs consider feedback from field attachment reports \Employer 06 (Site Manager) 04/11/2021: 37 - 37 (0)

To the moment I am not involved in any curriculum development process or review.  $\ensuremath{\backslash} \text{Employer 20}$  (Human Resource Officer) 16/11/2021: 27 - 27 (0)

We assisted VETA in evaluating the curriculum. The curriculum was good for meeting the labour requirements of civil artisans, but there were many modules taught at once, so the assessment team advised VETA to reduce the learning package at all levels. Where design modules must be removed from National vocational award (NVA) level 3 to National Technical Award (NTA) level 6. VETA was also advised to train their students on map reading through using computers, as it was not taught.\Employers 04 (Project Supervisor) 01/11/2021: 11 - 11 (0)

Source: Field Data 2021

Impliedly is that curriculum development involved key stakeholders including employers, trainers and curriculum experts but on the side of trainers they said their participation were not having direct influence as one trainers said for years we have been requesting on curriculum changes in our module to remove some units speaking punctuations in English and communication skills module as an example of the unit which is difficult to train and to be understood by learners but till now is existing in our current curriculum the trainer had fourteen (14) years work experience (Trainer 21 on 19/11/2021). The response was also revealed by another trainer who had 2 years work experience (Trainer 15 on 18.10.2021). This implies that trainers were involved in curriculum development but they were unsure with procedures which were applied in curriculum development of sending their concerns to training coordinators.

The finding was similar with documentary review as it was indicated that,

The basic aim of providing VET is to impart vocational skills to learners, which match with career opportunities as supplied by the labour market. In order to meet rapid technological and socioeconomic changes, VETA adopted competency-based curricula which are in a modular format and

individually. Collaboration with the labour market is seen to be of paramount importance because this collaboration guarantees a dynamic development and tailoring of vocational education and training in step with the rapidly changing qualification needs of trade and industry. The-paced with flexible entry and exit, skills and knowledge being broad-based to specialization (VETA, 2013: V).

Although, data shows that the government through its machinery developed the learning package and qualifications for not only entry into the learning process but also the number/quality of trainers and the training equipment and tools, that is not sufficient to make graduates competent. Developing a curriculum as were based on labour market demand, VET reforms, feedback from field attachment as employers informs VET institutions on the challenges they faced during work-based training (field practical) when learners were performing various activities at their companies and competencies which are demanded at work, these insights acted as inputs in developing the curriculum. Moreover, users of curriculum including trainers and learners when face challenges and report to the VET curriculum development department, the department accept their concerns become an input for curriculum development as per CBET requirements. Despite, the synergy of stakeholders in CBET at VET the system was found challenging to learners and as when they graduate one from public and another from private institution where curriculum development differs in involving stakeholders and criteria for development differs as it was reported by curriculum development officer that,

Despite the emphasis of CBET approach to involve different stakeholders in curriculum development at VET in Tanzania it is not working as expected due to some VET institutions particularly private institutions are not ready to involve stakeholders to shift from traditional approach to CBET because the curriculum which they apply are directed by establishers of those institutions such as missionaries (Trainer, 7 on 06/10/2021).

The findings were in line with the study of Njati (2015) who revealed that in Kenya curriculum were imported from other countries based on the demand of the establishers. For instance, in faith based polytechnic colleges curriculum was developed by missionaries. Despite the goodness of the curriculum but it lacked inputs from other stakeholders who are consumers of graduates as direct copying or transfer of curriculum from another jurisdiction as a means of addressing mobility and qualifications, without taking into account cultural and political differences, teaching traditions and provision of education, is not advisable (Koskei,2015). Also, Bareika et al. (2021) noted that, the main reason hindering synergy of stakeholders in CBET training process is one or several of the following: lack of interest or motivation to be involved; lack of time and/or financial motivation; lack of sufficient knowledge or experience in the curriculum development process. Additionally, Koskei (2015) revealed that curriculum development at first glance appear to be of chief concern to educators, governments and parents, and both have relevance and impact on the development of communities and prosperity. However, the curriculum development process in Kenya is exclusively done by subject panelists at KICD, limiting stakeholders' synergy under CBET approach. In this case the curriculum which is developed without involving stakeholders may have inputs which do not meet the demand of the society as synergy of stakeholders from various categories is not found.

## 6.0 Consensus of stakeholders on curriculum content

The findings revealed that there was a consensus on what should be taught at VET. This is because contents of the curriculum reflect agreements and suggestions from stakeholders in the curriculum development process. For instance, a former VETA training director, who had an experience of 40 years in VET and had worked in various positions including curriculum development department and participated in the curriculum development process which was released in 2013 as a secretariat member, expressed that:

The subjects identified in the curriculum were reached after consensus with stakeholders. For instance, employers from civil construction sector claimed that machine manuals which were used in their companies were not made in Tanzania they were written in foreign language and

indigenous employees failed to interpret. In this case, there was a need to add foreign languages as a subject. We reached a consensus that it was not just about foreign languages but English and communication skills in general. Thus, we included English language and communication skills in both courses; masonry and carpentry. This was done to help civil artisans understand machine manuals for day-to-day operations. Also, engineers revealed that reading estimations and simple calculation was challenging among employees. Therefore, Mathematics subject was seen crucial (Key informant 9, on 7/7/2023).

# Furthermore, the former VETA training director noted that:

The government and the community at large indicated that changes of labour market need rapid technology changes. Few opportunities for paid employment, increase of disasters, health awareness including HIV/AIDS were important to be enhanced and acquired at the learning process. Due to diversity of these demands, we reached a consensus to add soft competencies in the curriculum including life skills, computer application and entrepreneurship education to meet stakeholders' interests. The major reason for adding health awareness was to enhance learners' safety competencies (Key informant 9, on 7/7/2023).

In a similar vein, the training coordinator from Kihonda RVTSC with 18 years work experience noted that:

Members from universities advised VETA to embed soft skills to help our graduates excel for further studies in higher learning institutions either in similar or related courses. This is because VETA awards are connected with national awards certification of technical education from National Vocational Awards (NVA) to National Technical Awards (NTA) levels. This connection is likely to enhance acquisition of competencies for employability of civil artisans in various sectors (Key informant 1, on 4/10/2021).

These findings imply that there was a consensus on curriculum development inputs for enhancing learners' acquisition of employability competencies at VET to meet social and labour market needs. Explanations of the retired director concurred with the 2013 VETA Curriculum which identified subjects in masonry and carpentry courses. Subjects included in the curriculum were Practical (Core subjects), Theory (interpreting and defining the tools applied in the core subjects), Field Attachment, Mathematics, Technical Drawing, Engineering Science, Life Skills, Entrepreneurship Education, Computer Application, English Grammar and Communication Skills.

## Findings from mandated VETA Curriculum (2013) revealed that:

In both courses, subjects regarding knowledge, skills and attitudes were included in the curriculum content where practical studies aimed at enhancing learners to acquire professionalism, technical competencies to perform activities including managing small sites, repairing sites, constructing and fixing windows, doors; theories were imparted to enhance awareness of technical terminologies; field attachment were included to expose learners with working environment to translate what was leant with the real world of work and familiarize with different working culture and understand how to cooperate with workers from different backgrounds. Mathematics was taught to enhance ability to estimate ratios, statistics, equations, logarithm, Cubic's and heights of materials required in civil works (VETA, 2013a & 2013b).

Furthermore, it was noted that English and Communication Skills, Computer Application, and Entrepreneurship subjects were included in the curriculum to help learners gain employability skills:

English language and communication skills were included to enhance communication abilities including writing, speaking, listening reading and language skills particularly English language which was used for reading manuals, assessment and office communication. Computer application was taught to enhance introduction to computer application, Microsoft word office and internet utilization secluding emails. Entrepreneurship was included to enhance competencies of managing small businesses and getting into business (self- employment) (VETA, 2013a & 2013b).

From the findings from key informants implies that implies that there were synergy of stakeholders and consensus in curriculum development process as stated by stakeholder's and consensus theories that to reach organization goal there should be involvement and consensus of stakeholders who have interest and are affected or indirect by decisions made by group of individuals.

## 6.0 Conclusion

From the findings the synergy of stakeholders was observed on development that provided inputs for training and learning process. This was also identified in the stakeholders' and consensus theory which insisted on stakeholders' involvement and consensus in decision making for attaining organization goal. Thus, this article contributes to the theory that stakeholders particularly employers and trainers were involved in the curriculum development process through feedback on the challenges which they faced at implementation stages while the evaluation stage was done by government authorities. However, both employers and trainers were uncertain if their inputs were included in the curriculum. For the case of trainers, they indicated that they were required to submit their challenges to training coordinators and training coordinators were required to send them to curriculum development office. These bureaucratic procedures influenced trainers to create doubts on their comments if they reached as they commended or were lost somewhere. Also, employers were not sure if they were involved or not involved as they said VET collects feedback from them only during field practical of their learners but out of that they didn't know how the curriculum were developed. This is likely to be influencing VET graduate employees to lack some of the competencies required for the job. Despite trainers and employers' doubts on the synergy in CBET at VET the synergy was vivid observed from trainers and employers' opinions as indicated in Figure 2 and Table 9.

# 7.0 Limitation of the study

Out of 822 VETs functioning in Tanzania Mainland (URT, 2021), only four VETs were selected for the study based on two courses, including masonry and carpentry. Also, only 22 trainers from carpentry and masonry courses were selected out of 80 trainers who were training at the four selected VETs. Although the findings apply to a variety of contexts, extrapolating them to other VET programs would be perilous. As a result, additional research may be undertaken in other courses or broaden its scope to other disciplines. Additionally, only 20 employers were selected on the ongoing projects at Morogoro region while in other completed projects where the study did not cover employers could have knowledge or participated in curriculum development. Furthermore, the study did not collect data from employees and civil engineering boards to compare findings with those revealed from trainers to broaden stakeholders' synergy in curriculum development. Further studies may be undertaken to include stakeholders from civil engineering boards to broaden the scope of the current study.

## 8.0 Declaration

There is no conflict of interest

## 9.0 Acknowledgment(s)

The corresponding author acknowledges the Tanzania Institute of Accountancy as the article is part of PhD programme which is funded by the Tanzania Institute of Accountancy.

## References

Abas, M.C. and Imam, O. A. (2016). Graduates' competence on employability skills and job performance. International Journal of Evaluation and Research in Education (IJERE) 5(2), 119-125

Akyazi, T. et al. (2020). Skills needs of the civil engineering sector in the European Union countries: Current situation and future trends. Applied Sciences (Switzerland), 10(20), 1–24

Audu, R., Kamin, Y. and Saud, M. S. (2013). Acquisition of employability skills in Technical Vocational Education: necessity for the 21st century workforce. *Australian Journal of Basic and Applied Sciences*, 7(6), 9–14.

Bareika, N., Barun, A., Dauhiala, N., and Dauhiala, D. (2021). The role of external stakeholders in ensuring the quality

- of educational services of Polotsk state university. In SHS Web of Conferences (Vol. 97, p. 01021). EDP Sciences.
- Biemans, H. et al. (2004). Competence-based VET in the Netherlands: Background and pitfalls. *Journal of Vocational Education and Training*, *56*(4), 523–538.
- Boahin, P. and Boahin, P. (2015). Competency-based curriculum: A framework for bridging the gap in teaching, assessment and the world of work. *International Journal of Vocational Education Research*, 4(2), 1–15.
- Boyatzis, R (1982). The competent manager: A model for effective performance. New York. Wiley and Sons
- Brown, P. (2003). The Opportunity Trap: education and employment in a global economy. *European Educational Research Journal*, 2(1), 141–179. https://doi.org/10.2304/eerj.2003.2.1.4
- Clarke, D. and Palmer, L. (2011). Skills for Employability: The Role of Information & Communication Technologies. Nairobi, Kenya.
- Clarkson, M (1995). A stakeholder framework for analysing and evaluating corporate social performance: *Academy of Management Review* 20 (1) 92-117
- Cohen, S (1995). Stakeholder and consent: Business and Professional Ethics Journal 14 (1) 3-24
- COSTEC (2016). Research priorities for Tanzania 2015-2020. Dar es Salaam-Tanzania: Government Press.
- Creswell, J. (2009). Reseach Design: Qualitative, Quantitative, and Mixed-Methods Research (3<sup>rd</sup> ed.) Calfornia: SAGE Publications, Inc.
- Dobbo, T. L. (2018). Higher vocational education reform: matching skills to markets in China. *International Journal of Educational Studies*, 05(02), 79–89.
- Erjavec, J. (2021) 'Stakeholders in curriculum development case of Supply Chain and Logistics programme', in 7th International Conference on Higher Education Advances (HEAd'21). Valencia: University of Ljubljana, Slovenia, pp. 397–403. http://dx.doi.org/10.4995/HEAd21.2021.12875.
- Fagrell, P., Fahlgren, A. and Gunnarsson, S. (2020) 'Curriculum development and quality work in higher education in Sweden: The external stakeholder perspective', *Journal of Praxis in Higher Education*, 2(1), pp. 2–19.
- Freeman, R.E (1984) Strategic management. A stakeholder approach in R Lam (Ed.) Advances in strategic management. Greenwich JAI Press
- Gordon, D. A. (2013). *Employability and Social Class in the Graduate Labour Market*. Cardiff University (Doctoral Thesis).
- Habtamu, G. (2016). Towards competence-based technical-vocational education and training in Ethiopia. Wageningen University (Doctoral Thesis).
- ILO. (2016). Compilation of assessment studies on technical vocational education and training (TVET): Lao People's Democratic Republic, Mongolia, the Philippines, Thailand and Vietnam. ILO
- ILO. (2019a). Developing the construction industry for employment-intensive infrastructure investments. Geneva: ILO Employment Policy Department.
- ILO. (2019b). World Employment Social Outlook Trends 2019. Geneva: ILO Employment Policy Department
- ILO. (2020). Competency-Based Training (CBT): An Introductory Manual for Practitioners (1st, ed.). Geneva 22, Switzerland, ILO.
- ILO (2011) Skills for Employment: Increasing the employability of disadvantaged youth. Geneva. Available at: www.ilo.org/skills.
- Itika, J; Ridder, Ko and Tollenaar, A. (Eds) (2011) *Theories and stories in African Public Administration*. African Studies Centre. Leiden
- Knan, M.M.H (2022) Competency-Based Training and Assessment: A paradigm Shift in Bangladesh's TVET. Dhaka, Bangladesh. Axis Publishers
- Kikwasi, G. J., & Escalante, C. (2018). Role of the construction sector and key bottlenecks to supply response in Tanzania (No. 2018/131). WIDER Working Paper
- Kikwasi, G. J. (2011). An evaluation of construction skills in Tanzania. *Engineering, Construction and Architectural Management*, 18(2), 127–139.
- Kinash, S., Crane, L., Judd, M-M., Mitchell, K., McLean, M., Knight, C., Dowling, D., & Schulz, M. (2015). Supporting graduate employability from generalist disciplines through employer and private institution collaboration, report prepared for the Office for Learning and Teaching, Australian Government. http://graduateemployability.com
- Koobonye, S. (2020). TVET in Botswana: a case study on its ability to develop demand- driven and competence-based skills for the labour market. (Unpublished Master's Thesis) Ludwigsburg University of Education and Helwan University Cairo, Egypt.
- Kopweh, P. S. (2014). Curriculum development in Tanzania: An investigation of the formulation, management and

- implementation of the 2005 reform in selected disadvantaged districts. University of Glasgow (Doctoral Thesis). https://doi.org/10.1038/132817a0
- Koskei, K. K. (2015). Assessment of stakeholders' influence on curriculum development process in secondary schools in Kericho County. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 20(3), 79-87
- Mabala, S. (2019) Policy Brief: How to Reduce Youth Unemployment in Tanzania. Denmark.
- McClelland, D.C. (1973) 'Testing for Competence Rather Than for "Intelligence", *American Psychologist*, (January), p. 14.
- Ministry of Finance and Planning. (2021). National Five Year Development Plan 2021/22-2025/26: "Realizing Competitiveness and Industrialization for Human Development." In *The United Republic of Tanzania*. <a href="https://www.mof.go.tz">www.mof.go.tz</a>
- Mitchell, R;.B Angle, J & Wood, (1997) Towards a theory of stakeholder identification, silence: Defining the principle of whom and what reality counts: *Academy of Management Review* 22(4) 853-866.
- Mkonongwa, L. M., and Komba, S. C. (2017). Enhancing the quality of teaching and learning in Tanzania through improved English language teaching and educational management skills. *International Journal of Research Studies in Language Learning*, 7(2), 1–14.
- National Council of Technical Education (NACTE). (2019). *NACTE and the Quality in Technical Education: Handbook for monitoring the Quality in the Technical Institutions in Tanzania*. Dar es Salaam-Tanzania: Ministry of Education, Science and Technology
- National Council of Technical and Vocational Education and Training (NACTVET). (2022). Conference on Improving TVET quality and relevance for productive workforce in Tanzania 7th 8th June, 2022 at the NSSF building in Dodoma, Tanzania
- National Postsecondary Education Cooperative Project (NPEC). (2002). Defining and assessing learning: Exploring competency-based initiatives. *U.S. Department of Education, National Center for Education Statistics*.
- Ndiaye, S. A. R., and Kane, P. M. S. (2023). Collaborative Research at the Campus Franco Sénégalais: Challenges and Opportunities. *ASRIC Journal on Social Sciences and Humanities Vol* 4(2) (2023) 179-192.
- Neuman, W. L. (2014). Social research methods: qualitative and quantitative approaches (7th). Pearson education limited
- Ngure, S. W. (2013). Stakeholders' perception of technical, vocational education and training: the case of Kenya micro and small enterprises in the motor vehicle service and repair industry. *Cowan University (Doctoral Thesis)*.
- Njati, I. C. (2015). *Instructional needs and their use in Pre-service training in polytechnics in Isiolo, Meru, Embu and Machakos Counties*. Kenyatta University: Kenya (Doctoral Dissertation).
- Obwoge, M.E. (2016) 'Competency- based education and training: A fresh green leaf from the Australian context for TVET in Africa', *IRA International Journal of Education and Multidisciplinary Studies* . 3(3), pp. 1–9. doi:10.21013/jems.v3.n3.p23.
- OECD (2012) Better Skills, Better Jobs, Better Lives: The OECD Skills Strategy. doi:http://dx.doi.org/10.1787/9789264177338-en.
- Pang, E., Wong, M.U.,. Leung C. H and Coombes, J.(2019) 'Competencies for fresh graduates' success at work: Perspectives of employers', *Industry and Higher Education*, 33(1), 55–65, DOI: 10.1177/0950422218792333.
- Pavlova, M. (2019) 'Emerging environmental industries: impact on required skills and TVET systems', *International Journal of Training Research*, 17(1), pp. 144–158. doi:10.1080/14480220.2019.1639276.
- Rädiker, S., and Kuckartz, U. (2020). Focused Analysis of Qualitative Interviews with MAXQDA: Step by step (1st editio). MAXQDA Press
- Raihan, A. (2014). Collaboration between TVET institutions and industries in Bangladesh to enhance employability skills. *International Journal of Engineering and Technical Research (IJETR)*, 2(10), pp.50–55.
- Reed, D (1999) Stakeholder management theory: A critical perspective. Business ethics Quarterly. 3(8) 453-483
- Rutayuga, A. B. (2014). The emerging Tanzanian concept of competence: Conditions for successful implementation and future development. University of London (Doctoral Thesis).
- Spencer, L and Spencer, S (1993) *Competence at Work*: Models for Superior Performance. New York: John Wiley and Sons
- Tekle, A., Areaya, S., and Habtamu, G. (2024). Stakeholders' perceptions of occupational competency assessment and certification systems in Ethiopia's TVET programs. *Higher Education, Skills and Work-Based Learning*, 1–16. https://doi.org/10.1108/HESWBL-02-2024-0030
- Tondi, G.N. (2014) Analysis of Stakeholders' Views on the Quality of Education in Community Secondary in Moshi Rural District. Open University of Tanzania (Masters Dissertation)
- UNDP & URT. (2018). Tanzania Human Development Report 2017: Social policy in the context of economic

- transformation.
- UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. (2016). World TVET Database Tanzania. Bonn, Germany. unevoc@unesco.org
- URT. (2014) A report on the study on national skills development to facilitate Tanzania to become a strong and competitive economy by 2025. Dar es Salaam, Tanzania: Government Press
- URT. (2016). *National Five Year Development 'Nurturing Industrialization for Economic Transformation and Human Development.'* Dar es Salaam, Tanzania: Ministry of Planning and Finance
- URT. (2013). 'Vocational skills gaps in the Tanzanian oil and gas sector'. Dar es Salaam, Tanzania: VETA.
- URT. (2014). Education and Training Policy 2014. Dar es Salaam, Tanzania: Ministry of Education and Vocational Training
- URT. (2017). *Employment and labour relations Act.* (Patent No. 47). Ministry of labour, youth, employment and persons with disability. Dar es Salaam: Government Press
- URT. (2018). Education Sector Performance Report 2017/2018. Tanzania Mainland. Dar es Salaam, Tanzania: Government Press
- URT. (1999). The Tanzania Development Vision 2025. Dar es Salaam, Tanzania: Planning Commission.
- URT. (1996). *The technical education and training policy in Tanzania*. Dar es Salaam. Ministry of Science, Technology and Higher Education
- URT. (2021). TVET Indicators Report. Dodoma, Tanzania: Ministry of Education, Science and Technology.
- VETA (2020). Performance audit report on access to quality vocational education and training Development. Dar es Salaam, Tanzania: National Audit Office
- VETA- Tracer Study. (2019). Tracer study report for 2010-2015: Vocational education and training graduates. <a href="https://www.veta.go.tz">www.veta.go.tz</a>
- VETA. (2013a). Revised curriculum for carpentry and joinery. Dar es Salaam, Tanzania: Ministry of Education, Science and Technology.
- VETA. (2013b). Revised curriculum for masonry and bricklaying. Dar es Salaam, Tanzania: Ministry of Education, Science and Technology.
- WEF. (2014). Matching Skills and Labour Market Needs Building Social Partnerships for Better Skills and Better Jobs. Switzerland 22-25 January, Global Agenda Council on Employment
- WEF. (2019). Strategies for the new economy skills as the currency of the labour market. *World Economic Forum* (Issue January). Accessed on 15.10.2021 from <a href="https://www.weforum.org">www.weforum.org</a>
- World Bank (2014) Youth Employment in Sub-Saharan Africa Youth Employment. Washington DC: Africa Development forum