Exploring Interactive Multi-Dimensional Approaches of Delivery of Communication in Patient Scenarios in Oral Health Education

Supervisors: Informatics: Dr Alfie Abdul-Rahman & Dr Lin Gui
FoDOCS: Dr Melanie Nasseripour & Dr Ana Angelova

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This is a joint project between the Department of Informatics and the Faculty of Dentistry, Oral & Craniofacial Sciences (FoDOCS). Communication in patient scenarios in oral health education can be cost-intensive in terms of time and resources. In this project, we propose exploring interactive multidimensional approaches such as immersive technology, text-to-text, and voice-to-voice communication delivery in patient scenarios in oral health education. These approaches enhance the learning experience and offer a cost-effective solution, making the delivery of communications in patient scenarios in oral health education more feasible and sustainable.

This project aims to design and create adaptable, contextually relevant patient scenarios, offering engaging and realistic interactions for students. The beauty of these approaches is their adaptability. Whether it is a VR interactive tool, text-based, or voice-based conversation, they can all respond to students' inquiries and actions in real-time, mimicking the interaction they would normally have in the clinic. This adaptability ensures the relevance and effectiveness of the project in various educational settings.

We aim to examine the Generative Language Models (GLMs) to generate customized case studies and simulation scenarios so that each learner can practice specific skills repeatedly in a controlled environment. This encourages the acquisition and refinement of skills, such as explaining the importance of oral hygiene and discussing dietary habits. The critical focus is patient-clinician communication, behaviour change, professionalism, etc.