Competency Based Education and Training (CBET) on Students' Engagement in Learning Process at Tanzania Public Service College-Mbeya Campus

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Abstract

This study assessed the relationship between competence-based education and student's engagement in learning process in technical institutions in Tanzania, the case of Tanzania Public Service College-Mbeya Campus. A survey design was used employing quantitative and qualitative approaches. The sample size of 116 was involved with 113 students and 3 facilitators. Students were selected through stratified sampling and teachers through purposive sampling. Data were collected through semi-structured questionnaires, interviews and documentary review and analysed using content analysis and descriptive analysis such as percentages. The study revealed that there is a relationship between competence-based education and students' engagement in the learning process. The results also revealed that competency-based education increases students' engagement especially when the activating teaching methods were used. Based on the findings, it is recommended that the implementation of competency-based education and training should be emphasized for improved teaching and learning processes in the country as it enables the acquisition of skills, knowledge, values and abilities relevant to the workplace contexts. It is further recommended that classroom environments should be improved to allow effective utilization of competence-based training and activating methods in teaching and learning so that students can be properly engaged in their studies.

Keywords: Competency Based Education and Training, Student Engagement, Technical Institution, Classroom Environment.

1.0 Introduction

Competence-based education and training (CBET) originated in the United States in the 1960s and currently many countries throughout the world have introduced it and accommodated in their education system. In Tanzania, CBET was introduced in 2000 and its implementation in technical colleges started in 2002. CBET is expected to improve students' academic performance through student engagement as it emphasizes on developing competences in students through engaging themselves into different academic activities related to their studies. CBET can be defined as an education system based on outcomes and pre-determined standards on what students can do (Bielman's *et al*., 2008). Similarly, student's engagement in learning process refers to the extent to which students identify with and value schooling outcomes, and participate in academic and non-academic school activities.

Students' engagement usually comprises a psychological component pertaining to students' sense of belonging at school and acceptance of school values, and a behavioural component pertaining to participation in school activities (Goodenow, 1993). Similarly, other scholars define student engagement by considering the three dimensions, behavioural, cognitive, and affective (Chapman, 2002; Fredericks *et al*., 2004, 2016; Mandernach, 2015; Bond et al., 2020). Behavioural engagement refers to active responses to learning activities and is indicated by participation, persistence, and/or positive conduct. Cognitive engagement includes mental effort in learning activities and is indicated by deep learning, self-regulation, and understanding. Affective engagement is the emotional investment in learning activities and is indicated by positive reactions to the learning environment, peers, and teachers as well as a sense of belonging (Chapman, 2002; Fredericks *et al*., 2004, 2016; Mandernach, 2015; Bond et al., 2020).

Therefore, it can be argued from the foregoing observations that student's engagement only includes active participation of the students in their studies, but is also it concerns issues relating to deep learning, understanding, learning environment, and the influence of peers as well as teachers.

It is also emphasized that the main objective of any education system is to enable learners to acquire knowledge and skills which will make them competent and utilize such competence to transform their own lives and to contribute to the development of the nation (Mkonongwa, 2018). Empirical findings indicate that student's engagement can increase student's understanding when they are exposed to student centred learning processes and methods which produced students with the necessary skills and knowledge which can enable them to achieve higher academic achievement rather than teaching students with the traditional method, which is teacher centred, (Norazila, 2012; Katharina, 2016; Jayron and Mohamed, 2016). Through students centred learning approach students are expected to perform better when they get employed after completing their studies.

CBET emphasizes on the acquisition of skills and knowledge which are needed by the students and the labour market (employers). It is important to note that CBET also prepares learners to master their environment by using skills, attitudes, values, and knowledge gained through training. Most of the studies in relation to CBET analysed the impact of CBET training on students achievement and the challenges CBET faces in service delivery (Kimaro& Otieno, 2010; Oyugi, 2015; Komba & Mwandanji, 2015; Tambwe, 2017; Sand, 2018; Mkonongwa, 2018; Omariba, 2022). However, very few studies assessed the influence of CBET training on student's engagement. Therefore, this study examines the relationship between CBET and students' engagement in the learning process towards the improvement of academic performance. Specifically, this study will, first, determine the relationship between CBET and students' engagement in learning process, and, second, the influence of CBET on students' engagement in learning process.

2.0 Literature Review

2.1 Theory Guiding the Study

This study is guided by sociocultural theory which was propounded by the soviet Psychologist Lev Vygotsky (1978). According to this theory, knowledge is culturally constructed through interaction with materials as well as social interaction with peers and instructors (Shabani, 2016, Vygotsky, 1978). Therefore, as per this theory, it can be seen that student engagement is the association of different actors starting from the relationship between students and their instructors as well as their relationship with resources and other material things aimed at enabling students acquire necessary skills and knowledge needed in their field of study. This theory is seen as relevant to this study because it describes the interaction between different actors and their relationship in the teaching and learning processes. This also indicates that interaction is a key to the success of this processes. The theory also emphasizes the role of environment in students learning process by encouraging their involvement though the introduction of effective pedagogical practices in the learning process. Through this theory, teacher and students collaborate in learning and practicing four key skills which are summarizing, questioning, clarifying, and predicting. In addition, Vygotsky (1978) observes that student engagement is instrumental to the assumption of constructivism and the influence of individuals constructing knowledge together in activities that are purposeful, active, and collaborative.

Therefore, through Vygotsky' theory it is argued that learning can happen or can effectively and efficiently be practiced within the context of social interaction and with respect to student's culture. Similarly, it can be argued that students are social by nature and therefore they need to interact with one another and with their teachers in the classroom and outside the classroom. Hence, students' engagement is very critical and useful in the teaching and learning processes.

In his theory, Vygotsky's explain five principles or key concepts as follows:

i) ***Zone of Proximal Development (ZPD):*** According to Vygotsky, the Zone of Proximal Development refers to the "distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers." Therefore, it is argued that collaborative interactions can provide a room for a more skilled person, such as a teacher or a peer, to provide support that scaffolds learner's understanding and skills acquisition. It is true that interactions or student engagement is important for educational achievement and the acquisition of skills, knowledge, and abilities of the learner. This is what Briner (1999) refers to as 'More Knowledgeable Order' because it provides the room for learners with the ability to grasp or apply the idea but only with the support of those who are knowledgeable.

ii) ***Social Interaction*****:** The second principle emphasized the importance of social interactions in cognitive development. Vygotsky (*ibid*) believed that learning occurs through interactions with others, particularly more knowledgeable individuals. Language plays a central role in these interactions, as it enables communication, the transmission of knowledge, and the development of higher mental processes

(Vygotsky, 1978). It is emphasized that the interactions between learners and teachers with the required skills and knowledge is a key to student engagement hence improving learner's performance. It is also important to note that language is a key to student engagement, therefore mastery of the medium of instruction is a key not only to cognitive development but also to student engagement.

iii) ***Cultural Tools and Mediation:*** Vygotsky (Ibid) argues that cultural tools, including language, symbols, artefacts, and social practices, mediate learning and development. These tools are the products of a particular culture and are used by individuals to think, communicate, and solve problems. Through cultural tools, individuals internalize and construct knowledge, thus, transforming their cognitive processes. (Vygotsky, 1978).

iv) ***Scaffolding***: Scaffolding is any help, assistance, or support provided by a more competent individual (e.g., a teacher) to facilitate a learner's understanding and skill development. Scaffolding occurs by gradually adjusting the level of support according to the learner's needs, and transferring responsibility to the learner as their competence increases (Vygotsky, 1978). Therefore, in order for student engagement to be effective it is necessary to note that the use of knowledgeable and skilled teachers is very important, the issue is not only to engage learners in the learning process but also to expose them (learners) to competent individuals.

v) ***Private Speech and Self-Regulation:*** In his research, Vygotsky (ibid) noticed that young children often engage in private speech, talking to themselves as they carry out activities. The author believed that private speech is important in self-regulation and cognitive development. Further, over time, this 'private speech' becomes internalized and transforms into inner speech, which is used for self-guidance and problem-solving (Vygotsky, 1978).

2.2 Empirical Literature Review

Before discussing the relationship between Competence-Based Education and Training (CBET), there is a need to define the relevant concepts of CBET student's engagement and class environment. For instance, the term CBET has been defined as systems of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education (Mkonongwa, 2018). Elsewhere, Savage (1993) defines CBET as a functional approach to education as it emphasizes life skills and evaluates mastery on skills necessary for an individual to function proficiently in a given society.

Similarly, Sullivan (2005) considers competence as a set of skills, knowledge, and behaviours someone needs to have achieved in order to perform tasks or activities at school and in the world of work. In this study, CBET is defined as a system, which enables learners to acquire the necessary skills, knowledge, abilities and attitudes, which are needed by the labour market for them to perform effectively and efficiently. According to Sullivan (2005), CBET is a system of instruction, assessment, grading, and academic reporting that are based on students demonstrating that they have learned the knowledge and skills they are expected to learn as they progress through their education.

Another term is student's engagement, this is defined as student involvement, academic involvement, and involvement in school assignments. Student engagement is a measure of a student's level of interaction with others, plus the quantity of involvement in and the quality of effort directed toward activities that lead to persistence and completion. The term Student engagement is defined by Finn and Rock (1997) as the involvement and participation of students in school activities, student recognition with school, and student appreciation of the school. Student engagement has three dimensions where each dimension of engagement can be positive or negative depending on the form of student engagement. Both types of engagement are the engagement of active learners especially in learning, but are demonstrated in two different situations, positive engagement (as expected by teachers) and negative engagement (unexpected to be shown to the students (Ali & Hassan, 2014).

In this study, the definition provided by Trowler (2010) has been used. Trowler (*ibid*) defines student engagement as concerning with the interaction between time, effort, and other relevant resources invested by both students and their institutions intended to optimize the student experience and enhance the learning outcomes and development of students' performance and reputation of the institution. It is also argued that student engagement includes several components such as student feedback, student representation, student approaches to learning, institutional organization, learning spaces, architectural design and learning development (Trowler, 2010). It can also be concluded that students who are engaged in their academic studies are also said to have high academic achievement (Leonard, 2008; Friedricks, Blumenfeld &Paris, 2004).

In addition, Moore (1998) identifies distinct types of interaction arguing that these are very important and useful. These are learner-content, learner-learner and learner-instruction interaction. Learner-content is the type of interaction that results in conceptual changes in the learner's knowledge, understanding, perspectives, and cognitive structures. Learner-learner is the second form of interaction between and among learners and is often valuable for clarifying understandings, correcting misconceptions and extending learning. Group work also provides an opportunity for students to learn skills of communication, negotiation, collaboration and decision making which are vital to a high functioning workforce. The third type of interaction is between the learner and the content expert (i.e., instructor). As observed by Moore (1989), the frequency and intensity of the teacher's influence on learners when there is learner-teacher interaction is much greater than when there is only learner-content interaction.

The last term to be discussed is class environment. Classroom environment is a blend of the social, emotional and instructional elements of a class. Research shows that many aspects of a classroom environment can affect student motivation and students who are more motivated, put more effort into learning activities (Ambrose, 2010). It is argued that for students to learn, they must feel safe, engaged, connected and supported in their classrooms and schools or colleges. It is also argued that classroom environment could serve as a motivating factor to the academic performance of students. If the classroom is conducive and spacious, it could contribute to the effective teaching and learning, this could enhance effective teacher-student interaction hence improving student engagement. Similarly, a spacious classroom can easily support the interaction between the teacher and students as well as support the use of participatory teaching methods hence the use

of competence-based education and training approach. On the other hand, if a classroom environment is not conducive it could have negative impact on academic performance of students.

Empirical findings have proved a positive association between CBET and students' engagement, in other words, for CBET to be meaningful and to contribute to the desired outcomes it is important for the students to be engaged or participate actively in the teaching and learning processes (Goodenow, 1993; Chapman, 2002; Fredericks *et al*., 2004, 2016; Mandernach, 2015; Bond et al., 2020). CBET is an approach which contributes to the competence of the student after completing a certain level of education and mostly post-secondary education. CBET enables learners to be competent which means to have the necessary skills, abilities, attitudes and knowledge and thereby leading to good performance at the place of work. It is important to note that these skills, knowledge, abilities and attitudes can be acquired by students through engaging them in their studies making sure that they interact with one another and with their teachers. As indicated earlier, CBET is a human resource development approach which can be defined as education based on outcomes and pre-determined standards on what students can do (Biemans *et al,.*2004). As Brockman *et al*., (2008) argues, competence is multidimensional which means the capacity building targeted needs to be specified, which means study competence can either be knowledge based or skill based.

According to the U.S. Department of Education, the competence-based education approach allows students to advance based on their ability to master the skill or competence at their own pace regardless of the environment (Mitchell, 2017). It is also argued that education that is focused on what students can do, rather than what they can learn, is competence-based education (Tambwe 2017). Training to become a competence-based educator requires to study various teaching and learning theories that focus on learning outcomes with specific, measurable definitions of knowledge, skills and learner behaviour. Competencies are a set of skills, knowledge and behaviours someone needs to have achieved in order to perform certain tasks, jobs or activities in the world of work (Hager & Hyland, 2003).

Competence-based curriculum is a functional approach to education as it emphasizes life skills and evaluates mastery of skills, necessary for an individual to function proficiently in a given society (Savage, 1993). In addition, Mosha (2012) notes that a competence-based curriculum seeks to develop in learners the ability to know, to learn and to learn how to learn, to do things, and to learn and work with other people. It is equally important to note that Competence based and training is centred on communication between the instructors and the learners; instructors are required to make sure that they are being involved themselves in doing different academic activities and by doing so they are working together with their fellow students as well as their instructors or teachers. Therefore, it suffices to say that competence-based education and training (CBET) is an approach that emphasizes the development of skills or competences, which are actually required in the world of work and these skills or competencies are acquired through interactions.

Student engagement is also associated with students' centred learning whereby students and the teacher share the focus. Instead of listening to the teacher exclusively, students and teachers interact equally. Group work is encouraged, and students learn to collaborate and communicate with one another (Concordia University, 2010). This approach is

considered to include active learning, in which students solve problems, ask and answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class; cooperative learning, and inductive teaching and learning (Singh, 1996). Therefore, students engagement is related to competence-based education and training because both emphasize on the active participation of students in the teaching and learning processes through the use of activating or participatory teaching methods, CBET insists on the acquisition of skills, knowledge, attitudes, and abilities thought actively involving students, the major issue is to make sure that students are taking an active role in the teaching and learning processes.

CBET is seen as an effort to ensure that students are prepared for post-secondary life with the skills they need to be successful (Bral, Cunningham, 2016). We need to know that CBET is an outcome-based approach and what is important is for the students to be able to master the needed knowledge, attitudes, values, skills, and behaviours needed by that particular field under study and also these may be used by learners to adapt to their environment so that they can be able to employ themselves. .

Therefore, the empirical evidence on the relationship between CBET and students' engagement indicates that there is a relationship between the two. Some scholars show its relationship by considering factors such as interaction, motivation, classroom environment, and interest in what the students are studying (Goodenow, 1993; Chapman, 2002; Fredericks *et al*., 2004, 2016; Mandernach, 2015; Bond et al., 2020). Similarly, other scholars describe the relationship between CBET and students' engagement in the sense that CBET and students' engagement both emphasize on students learning approach whereby students and teachers share the focus and interact equally. Similarly, this depends very much on the teaching methods used. Under students learning approach, the methods emphasized include, group work where students learn to collaborate and communicate with one another (Concordia University, 2010). As Singh (1996) argues, students learning approach emphasizes active learning which involves solving problems, students asking and answering questions, formulating problems of their own, discussing, explaining, debating or brainstorming during class.

It suffices to say that there is a relationship between CBET and students' engagement, this is because in order for the students to be engaged effectively in their studies, CBET methodologies must be used. CBET emphasized on the use of participatory teaching methods hence achieving active participation of the students in their studies and students' engagement stressing on the involvement of the students in their studies to enable them acquire the necessary skills and knowledge and improving their academic performance. Both. CBET and students' engagement emphasize on students centred approach whereby students are seen as a key in the teaching and learning processes. Similarly, the use of participatory teaching methods as well as students' engagement is very important for CBET.

3.0 Methodology

This study employed a mixed method approach where both quantitative and qualitative data were collected. A survey semi-structured questionnaire was used to collect quantitative data from students and interview were used to collect qualitative data using facilitators who helped to analyse the relationship between CBET and students' engagement at TPSC Mbeya

campus. The interview and semi-structured questionnaire were used to collect primary data while critical review of documentary information related to the study was used to collect secondary data. The sample size for this study was 116 respondents (113 students and 3 facilitators) who were selected from the general population of students of TPSC Mbeya campus. In order to get these 113 respondents from the population the researcher used stratified sampling. First, the researcher divided the population of TPSC Mbeya into two strata, diploma and certificate students, then he used the simple random sampling to select 113 respondents. The three facilitators were purposively selected from among the facilitators of TPSC Mbeya, namely understanding and teaching experiences through CBET approach. The semi-structured questionnaire comprised 20 questions which had a set of variables which were assigned the corresponding ratings by the respondents by using a 4-point Likert scale which requires the respondents to rank each factor from a range of 1=not influential, 2=slightly influential, 3=fairly influential and to 4=very influential. Interviews were administered to obtain data from three facilitators who were purposively selected. Qualitative data were analysed by using content analysis. Quantitative data were sorted, organized, coded and edited. The data collected were analysed by using SPSS version 16 and this was used to produce frequencies for easy interpretation and analysis of the collected data. The researcher used tables to presents the analysed data.

4.0 Results and Discussion

4.1 Characteristics of the Respondents

This section presents the demographic data of 113 respondents who were selected for this study.

Table 1: Demographic Data of Respondents (N=113)

Variable	Values	Count	%
Gender	Male	49	42.2
	Female	67	57.8
Age	16-20 years	31	26.8
	20-30 years	71	61.2
	40-50 years	14	12
Marital status	Single	83	71.5
	Married	33	28.4
Level of education	Technician certificate	42	36.5
	Diploma	71	61
	Bachelor degree	01	0.8
	Master's degree	02	1.7

Source: Fieldwork 2023 (Researcher's computation using SPSS)

As indicated in table one, the total number of respondents was 116 and were classified based on their gender, age, marital status and level of education. Among the 116 respondents, 67 (57.8 per cent) were females and 49 (42.2 per cent) were males. As for age variable, the majority 71 (61.2 %) of the respondents belonged to the age group of 20-30 years, 31 (26.8 %) belonged to the age group of 16-20 years and 14 (12 %) were in the age group of 40-50 years. Th study results also indicated that the majority 83 (71.5 %) of the respondents were single and 33 (28.4 %) were married, most of the single respondents were at the age of between 20 and 30 years. The study showed further that 71 (61 %) of the respondents were pursuing diploma studies, 42 (36.5%) were at certificate level, 02 (1.7 %) had master's degree, and only 01 (0.8 %) had a bachelor degree. Those with bachelors and master's degrees were facilitators, therefore, there were 113 students and 3 facilitators participating in this study.

4.2 The Relationship between Competency Based Education and Student's Engagement

Results in table two show the relationship between competency-based education and students' engagement, and in showing this relationship several indicators were used and the responses of the respondents was shown.

Table 2: CBET Improves the Students Engagement

Sn	Indicators of student competency-based education and training	Not influential	Slightly influential	Fairly influential	Very influential
1.	CBET promotes participation/ interaction/involvement in different academic activities (group discussion, asking questions etc.)	7 (6.1)	7 (6.1)	10 (8.8)	89 (78.7)
2.	CBET promotes positive interaction with teachers/ facilitators	1 (0.9)	3 (2.7)	31 (27.4)	78 (69)
3.	CBET promotes positive interaction with peers	1 (0.9)	3 (2.7)	32 (28.3)	77 (68.1)
4.	CBET emphasized on the use of active learning classroom environment (classes with enough space for students to engage in different activities and teaching styles)	5 (4.4)	10 (8.8)	25 (22)	73 (64)
5.	Students are guided in their learning and control when and where they complete assignment and other related academic (self-regulation)	1 (0.9)	17 (15)	24 (21.2)	71 (62.8)

Sn	Indicators of student competency-based education and training	Not influential	Slightly influential	Fairly influential	Very influential
6.	CBET support self-assessment (filling self-assessment forms, log books etc.)	1 (0.9)	13 (11.5)	37 (32.7)	62 (54.9)
7.	CBET support reading books and other materials	2 (1.8)	58 (50.9)	18 (15.9)	35 (31)
8.	CBET is a self-motivation to learn	3 (2.7)	21 (18.6)	59 (52.2)	30 (26.5)
9.	CBET enables students to participate in an extra-curricular activity	16 (14.1)	32 (28.3)	39 (34.5)	26 (23)
10.	CBET promotes students' self-interest to learn	31 (27.4)	22 (19.4)	41(36.2)	19 (16.8)

Source: Fieldwork 2023 (Researcher's computation using SPSS)

Results in table two show that among the ten indicators being assessed participation in academic activities, positive interaction with facilitators, positive interaction with peers and classroom environment have greater impact on students' engagement. Results in table two indicate that the majority 89 (78.7 %) of respondents reported that CBET leads to improving student's engagement in their academic studies by taking an active role in the teaching and learning processes through group discussion, asking and answering questions in classes, which is influenced by the teaching methods used and which enable them to participate. The findings are in line with the findings in a previous study by Maher and MacAllister (2013) whereby it was concluded that students benefited from learning from one another in class through group discussions and presentations. In addition, course design and class environmental structure were found to be substantial factors in determining student access, engagement and success (Errey & Wood, 2011; Kift, Nelson & Clark, 2010). Participation also includes the use of participatory teaching methods which supports both teachers and students' participation.

In addition, this study also indicated that classroom environment has greater impact on students' engagement whereby 73 (64%) of the respondents supported that classroom environment is very influential. This finding is similar with the findings in a study by Young and Beyer (2017) who argue that the size of the class has a greater impact on student's engagement because students had difficulty in hearing their peers in the larger setting and were not effectively engaged because the number of students in a class is very big. Similarly, it was indicated that students preferred a smaller class environment which was noted to be more intimate and allowed for a stronger focus and comprehension of the content (Young *et al.,* 2017). In addition, a study by Cotner, *et al*., (2013) indicated that active learning classrooms facilitated more group interaction and placed less weight on the role of the instructor by enabling students to do most of the activities themselves and simplified the interaction among them.

This study has also shown that positive interaction between facilitators or a teacher and students as well as the interaction among students had a greater impact on student's engagement hence increasing their academic performance. Among the respondents who filled the questionnaires, 78 (69 %) indicated that interaction between the facilitators/ teachers and the students is very influential, equally, 77 (68.1%) mentioned the interaction among the peers is very important and influential on student engagement. The findings in this study coincide with the findings of a study by Cotner *et al*., 2013) who revealed that classrooms are designed to encourage interaction and facilitate active or team based collaborative learning by including features such as round tables, movable chairs, student laptop connections for sharing work on overhead projectors and tableside whiteboards. By having this structure in the classrooms, interaction among students and between teachers and students is simplified. Also, it was revealed that support and encouragement from teachers are also important for students to actively engage themselves (Smith, Ito, Gruenewald & Yeh, 2010). In another study Cotner *et al.* (2013) concluded that students who were assigned to an active learning classrooms performed better than those who were assigned to traditional classrooms. A study by Miller (2008) also revealed that classrooms should be designed such that they provide opportunities for students to engage in discussion about what they are learning, relate the content to personal experience and apply new information to their lives.

During the interview, on explaining how CBET contributed to the student's engagement at TPSC Mbeya campus, one respondent reported, that

> *In my understanding, CBET has a positive relationship with students' engagement because it increases students' engagement in studies, enabling them to acquire the required skills, values, knowledge, and attitudes. which are needed in their field of specialization hence improving performance….similarly, CBET is about interaction and interaction is about communication therefore, through interaction and communication students will be able to achieve their learning objectives….as well as improving their relationship with their facilitators and fellow students but this can be achieved if the design of the classrooms supported that (F1).*

Another respondent stressed,

> *CBET is about engagement, if there is no engagement then there is no CBET…and CBET emphasized on active participation of the students and the use of what we call participatory teaching methods or approaches and these methods ensures that students are taking an active role in the teaching- learning processes and there is an interaction between teachers and students (F2).*

These two respondents above emphasized on the interaction among the students and between students as very important and that the use of participatory methods in teaching is very pertinent. It is also argued that CBET and students' engagement are very closely related through actively involving the students in the learning process and helping them to acquire the skills, knowledge, attitudes, and abilities. Therefore, one may argue that in order for CBET to be effective and efficiency it is very important to engage students hence the use of participatory teaching methods.

The study by Miller (2009) supported the arguments above by emphasizing that good classroom gave more supportive environment with greater and more immediate access to the instructor or facilitator and their peers hence facilitate the teaching and learning processes. This will increase student participation and stronger relationships with students and it was also reported that students seemed more likely to establish friendships with their peers and therefore help others (Miller, 2009). Therefore, it was unanimously agreed by tresearchers that students learn better when they can engage with one another as they learn new concepts (Young, K., Young, C. &Beyer, A., 2017). In discussing the completion of assignments as one of the aspects of students-based competence education and training hence contributing to students' engagement, 71 (62.8%) agreed that completion of assignments is very influential. Similar findings are reported in a study by Lauria *et al.,* 2012; Gerber *et al.*, 2012; and Huei, 2014, who revealed that a number of completed assignments, tests and other academic works can show that students have been engaged in their academic activities because this is one of the measurements of student's engagement. Therefore, this study argues that student's engagement can be measured by the completion and submission of coursework or continuous assessment assignments.

In discussing the influence of competence-based education and training on student's engagement, three respondents agreed that one cannot talk about students' engagement without associating it with CBET. CBET emphasizing interaction between teachers and students therefore, for students' engagement to take place one needs to have a good interaction between the two. Similar findings are reported in other studies (i.e., Goodenow, 1993; Chapman, 2002; Fredericks *et al*., 2004, 2016; Mandernach, 2015; Bond et al., 2020). These scholars agreed that competence-based education and training has a close relationship with students' engagement, for students to be engaged effectively. In addition, these respondents were asked to give their views on the factors affecting student's engagement and cited the relationship among peers, interaction between teachers and peers and the school environment. Similar findings are reported in a study by Ally and Hassan (2018) which concluded that three major factors affecting student's engagement are family, peer, and school factors. They emphasized that those three factors can significantly affect students' engagement because students expect to get support from the school and parents for them to engage effectively.

The study findings revealed that reading books and other materials (35 or 31%), motivation (30 or 26.5 %), participating in an extra-curricular activity (26 or 23%) and interest (19 or 16.8 %) had no impact on students' engagement but these factors are very critical as far as students' engagement is concerned. Therefore, it was revealed that the aforementioned factors were identified as not very important or not influential on student's engagement. However, these findings are in contrast to the findings in a study by Mallillin *et al.* (2020) which show that student's engagement is related to motivation and interests of the students on what they are learning. As argued by Mallillin *et al.* (2020), if students have interest and are motivated on what they are studying then they (students) are likely to be influenced in actively engaging in their studies hence improving their performance. This finding is also is supported by findings in a study by Ambrose (2010) which indicated that if students are motivated then their performance is likely to be improved .

5.0 Conclusion and Policy Implications

This study was set to answer two research questions: What is the relationship between competence-based education and student's engagement in learning process? And, does competence-based education increases students' engagement in learning process? As for the first question, the findings revealed a relationship between CBET and students' engagement in learning process. This relationship can be seen through the indicators analysed in this study whereby the majority of the respondents agreed that they were very influential. Similarly, it was revealed by this study that CBET increases student's engagement and this can be seen through the use of participatory teaching methods which are normally used in CBET and these methods require students to be engaged in the teaching and learning processes. In this study, ten indicators were assessed, and among them, six indicators were seen as very influential on student's engagement and these were participation, positive interaction with teachers, and positive interaction with peers, classroom environment, completing assignments and other academic activities and self-assessment. Therefore, this paper revealed that there is a need for facilitators and the management of training institutions to take these aspects into consideration because they affect the learning process.

In regard to the thesis of this paper, the following recommendations are made: First, the use of CBET methods in teaching and learning processes should be emphasized because by doing that we can improve student's engagement hence increasing academic performance, getting competent graduates who will later on improve the national economy. Second, the classroom environment should be improved because it has a lot of impact on student's engagement. This can be done through providing the required resources to the training institutions which can support the effective and efficient student's engagement by adopting students' centred learning approach and leaving aside traditional approach. Third, the use of activating methods in teaching and learning should be emphasized so that students can properly be engaged in their studies.

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