

Immersive Learning Pilot: Closure report

A partnership project by Mater Foundation, Mater Education and Advanced Qld.

Immersive learning engages the senses, allowing employees to watch, listen, and interact within the learning experience. The purpose of this pilot was to explore immersive technology as a tool to enhance learning, effect, engagement, and experience within a healthcare culture.

Sean Hunter, Director of Systems Transformation

Introduction

When used strategically virtual reality (VR) has the potential to:

- Shorten the time participants need to learn
- Reduce the number of learner mistakes
- Boost knowledge retention and creativity
- Scale delivery of education with consistency
- Offer active experiences rather than passive information sharing
- Provide a safe space to practice new skills

When VR is used in learning and development initiatives, we can push the boundaries of professional development and training by:

- Transporting participants to new places
- Simulating real-world scenarios and creating safe environments for practicing new concepts
- Engaging participants senses, allowing them to watch, listen, and interact within the learning experience

To this end, VR was the standout innovation opportunity for Mater's deceasing participant rates within our organisational culture program, Speaking with Good Judgement (SWGJ).

A cultural program promoting psychological safety

Speaking with Good Judgement introduces Mater employees to concepts and principles for establishing a safe environment for challenging conversations, including how to speak up and provide feedback.

To enhance the effectiveness of this program, Mater Education conducted a pilot study using virtual reality technology to provide a safe, content-rich, and scalable learning environment for its employees. By utilising this immersive technology, Mater Education aimed to improve the learning experience, engagement, and retention of the SWGJ concepts, which would enable its people to better prepare for real-life work situations requiring SWGJ behaviours.

Summary

This review will evaluate the effectiveness of VR as a scalable solution for education within a healthcare environment. The focus is on verifying the application of VR technology as a means of delivering and teaching the Speaking with Good Judgement methodology, particularly in the context of feedback conversations.

The making of "Through the Looking Glass"

Timeline

Originally planned for a 6-month duration, the pilot project timeline was extended by 3 months to allow for the implementation of individual SWGJ sessions in the SEQ and NQ regions. The timeline below provides an overview of the entire project, showcasing the deliverables accomplished during each month.



This report details the project approach and methodology employed during the development of the VR scenarios and product. It also delves into the evaluation of participants' experience after its launch in October, providing a detailed account of their feedback and the performance and effectiveness of VR education delivery.

Method

Stage 1: The partnership

Thanks to the support of Mater Foundation, Mater Education, and Advance Queensland, we partnered with People Tech Revolution to develop a pilot VR product called 'Speaking with Good Judgement: Through the Looking Glass'. This product consisted of a series of short, animated scenarios that transported Mater employees into a virtual world where they could interact with various SWGJ scenarios guided by a narrator. Our goal was to enhance the delivery of the SWGJ concept of 'feedback' by offering a VR experience that showcased the functionality and application of this technology as a tool for learning at Mater.

Stage 2: Building our virtual reality capital

Significant time and effort went into the design and development of all the characters and environments for this pilot. This included the creation of 360-degree, customised renders of Mater facilities such as the lobby, lunchroom, and patient room, as well as the development of 7

characters. By investing in this work as part of the pilot it will allow Mater to enhance any future virtual reality projects by optimising development processes and minimising costs.

Characters:





Helen



Benson







 VR Guide

 Catherine

Environments:



Stage 3: Design of branched learning options

Utilising branched scenarios in education is a wildly recognised technique that allows learners to acquire practical skills in a safe and supportive environment, without the fear of failure. This learning approach is based on presenting learners with a series of decision points or branching paths that enable them to explore multiple outcomes and consequences of their actions, leading to a deeper understanding of the topic.

The scripts for 'Through the Looking Glass' were co-designed by a team of experts from Mater Education, People Tech Revolution, SWGJ team leads and the Centre for Medical Simulation. The objective of this collaborative effort was to create realistic, engaging, and interactive scenarios that would enhance the current delivery of SWGJ and improve the learner experience.

Concept 1 Overview - Example

This scenario would involve the participant viewing the situation as a bystander and then being put in the shoes of the person asking for directions. Then the participants can practice good judgement by approaching Paul.



Concept 2 Overview - Example

A colleague has entered the patient's room without hand-washing or using appropriate hygiene techniques. Explore multiple branching narratives that use SWGJ frameworks to see how to react.



Concept 3 Overview - Example

This scenario would involve the participant acting as a bystander for someone showing up late to the meeting. They will have the opportunity to speak with good judgement to either the meeting organiser or the person who was late to gain their perspective.



Stage 4. Launch of the pilot and evaluation

The pilot was proudly presented at multiple events, including the Innovation Steering Committee end of year annual meeting (2022) and the People and Learning Monthly meeting. It was also showcased in various departments within Mater, such as Digital Technology and Infrastructure and Corporate Learning and Organisational Development. Notably, members of the Mater Executive Leadership team, including Mater CEO Dr. Peter Steer, CEO of Health Donna Bonney, and Chief People and Learning Officer Donna McGrane, have personally tested the product during the pilot phase and expressed their satisfaction and support for its current and the future use of VR at Mater.

Importantly, *Through the Looking Glass* was delivered at Mater's regional and Brisbane campuses to an audience of more than 60 participants - 30+ staff in Mater regional sites and 30+ staff in Mater SEQ sites. Prior to launch a workshop was hosted by People Tech Revolution to brief SWGJ facilitators on the technology, standards of execution and trouble shooting. Following this session Alison Ellis; SWGJ Program Lead and her team of facilitators began integrating the product into the flow of their typical live delivery.

Evaluation results are as follows:

• Did Mater people like it?

Data collected immediately after exposure to the VR experience indicating completion rates, engagement and reflections about the technology as a medium for learning.

I found the virtual reality experience to be enjoyable

Mo	re Details 🖓 Insights	
•	Strongly Agree	47
•	Somewhat Agree	10
•	Neutral	3
•	Somewhat Disagree	1
•	Strongly disagree	0



The virtual reality equipment felt comfortable to wear

Mo	re Details 👋 Insights	
•	Strongly Agree	41
•	Somewhat Agree	18
•	Neutral	2
•	Somewhat Disagree	0
•	Strongly disagree	0



I would welcome virtual reality as a regular medium for learning at Mater

More Details

•	Strongly Agree	47	
•	Somewhat Agree	12	
•	Neutral	1	
•	Somewhat Disagree	1	
•	Strongly disagree	0	
•	Somewhat Disagree Strongly disagree	1 0	

- When asked if they would like to do the experience again, and why? Participants responded in the following ways:
 - Great to break up the course
 - It's fun and interactive
 - I feel it is a great way to learn and feel involved
 - It is an excellent and enjoyable learning tool
 - I was more focused
 - I felt more engaged in the learning experience
 - VR made it easy to focus on the content and concentrate
 - It allowed me to move at my own pace
 - I would like to use it again to practice more SWGJ concepts



SWGJ Lead, Allison Ellis and Mater employee Sarah.

 When asked to share her reflections about the experience SWGJ Lead, Alison Ellis responded in the following way:

> Through the looking glass presented a really psychologically safe and focused environment for participants to engage in or observe what a good SWGJ moment looked like. People could put on the googles and be transported to virtual Mater where they recognised the place and space and felt comfortable to listen and understand the concepts as told through the narrative the characters shared. This was very powerful for their learning.

• Did Mater people learn something?

Data collected within weeks of participants' completing the VR experience increased impact on behaviours of staff through a sustained ability to recall the concept of the Basic Assumption, practice principles for holding the Basic Assumption and reflect upon the Basic Assumption in action. I felt more engaged with VR content than the traditional face to face learning content

More Details		
Strongly Agree	26	
Somewhat Agree	21	
Neutral	10	
Somewhat Disagree	3	
Strongly disagree	1	

My attention was focused on the virtual world and not the real world during the experience

Mo	re Details 🖗 Insights	
•	Strongly Agree	44
•	Somewhat Agree	11
•	Neutral	4
•	Somewhat Disagree	0
•	Strongly disagree	2



- What impact did the VR experience have on people's behaviour? Evaluation pending Data collected three months after participants complete the VR experience with the aim of understanding if VR Increased employee skill and engagement for using the Basic Assumption in their everyday interactions with colleagues as evidenced through analysis of personal development plans.
- What was the impact of behaviour change on the business? Evaluation pending
 Data collected within 6 to 12 months of the participants' completing the VR experience.
 Captured through a survey this stage will measure participant perception that informs Mater
 about the VR experiences impact on morale as evidenced via employee satisfaction. (a)
 Mater People indicate an appreciation for the VR experience and (b) do Mater People
 demonstrate an appetite for future applications of VR at Mater in the future. Some qualitative

As mentioned, we are unable to provide quantitative evaluation about behaviour and impact until participants have had time to embed the learning and practice their skills. Nevertheless, when asked to predict the application and value of the VR product in the future this is what Alison had to say:

What we are most excited about is the next step. Meaning, how people can interact with the characters. It's one thing to see them and hear them, but we can tell it is going to be another thing for participants to "have a go" themselves. This next stage should also help to embed learning through practice and play. Pre VR we would role play the SWGJ scenarios and then invite people to reflect. When we evaluate participants experience of the program, they tell us they are comfortable with the content but overwhelmingly report their confidence is low to walk away from the learning and practice the behaviour. VR will be a game changer, helping us to create ongoing opportunities for deliberate and safe practice of the skills following on from the live workshop experience.

Summary

The pilot participants' feedback demonstrates that VR technology can considerably enhance the learning experience of staff, while also providing a psychologically safe environment to observe and learn key concepts from the SWGJ program.

According to the pilot, incorporating VR technology in the SWGJ program has yielded positive results in terms of participant focus, engagement, and experience. A whopping 90% of participants reported an increase in their concentration levels, 77% found the scenarios presented to be more engaging than traditional face-to-face delivery, and 93% expressed overall enjoyment of the experience. These findings are significant as they provide essential ingredients for participants to absorb, learn and experience the key concepts of the program.

These results indicate Mater People thrive in immersive and engaging VR environments as it aligns to their hunger for continuous learning and comfort with technology. These findings, along with comments from the SWGJ program lead has led to Sean Hunter, Mater's Director of Systems Transformation supporting and endorsing the adoption of VR as a viable tool for education.

Next steps

With over 96% of participants wanting to see more training delivered via VR and the findings from this pilot the next steps would be:

- Working with the SWGJ team on how we can embed Through the Looking Glass into the program full time
- Continue the partnership with People Tech Revolution to produce a practice or a speaking in your own word's scenario for the SWGJ program
- Enhance the existing VR scenarios with any feedback from the program to add additional scripting, characters or environments
- Identify opportunities within Mater for additional VR scenarios e.g. Other corporate learning or organisational development programs, health programs that can reduce time and cost (donning and doffing PPE)
- Investigate if VR can enhance the delivery of Mater Education's High Value Conversations program

Overall the goal would be to update and add new content to Mater's VR library and work on embedding VR into education delivery at Mater.