Expanding the Atelier: Design Lead Academic Project Using Immersive User-Generated Mobile Images and Augmented Reality

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Abstract : While there is much hype around the potential and development of mobile virtual reality (VR), the two key critical success factors are the ease of user experience and the development of a simple user-generated content ecosystem. Educational technology history is littered with the debris of over-hyped revolutionary new technologies that failed to gain mainstream adoption or were quickly superseded. Examples include 3D television, interactive CDROMs, Second Life, and Google Glasses. However, we argue that this is the result of curriculum design that substitutes new technologies into pre-existing pedagogical strategies that are focused upon teacher-delivered content rather than exploring new pedagogical strategies that enable student-determined learning or heutagogy. Visual Communication design based learning such as Graphic Design, Illustration, Photography and Design process is heavily based on the traditional forms of the classroom environment whereby student interaction takes place both at peer level and indeed teacher based feedback. In doing so, this makes for a healthy creative learning environment, but does raise other issue in terms of student to teacher learning ratios and reduced contact time. Such issues arise when students are away from the classroom and cannot interact with their peers and teachers and thus we see a decline in creative work from the student. Using AR and VR as a means of stimulating the students and to think beyond the limitation of the studio based classroom this paper will discuss the outcomes of a student project considering the virtual classroom and the techniques involved. The Atelier learning environment is especially suited to the Visual Communication model as it deals with the creative processing of ideas that needs to be shared in a collaborative manner. This has proven to have been a successful model over the years, in the traditional form of design education, but has more recently seen a shift in thinking as we move into a more digital model of learning and indeed away from the classical classroom structure. This study focuses on the outcomes of a student design project that employed Augmented Reality and Virtual Reality technologies in order to expand the dimensions of the classroom beyond its physical limits. Augmented Reality when integrated into the learning experience can improve the learning motivation and engagement of students. This paper will outline some of the processes used and the findings from the semester-long project that took place.

Keywords : augmented reality, blogging, design in community, enhanced learning and teaching, graphic design, new technologies, virtual reality, visual communications

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