

Abstract

Mathematics plays a critical role in driving economies and scientific transformation of any society. However, students' poor performance over the years in secondary schools' national examinations remains a major concern to all the stakeholders. The poor performance has been attributed to high influx of students due to free secondary school programme posing a challenge of inadequate one-on-one tutoring leading to attitude issue. The proposed Mobile Intelligent Tutoring Systems (M-ITS) have the potential to deliver cheap and one-to-one support to students outside the traditional classrooms and computer laboratory settings. The use of mobile devices can be an advantage with most schools with inadequate financial resources to invest in and maintain modern computer laboratories since the cost of acquisition and maintaining light weight mobile devices is lower. In addition, learners can easily carry them between home and school as well as share the mobile tutors between classes in the same school. This paper outlines the use of Mobile Intelligent Tutoring Systems in supporting the Mathematics human tutors in secondary schools and the role that mobile devices can play in disseminating and supporting the knowledge gained by intelligent tutors. The paper reviewed the existing related literature and traditional architecture of ITS. It then proposed an additional model on mood detector to be included in the design of M-ITS. The final part of the paper makes considerations on the development and implementation of Mobile Intelligent Tutoring Systems.