**UNE L&T Symposium 2025 – Presentation Synopsis**

**1. Title of Presentation:**

CattleVR in Animal Handling at UNE: Immersive learning for safety, welfare and confidence.

**2. Presenter(s) Name(s) and Affiliation(s):**

Emma Lynch, Tellisa Kearton and Amy Tait. School of Environmental and Rural Sciences, UNE.

**3. Main Takeaways:**

***Takeaway 1:*** This immersive learning tool provides an engaging experience for students and prospective students to learn about cattle behaviour and handling.

***Takeaway 2:*** CattleVR provides needed context for putting into practice low stress stock handling principles in a safe and immersive environment that facilitates peer learning and engagement.

**4. Application in Educational Contexts:**

***Teaching Methods:*** The use of virtual reality in animal sciences produces higher interest in participants compared to non-immersive computer screens (Filter, Eckes, Fiebelkorn & Büssing, 2020), however more research is needed to measure direct impact for learning outcomes. By developing activities based around interacting within the virtual environment, we have created numerous learning experiences and resources that incorporate peer learning and directly linking to the low stress stock handling principles.

**Assessment:** The VR activities can be directly linked to assessment in animal handling as they incorporate practices and content embedded in the teaching materials, such as flight and pressure zones, balance points, and techniques for low stress stock handling. Assessment for animal handling includes a viva interview in which students answer questions directly related to their understanding of low stress stock handling and describe the way in which they interact with animals.

**Student Engagement:** The CattleVR program has been shown to be highly engaging for students of all ages, with students keen to experience as well as observe, activity participation and feedback has been positive. We are currently developing some survey feedback materials to gather quantitative data on the efficacy of the program in improving student engagement and learning outcomes.

**Curriculum Development:**

Virtual reality programs can be simple to implement into delivery of educational materials as it primarily works in a complimentary manner. By allowing additional time to practice and develop understanding of low stress stock handling, we can improve confidence and knowledge in a safe and controlled environment.

**5. Valuable Sources and References:**

**Source 1:** Think Digital CattleVR [web page](https://cattlevr.com/) has several resources for the use of the program in learning and teaching.

**Source 2:** (Filter et al., 2020) provides evidence for the interest generated by use of immersive VR, and this motivates students to learn and retain key concepts.

**6. Weakness and Area for Future Research:**

**Weakness:** The main limitations for the use of CattleVR in animal science practicals are those associated with technical issues and usability of the devices, maintaining charge and connection to the larger screen for students to observe is critical.

**Future Research:** Our team aims to conduct a longitudinal study to observe the impact of embedded VR in animal science learning, we plan to obtain survey data and performance data within the unit. This will inform the development and integration of the VR activities moving forward.

Filter, E., Eckes, A., Fiebelkorn, F., & Büssing, A. G. (2020). Virtual Reality Nature Experiences Involving Wolves on YouTube: Presence, Emotions, and Attitudes in Immersive and Nonimmersive Settings. *Sustainability*, *12*(9). <https://doi.org/10.3390/su12093823>