

Mataka, Samantha and Miller, Paul K. ORCID: <https://orcid.org/0000-0002-5611-1354> (2024) Can student engagement be enhanced using an immersion room for simulated learning? In: Achieving Excellence in Radiography Education and Research Conference, 20-21 November 2024, Ibis Birmingham New Street Station, Birmingham, UK. (Unpublished)

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/7840/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
 - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

Can student engagement be enhanced using an immersion room for simulated learning?

Samantha Mataka and Paul K. Miller

Institute of Health, University of Cumbria, UK

Abstract

Background: Higher education institutions are increasingly prioritising the enhancement of student engagement, recognising its significant impact on student outcomes (Tinto, 2023). Student surveys based on engagement models are commonly utilised to gather performance feedback. This research paper investigates the potential of new technologies, such as immersion rooms for simulated learning, to elevate student engagement. As evidenced by Scott et al (2018) a more inclusive learning environment can be created by integrating active learning methods and introducing relevant learning scenarios using available resources.

Method: The research was conducted using an action research methodology (McNiff, 2017). This was manifestly designed to develop an interactive learning session for second-year BSc Diagnostic Radiography students. The session involved an immersion room experience and other group-based active learning activities. The students were asked to provide feedback through a mixed quantitative and qualitative post-hoc questionnaire, of a total cohort of 60 students, 29 48% responded.

Results: Quantitative and qualitative outcomes were positive. Quantitatively, the questionnaire revealed that all of the students actively enjoyed the experience, with 93% enjoying working in smaller groups. In the immersion room, 96% of students reported feeling comfortable asking questions, while only 52% of students asked questions in sessions with their whole year group present. The qualitative results expressed positive reactions to the visual learning aspects of the immersion room. One student described the immersion room as "a unique way to learn and stay engaged with the help of modern technology". Motivating students beyond the assessment and achieving skills for employability is an important element of Radiography education. 97% of students found the experience gained from the immersion room would be useful in clinical practice.

Conclusions: The findings from this research will be used to incorporate new, simulated learning, and active learning techniques into Undergraduate modules to create a captivating inclusive learning experience for students.

References

McNiff, J. (2017) *Action research: all you need to know*. Los Angeles: SAGE.

Scott, L., Bruno, L., Gokita, T., & Thoma, C. A. (2019). Teacher candidates' abilities to develop universal design for learning and universal design for transition lesson plans. *International Journal of Inclusive Education*, 26(4), 333–347.
<https://doi.org/10.1080/13603116.2019.1651910>

Tinto, V. (2023) 'Reflections: Rethinking Engagement and Student Persistence', *Student Success*, 14(2), pp. 1-7 Available at: <https://doi.org/10.5204/ssj.3016>