

Trainees' Perception on the CBET Curriculum in Kenya: The Case of TVET Institutions in Coast Region

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Abstract

A considerable number of Technical and Vocational Education and Training (TVET) trainees released for the market are characterized by incompetence as they cannot exhibit behavior commensurate with the aspects of learning acquired at their different levels. Additionally, results from Southern Africa Consortium of Monitoring Educational Quality (SACMEQ-III) show that Kenya's basic education system is failing to produce graduates with skills and competencies that satisfy the needs of a participatory society and the knowledge economy. Using this situation as a rationale, this study sought to find the reasons behind incompetence of trainees and the challenges faced by trainers in implementing competency-based programs in TVET institutions in Coast region. Three public TVET institutions in Coast region were considered in this study. To achieve this purpose, the following research questions were adopted, 'what is the trainers understanding of the concept and objectives of Competence Based education and Training (CBET) curriculum?', 'how do trainer's involve students in classroom activities?', 'to what extent are the training institutions, trainers and their trainees attached to industries and other business sectors?', 'are teaching/learning materials and equipment available for the training of CBET?', and 'what is the perception of trainees towards CBET curriculum?'. Descriptive research method was employed to collect information from respondents. The target population was 870 and the sample size was 136; comprising of 22 trainers', 94 trainees, 3 principals, 3 Industrial Liaison Officers, and 18 Heads of Department. Purposive sampling was used to select the TVET institutions and stratified random sampling was used to select the respondents. All the Principals, Heads of Department and Industrial Liaison Officers were used in the study as their population was not large. Instruments of data collection involved Questionnaires, Interview guides and observations checklist. Data from completed instruments were coded and analyzed using SPSS. Frequency tables, Percentages and chi square were used to analyze the data. The study found that trainers had good understanding of the concept and objectives of CBET Curriculum. Based on these findings it is recommended that, the government should support TVET institutions in hiring of more qualified trainers and technical support staff; stakeholders, that is, parents, industries, government and donors should contribute to providing adequate training equipment that are technologically modern in order to equip the training workshops. Further, government should use different options like tax reduction, rewarding and providing incentives to participating companies to motivate industry owners and micro and small enterprises to cooperate fully with TVET institutions to support training.

Keywords: CBET Curriculum, TVET institutions, Competencies, Performance, Technical and Vocational Education and Training

INTRODUCTION

Education is key to the economic development of both developed and developing countries. Most especially: sustainable economic development, environmental protection, social and political development of a nation directly or indirectly depends on education (MGIEP/UNESCO, 2014). Competency Based Education and Training (CBET) approaches are aimed towards knowledge transfer and high order thinking. Thus, the future success of individuals, enterprises, communities and nations increasingly depend on the existence and possession of transferable and renewable skills and knowledge. This can be realized when competency-based TVET curriculum is effectively implemented (NICHE, 2010).

Technical and Vocational Education and Training (TVET) is an education program which is mainly designed for learners to acquire practical skills, know-how, and understanding necessary for employment in a particular occupation, trade or a group of occupations (Anindo, Mugambi, & Matula, 2016). The most important feature of TVET is its orientation towards the world of work, with the curriculum emphasizing the acquisition of employable skills. This means that TVET will promote skill acquisition through competency-based training for the world of work. Thus, competency-based curriculum is derived from employment opportunities that exist for the graduates. Graduates from CBET curriculum will either be employed in different public and private business sectors or they will be self-employed.

Currently, the government of Kenya has made major milestones by reorganizing the management of TVET by putting in place the CBET approach (Ondiek, 2016). In this approach, formation of various bodies with specific functions has been put in place to ensure its effective implementation. These bodies include; Curriculum Development, Assessment and Certification Council (CDACC), the Kenya National Qualifications Authority (KNQA), Technical and Vocational Education and Training Authority (TVETA) and Sector Skills Advisory Committees (SSAC's) (MOE, 2016). Therefore, since CBET curriculum design and implementation is a complex, challenging and demanding task, it becomes necessary to investigate the challenges faced alongside its implementation.

Whereas introduction of CBET Curriculum represents a positive step in moving Kenya towards achieving the goals of Vision 2030 thus raising education standards, challenges in Kenya have to do with effective implementation since its adoption (Kigwilu, Akala, & Wambua, 2016). The necessary improvements in quality of education especially student's achievement require effective implementation of Competency-Based Curriculum. The researcher therefore undertook to find the challenges in the implementation of CBC in TVET institutions in Kenya. The general objective of the study was to investigate the trainees' perception on the CBET curriculum in Kenya: The Case of TVET Institutions in Coast Region.

METHODOLOGY

This study was conducted in technical institutions in Coast region of Kenya. The Coast region covers the following counties; Mombasa, Taita Taveta, Kwale, Kilifi, Tana River and Lamu. The study involved the Kenya Coast National Polytechnic, Dodoma Technical Training Institute and Coast Institute of Technology respectively.

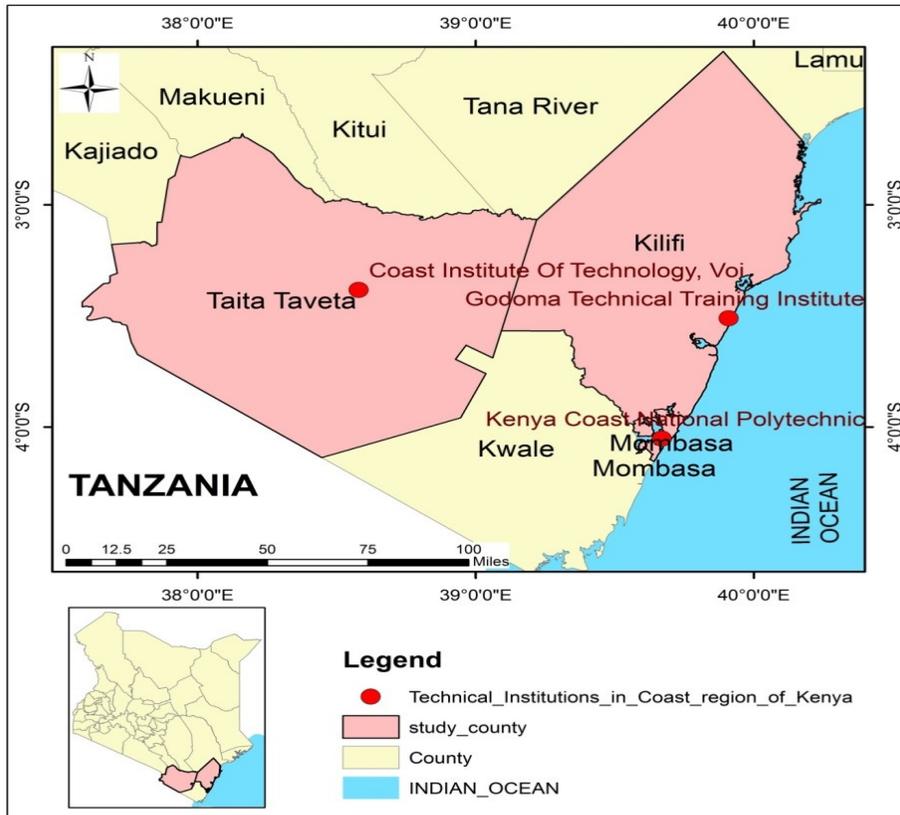


Figure 1: A map of the Kenya Coast Region (study area) showing various counties and boundaries

Source (Author, 2020)

Descriptive study sets out to collect, organize and summarize information about the matter being studied (Punch, 2016). Descriptive research is concerned with how, what is or what exists as related to some preceding event that has influenced or affected a present condition or event (Cohen et al., 2005). This is in line with the study objective as it sought to determine the trainees' perception on the CBET curriculum in Kenya. The Coast Region of Kenya to be covered in this study has Six (6) public technical training institutions. The study population targeted Principals, Heads of Department (HODs), Industrial Liaison Officers (ILOs), trainers and trainees (2nd and 3rd years only) of only three counties namely; Mombasa county, Kilifi county and Taita Taveta county.

Table 1: Distribution of Target Population

Target population	Total
Trainers of Technical institutions	220
Trainees	626
Principals	3
HODs	18
ILOs	3
Grand Total	870

The sampling methods used in this study were random sampling, purposive sampling and stratified sampling methods. Stratified sampling was selected because the population was heterogeneous and in addition, stratified sampling results in more reliable and detailed information (Kothari, 2004).

Purposive sampling method was used to select three (3) TVET public institutions out of the six (6) institutions in Coast region. Other three were purposively omitted for the following reasons; Taveta Technical Training Institute received its first batch of first years during May 2018 intake. A.S. Mwidani and Weru technical training had only first years.

After stratifying the target population into different sub-groups, random sampling was used to select respondents from each sub-group in the target population. This improved representativeness by reducing sampling error. Stratified random sampling technique was used to select respondents from trainers and trainees of technical institutions in each of the three institutions purposively selected. All Principals, ILOs, and HODs were used in the study since their target population was not large.

Table 2: Distribution of Sample size

	Target Population	Procedure	Sample size
Trainers of Technical institutions	220	10%	22
Trainees	626	15%	94
Principals	3	100%	3
HODs	18	100%	18
ILOs	3	100%	3
Total	870	100%	140

Primary instruments of data collection were self-developed questionnaire and interview schedule that were used to gather qualitative and quantitative data on views, opinions and perceptions of the respondents regarding CBET curriculum.

Quantitative data was analyzed through descriptive statistics while qualitative data was organized thematically. Qualitative data was categorized into themes and patterns in relation to the objective of the study. Data was coded into descriptive codes and analyzed using non-numeric techniques. The Statistical Package for Social Sciences (SPSS) version 23.0 was used to analyze data with the aid of a computer (Jambwa, 2003).

RESULTS AND DISCUSSION

Instrument response rate

The target population of this study comprised of 220 trainers, 626 trainees, 3 principals, 18 HODs and 3 ILOs from TVET institutions. Out of the sampled population there were 20 responses from trainers out of the 22 questionnaires given out, 94 responses from the 94 sampled trainees, 3 responses from the 3 sampled principals, 16 responses from HOD's out of the 18 questionnaire given out and 3 responses from the 3 sampled ILOs.

Demographic information of the Respondents

Majority (94.7%) of the trainees who participated in the study were of male gender while female represented 2.6% with a significant difference ($\chi^2= 88.36$, d.f.=1, P-Value = 0.0000). This shows that there was a great gender disparity among the trainees. The gap in the gender distribution could be attributed to the fact that TVET was designed to offer mostly Science, Technical, Engineering and Mathematics (STEM) related courses, which according to Dasgupta and Stout (2014) and UNESCO (2019), women in STEM were underrepresented. The course or department distribution shows that all of the respondents were from STEM related courses (Dasgupta & stout, 2014). The findings further show majority (94.7%) of the students in the study were aged between 21-30 years while the rest (2.1%) were under the age of 20 years with a significant difference ($\chi^2= 171.14$, d.f.=2, P-Value = 0.0000). This shows that the bulk of enrolled students for TVET were young and at an age where they could make independent decisions concerning their career path. Although TVET institutions accept students of all ages above 18 years, majority of entrants to these institutions were students who had just finished secondary school education. These findings are in agreement with GoK (2012) report which indicated that subsidized secondary education resulted in a large number of KCSE graduates joining TVET institutions.

Male represented 70% of the trainers with only 30% being female with a significant difference ($\chi^2= 15.00$, d.f.=1, P-Value = 0.0001). Additionally, education distribution indicated that most trainers (70%) had a first degree and above. Majority of these trainers were aged 31 years and above representing a total sample of 75%, which indicated they had enough experience to develop their careers. The distribution regarding area of specialization shows that 10% of the lecturers sampled were specialized in Automotive/Mechanical, 20% Electrical/electronics, 15% in Building and civil, 15% in Hospitality, 25% in Business, 15% in other areas with no significant difference ($\chi^2= 8.0$, d.f.=5, P-Value = 0.1562). These findings indicate that just like was the case for trainees, majority of the trainers was male. Hence, much emphasis should be placed in encouraging females to participate in the male dominated engineering field and more specifically STEM related courses. The data also shows that the trainers had initial educational training to handle trainees' in their respective areas of specialization. Two male and one female principal participated in the study.

Trainers understanding of the concept and objectives of CBET Curriculum

The responses indicating perceived degree of understanding of CBET curriculum were set. They were indicated by, 'strongly disagree', 'disagree', 'undecided', 'agree', and 'strongly agree'. Arbitrary scoring weights of 1, 2, 3, 4, and 5 were used for strongly disagree, disagree, undecided, agree and strongly agree respectively for statements favoring a point of view representing the concept and objectives of CBET.

Majority (55.0%) of the respondents agreed with the statement that CBET Curriculum is the set of characteristics which enable performance with a significant difference ($\chi^2 = 90.0$, d.f.=4, P = 0.0000) from those who strongly agreed (25.5%), disagreed (10.0%) as well as those who strongly disagreed (5.0%) as portrayed in table 1. As far as whether CBET curriculum is a cluster of skills consisting of cognitive, affective and psychomotor skills skillfully weaved together into a whole, majority strongly agreed (50.0%) followed closely by those who agreed (40.0%) while a significantly lower proportion (10.0%) were undecided ($\chi^2 = 26.0$, d.f.=2, P = 0.0000).

Out of 20 (100.0%) respondents interviewed, majority (65%) indicated that they agreed with the statement that professional competence is the generic and internalized capability to deliver sustainable effective performance in a certain task situation, with a significant different ($\chi^2 = 54.5$, d.f.=2, P = 0.0000) from those who strongly agreed (30%) and undecided (5%) as portrayed in table 1. Majority (50.0%) were undecided with statement that CBET curriculum objective focuses on present and future jobs of learners ($\chi^2 = 66.0$, d.f.=4, P = 0.0000) while majority pointed out that it addresses the ever changing market demands, satisfies both local and global demands of workplace (50.0%), promotes lifelong learning (50.0%) as well as focuses on teachers' effectiveness in the use of interactive, participatory teaching and learning techniques (55.0%) with a significant difference as portrayed in table 1.

Table 1: Trainers understanding of the concept and objectives CBET Curriculum (N= 20)

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Total	Chi squares
(a) Concept of Competence							$\chi^2 = 90.0$ d.f.=4
Is the set of characteristics which enable performance	5	0	5	55	25	10	p = 0.0000
Is a cluster of skills consisting of cognitive, affective and psychomotor skills skillfully weaved together into a whole			10	40	50	10	$\chi^2 = 26.0$ d.f.=2 p = 0.0000
Professional competence is the generic and internalized capability to deliver sustainable effective performance in a certain task situation			5	65	30	10	$\chi^2 = 54.5$ d.f.=2 p = 0.0000
(b) Objectives of Competency-Based Curriculum							
To focus both on present and future jobs of learners, to address the ever changing market demands	5	5	50	40		10	$\chi^2 = 66.0$ d.f.=3 p = 0.0000
To satisfy both local and global demands of workplace	5	1	5	50	25	10	$\chi^2 = 70.0$ d.f.=4 p = 0.0000
To promote lifelong learning	5	5	25	50	15	10	$\chi^2 = 70.0$ d.f.=4 p = 0.0000
To focus on teachers' effectiveness in the use of interactive, participatory teaching and learning techniques		1	0	55	25	10	$\chi^2 = 54.0$ d.f.=3 p = 0.0000

Further, the results in table 1 indicates that, all the items presented to the respondents both in section (a) and in section (b), were responded with majority either agreed or strongly agreed. This is a clear indication that trainers had an understanding of both the concept and objectives of CBET curriculum.

Involvement of trainees in classroom activities

To examine trainees' involvement in classroom activities, the researcher examined the questionnaire responses pertaining to activities during classroom, both for theory and practical instruction. Majority (39.4%) of the respondents were undecided followed by those who agreed (30.9%) that teaching learning activities were interactive while 2.1% disagreed with the statement with a significant difference ($\chi^2 = 50.10$, d.f.=4, P-Value = 0.0000). Regarding whether learners were allowed to demonstrate their competencies during learning, majority (36.2%) agreed with this statement followed by those who were undecided (25.5%), strongly agreed (21.3%) while few (7.4%) disagreed with the statement with a significant difference ($\chi^2 = 28.1$, d.f.=4, P-Value = 0.0001). Majority (43.6%) of the respondents strongly agreed that trainers asked learners questions and respected learners ideas while a significantly lower proportion (1.1%) of the respondents strongly disagreed ($\chi^2 = 38.76$, d.f.=4, P-Value = 0.0001). Majority (34.0%) of the respondents agreed that trainers provided collaborative tasks for students to do in class followed by those who were undecided and strongly agreed with equal representation (27.7%) respectively while least (4.3%) disagreed with a significant difference ($\chi^2 = 69.7$, d.f.=4, P-Value = 0.0001).

In regard with whether learners interacted with trainers, majority (46.8%) of the respondents strongly agreed followed by those who agreed (28.7%) while a significantly lower proportion of the respondents strongly disagreed ($\chi^2 = 4.69$, d.f.=4, P-Value = 0.0001). Above twenty-six percent (26.6%) of the respondents were undecided on the statement that trainers direct questions to specific learners and distribute turns in class with insignificant difference ($\chi^2 = 4.69$, d.f.=4, P-Value = 0.3200) from those who strongly agreed, undecided, agreed as well as those who strongly agreed with the statement. Majority (39.4%) of the respondents agreed with the statement that trainers encouraged students' questions and engagement during learning process with statistically significant lower percentage (6.4%) strongly disagreeing with the statement ($\chi^2 = 49.2$, d.f.=4, P-Value = 0.0000).

Trainers invited learners to make demonstrations on the chalk board/ black board as majority (30.9%) of the respondents agree with the statements with a significant difference from those who strongly disagreed ($\chi^2 = 28.12$, d.f.=4, P-Value = 0.0000). Majority of the respondent pointed out that they agreed (37.2%) with the statement that trainers provided constructive feedback to learners in the learning process with significantly lower proportion (1.1%) strongly disagreeing ($\chi^2 = 44.0$, d.f.=4, P-Value = 0.0000).

In regard to whether technicians involved trainees in preparing for the lessons in advance, there was no significant difference ($\chi^2 = 3.50$, d.f.=4, P-Value = 0.4773) in those who strongly disagreed (19.1%), disagreed (14.9%), undecided (22.3%), agreed (25.5%) as well as those who strongly agreed (18.1%). There was no significant difference on the views pertaining to whether trainers demonstrated the practical before allowing learners to do the same ($\chi^2 = 8.10$, d.f.=4, P-Value = 0.0877). Respondents had unequally different views pertaining to whether learners were provided with worksheet/ guidelines and allowed to demonstrate thus there was no significant difference in their views ($\chi^2 = 10.09$, d.f.=4, P-Value = 0.0389) as portrayed in the table 2 while all respondent had equal views on the statement that immediate feedback was provided by trainers on performance after each practice ($\chi^2 = 5.20$, d.f.=4, P-Value = 0.2669). Results from the table further indicate that, a greater proportion of respondents either agreed or strongly agreed with items in section (a) than the proportion of

respondents who either agreed or strongly agreed in section (b). This can be attributed to the fact that there is more involvement of trainees in classroom activities during theory lessons than during practical lessons.

Table 2: Involvement of trainees in classroom activities (N= 94)

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Total	Chi squares
(a) Activities during classroom instruction – Theory lessons							
Teaching learning activities are interactive	6.4	2.1	39.4	30.9	21.3	10	$\chi^2 = 50.10$ d.f.=4 p = 0.0001
Are learners allowed to demonstrate their competencies during learning	9.6	7.4	25.5	36.2	21.3	10	$\chi^2 = 28.1$ d.f.=4 p = 0.0001
Do trainers ask learners questions and respect learners ideas	1.1	3.2	22.3	29.8	43.6	10	$\chi^2 = 66.5$ d.f.=4 p = 0.0001
Do trainers provide collaborative tasks for student to do in classroom	6.4	4.3	27.7	34	27.7	10	$\chi^2 = 38.76$ d.f.=4 p = 0.0001
Do learners interact with trainers in class	2.1	4.3	18.1	28.7	46.8	10	$\chi^2 = 69.7$ d.f.=4 p = 0.0001
Do trainers direct questions to specific learners and distribute turns in class	18.1	16	26.6	23.4	16	10	$\chi^2 = 4.69$ d.f.=4 p = 0.3200
Do trainers encourage student questions and engagement during learning process	6.4	8.5	10.6	39.4	35.1	10	$\chi^2 = 49.2$ d.f.=4 p = 0.0001
Do trainers invite learners to make demonstrations on the chalkboard/blackboard	6.4	8.5	24.5	30.9	29.8	10	$\chi^2 = 28.12$ d.f.=4 p = 0.0000
Do trainers provide constructive feedback to learners in the learning process	1.1	8.5	23.4	37.2	29.8	10	$\chi^2 = 44.0$ d.f.=4 p = 0.0000
(b) Activities during classroom instruction – Practical lessons							
Do technicians/teachers involve trainees in preparing for the lessons in advance	19.1	14.	22.3	25.5	18.1	10	$\chi^2 = 3.5036$ d.f.=4 p = 0.4773
Do trainers demonstrate the practical's before allowing learners to do the same	20.2	13.	13.8	23.4	28.7	10	$\chi^2 = 8.10$ d.f.=4 p = 0.0877
Are learners provided with worksheets/guidelines and allowed to demonstrate	20.2	11.	16	30.9	21.3	10	$\chi^2 = 10.09$ d.f.=4 p = 0.0389
Is immediate feedback provided by trainers on performance after each practice	20.2	11.	25.5	22.3	20.2	10	$\chi^2 = 5.20$ d.f.=4 p = 0.2669

Trainees' perception of CBET curriculum

This part of the study was intended to assess whether the trainees have positive or negative perceptions of CBET program. Majority (43.6%) of the respondents agreed with the statement that CBET curriculum was practical in nature while a lower significantly different proportion (6.4%) indicated that they strongly disagreed ($\chi^2 = 47.59$, d.f.=4, P-Value = 0.0000). As per whether CBET curriculum improves employment, majority (44.7%) agreed with significance different from those who did not as summarized in table 3. As far as trainers' perceptions of CBET curriculum was of concern, majority of the respondents strongly disagreed with the statements that; courses were easy and people can do them without study (64.9%), is suitable for poor academic achievers (31.9%), is for those who have no other alternatives (56.4%), affects creativity and logical thinking of trainees (30.9%) as well as is a matter of wasting time and money (77.7%) with a significant different as portrayed in table 3.

Majority (36.2%) of the respondents disagreed with the statement that CBET curriculum is less valuable compared to the previous TVET training with a significant difference ($\chi^2 = 34.86$, d.f.=4, P-Value = 0.0000) as majority (27.7%) were undecided on the statement that CBET curriculum is inferior to academic (content based) education with a significant difference ($\chi^2 = 12.65$, d.f.=4, P-Value = 0.0131).

Majority of the respondents agreed with statements that; CBET curriculum can help students acquire better work ethics (54.3%), offers skills that are of high quality (50.0%), develops positive attitude of trainees towards work (62.8%), provides bright future for trainees (52.1%), is useful to the individual and society (54.3%), is attracting and interesting (57.4%), develops self confidence among the trainees (46.8%), curriculum helps the trainees to cope up with the rapidly changing world (45.7%), is based on reality of work place (56.4%), can alleviate unemployment problem (47.9%), can play a role in reducing poverty (61.7%), enables trainees to be self-employed (44.7%) as well as it provides skills that trainees need in their life after school (45.7%) with a significant difference as indicated in table 3.

Out of the 22 items presented, majority of respondents either agreed or strongly agreed in 15 statements, disagreed or strongly disagreed in 6 statements and were undecided (27.7%) in 1 (one) statement, "Curriculum is inferior to academic (content based) education." This indicates that there is a positive perception of respondents towards CBET curriculum. Even though the majority of items were positively perceived, the negatively perceived items were important because they coincide with some negative public perceptions in some developing countries.

Table 5: Trainees perceptions of CBET curriculum (N= 94)

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Total	Chi squares
Is practical in nature	6.4	19.1	7.4	43.6	23.4	100	$\chi^2 = 47.59$ d.f.=4 P = 0.0000
Improves employment	4.3	12.8	12.8	44.7	25.5	100	$\chi^2 = 50.69$ d.f.=4 P = 0.0000
Courses are easy and people can do them without study	64.9	27.7	2.1	2.1	3.2	100	$\chi^2 = 151.3$ d.f.=4 P = 0.0000
Can help students acquire better work ethics	5.3	2.1	5.3	54.3	33	100	$\chi^2 = 104.95$ d.f.=4 P = 0.0000
Is less valuable compared to the previous TVET training	29.8	36.2	12.8	18.1	3.2	100	$\chi^2 = 34.86$ d.f.=4 P = 0.0000
Offers skills that are of high quality	8.5	3.2	9.6	50	28.7	100	$\chi^2 = 74.55$ d.f.=4 P = 0.0000
Develops positive attitude of trainees towards work	4.3	1.1	3.2	62.8	28.7	100	$\chi^2 = 141.65$ d.f.=4 P = 0.0000
Provides bright future for trainees	4.3	1.1	9.6	52.1	33	100	$\chi^2 = 95.40$ d.f.=4 P = 0.0000
Is useful to the individual and society	2.1	3.2	3.2	54.3	37.2	100	$\chi^2 = 117.35$ d.f.=4 P = 0.0000
Curriculum is inferior to academic (content based) education	22.3	26.6	27.7	13.8	9.6	100	$\chi^2 = 12.65$ d.f.=4 P = 0.0131
Is suitable for poor academic achievers	31.9	13.8	14.9	29.8	9.6	100	$\chi^2 = 20.25$ d.f.=4 P = 0.0004
Is for those who have no other alternatives	56.4	25.5	6.4	9.6	2.1	100	$\chi^2 = 97.6$ d.f.=4 P = 0.0000
Is attracting and interesting	4.3	6.4	8.5	57.4	23.4	100	$\chi^2 = 97.55$ d.f.=4 P = 0.0000
Affects creativity and logical thinking of trainees	30.9	24.5	8.5	25.5	10.6	100	$\chi^2 = 19.2$ d.f.=4 P = 0.0007
Develops self confidence among the trainees	2.1	5.3	4.3	46.8	41.5	100	$\chi^2 = 100.9$ d.f.=4 P = 0.0000
Curriculum helps the trainees to cope up with the rapidly changing world	5.3	4.3	3.2	45.7	41.5	100	$\chi^2 = 96.5$ d.f.=4 P = 0.0000
Is based on reality of work place	5.3	10.6	3.2	56.4	24.5	100	$\chi^2 = 95.8$

								d.f.=4 P = 0.0000 $\chi^2 = 54.1$
Can alleviate unemployment problem	7.4	11.7	11.7	47.9	21.3	100		d.f.=4 P = 0.0000 $\chi^2 = 125.1$
Can play a role in reducing poverty	2.1	1.1	12.8	61.7	22.3	100		d.f.=4 P = 0.0000 $\chi^2 = 108.8$
Enables trainees to be self employed	1.1	3.2	5.3	44.7	45.7	100		d.f.=4 P = 0.0000 $\chi^2 = 108.8$
Provides skills that trainees need in their life after school	1.1	5.3	3.2	45.7	44.7	100		d.f.=4 P = 0.0000 $\chi^2 = 153.686$
Is a matter of wasting time and money	77.7	14.9	6.4	1.1		100		d.f.=3 P = 0.0000

The impact of trainee's perception on training program was supported by Wesselink (2010), who stated that student perception can influence the nature and quality of teaching-learning process. In general trainees' perception of the meaningful learning environment can determine the learning results and in the same way, the negative perception of trainees may have negative impact on the learning results, hence affect implementation of CBET curriculum and consequently, affect trainees' competencies. Thus, even though majority of the items were viewed positively as shown in the table 3, trainees' negative perception about CBET program, as reflected by their responses to the 6 (six) items in the questionnaire in table 3, can have a negative impact on their competencies.

CONCLUSION

This study sought to investigate trainees' perception on CBET curriculum in Kenya. From the findings of the study, the researcher arrived at the following conclusions: Majority of the trainers have an understanding of concept and the objectives of CBET curriculum in the institutions under investigation. On trainees' involvement in classroom activities the findings show that, during classroom instruction trainers were biased towards theory than practical's. This is against the basic principles of CBET that both training and assessment is based on what the learner can demonstrate than what he knows (ILO, 2012). The bias towards theory indicates that trainees were not adequately involved in practical lessons and hence were not sure of their competencies. This further shows that they would not be competent to work in the industry in their areas of training. On perception, findings of this study revealed majority of trainees have a positive perception towards CBET curriculum whereas a significant minority of trainees had a negative perception towards CBET curriculum. The negative perception could be attributed to the low involvement of trainees in practical lessons; and the low involvement of trainees in practical lessons as seen from results in Table 3 indicating that learners felt incompetent to match the industry demands.

RECOMMENDATIONS

Based on the major findings and the conclusion made, the following recommendations were made:

- The Ministry, relevant government agencies and TVET institution officials should strictly follow and supervise the actual implementation of competency-based strategies to ensure the basic tenets of competency-based curriculum are followed during training. TVET trainers on the other hand should involve learners more during practical lessons to ensure competencies were embedded in their trainees. This would give learners confidence to demonstrate the same in the world of work.
- The government should support TVET institutions by hiring adequate trained trainers and qualified technical support staff to curb inadequacies currently therein. The technical support staff would assist trainers especially during practical lessons.
- Trainee's perception was revealed to be positive towards CBC in the study. However, some important misconceptions which have impact on the implementation of CBET curriculum were reflected by trainees. Thus, government and concerned bodies should use media for awareness creation, the role CBET curriculum play in poverty and unemployment reduction, philosophical foundations of education for self-reliance to counter the common accepted notion of education for employment. Wrong perception about TVET exists both in developing and developed countries. Countries like China solved the problem of the image of the society by opening TVET universities; South Korea and India have increased the permeability from TVET to higher education (Ratnata, 2013).

REFERENCES

- Anindo, J., Mugambi, M. M., & Matula, P. D. (2016). Training Equipment and Acquisition of Employable Skills by Trainees in Public TVET and Training Institutions in Nairobi County, Kenya. *International Journal of Advanced Research in Education and Technology, IJARET.*, Vol 3(4).
- Cohen, L., Manion, L., & Morrison, K. (2005). *Research Methods in Education, 5th Ed.* London: Taylor and Francis.
- Dasgupta, N., & stout, J. (2014). Girls and Women in Science, Technology, Engineering and Mathematics: STEMing the tide and Broadening Participation in STEM careers. *Policy Insights from the Behavioral and Brain Sciences* (pp. Vol I(1) 21-29). London: Sage.
- GoK. (2012). *Sessional Paper No 14, Reforming Education and Training sectors in Kenya.* Nairobi: Government printers.
- ILO. (2012). *Implementing Competence Based Training (CBT).* Bangladesh: ILO.
- Jambwa, M. M. (2003). Data processing, Analysis, and Dissemination. *Expert Group Meeting to Review the Draft Handbook on Designing of Household Sample Surveys*, 3-5.
- Kigwilu, P. C., Akala, W. J., & Wambua, J. M. (2016). Challenges Facing the Effective Implementation of Artisan and Craft Courses in Catholic Sponsored Community Colleges in Nairobi, Kenya. *IOSR Journal of Research & Method in Education Vol 6 (2).*
- Kothari, C. R. (2004). *Research Methodology, 2nd Ed.* New Delhi: New Age.
- MGIEP/UNESCO. (2014). *Education for Peace and Sustainable Development- Concepts, Clarity and Cohesion.* New Delhi: UNESCO.
- MOE. (2016, July 3). *Ministry of Education.* Retrieved from www.education.go.ke: http://www.education.go.ke/index.php/downloads/file/110-the-technical-and-vocational-education-and-training-act-2013
- NICHE. (2010). *NICHE Strategy on Technical and Vocational Education and Training (TVET).* Nuffic: NICHE.
- Ondiek, M. M. (2016). Implementation of CBET approach in TVET Institutions: Opportunities and Challenges. *ICAO Course Developers and Instructors Standardization Meetings.* Nairobi: TVET CDACC.
- Punch, K. F. (2016). *Developing Effective Research Proposals 3rd Ed.* London: Sage.
- Ratnata, W. I. (2013). Enhancing the image and attractiveness of TVET. *Indonesia University of Education. www.tvet-online.asia, Vol I(1).*

- UNESCO. (2019, July 18). *UNESCO.Org*. Retrieved from Girls' and Womens' education in Science, Technology, Engineering and Mathematics (STEM).: <http://en.unesco.org/themes/education-and-gender-equality/stem>
- Wesselink, R. (2010). *Comprehensive Competence Based Vocational Education. The development and use of a curriculum analysis and improvement model*. Wageningen: Wageningen University.