Evaluation of Teachers Attitude on the Integration of ICT in Teaching

Grace Oyugi, Prof Edward Tanui, Dr Alexandra Rono
Maasai Mara University
Maasai Mara University
Maasai Mara University
Corresponding Author: Grace Oyugi

ABSTRACT: Over the last two decades, the rapid growth of ICT has become the most important topics in Kenya. It is among one of the issues raising concern in the education sector. The government has advocated for the implementation in most Ministries, education being one of them. This is due to the capability of ICT in providing a dynamic and proactive teaching in classroom environment. It was only applied in the cyber which was regrettable and thus to enhance the application of ICT, the government distributed Tablets to primary schools. Despite the provision of the Tablets in schools, teachers continued applying traditional methods of teaching. Despite teachers being required to integrate ICT in their daily teaching in classroom and replace their traditional methods with modern tools and facilities. The paper evaluated the teachers’ attitude towards the integration of ICT in education, specifically at primary level. The paper aimed at establishing whether the teacher attitude influences the integration of ICT into the teaching process. A survey, questionnaire and interview schedules were applied to 508 sampled teachers from Nairobi County. The findings illuminate that most of the teachers had negative attitude towards integration of ICT into teaching due to their being incompetent in the application of ICT tools. From the findings, only a few teachers were knowledgeable in application of ICT in their classrooms for their own work rather than using it in their classroom for teaching.

I. INTRODUCTION

Information Communication Technology (ICT) is perceived as a catalyst for change in teaching styles, learning approaches and in access to information (Watson, 2010). It refers to technologies that provide access to information through electronics such as projector, radio, video tapes are applicable in class and they enhance the mastery of the content. This has led to integration of ICT into teaching which has changed conventional way of learning and proposes the need to rethink education in terms of a more current context. Watson (2010) ICT can be used to find, develop, analyze and present information in a classroom situation with set pedagogical skills, competence and availability of resources, as well as to model situations and solve problems. Crown (2010) enhances rapid access to ideas and experiences from a wide range of learners concurrently. ICT also enhances the spread of cultures among the students allowing students to collaborate and exchange information on a wider scale. It includes the full range of display and projection devices used to view computer which enhances learning in class, the literature reviewed showed that most teachers were applying traditional methods in teaching necessitating the researcher to investigate on the teachers’ attitude on the integration of ICT in teaching.

Despite the importance of ICT in enhancing teaching, it has not been embraced by most teachers and very few research on the area seemed to have been carried out in this area resulting to. Little being known about how Kenya primary schools have integrated ICT in their teaching and learning. It has been noted that there is a considerable teaching lag in integration of ICT in education. The paper evaluated on the teacher’s attitude on the integration of ICT into teaching in primary schools, There has been noted lack of adequate attention to technology integration in teacher preparation programs which limits the integration of ICT into teaching. Teachers in Kenya continue using non-ICT based approaches in teaching various subjects, despite the efforts made by the government of Kenya to equip schools with ICT infrastructure, to enable teachers to integrate ICT in their teaching and learning activities competently and effectively, little is known by way of research about the ICT Integration into teaching in public primary schools. It is not clear whether the attitudes of primary teachers in the county are influencing the integration of ICT.
A review of research studies have shown that effective use of computers depends on the teachers' intentions, personal beliefs and attitudes towards teaching with technology, according to Buabeng-Andoh (2012). The more experience teachers have with computers, the more likely they will display positive attitudes. Chen (2008) noted that, there is no resonance between teachers’ beliefs and their actual practice while integrating technology in the classroom. While most of the previous studies focused more on the influence of teachers’ attitudes and beliefs on actual practice (Chai, Koh and Tsai 2010; Palak and Walls 2009); it has been rare for a study to investigate the reciprocal relationship between teachers’ attitudes and beliefs and their practice.

II. FINDINGS

The study found out that 69% of the respondents indicated that teachers were not using ICT in their teaching while 31% indicated intention of using ICT in their teaching. The study also found out that 64% of the respondents indicated that teacher’s attitude was negative while 33% indicated that the teacher’s attitude was positive. It further revealed that teachers have negative attitude toward technology. Providing them with excellent ICT facilities may not influence them to use it in their teaching as shown by a mean of 3.1 and a standard deviation of 1.10; Teachers need to be assured that technology can make their teaching interesting, easier, more fun for them and students, more motivating and more enjoyable as shown by a mean of 3.6 and a standard deviation of 1.10; that ICTs is an important component in the process of teaching as shown by a mean of 4.1 and a standard deviation of 0.84 and that the school should always boost the attitude of teachers towards ICT by creating a conducive environment for ICT learning. as shown by a mean of 4.1 and a standard deviation of 0.73.

Majority of respondents had neither accessed computers nor internet in their staffrooms, school, nor in cyber. They had also not received any ICT training before. They lacked expertise in ICT use and could not even use a computer at all, a few could operate basic computer functions and a word processing application, some could use MS Office applications (word processors, Spreadsheets, presentation software) for personal assignment, while very few could use Internet and Internet resources.

Teachers demonstrated deficiency in understanding of ICT operations and concepts; there was also lack of interest in continual growth of technology knowledge so as to stay abreast of current and emerging technologies; It was further established that teachers lacked design learning strategies to use ICT to support the diverse needs of learners; teachers failed to apply current research on teaching and learning with ICT when planning learning environment; They could not identify and locate technology resources suitable for meeting learning objectives; and had not planned student learning in a technology enhanced context; there was no management and care of ICT resource in respondent’s institutions; teachers did not use a technology resource to engage in ongoing professional development and lifelong learning.

Technology is used to collaborate with peer and stakeholders; it was observed that most teachers did not reflect on professional practice to make informed decisions regarding use of technology for teaching/learning; neither did they identify technology resource that affirm diversity. In this review and in the companion report on ICT and Attainment (Cox and Abbott, 2004) there is extensive Evidence of ICT contributing to improved learning by Pupils. The benefits include: enabling pupils to challenge their preconceptions; giving them the means of providing more powerful explanations; helping them develop better reasoning strategies; developing their confidence in their ability to communicate their knowledge to others; helping them achieve more autonomy in their learning; and helping them relate their learning in a wider context.

However, all the evidence shows that these benefits are dependent on the way in which the teacher selects and organizes the ICT resources and their attitude towards integration of ICT, and how ICTs is integrated into other activities in the classroom and beyond. The crucial component remains the teacher’s attitude on learning the skills of applying ICT in class, and their pedagogical approaches.

III. CONCLUSION

The study concludes that the level of teacher’s attitude influences integration of ICT into teaching. It was further established that, teacher’s attitude was negative and that majority of teachers didn’t intend to use ICT in their teaching. Further more, if teachers have negative attitudes toward technology, providing them with excellent ICT facilities may not influence them to use it in their teaching.

IV. RECOMMENDATIONS

The Ministry of Education should ensure that the objectives of ICT in education are achieved through preparation of sufficient and up-to-date tested ICT infrastructure and equipment to all educational institutions. In addition, ICT should be integrated during regular classroom instruction and trainers should demonstrate to the trainee’s innovative ways of teaching and learning.
Primary teacher training colleges should develop and an evaluation framework to help in determining level of adoption of ICT in the process of teaching.

The government should source for partners, well-wishers, stakeholders and sponsors to finance the acquisition of more ICT infrastructure. This will ensure that the adequacy of computer in the colleges so as to improve their use in the process of teaching and learning. There is need to lessen the workload of a teacher so as to enable them find time to learn and integrate ICT in the process of teaching and learning. Adoption of ICT in the process of teaching and learning would also go a long way in ensuring that the workload of teachers is lessened.

The government should provide teachers with regular trainings and seminars on how to integrate ICT in the teaching and learning process. There is need to ensure that they provide refresher training on regular basis.

iii). A large number of teachers did not have access to computers to aid the teaching/learning process and this consequently imply that teacher trainers did not have access to the internet which means that integration is influenced to a large extent by inaccessibility of requisite ICT infrastructure.

iv). That the teachers were either average or below average when it came to handling computers, hence had little exposure with computers and computer related technologies.

v). Given that curriculum delivery was mostly done in classrooms one would be justified to say that computer related technologies were to a large extent not aiding curriculum delivery in the teaching and therefore trainees also lacked that exposure on integration.

vi). There were a myriad of challenges which influence integration of these technologies such as; inadequate computers in the schools, lack of expertise necessary for the integration of ICT in the teaching and learning process, high work load for the teacher trainers and lack of interest among teacher trainers which prevented them from integrating ICT in teaching and learning process. Thus, posing a challenge in the integration process.

REFERENCES


[4]. Albirini (2010) cultural perceptions abd the missing elements in implementation of ICT in developing countries.


[6]. Beak, Jung and Kim (2008) teaching high school ICT using image processing a case study implementation of computer technology.

[7]. Baer and Kenton 2005 Teachers perception of technology and integration in teaching.

