



Panoramic video telepresence provides immersive virtual reality to enhance and extend student learning experience

City University of Hong Kong - School of Veterinary Medicine
in collaboration with Cornell University

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Introduction

City University of Hong Kong has established a veterinary school that strives to be a regional leader in quality veterinary education. International accreditation through the Australasian Veterinary Boards Council (AVBC) requires the school to address all the major livestock species in its animal husbandry and clinical teaching. Providing that experience in the built-up urban area of a major Asian metropolis is challenging and virtual experiences will be drawn upon to extend and enhance students' experiences.



Background

The advantage of virtual experiences is that they are predictable and repeatable, and can be sourced from all corners of the globe, allowing the students based in a major Asian city to experience farm life in Australia, New Zealand, Europe and the United States. Sheep and cattle, pig and poultry (as well as abattoir) operations can be virtually experienced.



A prototype shearing shed farm experience was filmed on a sheep farm in South Australia.

Results

The School of Creative Media at City University of Hong Kong is a world leader in the innovation of cultural and educational applications of virtual and augmented reality. It has developed a 360-degree projection environment which, when combined with a proprietary system for panoramic digital video recording, is able to create compelling real world scale immersive experiences. These techniques are eminently suited to high fidelity 360-degree recordings of farm life at different locations in the world, enabling students in Hong Kong to have a telepresent sense of being there. The 10-metre diameter projection arena provides for our expected thirty students at a time to be completely immersed in these situations and have the most direct teaching and learning experience possible in virtual reality.



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<https://youtu.be/LCTZ4ACGuCs>

