Effects of Hypermedia on Learning Achievement in Geography for Hearing Impaired Learners in mixed Special Secondary Schools in Kenya

Obondo Gaudence
Department of Curriculum, Instruction and Educational Media, Moi University,
P.O Box 3900, Eldoret, Kenya.
Tel.: +254-720-550-507. Email: gaudenceobondo@yahoo.com

Prof. Jackson K. Too
Senior Lecturer Moi University, Department of Curriculum, Instruction and Educational Media
P.O. Box 3900, Eldoret, Kenya
Tel:+254-722-672-758. Email:jkiprop2002@yahoo.com

Dr.Violet K. Nabwire
Lecturer Moi University, Department of Curriculum, Instruction and Educational Media
P.O Box 3900, Eldoret, Kenya.
Tel.: +254-722-292-656. Email: vknabwire@gmail.com

ABSTRACT

The hearing impaired (HI) students often encounter communication problems in classroom. Yet some specific media can facilitate and enhance their learning. This study reports on the development of hypermedia educational instruction that supports HI student's achievement in Geomorphology. The objectives were; find out the achievement of students exposed to hypermedia lesson in Geomorphology, gender disparity, determined changes on the role of both students and teacher. 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 mixed methods using quasi experimental approach involving Solomon four nonequivalent control group design. Simple random sampling procedure was used to obtain four schools, two for experiment and two for control group. Data collection instruments were pre-test, post-test and questionnaire. Data were analyzed using descriptive and inferential statistics. The results revealed that use of hypermedia for teaching HI resulted in higher achievement, girls improved more than boys, there are changes in role; students from passive to active, teachers from dispenser of knowledge to facilitator. Hypermedia allows interaction and self-learning. These findings may create awareness and need for integrating hypermedia in pedagogy for improved performance, thus helping learners to focus attention that promotes teachers' instructional technique. The following recommendations were made; review of curriculum and digitize HI

content, improve ICT infrastructure and facilities.

Keywords: Hypermedia, Geomorphology, Hearing Impaired, Achievement

Email: gaudenceobondo@yahoo.com