 Abstract

Computer equipment, communications and related resources (ICT) are now commonly found in learning institutions and educators recognize that they can be used to support learning. In Kenya, learning institutions are rapidly embracing ICT in an effort to stay abreast of technological innovations in education and to improve the quality of learning. The purpose of this study was to examine the role played by ICT equipment, connectivity and access in schools to facilitate teaching and learning in Kenya.

Nine schools and one technical teachers college in Nairobi City and its environs were selected for the study and qualitative and quantitative data was collected from the schools on distribution of ICT equipment and their condition, quality of technical support provided, connectivity options used and access to teachers and learners. The data obtained was then analysed using qualitative and quantitative methods in order to show the role played by computer-based technology in facilitating learning and teaching in the selected schools.

 The study found out that 90% of the learning institutions had computers. However, only 60% (6/10) of the institutions and 38.32% (128/334) of the computers were connected to the internet. The study also found out that the ratio of educators to computers was 1.05 (352/334) while the ratio of available computers to educators was 2.53 (352/139). Similarly, the ratio of learners to computers was 24.45 (6,822/279). Another finding of the study was that 80% (8/10) of the institutions had an ICT advisor/technician. The roles of the ICT advisor/technician varied from one institution to another but generally, their duties were to maintain and repair computer equipment; and to advise management on choice of ICT hardware and software. In some schools, they also taught computer skills to teachers and students. The study also found that institutions were using a variety of computer software for teaching, learning and administration and that there was no curriculum from the Ministry of Education to guide primary schools on how to integrate computers in teaching and learning.

It was concluded that, the use of ICT for learning and teaching is still at its infancy in most learning institutions in Kenya due to lack of a formal curriculum to follow especially in primary schools and limited ICT infrastructure. There is therefore urgent need to provide a curriculum to guide the use of ICT for teaching in primary schools and to improve the infrastructure. This will enable the institutions to benefit fully from ICT in their efforts to enhance the quality of education in Kenya.