

The usability of tablets in teaching and learning of biology: A survey of Christian Social Service Commission secondary schools

Author: Lawrence John Sanga
(MA Education, 2018)

This study explored the usability of tablets in teaching and learning of Biology in Tanzanian secondary schools. Using a mixed method approach, data were generated from 206 respondents through questionnaires, interviews and classroom observations. Specifically, data were obtained from 16 Biology teachers, 06 heads of schools, 05 academic masters and 180 students from 'O level' secondary schools, specifically those which use tablets in the teaching and learning of Biology.

Data analysis revealed that Biology teachers and students have positive perceptions on the use of tablets in the teaching and learning of Biology. Tablets were considered useful, interesting and easy to use, which gives hope that they would improve the learning outcomes. However, the study found that tablet as a device by itself without e-learning platform coupled with rigorous curriculum content has limited potential in the teaching and learning process. A well-designed e-learning platform embedded into tablets would make it an essential tool for improving the quality of teaching and learning of Biology and other subjects in secondary schools. Government and other education key actors need to intensify the use of tablets in teaching and learning of Biology and other subjects in Tanzanian secondary schools. Inadequate number of tablets in school, limited internet connectivity, skills and knowledge of using tablets and the time allocated, somehow limit the use of tablets in the process of teaching and learning of Biology. Following these findings, the government and key education actors are urged to work on these challenges, to enhance tablet's potential for improving the teaching and learning of Biology in secondary schools.