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Integrating Technology into Undergraduate Classroom; Studentled Video Production as an Effective Instructional Strategy

T.P. Rupasinghe, S.C. Wijesinghe

Department of Applied Computing, Faculty of Computing and Technology, University of Kelaniya, Sri Lanka

In the current world context, successful integration of digital technology and education theory has led to new advents of teaching and learning. Current students, termed as "Digital natives" have grown up in a multi-media simulated world and are highly competent in adopting to new technologies and therefore, it is importance to utilize technology enabled pedagogical approaches to invoke students' interest and engagement. Further in the current socio-economic context, it is of enormous importance to enhance students' generic skills such as self-directed learning, critical thinking, problem-solving. collaboration and cooperation in addition to the domain-specific knowledge and skills. Utilizing digital technologies in the tertiary education can be named as a valuable approach to address above challenges. In the past decade, using digital videos in the teaching and learning have become an emerging instructional strategy, mainly being used in the content delivery. However, there is only a limited number of studies that have been conducted focusing on learning through student-produced digital videos. Current study focuses on investigating student-led video production as an effective active learning instructional strategy. Study was conducted as a part of an Engineering Technology degree program and students (N=72) were asked to create videos (10-15 minutes) to educate their peers on given topics in the course content. Then they were given the opportunity to teach their peers using produced videos. Students' perception on the activity was evaluated using surveys and its' impact on the learning process was evaluated through an in-class quiz and was compared with previous quizzes. Majority of the students (> 90 %) had agreed that the activity helped them to understand subject matter better and improved their confidence, communication skills, team work skills and technical skills. Further, according to statistical testing it was proved that the average mark (57 %) for the quiz after the activity was higher than previous quiz (39 %) proving that the activity has a direct impact on students learning. In conclusion, it can be stated that student-led video production has a vast impact as an instructional strategy which enhances students' competence, generic skills as well as the subject knowledge and thereby enhance the quality of tertiary education.

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E-mail address: thilinir@kln.ac.lk

¹ Corresponding author.