

# **A preliminary investigation: Nurturing student-centered learning through CT segmenting mobile augmented reality learning materials among TVET students in Malaysia**

## **Abstract**

This paper describes a preliminary investigation (PI) on how the student-centered learning can be adapted through computational thinking (CT) and segmenting principle. The PI is conducted to investigate the current issues of teaching and learning and the importance of student-centered learning. This study highlights two main domains; CT and segmenting principle as well as one technology intervention to be adapted in designing a learning material that could support the student-centered learning. Articles' reviews and semi-structured interviews are two main methods used in this study. Ten respondents were selected to participate in the interview which are one content expert of CT, three lecturers and six students from Malaysian Technical University Network (MTUN). The findings of PI proved that there is a need to develop a learning material that support the student-centered learning and strengthen the findings of literature reviews that there is a lack of CT knowledge and awareness among MTUN students. Researcher highlights that a learning material related to digital video production could be designed and developed to support the student-centered learning and adapting the segmenting, CT as well as interactive mobile AR technology intervention to reduce the students' cognitive load and increase students' performance and interest in learning.