

Title: Virtual Reality for Indigenous Heritage Media Practices

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Short Abstract: A community mural was created by Indigenous and refugee primary students in a virtual subway using immersive virtual reality technology, exploring the value of a new heritage media practice to engage Indigenous learners in culturally relevant and future-focused multimodal literacy practices. Using a virtual reality headset and motion sensors, with virtual spray-painting graffiti software, the virtual subway became a vibrant digital landscape for valuing Indigenous heritage through dynamic media affordances. The students explained the cultural significance of their graffiti art, while immersive storytelling engaged students in new forms of embodiment, such as in-air haptics and locomotion. Data collection included virtual reality screen capture, video recorded think-aloud interviews, and still images of the students' virtual paintings. The activity formed part of a larger, funded research project that explores the transformed role of the senses and the body in new multimodal and digital media practices, such as virtual, mixed, and augmented reality - a group of gaming and industry technologies called extended reality (XR). While these are predicted to become some of the fastest growing technology markets this decade, there are few examples in research to guide teachers to design culturally relevant learning experiences using XR media for Indigenous and other culturally marginalised groups in education. The paper addresses the conference theme "Hearts, Mind, Stories: Landscapes of Learning" by demonstrating how immersive digital technologies can be used as multimodal literacy tools, enabling students to share their cultural stories in new virtual landscapes.