

An Assessment of the Potential of ICT in Improving the Quality of Teaching and Learning of Kenya's Technical Education

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Abstract

The aim of this research was to investigate the integration of ICT in technical Education through current and emerging ICT-based solutions by considering ICT as a teaching tool for better grasping of concepts with the use of visual presentations, simulations and access to supplementary resources via the internet for quality technical education delivery. Methodology: The research was conducted using a survey design approach. The study was conducted mainly in technical institutes, polytechnics and secondary schools. A purposive sampling technique was employed to locate the cases that have the required information with respect to the research objectives i.e. mainly in learning institutions. The target population is 2000 while the accessible is about 500. A sample size of 217 is desirable. A sample of 150 was chosen because it lies between 217 and 132. The compositions from various institutions were as follows: polytechnics 35, technical institutes 75 and secondary schools 30. Data collection was carried out in polytechnics, technical institutes and secondary schools using questionnaires, interviews, observations and document analysis. Chi – square (χ^2) goodness of fit and percentage distribution technique were used to analyze the data. To assess the consistency and accuracy of the research exercise, the research reliability and validity were computed and various statistical conclusions drawn. Findings: Findings revealed that ICT use in technical education is an asset, provision of affordable infrastructure, teacher training to facilitate dissemination of knowledge and skills, creating awareness of the opportunities offered by ICT as an educational tool to the technical education sector, are also necessary. Although ICT as an instruction tool is an asset, it does not replace the conventional teacher and the practical hands-on skills. Unique Contribution to Theory, Practice and Policy: The study recommends that for effective utilization of ICT in the instruction Process, measures must be put in place to encourage the provision of infrastructure for access to local, national and international information resources at or next to the institutions.

Keywords: ICT, Technical Education, Teaching Tool.

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