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THEME: ‘Re-Engineering Education for Sustainable Development’

Sub-themes:
- Enhancing quality in education
- Educational reforms and governance
- Research, innovation and knowledge transfer in education
- Application of ICT in education
- Resource mobilization and utilization in education
Integration of ICT in Teaching and Learning of Science in Perspective- A Case Study of a Secondary School

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Abstract

The study on which this paper is based was carried out to explore how teachers integrate ICT in teaching of secondary science. Four teachers of science who integrate ICT in teaching and learning were identified using purposive sampling. Semi-structured interviews were used to collect data from these teachers. Follow up non-participant classroom observations of these teachers was carried out. In addition, document analysis of these teachers’ schemes of work and lesson plans was conducted to see if ICT integrated lessons were planned for regularly. Students taught by these teachers were also asked to fill questionnaires to find out how ICT impacted on their learning processes. Findings from this study showed that these teachers have increasingly integrated ICT in teaching and learning. The teachers used the word processor to make schemes of work and write teaching notes. They also downloaded videos from ‘you tube’ and other sites like MERLOT (multimedia Educational resources for Learning and online teaching). The study also found that students had developed a lot of interest in learning of science when ICT was used. Indeed, some students requested that they be allowed to use mobile phones to access the internet in school. However, the study also found that the teachers faced many challenges in trying to integrate ICT in their teaching. Including lack of technical support. The study made several recommendations including that the technical support be provided to teachers in all schools.

Key words
Integration of ICT, teaching and learning of science, secondary education, research, Kenya