Transforming Learners' Learning Experience through Gamification-Enhanced Virtual Learning within a Scaffolding Collaborative Learning Environment

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ABSTRACT

The traditional education system is more teacher-centred, too passive and the effect is less satisfactory in the aspect of students' knowledge development (Odukoya & Fapohunda, 2019). Activity-based learning activities are important to help students understand various challenges in the real world in the provided learning environment. Yuliani and Lengkanawati (2017) argued that the involvement of learners in hands-on activities is a more meaningful source of knowledge compared to a source of knowledge that is only acquired theoretically through lectures and referring books. In the philosophy of constructivism, it is also emphasized that learners' knowledge can be built themselves through the experiences in their learning process (Knapp, 2019). Accordingly, the Industrial Revolution 4.0 is emphasized in the education sector as a necessity to produce a workforce that can meet the needs of the job market. According to the Malaysian Education Plan (PPPM 2013-2025), one of the aspirations from the plan is to rapidly catalyse technical and vocational education training in order to produce a highly skilled and adaptable workforce that is innovation, creative and competitive. Art is the key to creativity. The production of artwork allows children to explore opportunities and is not like other subjects to determine probability (Roy, 2019). However, like many other Southeast Asian countries, there are several challenges and problems that need to be addressed to increase competitiveness with socio-economic globalization (Grigorenko, 2019). Visual Arts Education at school seems to be neglected and does not get the same emphasis as the core subjects such as language, Science and Mathematics (Wahid, Bahrum, Ibrahim & Hashim, 2017).

Keywords: Gamification-Enhanced, Virtual Learning, Scaffolding Collaborative Learning Environment