

Occupational Safety And Health – Digital Board Game (OSH-DBG), A Way Forward For Digital Teaching and Learning

Noorsaidi Mahat Ahmad Faiz Abdul Rashid Asmah Alia Mohamad Bohari Hemyza Budin Mohd Azrai Azman Roseline Anak Ikau Nik Umar Solihin Nik Kamaruzaman

Universiti Teknologi MARA (UiTM) Sarawak

noorsaidi@uitm.edu.my

JM024 - Innovation - Local - Category B: Professional (Other Institutions) -

Abstract—Nowadays, it is challenging among the students on the importance of safety at the construction site. Students are demanding, and they grew up with higher requirements for learning. Therefore modern pedagogical paradigms that emphasize creative thinking are required. Gamification in teaching and learning is an innovative approach to motivate students to learn by using game elements to make more exciting and fun. Game-based learning has introduced to improve teaching activities by stimulating learning engagement and motivation among players new skills and concepts voluntarily. Gamification also an effective approach to make positive changes in students behaviour and attitudes towards learning. OSH-DBG is one of a digital board game. Its promote the development of knowledge and information, especially to the built environment students in safety awareness. The experience in the form of games in this product is more likely to influence good attitude in safety awareness, especially to students of Built Environment. This digital and online gamification concept was built to make this game more interactive. The objectives of this project are to increase the development of knowledge and information about construction safety and health and to improve essential skill on safety for construction requirements.

Keywords—e-learning, gamification, interactive, learner engagement, digital direct learning.

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition 2021 © Universiti Teknologi MARA Cawangan Melaka