**Thesis Project Portfolio**

# Virtual Reality as a Tool for Career Development

# Virtual Reality As An Effective Means Of Career Development

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## Sociotechnical Synthesis

This paper examines the possibility of Virtual Reality (VR), the use of computer modeling and simulation that enables a person to interact with artificial three-dimensional visuals, as a viable method for career development. Trevor Pinch and Wiebe Bijker's article, The Social Construction of Facts and Artifacts, is used as a lens to examine how VR technologies overlap with career development by exploring how societal norms and user perceptions shape the integration and impact of VR platforms in professional skill-building. Analysis highlights that the use of VR has had various big interpretations, from entertainment to distinct educational tools . The framework analysis concludes that it is critical to show relevant stakeholders that VR is an effective and safe long term method for skills development in order for large-scale change to occur. Therefore, research revolves around that very question: Can VR be used effectively for frequent and long term periods of learning? To address this question, two experiments were conducted over a span of two weekends involving a diverse group of five participants in order to measure how long individuals were able to comfortably stay within the virtual environment and whether learning within the virtual environment was viable. Findings from the first experiment showed that participants managed to remain immersed in the virtual environment for around 1.57 hours before lack of enthusiasm prompted many of their exits, with very few reporting physical strain as their cause of exit. These findings are reasonable, as there were no tasks for participants, and although there was streaming entertainment and video games to maintain interest, it may not have appealed to everyone. It also aligns with the prior understanding that prolonged exposure to electronic screens has been consistently associated with ocular strain. The second experiment showed that participants generally found the experience of engaging in educational tasks within the virtual environment enjoyable and recognized its potential benefits in industry development. However, when asked about their opinion on VR being a viable method for career development, every participant expressed optimism but were hesitant to fully embrace it over current traditional methods, as they expressed skepticism about its applicability in other fields, noting limitations and practical challenges during their experience. Although there are clear findings in these experiments, the scale of this research is too small. Five participants is not nearly enough to make conclusions for populations. However, the preliminary findings can serve as a foundational basis for advocating funding toward larger-scale investigations.