

## **A conceptual framework for evaluating the effectiveness of robotic game approaches to motivation and performance in Geography**

### **ABSTRACT**

In 2017, the standard secondary school curriculum (KSSM) replacing the previous curriculum was introduced as a continuation of curriculum changes in the 21st century. However, these changes still make Geography a compulsory subject for middle and upper secondary subjects. As a result of this change, fewer schools in Malaysia offer geography in the upper middle class and if so, the choice is given to middle school students. This situation is especially critical as most Geography teachers still practice conventional teaching methods in the classroom. The implication is that students are less motivated to study Geography and this phenomenon has also influenced their geographical achievement. Therefore, various 21st century teaching methods have been introduced in classroom learning and facilitating activities. This is because the use of the game approach as a teaching tool has a positive impact on students' engagement and motivation to learn geography. However, unlike in Malaysia, the game's approach has been less widely introduced, especially in geography learning and facilitation in secondary schools. Therefore, the purpose this conceptual framework was developed to evaluate the effectiveness of using a robotic game approach in improving student motivation and achievement in secondary school. The finding of this study clarify that robotic games suitable to use in Geography learning and teaching.