

Abstract

The study sought to investigate the influence of availability of internet connectivity on teachers' integration of information communication technology in teaching and learning in public primary schools in Kakamega County, Kenya. The study objectives sought to determine the influence of the degree of internet connectivity in various categories of schools on integration of information communication technology in teaching and learning and in public primary schools in Kakamega County, Kenya and to establish the influence of internet accessibility on integration of information communication technology in teaching and learning in public primary schools in Kakamega County, Kenya. The study used Technological Pedagogical Content Knowledge theory. The study used descriptive survey design. The target population of the study was 1 County Director of Education, 356 public primary school head teachers and 3204 public primary school teachers. The sample size for the study was 1 County Director of Education, 189 public primary school head teachers and 356 public primary school teachers who were selected using purposive sampling, proportionate sampling, simple random sampling and census sampling techniques. The sample frame for the study consisted of 546 respondents. Data was collected using questionnaires and interview schedule. Data for this study was presented in frequency tables. Both a quantitative and a qualitative analysis of the results was performed. In order to determine the degree of relationship between internet connectivity and teachers' integration of information communication technology in teaching and learning in public primary schools, the Chi-square (X^2) test was utilized. It was anticipated that, the planners and policy makers will use the study's findings as a basis for revamping the country's present internet strategy in order to address the problems impending teachers' integration of information communication technology in teaching and learning in public primary schools, students would graduate with knowledge and abilities that are competitive on a worldwide scale and go on to play an important role in the development of their country. The results of this study showed that, 76.12% of the sampled public primary boarding schools were connected to internet while 23.88% were not connected to internet. 12.84% of the public primary day schools were connected to internet while 87.16% of these categories of schools were not. The Chi-square (x^2) test results showed that internet connection in public primary schools was not significantly different in public boarding primary schools than in public day primary schools ($X^2 = 14.249$, P Value = 0.512). These findings indicate that, most public primary schools were not

connected to internet and therefore, teachers' integration of information communication technology in teaching and learning in public primary schools in Kenya was minimal. The study therefore recommends that, the government of Kenya through the Ministry of Education should offer broadband internet connection packages to teachers at fair installment and payment terms.