Virtual Reality in Experiential Learning: A Case in Scout Association of Hong Kong
Subtitle – Use Subtitle Style

Cheuk Hang Au, chau0481@uni.sydney.edu.au; Richard Lui, Richard.lui@polyu.edu.hk

The recent technological advancement has lowered the cost of Virtual Reality (VR) (Au Yiu and Fung 2018) and expanded its applications into various contexts such as entertainment, education and rehabilitation (Cho et al. 2018; Darbois et al. 2018), in the light of its advantages such as enhancing enjoyment and confidence, fostering learning-by-doing and increasing interest (Akçayır and Akçayır 2017). Yet, the actual adoption depends not only on hardware cost but also the availability of contextual-fit VR applications. To develop these contextual-fit applications, unfortunately, can be costly in terms both time and cost for many non-profit organizations (Lui and Au 2018). To support their need for these applications, we need an empirically supported process model to facilitate the development of these technological applications (Au et al. 2017). In our proposed research, we will study the development process for a VR application for the Scout Association of Hong Kong (SAHK) by a group of postgraduate students. The application is expected to facilitate the learning of Airman knowledge of the SAHK members in a more interactive environment. By adopting a mixed research method, which includes interviewing different stakeholders, analyzing the students' reports and surveying users, we expect to establish a process model that can illustrate how to develop VR applications for the experiential learning in the context of non-profit organizations.

References
Akçayır, M., and Akçayır, G. 2017. "Advantages and challenges associated with augmented reality for education: A systematic review of the literature", Educational Research Review (20), pp. 1-11.
Au, C., Xu, Z., Wang, L., and Fung, W. 2017. "Establishing a three-step model of designing the polling stations for shorter queue and smaller waiting time: a case study using computer simulation", Journal of Information Technology Case and Application Research (19:4), pp. 225-245
Au, C., Yiu, W., and Fung, W. 2018. "Emerging Simulation and VR for Green Innovations: A Case Study on Promoting a Zero-carbon Emission Platform in Hong Kong", in IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), pp. 1841-1845.
Cho, I., Yoon, Y., and Jung, M. 2018. "A Study on Entertainment Video Game Content Industry using Virtual Reality Technology", Journal of the Korea Entertainment Industry Association (12:2), pp. 1-13
Darbois, N., Guillaud, A., and Pinsault, N. 2018. "Do Robotics and Virtual Reality Add Real Progress to Mirror Therapy Rehabilitation? A Scoping Review", Rehabilitation Research and Practice (2018), pp. 1-15.
Lui, R., and Au, C. 2018. "I.S. educational game: Adoption in teaching search engine optimization (SEO)", Journal of Computer Information Systems , pp. 1-11