

**THE INFLUENCE OF SELECTED SCHOOL, TEACHER AND STUDENT-BASED  
FACTORS ON THE USE OF ICT IN TEACHING AND LEARNING IN PUBLIC  
SECONDARY SCHOOLS IN NYANDARUA SOUTH SUB-COUNTY, KENYA.**

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## ABSTRACT

Use of Information and Communication Technology (ICT) in teaching and learning plays an important role in providing students with relevant skills and knowledge that will enable them to easily adjust to the evolving world of technology after school life. The Government of Kenya passed ICT policy in education in 2006 whereby schools are supposed to integrate ICT in the curriculum. However, it was observed from available records of Nyandarua South Sub-county that only one public secondary school was offering ICT as an examinable subject. This implied that there may be factors undermining use of ICT in teaching and learning in public secondary schools in the Sub-county. This study aimed at examining some selected school, teacher and student-based factors (independent variables) that could be influencing the use of ICT in teaching and learning in public secondary schools in the Sub-county (dependent variable). The study used *ex post facto* research design whereby data was collected using a questionnaire from ICT coordinators in 30 public secondary schools in the Sub-county with a view to explore their perceptions on the influence that the selected school, teacher and student-based factors could be having on the use of ICT in teaching and learning. Nominal scale data was analyzed through frequency counts and percentages while hypotheses were tested using simple regression statistic at  $\alpha = 0.05$  level of significance. The study revealed that the selected school-based factors have the highest negative impact on use of ICT in teaching and learning, followed by teacher-based factors and lastly student-based factors. Limited connectivity to internet, inadequate computers in classrooms and low ICT funding due to other competing needs in schools were the school-based factors with highest negative effect on use of ICT in teaching and learning. Teacher-based factors that had the highest negative impact on the use of ICT in teaching and learning were skill gap in ICT lesson delivery and attachment to traditional pedagogical approaches. The study also indicated that student-based challenges on ICT usage in the study area were skill gap on computer usage, time wastage through engagement in computer games and infrequent attendance to computer based lessons. The findings generated by the study can enable the Ministry of Education to identify challenges relating to the implementation of ICT policy on teaching and learning in public secondary schools in Kenya. Similarly, school managers may explore ways of addressing obstacles that could be undermining integration of ICT in teaching and learning in their institutions. The study can, in addition motivate further research in this critical area of secondary education within and outside Kenya.