

Effects of hypermedia on learning achievement in geography for hearing impaired learners in mixed special secondary schools in Kenya

Abstract

This paper investigates the essentials of Hypermedia on the achievement of HI for sustainable development. The poverty alleviation of a country depends very much on the extent to which it can develop, use, exploit and sell information knowledge and technology. Hypermedia for instruction generally facilitates the acquisition and absorptions of sustainable development of the people by widening opportunities for the poor and equipping the HI students with skills to enable their full social and economic participation. The only way to achieve this is to integrate hypermedia in the instruction. The objective of the study were to; find out the achievement of boys and girls exposed to hypermedia lesson, find out determinants on use of hypermedia, determine the influence of integrating hypermedia on learning achievement, examine the institutional support for use of hypermedia in teaching and establish the attitude of learners towards the use of hypermedia in teaching and learning. The study was informed by multiple intelligence and cognitive theory of multimedia learning regarding individual differences and strength of the brain to store well and recall images as opposed to text. The study assumed a pragmatic research paradigm adopting quasi experimental approach involving Solomon four nonequivalent control group design. The target population was twenty hearing impaired secondary. The sample size was 79 students. Simple random sampling procedure was used to obtain four schools. Data collection instruments were pre-test, post-test, questionnaire and interview schedule. Data were analyzed using descriptive and inferential statistics which. The results showed that use of hypermedia; resulted in higher achievement, positive effect on motivation, retention, enjoyment, knowledge construction, self-directed learning and attitude, selection depends on its effectiveness, difficulties encountered were accessibilities and availability, leadership plays important role in the integration of media. The findings of this study may create awareness and need for integrating hypermedia in pedagogies for improved performance, helping learners to focus attention that promotes teachers' instructional technique. Recommendations made; review of curriculum and digitize HI content, improve ICT infrastructure and facilities, MoEST should develop ICT policy for the HI, frequent seminars and workshops to mainstream HI knowledge.

Key words: Hypermedia, Hearing Impaired, Achievement, Geomorphology