Embodying the Patient Experience: The Application of Virtual Reality (VR) in the Healthcare Classroom

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Nazareth College is known for its personalized education, a focus on social justice, and the support of students as they pursue their life's work.

Our faculty community is also dedicated to innovative teaching and learning practices which can include the intentional integration of technologies to transform the student experience. Through the adoption of embodied virtual reality (VR) experiences embedded at key points in the curriculum, our health professions faculty have identified a way for their graduate and undergraduate programs to expand students' capacity for empathy prior to starting in-person clinical experiences. This short talk will focus on the ways in which three specific health professions programs have successfully integrated VR in the curriculum – Communications Sciences & Disorders, Physical Therapy, and Social Work - and the student perspective of those experiences.



Fig. 1. Still image of The Beatriz Lab, a VR experience of a senior patient with Alzheimer's Disease. (Image source)

The Teaching & Learning Technologies unit at Nazareth College stumbled upon the use of VR for clinical preparation in the healthcare classroom during a professional conference. At that conference, a California State University nursing program shared how the integration of VR "embodied" experiences actually moved the needle on teaching students vital soft skills, like empathy for patients, prior to entering their clinical

rotations. The data was so compelling that we researched the company which created the VR labs for healthcare professionals, called Embodied Labs, and decided to pilot the labs on the Nazareth College campus to see if our students experienced similar growth.

The pilot experience started with our Communication Sciences & Disorders (CSD) program, specifically integrating the "Alfred" patient experience in our *Aural Rehabilitation* undergraduate course. Alfred is a VR patient with vision and hearing loss.

Our team administered pre-and-post experience surveys to collect data from student participants in the course during the Fall 2019 semester. The student respondents demonstrated significant growth in their understanding of the perspective of an older adult with hearing loss. Overall, the student respondents rated the VR experience as valuable to their learning. See figure 2 for more information.

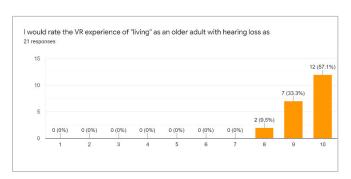


Fig. 2. Student response to a post-experience question rating the VR experience on a scale of 1-10, with 10 being "very valuable to my learning about hearing loss."

The success in our CSD program sparked a shift in other health professions' programs. In this 20 minute talk, we will briefly cover how we adopted Embodied Labs VR on our campus, explore how our Physical Therapy and Social Work programs decided to integrate different VR labs in their curriculum, and share the student perspective. Overall, both our faculty and

students view VR as an integral and transformative piece of their healthcare education at Nazareth College.