

Development of a Module for Collaborative Technology Pedagogy Content Knowledge (TPACK) Among Undergraduates

Dorothy DeWitt¹, Norlidah Alias¹, Mariani Md. Nor²

*¹Department of Curriculum and Instructional, Faculty of Education, University of Malaya;
dorothy@um.edu.my*

²Department of Educational Psychology and Counselling, Faculty of Education, University of Malaya

The availability of new digital technologies in the 21st century requires educators to transform their instructional practices. However, traditional lectures may be less relevant in developing skills of collaboration and integrating technology, which are skills required at the workplace. Instead, instructors require technology pedagogy content knowledge (TPACK) which allows for development of collaborative skills and enriching experiences for learning with technology. This research attempts to develop a collaborative TPACK module for undergraduate students in a Bachelors of Counselling programme in the Faculty of Education. The module was developed based on the needs analysis of the students enrolled in the programme, and input from experts in the fields of counselling and instructional technology. The module was developed to investigate how students match different domains of content knowledge with different technology applications for collaboration while they engaged in completing a project. The findings indicate that the collaborative TPACK module could improve collaboration and TPACK. This indicates that there is a possibility that this instructional model could be applied to develop TPACK among instructors in different disciplines. Further research could be conducted to determine if academics from other institutions could also improve their TPACK based on this model.

Keywords: Technology pedagogy content knowledge (TPACK), Collaborative learning, technology in instruction

This project is supported by RU002D-2016 grant under UM-LiTeR Grant of 2016.