

Challenges Affecting The Implementation Of Technical Curriculum In Public Tvet Institutions In Kenya: A Case Of Nandi And Uasin Gishu Counties

Kemei Kennedy¹, Simon Wanami¹, Bonaventure. W. Kerre¹

¹University of Eldoret, Kenya

Corresponding Author: Kemei Kennedy

Abstract: Education is a medium through which the social values and norms of the learners are transmitted through the formal schooling system. Formal education is a vital instrument for attaining technological progress and economic growth judging by the experience of industrialized nations. Investing in education is a potent means that could be explored to fast-track technological progress, economic growth and boosting citizens' capacities. The main purpose of the study was to investigate the challenges that affected the implementation of the technical curriculum of TVET programs in TVET institutions. This was to improve on the quality of the programs offered in the TVET institutions thus making the graduates marketable and in tandem with the industrial needs. This research adopted a descriptive research design. The study targeted all technical teachers and graduating students of public technical training institutions in Uasin-Gishu and Nandi County. The study sampled 136 technical teachers and 276 technical students from two technical institutions in Uasin-Gishu and Nandi Counties. Questionnaires were content and face validated and reliability was determined using Cronbach's alpha. Data from the questionnaires were analyzed using descriptive statistics. The study established that student's poor reading culture, student's peer group, learners' irregular attendance to class, lecturers' competence among other factors, had a high influence on the implementation of the technical curriculum. The study recommends that the lectures should be competence in their area of specialty and that the students should have regular attendance to classes. It was recommended that a further research needs to be carried out to establish how the stakeholders who are the major beneficiaries can participate effectively in the implementation of TVET programs.

Key Words: Technical curriculum, TVET institutions, quality, TVET programs, formal schooling system

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I. Introduction

Education as asserted by Fillux(1993), is a medium through which the social values and norms of the learners are transmitted through the formal schooling system. Onyesom (2013) identified formal education as a vital instrument for attaining technological progress and economic growth judging by the experience of industrialized nations. As viewed from the policy perspective, investing in education is a potent means that could be explored to fast-track technological progress, economic growth and boosting citizens' capacities (Orodho, 2002).

TVET is used as a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences, and the acquisition of practical skill, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (UNESCO, 2002). TVET, in this respect, is designed to equip the people with not only vocational and technical skills, but also with broad range of practical skills, attitude and knowledge that are imperative in the work place and life (A, 1996).

The goals of technical and vocational education and training in Kenya is to develop an effectively coordinated and harmonized TVET system that is capable of producing quality skilled human resource, with the right attitude and values as required for growth and prosperity of the various sectors of the economy (Mureithi, 2008).

Technical training institutions, like any other TVET institutions, are faced with many challenges in their endeavor to train quality graduates (Werum, 2003). One of the uniqueness of this study is that the current TVET curriculum is more of euro-centric in the sense that it was adopted from the colonialists (Abebe, 2012). The stakeholders and the policy makers have not been able to modify it to suit the current Kenyan education system. The reviewed studies do not explicitly interrogate the determinants of effective implementation of the quality TVET programs and the challenges affecting the implementation process. Thus this paper looked at the

school based factors that affect the implementation of the TVET curriculum in TVET institution in Uasin Gishu and Nandi Counties.

II. Literature Review

Learning and teaching strategies

Out of the TVET teachers interviewed on the study conducted by Indoshi (2010), only 38% had acquired industrial work experience of only six months or less, 26% had work experience of between 12-36 months and 16% had work experience of over 36 months.

Moreover, the finding of the study conducted by Werum, (2003), showed that two thirds (67%) of the TVET lecturers were more comfortable teaching theory than practical. He concluded that teaching experience enables trainees to gain hands-on experience. The lecturers' preference to teaching theoretical content and practical aspects of the curriculum will affect the achievement of quality TVET programs.

Teaching experience of the TVET teachers

Ferej et al (2012) established that the majority of the TVET teachers had inadequate work experience. The study examined the challenges of quality and relevance in TVET teacher education in Kenya and had 150 respondents from TVET institutions in different towns in Kenya with relatively high numbers of TVET institutions. The respondents included policy makers, TVET administrators, TVET teachers and TVET trainees. Out of the TVET teachers interviewed, 38 % had acquired industrial work experience of only six months or less, 26 % had work experience of between 12 - 36 months and 16 % had work experience of over 36 months. Adequate initial work experience and updating enables the TVET teachers to apply appropriate work context to her/his students.

Teacher's motivation

In a study conducted by Abebe (2012), on the implications of teachers self-perception as adult and professional on their practices and professional development at Rift Valley University College in Ethiopia, the study showed that TVET teachers' perception negatively influence their motivation to teach and their attitudes towards their profession. In addition, the TVET teachers exhibited low motivation and morale for engaging in learning and professional development and cited such extrinsic factors as level of pay and benefits as contributing to their dissatisfaction in the work place (Sava, 2001). The study concluded that TVET teachers' low motivation to learn affected negatively their overall performance in the TVET institutions (Dasmani, 2011). The findings of the study reflect the experiences of the teachers in a different geographical location different from the settings in Uasin Gishu and Nandi region in Kenya.

In Kenya, Abebe (2012), argued that lack of motivation among teachers and low ratings of technical institution in TVET are some of barriers to implement of ESD. This was a result of a study investigating how model youth polytechnics in Kenya were implementing the Education for Sustainable Development (ESD).

Students participation in co-curricular Activities

The purpose and importance of the co-curriculum activities in complementing the teaching and learning strategies cannot be gainsaid (Fullan, 2001). Researchers have showed positive correlation between school outcomes and the student's participation in co-curriculum activities. For example, Mureithi, (2008) showed that 80% of the students show participation in the co-curriculum activities and also showed good academic performance in the annual examination. Students who participated heavily in the co-curriculum activities tend to model students and do not get involved in crime (Gewer, 2009).

Similarly, Ng'ethe, (2010) in his study showed that students' active participation in co-curriculum activities enhance their competences in the areas tested, which included cognitive, communication, academic and managing self. Moreover, studies have showed positive relation between students' academic performance and participation in co-curriculum activities (Dasmani, 2011).

Qualification of Technical teachers

An analysis of the challenge facing the implementation of technical college curriculum in south west Nigeria found that 65.83% of the instructors were professionals qualified to teach in Technical College (Olatoye, 2011). The study sought to investigate whether or not the instructors and teachers were professionals qualified to TVET in Technical colleges. On the contrary, UNESCO (2003) showed that private TVET institutions faced a shortage of qualified lecturers in Zambia. Out of the 159 teaching staff survey, only 36% had a teaching certificate. In the Kenyan scenario, a similar research showed that 37% of the TVET teachers in Kenya possessed Diploma and 33% possessed degree, about 20% held a certificate and 10% had master's degree as their highest qualification. The findings established that TVET teachers and instructors had the required minimum requirements to teach in TVET programs (UNESCO, 2003).

III. Methodology

The research adopted a descriptive research design. The descriptive design is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. The study targeted all technical teachers and graduating students in engineering departments of public technical training institutions in UasinGishu and Nandi County. Currently there were 200 technical teachers and 1000 technical students in both institutions.

Purposive (Stratified and convenience) sampling was used to sample the accessible population to participate in the study. To carry out the research questionnaires were used. The questionnaires were filled by both teachers and students. Data collected was analysed using descriptive statistics methods, especially the measures of central tendency. Data collected through the questionnaires was analysed according to emerging patterns or opinions derived through statistics using Statistical program for Social Science (SPSS).

IV. Findings

School based factors affecting quality of TVET programs

School based factors affecting quality of TVET programs

The study sought to evaluate to what extent the school based factors act as challenges in quality of the curriculum implementation. School based factors were operationalized in two; student factors and teacher's factors.

Student factors affecting quality of TVET programs

The results of student factors are as shown below; student's poor reading culture was seen to be the major challenge in quality of the curriculum implementation. This was highly preferred factor with a mean of 3.37. Students' peer group influence was ranked the second most challenge in the implementation of the curriculum with a mean of 3.23. Student's practice of examination malpractice and student's irregular attendance to class were ranked third and fourth respectively. Student's interest in learning was ranked fifth with a mean of 3.01. Student's parental background had a mean of 3.00 and was ranked sixth. Student's disobediences to school regulation and rules such as lateness to school was ranked seventh with a mean of 2.99. Lack of required learning material such as text books was ranked the least with a mean of 2.4. The skewness value for the student factors was -.347 indicating a negative distribution of values to the left. The kurtosis value for the same was -0.915 which indicates that the values are wider spread around the mean.

Table 1: Descriptive analysis of student factors on quality of TVET programs

			Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
N = 136								
students	interest	in	2.00	4.00	3.0074	.50912	.013	.964
students	low	entry	2.00	3.00	2.7426	.43879	-1.122	-.751
students	qualification	for TVET programmes						
students	poor	reading	3.00	4.00	3.3676	.48395	.555	-1.717
students	lack of	required	1.00	4.00	2.3676	.99487	-.016	-1.105
students	learning	materials						
students	parental	background	2.00	4.00	3.0000	.70972	.000	-.992
students	peer	group	2.00	4.00	3.2279	.84298	-.454	-1.446
students	influence							
students	self	confidence	2.00	4.00	2.8750	.60170	.055	-.280
students	practice	examination malpractice	2.00	4.00	3.1250	.60170	-.055	-.280
students	disobediences	to school regulation	1.00	5.00	2.9853	1.13520	-.002	-.299
students	irregular	attendance to class	3.00	4.00	3.1250	.33194	2.293	3.307
Composite	student factors'	values	25.00	34.00	29.82	2.91	-.347	-.915

Source: Survey data, 2017

The findings of Gewer, (2009) and Hargreaves, (2001) are in agreement with the results of this study that student's disobediences to school regulation and rules, student's interest in learning affects curriculum implementation and lack of required learning material are impediments in the realization of quality implementation of TVET programs.

Teacher factors affecting quality of TVET programs

The study also sought to evaluate the teacher’s factors that act as challenges in quality of the curriculum implementation. Lecturer’s competence was the major factor that affects TVET programs. It was ranked the first with a mean of 3.87. Teaching methods employed by the teachers was the second most factor affecting quality of TVET programs with a mean of 3.84. Lecturer’s syllabus coverage was ranked third with a mean of 3.79. Lecturer’s punctuality to class had a mean of 3.73; appropriateness of the teaching methods used by the lecturers had a mean of 3.71. Teachers interest to teach had a mean of 3.70 and research attitude of teachers was ranked 8th with a mean of 3.67. Availability of reading materials or equipment had a mean of 3.66, preparation of lesson by teachers was ranked 10th with a mean of 3.63. Evaluation of students’ academic performance had a mean of 3.62, use of teaching aids by teachers was ranked 12th with a mean of 3.33, negligence of duties had a mean of 3.26 while student teacher relationship had a mean of 3.19 and were ranked 13th and 14th respectively as shown in Table 4.5 below;

Table 4.5: Descriptive analysis of teacher factors on quality of TVET programs

N = 276	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Teaching methods employed by teachers	1.00	5.00	3.8370	1.06799	-.771	.040
Teachers lack interest to teach	1.00	5.00	3.7029	1.14992	-.512	-.685
Research attitude of teachers	1.00	5.00	3.6703	1.24023	-.608	-.532
Negligence of duties	1.00	5.00	3.2645	1.28161	-.328	-.967
Preparation of lesson by teachers	1.00	5.00	3.6268	1.10628	-.649	.050
Use of teaching aids by teachers	1.00	5.00	3.3333	1.25239	-.115	-1.128
Students' teacher relationship evaluation of students, academic performance	1.00	5.00	3.1920	1.37090	-.385	-1.118
Lecturers competence	1.00	5.00	3.8659	1.11525	-.937	.195
Lecturers' syllabus coverage	1.00	5.00	3.7935	1.22286	-.885	-.260
Lecturers' punctuality to class	1.00	5.00	3.7319	1.16019	-.715	-.453
Appropriateness of the teaching methods used by Lecturers	1.00	5.00	3.7138	.99524	-.537	-.375
Availability of reading materials or equipment in your course	1.00	5.00	3.6630	1.22943	-.872	-.072
Composite teacher values	23.00	61.00	47.0181	9.29456	-.289	-.752

Source: Survey data, 2017

Teacher factors that affect quality of TVET programs had a skewness value of -.289 indicating a negative distribution of values to the left. The kurtosis value for the same was -0.752 which indicates that the values are wider spread around the mean.

V. Conclusions

The study concluded that student factors such as poor reading culture, students’ peer group influence, student’s practice of examination malpractice and student’s irregular attendance, student’s interest in learning, student’s parental background, student’s disobediences to school regulation and rules and lack of required learning material such as text books affects quality of TVET programs. The major teacher factors affecting quality of TVET programs are Lecturer’s competence, teaching methods employed by the teachers, Lecturers’ syllabus coverage, Lecturers’ punctuality to class and appropriateness of the teaching methods used by the Lecturers.

VI. Recommendations

The Education Board in conjunction with the line ministries should institute policies to mitigate the student’s practice of examination malpractice. Collaborations between the surrounding community and learning institutions should be encouraged as it leads to effective curriculum implementations and quality of the curriculum. Students should be encouraged to participate in co-curriculum activities as it complements the teaching and learning strategies.

A further research needs to be carried out to establish how other programs in the education sector are being implemented. Other researchers could also look at how to strengthen primary stakeholders in TVET programs particularly how to ensure the beneficiaries can participate effectively in implementation of TVET programs.

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