

Does the Integration of ICT in Physics Instruction in Secondary Schools Play the Magic Card?

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Abstract

Physics is one of the subjects that have suffered low enrolment and performance in secondary schools. This enrolment and performance are pegged to the students' perception that Physics is difficult and uninteresting due to its abstract nature. Research has shown that integration of ICT in Physics instruction has the capability of simplifying the abstract content as well as creating interest in learners and consequently improving the quality of education. However, for this to be possible, Physics requires adequate operational ICT knowledge and resources. This study targeted 40 schools, 40 principals and 121 Physics teachers. The study was based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model. Descriptive survey design was used. Random sampling technique was used to get a sample of 18 schools and 52 Physics teachers whereas purposive sampling was used to get 18 principals. Questionnaires, interview schedules and an observation schedule were used to collect data. Validity and reliability of the study instruments were established through consultation, triangulation and piloting. The data was analyzed using SPSS. The study found that integration of ICT in Physics instruction in secondary schools was still very low. The study recommends that more ICT resources should be provided to secondary schools; and requisite integration skills should be given to all Physics teachers.

Keywords: integration, ICT integration, instruction, classroom instruction, physics instruction, quality of instruction, resources, ICT resources

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