

# ASCILITE 2023

*People, Partnerships and Pedagogies*

## Unlocking empathy and preparedness: Enhancing criminal justice education with Virtual Reality

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Developments in virtual reality (VR) technology and the increased availability of high-speed internet, have increased the affordability and accessibility of VR. This paper investigates the potential of VR to supplement the theoretical coursework of a large criminal justice course in Aotearoa New Zealand. By simulating interactions with people in prison, VR could offer a unique training platform where students develop essential skills, including communication, conflict resolution, and empathy, within a controlled environment. This ensures that trauma-sensitive issues can be addressed safely and effectively, providing students with invaluable experiential learning opportunities. Using VR, students could engage in simulated scenarios that mirror real-life. This immersive environment would allow them to gain firsthand experience and explore their emotional responses in a safe setting. Students could develop a deeper understanding of their triggers, manage their trauma, and acquire the necessary coping mechanisms to handle the challenging situations they may face in their future careers.

Keywords: virtual reality, criminal justice education, simulations

### Introduction

The University of Canterbury, Te Whare Wānanga o Waitaha in te reo Māori, is located in Ōtautahi Christchurch in Aotearoa New Zealand. Within the university, the discipline of criminal justice finds its place in the Faculty of Law. The Bachelor of Criminal Justice was established in 2014 as an interdisciplinary offering that addresses the growing demand for graduates in the criminal justice agencies. However, as criminal justice educators, we are facing the challenges brought about by the post-pandemic landscape of higher education. These challenges include declining lecture attendance and the need to adapt to new realities in the field (Marinoni, et al., 2020).

In addition, when thinking about criminal justice education, two questions are front of mind:

1. How can we adequately prepare graduates for employment in the criminal justice sector, fostering resilience and embedding transferable skills for long-term career success?
2. How can we ensure that our programs meet the needs of prospective employers by producing graduates who are ready to fill existing positions and equipped to address the evolving demands of criminal justice and allied agencies?

These questions, in the context of post-pandemic higher education, urge us to explore effective program delivery methods, curriculum design, and industry engagement strategies within criminal justice education. Moreover, the integration of virtual reality technology holds the potential to address these challenges and enhance the educational experience for students in criminal justice programs.

Thanks to affordable and reliable motion tracking systems, headsets, and the development of suitable software platforms, virtual reality (VR) has advanced to a mature stage within the commercial market (Oikonomou et al., 2022). These technological advancements have made VR accessible and viable for various applications, revolutionising industries and providing new possibilities for immersive experiences. Virtual reality technology offers a significant advantage in creating immersive virtual environments that provide users with authentic experiences that resemble those likely to be encountered beyond the virtual environment (Barbe, et al., 2023). In today's society, understanding diverse perspectives, promoting constructive responses, and cultivating empathy with reduced bias have become increasingly crucial (Aitamurto et al., 2021). VR, serving as a platform for immersive storytelling, holds the potential to evoke empathetic responses and contribute to social change. But the potential of virtual reality extends beyond broader social change to education. Monfared and colleagues (2022) highlighted how VR could enhance students' knowledge and skills through personalised learning, multi-sensory approaches, and improved interaction with educational content. Authentic, virtual experiences offer novel opportunities for interactive and engaging learning, transforming the educational process into a multi-dimensional, enjoyable, and first-hand experience.

## **Criminal justice students**

Research by Eren and colleagues (2019) indicated that students who have experienced past victimisation often pursue careers in criminal justice with the intention of bringing about systemic change. This desire to make a difference was also observed among criminal justice students who had personal encounters with police arrests, as highlighted by Disha and colleagues (2020). Our own experience aligns with these findings, with many of our students sharing their past or ongoing traumas during consultation sessions. Despite being forewarned about potentially triggering content, students frequently are re-traumatised during lectures, readings, or even reflective assessments.

It is crucial to provide these students with experiential learning opportunities before they enter the field for several reasons, including acknowledging and addressing their trauma. These traumatic experiences can have a profound impact on their emotional well-being and may trigger distressing reactions when they encounter similar situations in their future careers. Students can engage with realistic scenarios in a controlled environment by incorporating experiential learning, such as immersive simulations or role-playing exercises in VR. A VR experience can serve as an initial introduction or a preview of future in-person encounters (Bloch, 2021). This approach allows students to process their trauma in a supportive and supervised setting, fostering resilience and building coping mechanisms. Experiential learning provides an opportunity for students to develop critical skills, such as empathy, communication, and decision-making, while also gaining a deeper understanding of the complexities and challenges they may face in the field.

## **Potential uses of virtual reality in criminal justice education**

Virtual reality is a promising tool in criminal justice education, offering immersive and interactive experiences that enhance learning outcomes and provide unique opportunities for skill development and experiential training.

## **Assessing suitability of prospective careers**

Virtual reality (VR) offers a unique opportunity for students to gain insights into various criminal justice careers before committing to them. By immersing themselves in virtual scenarios that simulate real-life situations, students can gain a realistic understanding of the challenges, responsibilities, and dynamics of different roles (Smith, 2021). This experiential approach allows students to assess their compatibility with specific careers and determine if they align with their interests, skills, and personal characteristics. Through VR, students can explore alternative career paths within criminal justice agencies, considering factors such as communication styles, problem-solving approaches, and ethical decision-making. This informed exploration enables students to make more informed career choices and pursue paths that better suit their individual strengths and aspirations. At the University of Southern Queensland, law students were required to participate in a court case that unfolded within the virtual world of Second Life. The students actively engaged in a realistic role-play exercise designed to educate them about criminal law. To enable this, two virtual courtrooms were developed, and the students dressed their avatars in legal gowns. While one of us joined the project during its final stages, it became apparent that the learners displayed a notable level of nervousness similar to that experienced in a genuine courtroom setting, as described by Barnett and McKeown (2012). This virtual experience gave these law students an idea as to what it would be like to be a criminal lawyer, giving them the opportunity to reflect on the suitability of this career.

## **Learning frontline skills**

In conversations with criminal justice agencies in Aotearoa New Zealand, the demand for 'lived experience' from graduates becomes apparent. Despite being young and inexperienced, staffing shortages across the agencies have necessitated them deploying individuals with limited 'life' experience. As a result, new employees are leaving the agencies after a relatively short period (B. Alexander, personal communication, 2022). The evolution of AI (artificial intelligence) models opens up possibilities for students to safely interview prisoners or individuals under supervision, and gain that experience they are lacking. Effective communication and interviewing skills are essential across various professions, such as conducting police investigations, prisoner interviews, working with mentally ill offenders, and creating forensic reports (Barbe et al., 2023). VR training applications provide an immersive environment to enhance the acquisition and refinement of these crucial skills.

To enhance the realism of the training environment, virtual characters within the VR framework could offer contextually appropriate responses and realistic appearances and behaviours. Students could receive standardised reports evaluating their interview techniques, enabling continuous improvement and skill development (Barbe et al., 2023). Perspective taking involves understanding and imagining how others perceive the world. This can be achieved through mental simulation or visualisation, including imagining oneself as the other person (van Loon et al., 2018; Batson, 2012).

The use of virtual reality in these contexts has already been explored. Restorative justice, as a theory and practice, emphasises repairing harm caused by crime or conflict by actively involving all affected parties in seeking understanding, accountability, and healing. Professor Bloch (2021) proposed an immersive scenario where offenders could step into the shoes of survivors or their family members through avatars, partially experiencing the consequences of their actions. Dr Shakti Butler has developed Healing Justice VR, an interactive and immersive experience where participants engaged in role-play conversations with incarcerated individuals to simulate their preparation for future meetings with crime victims (Butler & Butler, 2022). In the context of prisoners, an open-source VR training framework has been developed by the Human Medical Center Göttingen. This framework used virtual characters with diverse biographies to provide conversational practice for prisoners (Barbe et al., 2023).

## **Virtual prison tours**

In the typical semester, we would take our learners on a visit to a prison to provide them with first-hand experience. However, due to staffing shortages in Ara Poutama Aotearoa Department of Corrections New Zealand, corrections officers are unable to accompany students on these tours, despite recognising the value of such experiences for prospective employees. To address this limitation, virtual reality (VR) technology offers a solution by simulating prison tours through VR rooms. These immersive experiences combine cinematic VR movies and omnidirectional camera technology to recreate realistic prison environments. By leveraging this technology, users could explore and engage with the virtual prison environments, experiencing a heightened sense of immersion. The VR movies would follow key principles, including adopting a first-person virtual presence, mirroring the postures of the characters for a more authentic experience. The movies must incorporate realistic graphics, high-quality actor voices, and dramatised narrations to create an immersive atmosphere. While interactive elements should be simplified to avoid distractions, users would be encouraged to interact with objects within the virtual scenes, enhancing the overall realism (Oikonomou et al., 2022).

The Erasmus+ STEPS (Supporting Ties in the Education of Prisoners) Project aimed to facilitate reflective and intrinsic discourse through immersion in VR stories. 'Bibi's Story' was an engaging and interactive short movie that took viewers into the life of Bibi, a young woman involved in drug trafficking and subsequently imprisoned. Set entirely within the confines of a small holding cell, the movie effectively portrayed the psychological pressure and isolation experienced in the prison environment. Through the viewer assuming the perspective of the main character, they could interact with the surroundings, selecting objects, and examining writings on the walls that trigger Bibi's memories and thoughts. Although the viewer's movement within the scene was limited due to the constrained space of the cell, this intentional constraint encouraged thorough exploration and attention to detail. By following the character's narrative, collecting fragments of information, and uncovering the circumstances that led Bibi to commit her crimes, the viewer gained insight into her motivations and actions (Oikonomou et al., 2022).

In a similar way, criminal justice students have the opportunity to not only gain knowledge about the physical layout of a prison but also familiarise themselves with the diverse individuals they are likely to encounter within those prison walls, all in a safe and supportive environment. This innovative approach eliminates the 'zoo animal' element often associated with traditional prison tours, where students are mere spectators. Instead, VR allows students to engage with virtual characters and experience realistic interactions, fostering a deeper understanding of the human aspect of incarceration. Through this immersive experience, students can develop empathy, challenge stereotypes, and gain insights into the complexities of the criminal justice system, ultimately better preparing them for their future roles.

## **Conclusion**

Immersive virtual reality, if effectively implemented, provides a distinct form of detachment from real-world interactions compared to face-to-face encounters with people in prison. The VR setting offers a unique opportunity for engagement in experiences that may not be readily accessible or appropriate in the physical

realm (Bloch, 2021). However, it is crucial to approach the use of virtual reality critically and thoughtfully, considering its role and implications within the current context.

The concept of presence plays a central role in the effectiveness of virtual reality experiences. Presence refers to the degree of immersion where an individual's motor and perceptual systems interact with the virtual environment in a manner similar to the physical world. It encompasses the phenomenon of place illusion, which generates a strong sense of actually being present in the virtual space. Additionally, the concept of plausibility illusion complements place illusion by creating a convincing perception that the events unfolding in the virtual environment are genuinely occurring, despite the participant's awareness that they are not (Bloch, 2021).

By understanding and leveraging the principles of presence, place illusion, and plausibility illusion, virtual reality experiences can be designed to provide a heightened sense of immersion and realism. These experiences can offer unique perspectives and insights to the responsible party, allowing them to partially experience the consequences of their actions or understand the impact of their behaviour on others (Bloch, 2021). However, careful consideration must be given to ethical guidelines and the dignity of all participants in these encounters.

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