VR Graduate Seminars: Where Pants Are Optional but Engagement Is Encouraged

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Introduction

Virtual Reality (VR) is a novel media source that allows users to be fully immersed in a digital world. Although there are varying definitions of what VR is, most users in the education and communication communities define it as a headset device that the viewer wears, allowing them to view and sometimes interact with 360-degree video or imagery. The headset blocks out other visual and auditory distractions, allowing for a fully immersive learning experience (Belisle & Roquet, 2020). While VR has been primarily used for gaming and entertainment, there are new adaptations bringing VR to the business, education, and communication sectors. In this innovative idea, VR was used to conduct virtual seminars on the topic of leadership communication for graduate students and invited industry leaders. The seminars were conducted as part of a distance-education graduate level course and successfully simulated the immersive experience of an in-person seminar. VR allowed students to learn about practical leadership communication strategies from industry experts, creating a unique and engaging learning experience. The use of VR in these seminars allowed for a more dynamic and interactive approach to teaching and learning, with students being able to explore and engage with 360-degree environments that were not possible in a traditional online setting. The immersive nature of the technology also helped students feel more present and connected, despite being in different physical locations.

How it Works

Seven graduate students were selected to participate in four Virtual Reality seminars conducted remotely via distance-education using Meta Horizon Workrooms, a virtual reality (VR) platform developed by Facebook's parent company, Meta. The platform is designed for remote teams and enables users to collaborate in a shared virtual environment. Participants communicate with each other using customizable avatars and interact with shared documents and tools in a virtual workspace. Meta Horizon Workrooms includes features such as a virtual whiteboard, allowing users to share ideas and collaborate visually in real-time. The platform also includes customizable meeting spaces that users can configure to their specific needs, with options for different room layouts and settings. Hand and face tracking technology allows for more natural and immersive interactions, with participants able to perform actions in the virtual environment using hand gestures and realistic facial expressions. Prior to the seminars, the seven VR students were provided with online modules that contained guidance on how to use the headsets and Meta Horizon Workrooms platform effectively. Two industry leaders were also identified and provided with Quest Pro headsets, receiving in-person training on how to lead the virtual seminars effectively using the VR technology. Throughout the semester, four VR seminars were held using Meta Horizon Workrooms, with the VR students participating in the immersive VR experience while the other remaining students (n=40) either joined via video-conferencing embedded in the VR room or watched a recording of the session posted to Canvas. At the end of the semester, the seven VR students were interviewed to gather their perspectives on the experience and the use of Meta Horizon Workrooms for remote collaboration.

Results to Date/Implications

This technology has a wide range of applications and has been used in four main areas to engage users in a new perspective: simulations, training, distance learning, and to access limited resources (Kavanagh et al., 2017). In agriculture, for example, educators and business professionals can use VR applications such as the Metaverse and Meta Horizon Workrooms to provide a more engaging and stimulating environment for students (Rospigliosi, 2022). The potential of VR to enhance distance education and provide new and engaging learning experiences for students is vast. In comparison to more traditional distance education platforms like Zoom and Microsoft Teams, students were more engaged with their virtual avatars through VR and cited a deeper understanding, increased motivation, and increased satisfaction when paired with a learning environment in the virtual world (Hedrick et al., 2022; Kavanagh et al., 2017). Integrating VR into classrooms and adapting to new and emerging technologies can greatly impact educators and their students. In conclusion, the use of VR in education and training is a rapidly growing field and one that shows great potential in revolutionizing the way we learn. By leveraging the immersive and interactive nature of VR, educators can create unique and engaging learning experiences that were not possible before, as demonstrated by the successful virtual seminars on leadership communication.

Advice to Others

Faculty considering implementing VR seminars should plan ahead and think through all the details, including the goals of the seminars, the technology needed, the logistics of getting headsets to students, and the training needed for seminar leaders and participants. Effective communication with students is also crucial, including clear and frequent communication about the VR seminars, how to access and use the technology, and any expectations or requirements for participation. Additionally, it's important to provide thorough training for seminar leaders to ensure they can effectively lead the virtual seminars and troubleshoot any issues that arise. However, there are some challenges to consider, including the logistics of delivering headsets to students, the limitations of current VR technology such as scaling the seminars to include more participants (currently Horizon Workrooms limits the VR room to a maximum of 16 avatars and up to 50 video-conference participants), and the barriers of internet access and technology knowledge. To run these seminars, students were required to have reliable internet service that could support video-conferencing platforms like Zoom. We observed that internet speed-test results varied depending on the time of day, so we found it more helpful to ask students about their video-conferencing experience as a benchmark for success. It is important to identify and address these challenges to ensure the success of the VR seminars. Finally, consider collecting feedback from students and seminar leaders to continually improve the VR seminar experience and ensure it aligns with course goals and objectives.

Costs/Resources

The Meta-Quest Pro **(**$1,499.99) and the Meta-Quest 2 ($399.99) can be used to access the Horizon Workrooms. The Meta Horizon Workrooms is a free app that is currently in Beta development.

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