

How can VR help people gain a better understanding of dyslexia

We all interact and experience life from our own perspective. Differences such as physical or learning disabilities, affect our perspective. Since our physical and digital worlds are often created for the majority of people's perspectives, minority groups (such as those with disabilities) can face challenges and barriers caused by the environment that make it harder for them to live their day-to-day lives. This issue drives me to be interested in exploring what can we do to improve the external environments for people with disabilities, and to apply the knowledge and skills I have been learning through the Interactive Media programme at York. The chance to help others inspires me to choose the research topic for my application to the Laidlaw scholarship.

My research project will explore whether Virtual Reality can be used to help people better understand dyslexia. This topic aligns to the creative research theme of the University of York as it aims to deliver new experiences to provoke, inform and entertain for the wider benefit of society. It also touches upon issues such as equality and wellbeing as it applies technology to communicate different perspectives. The existing technologies and specialized educational institutions that are found based on the medical model effectively support people with dyslexia to improve their academic progression. However, this approach can lead to people with dyslexia being excluded in different environments which further leads to discriminations as well as oppression towards those who have a learning disability. The aim of this project is to help broaden the perspectives of people who do not have dyslexia so that more people can understand the challenges and barriers that the structures within our society present to minority populations. Enabling more people to have a broader perspective can lead to the removal of barriers, to reduce physical and mental struggles and to create more enabling in social environments for those with dyslexia, without eliminating their individual characteristics.

In order to ensure that the project will be successful, I will first spend two weeks to conduct a literature review focusing on dyslexia, how people with dyslexia interact with others and their environment as well as key challenges and barriers for people with dyslexia. In order to get a deeper understanding on dyslexia, I plan to meet with people with dyslexia, and volunteer in related organizations in the community to observe the methods employed to improve the inclusion of people with dyslexia in different social environments. Based on my research findings, I will spend weeks three and four identifying concepts to frame different gameplays and define the parameters for a VR video game. The final two weeks will be spent documenting my research findings and game design. The time that would be needed to make a game would exceed the time available for this research project, so the demonstration project of my research will be a written report outlining the content design with a prototype of the game including storyboard model of game scenarios.