Mobile learning application: flipped classroom

ABSTRACT

This study attempts to illustrate the phases of designing a flipped learning mobile application. It is worth noting that changes in students' learning behavior should be met by changes in the classroom – particularly on the way a course should be delivered. Studies have shown that students who learn using the flipped learning method are less likely to fail as opposed to their counterparts in the traditional classroom setting. The rising importance and popularity of flipped learning necessitates the development of a mobile application that assists both students to learn and allow instructors to manage their course via their mobile devices, almost anywhere and anytime. The software development life cycle (SDLC) is divided into four distinct phases: 1) Preliminary study, 2) content design, 3) System design and development, and 4) System evaluation. The effectiveness of the application is tested using electroencephalography (EEG). The findings suggest effectiveness of the mobile application falls within the acceptable range. Improvements for the flipped learning mobile application is also presented.