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TEACHERS' INFORMATION COMMUNICATION AND TECHNOLOGY PREPAREDNESS FOR IMPLEMENTATION OF COMPETENCY BASED CURRICULUM IN PUBLIC PRIMARY SCHOOLS IN MERU SOUTH SUB COUNTY, KENYA

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ABSTRACT

Teachers are the implementers of curriculum hence play a significant role in developing and transforming a learner. Teachers' competencies such as knowledge and skill in the use of digital devices in all areas of the curriculum delivery is crucial in order to make learning more captivating. The purpose of the study was to investigate teachers' information communication and technology (ICT) preparedness on implementation of the competency-based curriculum. The study was carried out in public primary schools in Meru South Sub County, Kenya and adopted descriptive survey design. The target population was all preschool teachers in the Sub County. Simple random sampling technique was used to sample participating schools and pre-school teachers and head teachers. The sample comprised of 105 respondents, 75 preschool teachers and 30 head teachers. Data was collected using questionnaires and interview schedule. The research findings were analysed both quantitatively and qualitatively. The quantitative data was processed and analysed with the help of the SPSS software version 22 and summarised into frequency tables and percentages. The findings of the study revealed that majority of the teachers had not been exposed to information communication and technology and most of them were not competent as they lacked technological skills. Hence, lack of information communication and technology skills among the teachers may hinder effective implementation of the competency-based curriculum. The study recommend that the Ministry of Education and Kenya Institute of Curriculum Development to organise for in-service training for teachers to adequately equip them with ICT skills and secondly the Ministry of Education should provide adequate ICT facilities ,employ technical support team for repair and maintenance of the ICT facilities and offer ICT technical support to teachers for efficient implementation of competency based curriculum.
Keywords: ICT, Preparedness, Implementation, Competency Based Curriculum

BACKGROUND TO THE STUDY

Information and Communication Technology (ICT) is defined as a diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information that support teaching- learning such as computers, projectors and laptops. (Harriet, 2018). The introduction of ICT into schools and in the learning process was driven by global forces which are beyond the school-based decision making (Voogt, 2010). The expansion of technology across a wide range of areas including educational institutions, schools and universities came with the main intention of improving the teaching and learning environment (Al-Qahtani & Higgins, 2012). The implementation of ICT in education is to transform the teaching and the learning process from the traditional instructional teacher-centered endeavour to a learner-centered approach with active participation of the learner (Voogt, 2010). Teachers' role is to create a technology-based environment to facilitate the teaching and learning process (Lim, Chai & Churchill, 2011). In Kenya, there is a government policy that all schools should integrate ICT

in learning to facilitate curriculum delivery in line with vision 2030 (Ministry of Education Strategic Plan, 2006).

The desire to build up a society that is knowledgeable and the need to expand regional and global competition in the job markets has called for a move to a competency-based curriculum to address the demand and shortage of skilled labour in the education system. The competency-based curriculum in education seeks to develop learner's ability to apply appropriate skills and knowledge to successfully perform a function (Republic of Kenya, 2016). The introduction of competency-based curriculum in Kenya has raised a question on the capacity and teachers' preparedness in ICT skills in readiness for implementation of the new curriculum. The implementation of the competency-based curriculum in its first phase is facing quite a number of challenges. According to Kaviti (2018), the competency-based curriculum was hastily crafted and rushed through a pilot that was done in 2017. The study further shows that the pilot system of the new curriculum took an average of ten weeks, whereby less than 2000 teachers of the total 160,000 teachers implementing basic education in Kenya were trained. A report on competency-based curriculum activities by KICD (2018) on teachers trained on ICT integration indicated that 61 percent of teachers are not trained on ICT. Teachers should be equipped with ICT skills since digital literacy is one of the core competencies of the competency-based curriculum. 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 obstacles 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 (Kinuthia, 2009; Andemia, 2020; Waweru, 2018; Momanyi & Rop,2020). Therefore, there lacks clear evidence on whether teachers have been adequately prepared for the implementation of the competency-based curriculum.

In spite of the Government's efforts of substantially investing considerable resources in enhancing ICT integration in primary schools in Kenya, research has shown that ICT integration in public primary schools is growing at a very slow pace (Muriithi, 2017). Researchers argue that mere installation of technological tools such as computers, laptops, projectors hubs, routers, and the accompanying peripherals is not sufficient for educational reforms and may not automatically lead to integration of ICT in schools unless the government addresses teacher- factor that largely influence integration of ICT in schools (Wanyoike, 2016). According to Laaria (2013), teachers are the key players in implementing the ICT program but the ICT strategy adopted by the Kenya government did not factor in teachers' levels of preparedness in readiness to integrate ICT in teaching-learning process in public primary schools and this could have a serious negative effect on the implementation process

According to Schaffer and Richardson (2004), when technology is introduced into teacher education programs, the emphasis is often on teaching about technology instead of teaching with technology. A study by Andoh (2012) reported that teacher training institutions emphasized training about technology as opposed to how teachers could use technology to teach. Hence, inadequate preparation to use technology is one of the reasons that teachers do not systematically use ICT in their classes. Alazam, Bakar, Hamzah and Asmiran (2012) study examined teachers' ICT skills and ICT integration in the classroom, the case of vocational and technical teachers in Malaysia. The study has indicated that teachers' ICT skills were at moderate levels, and that a vast majority of teachers who participated in this study were moderate users of ICT in classroom teaching. Mcalister (2005) conducted a study to establish the relationship between teacher's use of ICT and training and found out that there is a positive relationship between ICT training and ICT use. The conclusion was that quality training should be offered to teachers as they are the key players in implementation. Efficient training and support in ICT should be given to teachers, and more considerations should be put in place on the teachers as they are role models for students.

According to a study by Pelgrum (2001), teachers' lack of knowledge and skills was the second most inhibiting obstacle to the use of ICT in schools. Pelgrum (2001) further noted that the success of educational innovations depends largely on the skills and knowledge of teachers. Similarly, in the United States, Knezek and Christensen (2000) hypothesized that high levels of skills and knowledge would produce higher levels of technology integration that will reflect on student achievements positively. Their model postulated that educators with higher levels of skill, knowledge, and tools would exhibit higher levels of technology integration in the classroom. Moreover, Berner (2003) studied the relationship between ICT skills and computer use in the classroom and found that the faculty's belief in their computer competence was the greatest predictor of their use of computers in the classroom.

Preparedness in readiness to integrate ICT in teaching calls for teachers' ability to handle computers and other ICT gadgets and associated software. In this regard, Drent and Meelisen (2008) established that the quality and level of teacher training influences effective adoption and use of ICT in schools. Simonson (2008) found that teachers' skills are related to their use of ICT in the teaching-learning process. Further, Bordbar (2010) reported that teachers' competence in computer use is a good predictor of ICT integration in teaching. Research shows that training must be relevant if teachers are to be well equipped to use ICT. These findings echoed Muriithi (2005) who reported that ICT training in Kenya was limited to ICT literacy. Similarly, Mingaine (2013) reported that secondary school teachers did not have sufficient skills on how to integrate ICT in teaching and learning. Ayere et.al 2010 reported that 55% of teachers in secondary schools did not have any ICT training at all of those who had training in ICT, 51% obtained training through personal initiatives after employment as teachers.

Kamaruddin *et.al* (2017) studied on Teachers' level of ICT integration in teaching and learning, a survey in Malaysian private preschool. A total 61 teachers from 10 private preschools in the district of Mualim in the state of Perak Malaysia were randomly chosen in this survey research. The findings revealed that most of the experienced teachers were not knowledgeable about the educational ICT application. The findings revealed that the teachers' level of ICT integration is still at the low level. This is based on the results of a study that most of the experienced teachers are normal users of ICT and ICT application was used for their own work rather than using it in their teaching and learning in the classroom. The government Kenya government in realizing vision 2030 envisages a

technologically empowered nation as basis on which Kenya can gain the status of a knowledge economy. Teachers need to be prepared for the new curriculum for them to transit smoothly from the traditional teaching materials to more innovative and digital resources. They would be equipped with all the teaching and technical skills that will help them effectively and efficiently adopt and integrate ICT into the school curriculum (Al-Awidi & Aldhafeeri, 2017). Teachers' readiness and willingness is fundamental for successful adoption and implementation of ICT into the learning and teaching activities and curriculum (Singh & Chan, 2014). Thus, if teachers are not well prepared, ICT integration to the curriculum may or may not be adequately implemented.

Teachers' readiness and willingness is fundamental for successful adoption and implementation of ICT into the learning and teaching activities and curriculum (Kinuthia, 2009). Thus, if teachers are not well prepared and engaged in all phases of their integration to the curriculum, digital technology may or may not be adequately implemented. A study conducted by Chege (2014) on factors influencing teachers' readiness to use ICT in teaching in public secondary schools in Gatundu North District, revealed that only 13.75 percent of the teachers were very confident about their ability to use ICT in teaching in the classroom. This means that majority of the teachers do not have enough technological skills to implement ICT in classroom. The study also found that majority of the teachers recommended training to make teachers more knowledgeable on ICT. A study carried out by Higgins and Moseley (2011), found that when teachers lack an understanding of why they should use ICT in teaching and how to use it hinders its implementation. Most educational and training institutions focus more on what ICT is, rather than focusing on how to use or apply it during classroom instruction. Thus, in-service training for teachers already in the profession should offer teachers basic ICT skills and train them on how to use it during learning.

A study carried out in Kenya by Salvan (2018) on teachers' preparedness for implementation of the competency based curriculum in private schools found out that teachers felt that they were not well equipped and sufficiently prepared with the ICT skills fundamental for handling and use of technological tools for effective implementation of technology in classrooms. Even though teachers had received formal training in instructional technology, majority of teachers had little knowledge on integration of computer technology into classroom instruction. It was found that majority of the teachers could not use technology during teaching. This was because the teachers had not been adequately equipped and made competent with technological skills for effective application in their practices. Muriithi (2017) study examined on factors affecting implementation of ICT Education in Public Primary schools in Kajiado North Sub-County, Kenya.

The study established that more than half (53.9%) of the respondents indicated that good match of training and skills are important to support ICT implementation in schools and poor school ICT policies have negatively affected implementation ICT education. A study by Malcolm and Godwyl (2008) reported that lack of professional development programs for teachers to upgrade their skills on emerging technologies is a hindrance to ICT implementation. Low levels of skills and the need to train users influenced ICT implementation. ICT skills are required for empowerment to enhance value and create opportunity through new technologies. Human capital must be developed through training, research and capacity building.

Leadership plays a key role in ICT integration in education. Sife et al (2007) argued that lack of technical, administrative and financial supports were problems that hinder teachers from making use of computers in their instruction. The support of the school head teacher or administrator can increase teachers" acceptance to use the computers in the teaching and learning process. Therefore, the role of the school leadership is critical in creating impetus, sustaining and an environment that enhances the use of computer in the teaching learning process. Priscilla et al (2008) affirmed that guidance from a head of department is key in encouraging the preparation of electronic lesson materials which encourage computer use for a certain subject in the instruction process. The study established that the success of integrating ICT into the instruction process among school teachers depends on the support provided by the head of the school.

Sife *et al.* (2007) found that for adoption of ICT to be successful and sustainable, head teachers as lead professionals should lead in the use of the technology, as well as have broad mastery of pedagogical, technical, administrative and financial dimensions of ICT in education. The study by Sife *et al* (2007) further state that it is imperative that administrators provide the conditions that are needed, such as ICT policy, incentives and resources. Kariuki (2004) argues that teachers who receive adequate ICT support from the administrators are more likely to use ICT in the teaching practice while those who do not get support are less passionate in using computer or do not incorporate technology in anyway. This assertion is also supported by Wang (2010) who affirms the fact that commitment and

interest of an institution's top management and other leaders at every level is the most critical factor for successful implementation of ICTs within the institutions. Yee (2000) believed that a leader who implements technology plans and also shares a common vision with the teachers stimulate them to use technology in their lessons.

Technical support in relation to ICT integration entails installation, operation, maintenance, network administration and security of the tools (Sife, Lwoga & Sanga, 2007). These form an important component of the implementation and integration of ICT tools. According to Murithi (2017) lack of technical support for a school's technology results to teachers' frustration and unwillingness to use the technology tools. Sife *et al*. (2007) argued that lack of technical, administrative and financial support were problems that hinder teachers from making use of computers in instruction. According to Aryatuha (2007) for a successful ICT adoption, adequate computer hardware and software must be accompanied with training of the users and continuous technical support. Without this, however high the quality of hardware and software deployed there will only be under-utilization and wastage of these resources.

It is therefore crucial that technical support be availed to enable repair and maintenance that would ensure the continued use of ICT tools in schools. Availability of technical support may minimize time wasting in troubleshooting hardware and software problems. Hence, the Kenya government in realizing vision 2030 needs a technologically empowered nation as basis on which Kenya can gain the status of a knowledge economy.

Statement of the Problem
The government of Kenya introduced 8-4-4 system of education in order to produce graduates who are self-reliant. However, the 8-4-4 system of education became too much examination oriented therefore paving the way for the newly launched competency-based curriculum currently being implemented in Pre-primary 1, Pre-primary 2, grade 1-2 and being piloted for grade 3 and 4. For teachers to fully implement a curriculum they need to have acquired knowledge, skills and competency to handle the curriculum. The teacher act as a facilitator in the teaching learning process. However, since the introduction of competency-based curriculum, there is no evidence that a study has been conducted to establish the level of teachers' ICT preparedness to implement the CBC in Kenya and specifically in Meru South Sub County. This study therefore sought to establish the level of teachers' ICT preparedness in the implementation of competency-based curriculum in public schools in Meru South Sub-county.

Objectives of the study
To establish teacher's technological skills for implementation of the competency-based curriculum in public primary schools in Meru South Sub county

METHODOLOGY
Descriptive survey research design method was adopted for this research because it involved studying conditions or events that had already occurred. The researcher collected information for the respondents concerning ICT preparedness for implementation of competency-based curriculum without manipulation of the variables hence making the design appropriate for the study. The target population was 1,648 teachers in public primary schools. The accessible population was 524 teachers. Simple random sampling technique was used to select a sample of 105 teachers which comprised 75 pre-school teachers and 30 head teachers. This sample was above the minimum of 100 respondents recommended by Borg and Gall (1995) in a survey study. To ascertain validity, the researcher sought assistance of experts, who helped to ensure construct and content validity of the instrument.

To determine the reliability of the research instruments, the study respondents were issued with questionnaires for them to fill. The same questionnaires were again subjected for retest. After the two tests, the Pearson's Product Moment Co-efficient was computed to establish the correlation coefficient. The Pearson Coefficient correlation yielded a 0.76 of pre-school teachers' questionnaire and 0.81 of the head teachers' interview schedule. According to Mugenda and Mugenda (2003), a correlation co-efficient of 0.7 or above is considered appropriate and hence reliable for collecting data. Data was analysed using the statistical package for social sciences (SPSS). Qualitative data was analysed using thematic approach while quantitative was analysed using percentages and frequencies. The results for the data analysis were then presented in frequency tables.

Demographic Information of Respondents
The pre-school teachers were requested to give information about their gender, age, academic qualification and years of service. The information was as presented in the subsequent sections.

Gender of Pre-school Teachers
The female gender constituted the highest percentage (88.6%) and male constituted (11.4%) in terms of number of pre-school teachers as summarized in Table 1. This negatively affects the education of a boy child since there are no male pre-school teachers to act as role models for the boys.

Table 1 Gender of pre-school teachers

Gender	Frequency	Percentage (%)
Male	12	11.4
Female	93	88.6
Total	105	100.0

Age of the Pre-school Teachers
Majority of the pre-school teachers (42.9%) are 50 and above years, (9.5%) are between age 20-29, (20.0%) are between age 30-39, and (27.6%) are between age 40-49. This means that most of the pre-school teachers (70.5%) are above the age of 40 years as illustrated in Table 2.

Table 2 Age of Pre-school teachers

Age	Frequency	Percentage (%)
20-29	10	9.5
30-39	21	20.0
40-49	29	27.6
50 and above	45	42.9
Total	105	100

Pre-school Teachers' Academic Qualification
The pre-school teachers were requested to give information about their academic qualifications. Majority of the pre-school teachers are certificate holders (49.5%) and diploma holders (41.9%). Very few pre-school teachers (8.6%) are degree holders as indicated in Table 3. The findings imply that pre-school teachers have the minimum qualifications required for the education of pre-school children.

Table 3 Pre-school teachers' academic qualifications

Academic qualification	Frequency	Percentage (%)
Certificate	52	49.5
Diploma	44	41.9
Degree	9	8.6
Total	105	100.0

Pre-school Teachers' Number of Years in Service
The pre-school teachers were asked to indicate the number of years they have taught at pre-school level. Majority of the pre-school teachers (95.2%) have taught more than five years as illustrated in Table 4. This implies that most of them are experienced in teaching.

Table 4 Pre-school teachers' response on number of years of service

Years of service	Frequency	Percentage (%)
0-4	5	4.8
5-9	6	5.7
10-14	11	10.5
15-19	29	27.6
20 and above	54	51.4
Total	105	100

Pre-school Teachers Number of In-service Training
Majority of the pre-school teachers (46.7%) had attended oone in-service training with most of the pre-school teachers having attended less than four trainings for the competency-based curriculum as summarized in Table 5.

This implies that majority of pre-school teachers may not be well versed about the competency-based curriculum. This was in concurrence with a report on competency-based curriculum activities by KICD (2018) on teachers trained on ICT integration that indicated that 61 percent of teachers are not trained on ICT. According to Mcalister (2005) who conducted a study to establish the relationship between teacher's use of ICT and training, there is a positive relationship between ICT training and ICT use. This implies that in readiness for the implementation of competency-based curriculum quality training in ICT should be offered to teachers as they are the key players in implementation of curriculum. Efficient training and support in ICT should be given to teachers, and more considerations should be put in place on the teachers as they are role models for students.

Table 5 Pre-school teachers' number of in-service trainings attended

Number of in-service	Frequency	Percentage (%)
One	49	46.7
Two	27	25.7
Three	11	10.5
Four and above	18	17.1
Total	105	100.0

Readiness to Implementation Competency Based Curriculum
The researcher sought to find out teachers' readiness for the implementation of competency-based curriculum. The results are presented inform of frequencies tables.

Pre-school Teachers' Exposure to ICT Facilities
The study sought to establish the pre-school teachers' technological skills for implementation of the competency-based curriculum. Majority of the pre-school teachers (81.9%) have not been exposed to ICT facilities as indicated in Table 6.

Table 6: Pre-school teachers' response on whether they have been exposed to ICT facilities

Exposed to ICT facilities	Frequency	Percentage (%)
No	86	81.9
Yes	19	18.1
Total	105	100.0

This implies that pre-school teachers may not adequately implement digital literacy which is one of the core competencies of the competency-based curriculum because of inadequate technological skills. A study by Malcolm and Godwyl (2008) reported that lack of professional development programs for teachers to upgrade their skills on emerging technologies is a hindrance to ICT implementation. Low levels of skills and the need to train users influenced ICT implementation. ICT skills are required for empowerment to enhance value and create opportunity through new technologies. Human capital must be developed through training, research and capacity building. Therefore, to make teachers conversant and effective in use of ICT for instruction, they should be exposed to different ICT facilities for effective implementation of competency-based curriculum.

Pre-school Teachers' Level of Competency
Majority (49.5%) are fairly competent in the use of ICT, (44.8%) are poor and only (5.7%) are good in the use of ICT as summarized in Table 7.

Table 7: Pre-school teachers' response on the level of competence in the use of ICT

Competence in use of ICT	Frequency	Percentage (%)
Poor	47	44.8
Fair	52	49.5
Good	6	5.7
Total	105	100.0

This is an indication that most of the teachers do not have technological skills required for implementation of digital literacy. This was in agreement with a report by KICD (2018) which revealed that (61%) of the teachers had not

been trained on ICT hence were not competent. According to a study by Pelgrum (2001), teachers' lack of knowledge and skills was the second most inhibiting obstacle to the use of ICT in schools. Pelgrum further noted that the success of educational innovations depends largely on the skills and knowledge of teachers. This is not a good reflection since digital literacy is one of the core competencies in the competency-based curriculum. Therefore, this implies that teachers may not be prepared for implementation of competency-based curriculum.

Pre-school Teachers' Overhead projector use.
Majority of the pre-school teachers (91.4%) never use projectors for classroom instruction, (6.7%) rarely use projectors and only (1.9%) always use projectors when teaching as indicated in Table 8.

Table 8: Pre-school teachers' response on the frequency of using a projector to teach

Frequency of projection	Frequency	Percentage (%)
Never	96	91.4
Rarely	7	6.7
Always	2	1.9
Total	105	100.0

The low percentage of teachers using the projectors in teaching implies that teachers may not be competent in the use of projectors or overhead projectors may be inadequate in schools. This is in line with a study by Muriithi (2017) on factors affecting implementation of ICT education in public primary schools in Kajiado North Sub- County, Kenya where More than half (53.9%) of the respondents indicated that good match of training and skills are important to support ICT implementation in schools. This implies that teachers need to be trained on use of ICT devices likely to facilitate delivery of the competency-based curriculum.

Pre-school Teachers' Computer Use
Majority of the pre-school teachers (65.7%) disagreed that they use computers for instruction as indicated in Table 9 below.

Table 9: Pre-school teachers' response on whether they use computers in classroom teaching

Use computers in teaching	Frequency	Percentage (%)
Disagree	69	65.7
Neutral	27	25.7
Agree	9	8.6
Total	105	100.0

This implies that most schools either have computers which they don't use for teaching or they do not have computers for classroom teaching. This contradicts the provisions of the competency-based curriculum on digital literacy the realization of vision 2030 where application of ICT is critical. This is in agreement with a study by Salvin (2018) that revealed that teachers were not well equipped and sufficiently prepared with the ICT skills fundamental for handling and use of technological tools for effective implementation of technology in their classrooms. This means that majority of teachers were not using computers despite the fact that ICT has been given a priority in the implementation of the competency-based curriculum.

Pre-school Teachers' Rating of Support Received
The study established pre-school teachers' views on level of head teachers support in use of ICT for implementation of the competency-based curriculum. Majority of the pre-school teachers (72.4%) are poorly supported, (18.1%) are fairly supported and only (9.5%) are well supported by their head teachers on use of ICT as illustrated in Table 10.

Table 10: Pre-school Teachers' rating on head teachers support on use of ICT

Competence in use of ICT	Frequency	Percentage (%)
Poor	76	72.4
Fair	19	18.1
Good	10	9.5
Total	105	100.0

Thus most pre-school teachers are not receiving support on ICT from their headteachers which is a requirement for implementation of digital literacy. Kariuki (2004) argues that teachers who receive adequate ICT support from the administrators are more likely to use ICT in the teaching practice while those who do not get support are less passionate in using computer or do not incorporate technology in anyway. This is in agreement with Wang (2010), who affirms that commitment and interest of an institution top management is the most critical factor for successful implementation of ICT within the institution. This is a clear indication that head teachers need to lead and support teachers in the use of ICT in schools in readiness and effective implementation of competency-based curriculum.

Head teachers' Responses
Adequacy of Facilities and Support
The study sought to establish the availability and adequacy of ICT facilities in readiness for implementation of competency based curriculum. From the findings, majority of the head teachers (99.5%) revealed that they had inadequate computers and projectors. Only (0.5%) agreed that they had adequate computers and projectors. This implies that teachers may be lacking adequate resources for the implementation of literacy skills. Hence the school management ought to provide adequate ICT resources for teachers use. This is in line with Sife (2007) who indicated that it is imperative that administrators provide the conditions that are needed, such as ICT policy, incentives and resources for successful integration of ICT in schools. All the head teachers revealed that their schools lacked personnel to offer technical support in ICT. This may hinder teachers' use of ICT devices because they may not be able to trouble shoot technical problems whenever they arise. This is in agreement with Muriithi (2017), who indicated that lack of technical support for a school's technology results to teachers' frustration and unwillingness to use the technology tools. According to Aryatuha (2007) for a successful ICT adoption, adequate computer hardware and software must be accompanied with training of the users and continuous technical support. Without this, however high the quality of hardware and software deployed there will only be under-utilization and wastage of these resources. This implies that lack of adequate ICT skills and technical support may be hindering teacher's preparedness in readiness of implementing the competency-based curriculum.

Level of Competence in the use of ICT
From the findings, majority of the head teachers (60%) were not skilled and knowledgeable regarding ICT. They revealed that they had some theoretical knowledge about ICT, but the practical part was missing. Only a few head teachers (40%) were competent in the use of ICT. This was in line with a study conducted by Chege (2014) which revealed that only 13.75 percent of the teachers were very confident about their ability to use ICT in teaching in the classroom implying that majority of the teachers lacked adequate technological skills to implement ICT in classroom. This was also in concurrence with a study carried out by Higgins and Moseley (2011) which found that when teachers do not know how to use ICT, it hinders its implementation. Digital literacy being one of the core competencies of the competency-based curriculum head teachers should be well equipped with ICT skills to ensure effective implementation of the competency-based curriculum.

CONCLUSIONS
Based on the findings of the study, it was concluded that majority of pre-school teachers and head teachers have not been exposed to ICT. Majority of the pre-school teachers confirmed that their level of competence in the use of ICT was below average and that they lacked technological skills. The findings also revealed that majority of the teachers have never used a projector and a computer during classroom instruction. This could be attributed to inadequacy of computers and projectors and inadequate technological skills among the pre-school teachers in the schools in Meru south Sub County. Majority of the pre –school teachers revealed that they receive poor ICT support from their head teachers and this may be due to the head teacher's incompetence in use of ICT. This implies that facilitation and delivery of the competency-based curriculum may not be adequately implemented due to teachers' inadequate technological skills and inadequate ICT facilities in schools.

RECOMMENDATIONS
Based on the findings of the study, the following are the recommendations for the study: The Ministry of Education and Kenya Institute of Curriculum Development to organise for more in-service training for teachers to adequately equip them with ICT skills to facilitate implementation of competency-based curriculum. The Ministry of Education through the government of Kenya to provide adequate computers and projectors for efficient implementation of competency-based curriculum. The Ministry of Education through the government of Kenya to employ technical support team for repair and maintenance of ICT facilities and to offer ICT technical support to teachers.

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