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THE INTRODUCTION OF VIRTUAL REALITY TO EDUCATION: SHOULD THE MARKETING DISCIPLINE ENGAGE?

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POSITION PAPER

This position paper explores whether faculty should embrace the use of virtual reality as a medium of academic engagement with the future intake of digital native students. In recent years there has been a tremendous surge in the use of digital device platforms to extend the reach of education to the wider student populations. As a result, the positive engagement by students of multimedia objects, including video, sound clips and data in a more integrated, multi-sensory digital medium has gained significant traction in the learning environment. Students are moving faster into this digital space and it is not long before professors are encouraged by students to adopt virtual reality (VR) as part of their teaching environment.

VR hardware has now gone mainstream and become widely available for consumers to purchase as VR sets, such as Facebook's Oculus Rift, PlayStation VR, HTC Vive and Google's Cardboard. The speed of these advances has meant that software developers are only beginning to catch up with the emerging technology. It is therefore important for professors to engage this evolving technology and assess its suitability to inspire the next generation of professors.

VR can be best described as:

> "*Virtual reality is the use of computer technology to create the effect of an interactive three-dimensional world in which the objects have a sense of spatial presence. The basic idea is to present the correct cues to your perceptual and cognitive system so that your brain interprets those cues as objects "out there" in the three-dimensional world. These cues have been surprisingly simple to provide using computer graphics: simply render a three-dimensional object (in stereo) from a point of view which matches the positions of your eyes as you move about. If the objects in the environment interact with you then the effect of spatial presence is greatly heightened*." (NASA, n.d.)

While engagement and learning are key immediate outcomes for any particular pedagogical action, a key long-term goal for digital natives must be sustainable learner-driven education (Ferguson, 2012). This requires that participants take sufficient hedonic value from learning that they will self-initiate learning in the future (Johnson and Liber, 2008). VR has the potential to appeal to imagination and emotion in a way that exceeds traditional media (Holsapple and Wu, 2007), suggesting VR-based learning may feed into future subject-specific driven practices.

In looking at the issue of enhanced learning opportunities, how do we evaluate the value of using VR? This is difficult as the space is evolving but initial research is providing evidence supporting that VR enhances the learning experience. Experimentation here is the key and faculty should apply for grant innovation funding, either internally or externally. The primary purchase is a headset. You can use the basic concept in Google Cardboard ($30 each) or higher end with the HTC Vive or Oculus Rift (approx. $400 each). Possibly purchase 5 handsets, one for each group of 5 in a class of 25 students. One student per Group will be tasked to use their smartphone and download the software. Locate actual VR videos appropriate to your marketing class on free VR apps like Orbulus, Trench Experience, NYT VR or YouTube. And remember videos made with 360 degree cameras are also a very engaging experience for students. The use of VR videos can help to both extend the curriculum into new areas of learning and offer students an exciting learning medium to better grasp the content of the class material.

There seem to be two main challenges, among others, facing professors. The first one is simple; do professors have the capability to understand the VR platform. While innovation in technology is moving along fast, many faculty do not simply possess the skill set to be able to adapt their subject discipline into the digital world as it is a demanding and time-consuming exercise. However, there is growing evidence that Colleges are beginning to provide faculty with better resources in support of digital initiatives in the classroom. Many Colleges are beginning to set up separate

departments to enable this, such as the Office of Digital Learning in Sacred Heart University. The second challenge is the 'fright' associated with engaging, what can seem at first, to be a very complicated digital platform. While professors are comfortable in the classroom, many are simply uncomfortable engaging in 'deep dives' of technology applications.

While many faculty may not quickly embrace this medium, those faculty who are eager to adopt technology in teaching should experiment with VR by purchasing headset(s) and exploring the VR or 360 videos that students can use. This can be achieved in small steps as part of the learning curve in embracing the digital native student. Taking the opportunity to pilot this platform with classes that may be more applicable to the VR content already available will make this journey much more exciting for all concerned. Reaching out to the student body for help with this endeavor can also help identify students who have both knowledge of VR and the passion to help make this pilot a success. Studies can then focus on evaluating student's learning outcomes after providing faculty with the conviction to explore the VR platform, and thus facilitating students with the latest technology in maximizing their learning experiences in preparing for the new careers in the 21st Century.

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