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Influence of Trainers' Knowledge and Skills on the Implementation of Competence-Based Curriculum in Technical and Vocational Education and Training Colleges in Uasin Gishu County

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ABSTRACT

Competence-based education and training is a functional approach to education as it emphasizes that learners need to gain necessary knowledge, skills, understanding and attitudes or values to work successful in their own profession or occupation. It is regarded as a holistic approach to education. This study sought to establish the influence of Trainers' knowledge and skills on the implementation of competence-based curriculum in Technical and Vocational Education and Training colleges in Uasin Gishu County. The study was guided by curriculum implementation theory. The study adopted a descriptive survey. The target population of the study was 850 respondents comprising of 10 principals, 240 instructors and 600 trainees. A sample size of 90 respondents was selected comprising of 6 principals, 24 instructors and 60 trainees as the respondents. Stratified purposive and simple random sampling techniques was employed. Questionnaires were used to collect data. Cronbach's alpha co-efficient was used to ensure reliability of the research instruments. Data was analyzed using pearson product moment correlation. The study established that there was a significant positive and strong relationship between trainers' knowledge and skills and implementation of competence-based curriculum ($r = 0.629$, $p = 0.000$). The trainers' knowledge and skills influenced the implementation of competence-based curriculum in Technical and Vocational Education and Training colleges in Uasin Gishu County. The study recommended that the ministry of education and Kenya Institute of Curriculum Development should organise for more in-service training for teachers to equip them with subject content knowledge, ICT skills and positively change their perceptions about the competency-based curriculum.

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Introduction

The competency-based curriculum is education that seeks to develop in learners the ability to apply appropriate skills and knowledge to successfully perform a function (Republic of Kenya, 2016). The curriculum emphasizes on the application of skills and knowledge to real life situations. Mosha (2012), states that a competency-based curriculum is one that has specific outcome statements that outline the competencies to be developed or attained. Competency is defined as proven ability to apply skills, knowledge and personal abilities in different study or work situations (Nikolov, Sholkova & Kovatcheva, 2014).

CBET is a program of study with clearly defined, concrete and measurable objectives of which every student participating in the program must have demonstrated mastery upon program completion (DeiBinger & Hellwig, 2011). According to Kaaya (2012), CBET is the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance expected in the workplace. Kufaine and Chitera (2013) state that the implementation of CBET by nations is geared towards the attainment and demonstration of skills to meet industry specified standards. Countries are therefore seeking to create an internationally competitive workforce by reforming their education and training systems.

It is now more than 40 years since the introduction of competence-based education (CBE) in the world. Historically, countries such as United Kingdom (UK), Germany, Netherlands and Australia have implemented competence-based education approach. However, the way in which the approach has been adopted differs from one country to another depending on the historical, social, economic and technological advancement of the respective country (Rutayuga, 2012). The CBET is favoured due to the claim that, it has significance in development of science and technology, specifically in training students in aspects that are in line with occupational and job skills; hence, producing graduates who are more competent as per employer's needs (Rutayuga, 2012). The CBET approach was successful in most of the European countries specifically, in producing competent graduates.

In Mexico, the implementation of competence-based approach curriculum began in 2009 through a number of reforms on basic education and national education policies in which competence was viewed as the application of skills, knowledge, values and attitudes (Secretaria de Education Publica, 2011). The competency-based approach aimed at stimulating students in order to attain optimum academic performance.

The skills, values, attitudes and knowledge were to be applied in day to day activities and learners were expected to reflect them on their endeavours.

In Nigeria Okoye and Isaac (2015) stated that in CBET, assessment is the process of collecting evidence of learners performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome laid in a particular unit and then making a decision, based on these judgements as to whether a learner has achieved the learning outcome as a whole or not (Okoye and Isaac, 2015). In Ghana the study by Anane (2013) showed that colleges have inadequate number of trainers and that of Rutayuga (2012) which revealed CBET was challenged by many factors; the major one being the inadequacy of resources that includes human, physical and financial resources.

In Malawi Kufaine and Chitera (2013) revealed that though Technical Entrepreneurial Vocational Education and Training Authority (TEVETA) as the governing authority that facilitate the provision of technical, entrepreneurial and vocational education and training. They induct instructors into the CBET methodology, still some technical colleges were offering training using old curriculum and teaching method other than CBET. Kufaine and Chitera (2013) found out that some technical colleges were offering training using old teaching method other than CBET teaching methods.

In Ethiopia Dadi (2014) revealed that though the in-service trainings were provided to TVET trainers, still it is unlikely to support trainers in training competence based TVET curriculum properly. In Tanzania Rutayuga (2012) advances the view that majority of the trainers lack basic competences to develop and use appropriate learner-centred methods. Also, trainers in technical colleges lack training and retraining before and during implementation of the new innovated curriculum.

Rwanda shifted to the competency-based curriculum in 2015 in order to deal with scarcity in skills in the Rwandan education system with emphasis on science and technology. This was called for due to Rwanda's desire to build up a knowledgeable society in order to meet its global and local demands in the job market. This was in response to Rwanda's education philosophy of making sure that every child at all levels of learning receives quality education to develop their full potential and relevant skills, knowledge and desired attitudes that will help them fit in the society and job market (Republic of Rwanda, 2015). Rwanda's objective is to transform its state by the year 2030 into a knowledge-based society and middle-income country. It considers ICT as a critical instrument in facilitating the transformation.

According to Komba and Kira (2013), the graduates who were the products of the old curriculum did not exhibit the competencies and skills that wholly addressed the global job market demands locally, regionally and internationally. The competency-based curriculum was intended to raise the quality of education in Tanzania and produce learners who could demonstrate and apply the acquired skills, attitudes and knowledge in problem solving in meeting the changing needs and aspirations of the society. Five years later after the implementation of the competency-based curriculum in Tanzania, a study carried by Tilya and Mafumiko in (2010) on the compatibility between the competence-based curriculum and teaching methods in Tanzania found out that curriculum developers, book writers and teachers lacked clarity on the implementation of the competency-based

curriculum as they had not fully grasped the meaning of the competency-based curriculum.

In Tanzania, the CBET approach was introduced in the year 2000; and in the year 2002 its implementation started in technical colleges. Currently, the approach is used in the Technical and Vocational Education and Training (TVET) sector, specifically, in Vocational Education and Training (VET) centres and Technical Education and Training (TET) colleges. The introduction of CBET was intended to facilitate a paradigm shift from the traditional Knowledge-Based Education and Training (KBET) (Rutayuga, 2012). According to Biemans et al. cited in Kufaine and Chitera (2013) it was expected that, the gap between the labour market and education would be reduced by the introduction of CBET. The introduction of the CBET approach targets students to acquire skills, knowledge, understanding and wider attributes that are necessary for the industry. In this regard, the approach demands collaboration with industries during training so that the competences that the students develop become more relevant to the industry (Kufaine and Chitera, 2013).

Kenya, like many African countries has a high number of unemployed youths. To curb this problem, education and training in Kenya must be aligned to meet the needs and aspirations of the Kenyan populace and vocational education and training should be emphasized to help reduce the high youth unemployment problem in line with sessional paper No. 1 of 2005 on policy framework on Education, Training and Research (Republic of Kenya, 2005). The social pillar in the vision 2030 singles out education and training as the vehicle into Kenya becoming a middle-income economy. In view of this, Prof. Douglas Odhiambo task force in 2012 came up with the competency-based curriculum which emphasises more on practical subjects that had earlier been neglected (Republic of Kenya, 2012). This new competence-based curriculum is aimed at producing a self-reliant and creative population which will reduce the unemployment rate in Kenya among the youths.

Due to this success some African countries including South Africa, Malawi, Ghana, Ethiopia and Tanzania started to adopt it (Rutayuga, 2012, Okoye and Isaac, 2015; Dadi, 2014; Kufaine and Chitera, 2013). A number of studies that are directly linked to technical colleges have been conducted. For example, there are studies conducted by Kufaine and Chitera in Malawi, Anane in Ghana and Dadi in Ethiopia. Generally, these studies revealed that, CBET is faced by a number of challenges in its implementation. The major challenges are that trainers have little awareness and understanding about the competence-based approach and this leads to their inability to implement it effectively. Other challenges include inadequacy of resources due to financial problems, large number of students in the classes and limited opportunities for the trainers to attend short term training on how to implement CBET curriculum (Anane, 2013; Dadi, 2014; Kufaine and Chitera, 2013).

Makuna (2013) observes that in the past Kenya has made many curriculum changes that have either not been implemented or taken too long to be implemented. Researchers have given many reasons which include teachers' resistance to implement the new curriculum due to incompetence of teachers, lack of training prior to introduction of the new curriculum and inadequate ICT skills (Bingimlas, 2009; Mumtaz, 2000 & Balanskat, 2006).

According to Kinuthia (2009) majority of teachers in Kenya are computer illiterate and only a few can competently use a computer. Gakuu (2006) points that teachers' attitude is critical in the process of curriculum implementation. Therefore, teachers should be well prepared to have a positive attitude for them to implement a new curriculum effectively.

The shift from content and teacher centred curriculum to competency-based curriculum is a move towards improving the quality of education by allowing children to widen their skills pertinent in their life and diverse application (Komba & Mwandaji, 2016). However, to implement these critical amendments it is vital to equip all the instructors and make them conversant with the new methodologies of instruction and learning for successful implementation of the CBC (MacLellan, 2004). Regarding this, Sudsomboon (2010) points out that the successful realization of competency-based curriculum relies heavily on the instructors, who are required to take up the new role of coaching and facilitating rather being transmitters of knowledge. Therefore, the preparedness of teachers for the implementation of the competency-based curriculum is very critical.

Literature Review

Trainers' factors include but not limited to aspects such as general awareness and understanding, knowledge and skills, perceptions and attitudes and training about the CBET curriculum. Komba and Mwandaji (2015) asserted that, implementation of a reviewed curriculum essentially depends on the trainers' awareness, knowledge, skills and the general understanding that they have on the curriculum change. The same has also been claimed by Altinyelken (2009) that trainers play a significant role in any reform processes and therefore the above-mentioned aspects should be taken into consideration in the implementation of the reviewed curriculum for the effectiveness of the processes of change.

Trainers' awareness and understanding of CBET curriculum

The trainers' general awareness and understanding includes the way in which the trainers are aware that they are implementing a CBET curriculum and they need to know what is emphasised in it. This includes awareness and understanding on CBET objectives and suggested teaching methods as well as assessment methods. For any new or changed curriculum, the awareness and understanding depends on the training provided to trainers in order to enlighten them about the changes made. This has been supported by Komba and Mwandaji (2015) when they write that, regular training for the trainers is very important since it enables them to acquire up-to-date teaching knowledge and skills to effectively implement the curriculum, which in this context is the CBET curriculum.

Trainers' knowledge and skills about the CBET curriculum

It is argued that trainers need to understand the context of the current CBET system in terms of the role, key characteristics, advantages and limitations, components and potential alternatives (Deißinger and Hellwig, 2011); also, to know how well trainers can design a CBET programme, acquire learning materials and resources, use appropriate facilities, develop procedures for managing CBET and foster partnerships between education and industry (Deißinger and Hellwig, 2011). In this study, the researcher focused on assessing trainers' knowledge and skills in two major areas: trainers' knowledge and skills in teaching methods as well as in assessment and evaluation methods.

Trainers need to be aware of the process of selecting suitable teaching methods that match with the contents to be taught or skills that need and developed among students during the process of teaching and learning. The methods that trainers need to select should foster the acquisition of knowledge, skills, understanding and wider attributes for students as these are addressed in the CBET curriculum. In CBET, trainers are usually needed to use learner-centred teaching methods due to the fact that a CBET curriculum is learner-centred. Although sometimes trainers can use both the teacher-centred and the learner-centred approaches, the emphasis is more on the learner-centred approaches (Anane, 2013). Therefore, trainers need to have knowledge and skills on the ability to practice well learner-centred methods rather than teacher-centred methods.

Learner-centred teaching methods include but not limited to scaffolding, small group discussions, problem-solving, demonstration, question and answer, presentation to peers, mind maps, evaluation on jointly agreed criteria, learning by doing, mentoring and coaching, discovery learning, projects, SWOT analysis, problem trees, in tray exercises, buzz groups, visits or field trips, role plays based on real life situations, case studies and real scenarios, work simulation activities, games, enterprise activities, practical and research methods (NACTE).

In some instances, trainers can use teacher-centred facilitation method such as direct instruction method only if a trainer wants to 'introduce learners to a new study area or define new concepts and show how they are interrelated or for teaching factual information' (Anane, 2013). These methods include lecturing and presentation. It is said that, in teaching, no single method is the best method, but a good teacher or trainer needs to involve a variety of teaching methods (foster, 2009). In that regard, a good trainer needs to use more than one teaching method in the teaching and learning process since students always have different strategies or learning styles. Trainers need to have sound knowledge and skills on the assessment and evaluation methods.

Assessment and evaluation of competence-based curriculum is one of the essential components due to the fact that, it is the one that provides assurance of the validity of all the processes conducted in the implementation stage. Thus, quality of assessment is of paramount importance in order to provide competent graduates (Rutayuga and Kondo, 2006). Generally speaking, assessment is a necessary and important aspect since it 'influences a student's academic prospects, career opportunities, and even success on the job in the world of work and provides accurate predictions for future professional competence (Rutayuga and Kondo, 2006).

Competence-based assessment is conducted on demand and under conditions which should come as close as possible to real workplaces' (Deißinger and Hellwig, 2011). Also, all the assessment should be in line with the learning outcomes (Lawson and Williams, 2007) and for that matter, assessment is not conducted to measure learner's achievement in comparison with other learners (norm-referenced assessment) but is conducted to measure the achievement of learners with reference to competence standards (criterion-referenced assessment) (Deißinger and Hellwig, 2011).

In CBET, 'assessment is the process of collecting evidence of learners' performance, upon which an assessor judges whether or not, or the extent to which a learner has met the performance requirements of the learning outcome

laid in a particular unit and then making a decision, based on these judgements as to whether a learner has achieved the learning outcome as a whole or not' (Okoye and Isaac, 2015). Furthermore, assessment helps to determine how much students have progressed in acquiring competencies necessary for their future profession and should be organised around assessment criteria specified in the respective curriculum (Rutayuga and Kondo, 2006). It involves both; formative and summative assessment.

Formative assessment is done throughout the process of teaching and learning and summative assessment is done at the end of a learning unit or semester. It is suggested that methods that can be used in assessment include written assignments (classroom assignments and tests), performance assessment that is done by observation, product assessments, portfolios, practical tasks, oral examinations and projects. CBET assessment ought to use a variety of assessment methods so as to gather enough evidence about students' achievement (Kitta and Tilya, 2010). The most useful approach in CBET is what is referred to as "Holistic assessment Approach". Holistic assessment refers to assessment, which checks a wider range of skills, knowledge, understanding and competencies combined together to successfully complete practical workplace tasks (Rutayuga and Kondo, 2006).

Trainer's in-service training about CBET curriculum

Generally, trainers' factors are greatly influenced by training. Training hinders or favours all the trainers' factors explained above. It is affirmed that trainers' "training plays a significant role in the successful implementation of innovative programmes" (Bumen and Cakar, 2014). The professional development activities (in-service training) or information on the reform movement are required to maintain the effective implementation of the curriculum. This includes short training on the intervening curriculum such as workshops and seminars regarding the philosophy and strategies for successful implementation of the curriculum. This involves training on pedagogical content knowledge (PCK) and pedagogical knowledge (PK).

Pedagogical content knowledge means trainers' "understanding of how they can help learners understand the subject matter (Kimario, 2011). Pedagogical knowledge means knowledge of instructional principles, classroom organisation and management, knowledge of the learners and how they learn. PK involves training on the art and science of teaching that implies the knowledge on how to teach (Kimario, 2011). The two types of knowledge (PCK and PK) are important to trainers for effective implementation of the curriculum.

Instructors' Capacity and Acquisition of Vocational Skills by Trainees

International Labour Organization (ILO) report on indicators on quality (2012) points out that, the effectiveness of the TVET programmes, which is a measure of the quality of the training, reflects exactly what happens in the classrooms. There is need to consider the educational, occupational background and training of instructors as a proxy for quality. The report further indicated that, re-training and upgrading of instructor's skills is vital for the success of TVET which in turn enhances the quality of graduates. The professional and pedagogical competence of the technical instructor is key to impart quality vocational skills.

Kigwilu and Githinji (2015) revealed that teacher qualifications and work experience have a high influence on

the implementation of Artisan and Craft curriculum. Moreover, low qualification of instructors in vocational training centres negatively affected provision of quality education & training in vocational training centres. This implies that the TVET institutions should employ more qualified instructors. Nieto (2003) posits that teachers must be trained, prepared for public service and provided with opportunities for professional development. MOEST (2003) report recommended that the government should provide VTC instructors with skill upgrading, in service training and attachment schemes. However, as noted by Kamau (2013), a research carried out in Kiambu Sub County revealed that, majority of instructors in the public vocational institutions under study were inadequately trained or not trained at all in technical trades and pedagogy.

Moreover, instructors in TVET institutions rarely go for in-service (Bourgonje and Tramp 2011) which enables the practicing instructor to update his/her professional knowledge, skills and interest (Khatete, 2010). Teachers in VET institutions lack necessary industry-based technological skills updated through industrial attachment (Nyerere, 2009). Similarly, Karemu & Gongera (2014) affirms that teachers in Kiambu County lack exposure to newest technology and a s well as necessary skills and therefore needs refresher courses. Mbugua et al. (2012) posited that in Kenya most TVETs operate with inadequate teaching staff which compromises the quality of teaching and learning since the short fall in the number of teachers is addressed through hiring part-time teachers, multi-grade teaching, and students individualized learning engagements.

Mayabi 2014, revealed that, although, the government has recruited qualified instructors in the VTCs to supplement the ones employed by the BOG, they are still few. Consequently, this affects the interactive capacity between the students and the teachers' hence poor quality of training and acquisition of skills. Chelimo (2005) notes that, schools with low teacher-pupil ratio greatly give individual attention to the pupils and there is increased interaction which enables the learners to be motivated. Contrary, Njoki (2014) reveals that in Nairobi County, TVET institutions are understaffed especially in technical disciplines which lead to ill preparation of students for work.

Theoretical framework

This study is based on curriculum implementation theory by Gross (1971). Gross (1971) posit that for successful implementation of any educational programme, factors such as teacher competency, clarity and awareness of the implementer, capacity of the implementer, support from the management and attitude of the teachers, learners and stakeholders must be considered. Gross (1971) states that the teacher who is the implementer should be competent; be aware of the content and what is to be implemented. He argues that when the implementers are not aware of the changes of the curriculum, they may not be effective and sufficiently implement the curriculum. The implementer should also have a positive attitude towards the new curriculum and the changes therein. Baumert, Kunter, Blum, Bruuner, Voss, Jordan & Tsai (2010), argues that the content knowledge of the teacher has an impact on the child's learning and affects how teachers deliver their content during classroom instruction.

Curriculum implementation theory has a link in this study in that it is about curriculum implementation. Adapting this theory, teachers' preparedness for effective competency-

based curriculum implementation requires trained teachers with content knowledge of the curriculum. Therefore, the theory will help the study to establish teachers' preparedness, in terms of readiness, knowledge, technological skills and attitude on competency-based curriculum implementation. The competency-based curriculum emphasizes that learners be formed with confident, be cooperative with others and lifelong learners through the construction of new knowledge and core competencies. The learners are the architects and active actors of the learning.

According to Gross (1971) capacity of the implementer is significant for effective curriculum implementation. The teachers executing the curriculum should have sufficient knowledge to effectively execute the curriculum. In-servicing of teachers is vital for equipping teachers with skills and knowledge necessary for handling a new curriculum. The pre-school teachers should therefore be trained for the competency-based curriculum through seminars, workshops and in-service training to acquire skills, knowledge and behaviours for implementing the curriculum well. Gross (1971) also points the need for changing people's attitudes for effective curriculum implementation. Hawes (1979) agrees with (Gross, 1971) by emphasizing the need for changing teachers' attitudes for effective curriculum implementation.

Research Methodology

The study adopted descriptive survey research design. In addition, descriptive survey determines and reports the way things are (Gall & Borg, 2007). This was because the study sought to obtain information that described the participants' views about how training facilities influenced the Acquisition of Skills by trainees. The questionnaires enabled the researcher to establish effect of the independent variable on the dependent variable.

The population of the study consisted of 10 TVETs with a total of 850 respondents; 10 principals, 600 trainees and 240 instructors. The trainees and instructors were included as primary respondents, while the Principals were included as informed respondents.

Stratified random sampling was used to sample (TVETs) and simple random sampling was used on trainees and instructors whereas purposive sampling was adopted in selecting the Principals. This was done after obtaining a list of all TVETs operating within Uasin Gishu County. Mugenda and Mugenda (2003) noted that a sample of between 10 and 30 percent is adequate for a population of below 1000. Ten percent (10 %) was used to sample the trainees and instructors since the population was large (Kombo, 2006). The Principals were purposely selected since they have core responsibility on TVETs management function. A sample size of 90 respondents was selected for this study. This was considered appropriate as affirmed by (Kothari, 2002; Cooper and Schindler, 2003) who opined that the sample of at least 10% of the target population was representative.

The study was conducted with aid of primary data from trainees, principals and instructors in Uasin Gishu County. The data from trainees, instructors and principals was collected using questionnaires. The use of questionnaires was

adopted because they were affordable to administer, in a short time, to respondents' who were sparsely spread in the county. The questionnaires assisted the researcher to obtain quantitative data. Self-administered questionnaires were filled by second finalist trainees, instructors and county polytechnic principals.

The questionnaires were used to save on time and to ensure that no interviewer bias (Kombo and Tromp, 2006). There were three different sets of questionnaires for finalist trainees, instructors and county polytechnic principals. The questionnaires were organized according to the research objectives. Questions were prepared in the form of a five-point rating scale (*Likert scale*) to allow the respondents to give their opinion and suggestion. Questionnaire was found appropriate for this study because it was relatively cheap and faster to collect data from the County where respondents were sparsely spread (Smith, 2012).

The researcher, then contacted principals of the sampled TVETs and agreed on schedule especially on dates of visiting each public VTC. Before administering the questionnaire on the agreed dates, the researcher explained the purpose of the study to the principals, instructors and second finalist trainees who had been sampled and invited them to fill the questionnaires which were self-administered. The instruments were collected by the researcher on the same date of administering them.

Validity refers to the extent to which instruments measure what they are intended to measure (Oso and Onen 2009). Therefore, the research instruments were developed under guidance of supervisors in Education, Technology Department at University of Eldoret. The supervisors reviewed and analyzed the contents of the questionnaires in order to improve content validity of the instrument. The researcher then incorporated all suggestions and recommendations.

Reliability refers to the degree of consistency of results after repeated trials. The test items were administered to the same persons after one week to test stability of instrument over time, (Kasomo, 2015). Therefore, reliability was determined by a test-retest technique where by the researcher administered pilot questionnaires twice in two separate location in Nandi County. The data collected through piloting was tested using Cronbach Alpha coefficient with the aid of SPSS and an internal consistency reliability coefficient of 0.755. A score of above 0.7 was deemed to mean that the instrument was reliable since Mohsen Tavakol & Reg Dennick (2011) stated that any score between 0.7 and 0.9 is acceptable.

After all data had been collected, the researcher conducted data cleaning, which involved identification of incomplete or inaccurate responses then corrected them to improve the quality of the responses. The data was categorized, coded and entered in the computer for analysis using the Statistical Package for Social Sciences. Data was subjected to correlation analysis with the aid of statistical Package for social sciences (SPSS V26).

Table 1. Correlation between Trainers' knowledge and skills and implementation of competence-based curriculum.

		Implementation of competence-based curriculum	Trainers' knowledge and skills
Implementation of competence-based curriculum	Pearson Correlation	1	.629**
	Sig. (2-tailed)		.000
Trainers' knowledge and skills	Pearson Correlation	.629**	1
	Sig. (2-tailed)	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=60

Results

The correlation analysis, was conducted to determine the relationship between the two variables. Pearson moment correlation results of the study (Table 1) showed that there was a significant positive and strong relationship between trainers' knowledge and skills and implementation of competence-based curriculum ($r = 0.629$, $p = 0.000$). This imply that an increase in trainers' knowledge and skills lead to an improvement of implementation of competence-based curriculum.

This implies that facilitation and delivery of the curriculum will be derailed by lack of teachers' exposure to ICT and inadequate technological skills. This concurs with a study by Hennessy, Harrison & Wamakote (2010) that observed the main hindrance in implementation of ICT was due to low levels of teachers' ICT knowledge and skills. The teacher's subject content is very significant as it influences how the teachers engage with the learners. The findings from Paulo (2014) points that understanding of subject matter of a discipline helps teachers to prepare well for the lessons, use different teaching methodologies and evaluate their learners' assignments appropriately. Teachers' fully preparedness with subject content knowledge is critical for effective implementation of the competency-based curriculum. This concurs with study findings from Baumert, Kunter, Blum, Bruuner, Voss, Jordan & Tsai (2010) that revealed pedagogical content knowledge and content knowledge of the teacher have an impact on the child's learning.

Conclusion

It was concluded that, CBET was introduced without relevant preparation since, trainers in technical colleges have limited awareness and understanding about the CBET curriculum as well as little knowledge and skills on how to implement CBET curriculum. Colleges had inadequate resources for implementing the CBET curriculum. The training was not tailored to meet the demands of different participants and was not provided on continuous basis.

Recommendations

Tutors should be adequately prepared in readiness for implementation of a new curriculum through in-service training, seminars and workshops for effective implementation of the curriculum.

The study also recommends that trainers should be equipped with more subject cotenant knowledge for quality and effective implementation of the competency-based curriculum.

The Kenya Institute of Curriculum Development should involve more trainers in curriculum change process to create positive attitudes among teachers for effective implementation of the competency-based curriculum.

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