INTEGRATING TECHNOLOGY FOR COLLABORATIVE LEARNING AND KNOWLEDGE SHARING: ITS IMPLICATIONS FOR UNDERGRADUATE EDUCATION

Authors:
Cecilia Titiek Murniati, Ph.D., Ridwan Sanjaya, Ph.D.
and Kristine Lisa Blair, Ph.D.

ABSTRACT

Digital technology has been changing the landscape of higher education teaching and learning. Existing literature on students' attitude on technology in the classroom shows that students are highly adaptable in using sophisticated technology for communication and for educational purposes. However, in order to be able to make the most of technology, students need guidance. Research on technology-based projects for knowledge sharing indicates that students have highly favorable opinions toward active learning strategies where students can contribute significantly to the collective knowledge. While the impact of technology on the academic achievement shows mixed results, numerous studies highlight the benefits of the use of technology on students' retention rate, class engagement, teamwork skill, and students' undergraduate education satisfaction. This paper discusses the results of a collaborative technology-based project and its implications on undergraduate educational policies. We examined students' perception of the group-based game-making in a language classroom. The participants showed interests in creating a game because it allowed them to share their language skills knowledge with their classmates. Classroom is viewed as a community of practice because students are mutually engaged. They work together to achieve a common goal and to establish their identity and membership. In the classroom, every student has equal status. Through group-based game-making, they were able to contribute significantly to the development of self-authorship. The more students interact, the stronger the membership become, and the more information they can share. The results of the interviews underscored the power of collaboration on students' learning experience and self-authorship. It will elaborate on the transformative values of technology in higher education, institutional policies, administrative support, and the infrastructure needed to encourage the creation of more technology-based projects, supports state-of the art education technologies. The challenges and the opportunities of technology for undergraduate learning experience will also be discussed.

Key words: digital technology, game, collaborative learning, self-authorship, community of practice