Abstract

This paper is an investigation of the challenges and opportunities associated with online 2D, Augmented Reality (AR), and Virtual Reality (VR) course content as a supplement to traditional pedagogical modalities in a workshop-style, creative course. Current trending suggests that VR users will number well over 200 million by 2020. Ernest Cline’s best-selling novel Ready Player One (2011) and Steven Spielberg’s cinematic adaptation of the same work (2018) have helped bring the idea of academics in a VR environment to the cultural forefront. As the use of Virtual Learning Environments (VLE’s) increases, it is important to examine what pedagogical methods most effectively aid students in achieving desired learning outcomes within those environments. Is virtual pedagogy a potent educational tool or a feckless technological distraction?

In the spring of 2017, the presenter worked with Intelligent.Education and Lineage Media Solutions to produce an introductory course in Songwriting for self-guided learners in an online VLE. Forty, ten-minute sections of lecture content were recorded with a Stereoscopic 3D 4K video camera while forty (40) Xbox Kinect cameras captured holographic metadata from various angles around a green-screen video studio. Intelligent.Education has designed their courses to be consumed on VR platforms like the Oculus Rift, HTC Vive, Samsung GearVR, Playstation VR, Google Daydream, and the Microsoft Hololens. Beyond a simple survey of current technologies, Ready Student One focuses on the challenges and opportunities associated with using 2D video lectures, interactive 3D “props” and transcripts, and immersive Virtual Learning Environments to effectively supplement traditional pedagogical methods in workshop-style creative courses.

Keywords: augmented reality, virtual reality, virtual learning environments, songwriting, Intelligent Education, Lineage Media Solutions, music industry studies