

Limitations of virtual reality learning in developing tactile sensation and communication skills

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A team of researchers from the University of Tsukuba conducted a study to evaluate the effectiveness of a virtual reality (VR)-based education system in improving the skill proficiency of radiology technologist students. While VR technology is widely used in gaming and business, its

potential use in the medical field is also being explored, particularly for surgical simulations and technical training for medical personnel.

VR-based education systems have been proposed as an effective way to train radiology technologists who handle radiation-based medical equipment without exposing them to harmful radiation. However, VR technology is still in its [developmental stage](#), and several challenges need to be addressed before it can be fully integrated into educational settings.

The team used a VR-based [education system](#) in this study to train radiology technologist students and evaluated the impact of the training on their skill proficiency. The results showed that although some skills demonstrated similar proficiency levels to conventional learning methods, certain skills that relied on tactile sensation and communication had significantly reduced proficiency levels. The study also found that self-assessment of proficiency was significantly higher for some skills in self-learning. The research is published in the journal *BMC Medical Education*.

This study highlights the challenges of implementing VR technology in education and emphasizes the need for the development of more effective VR-based education systems.

More information: Kengo Kato et al, Radiography education with VR using head mounted display: proficiency evaluation by rubric method, *BMC Medical Education* (2022). [DOI: 10.1186/s12909-022-03645-8](https://doi.org/10.1186/s12909-022-03645-8)

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