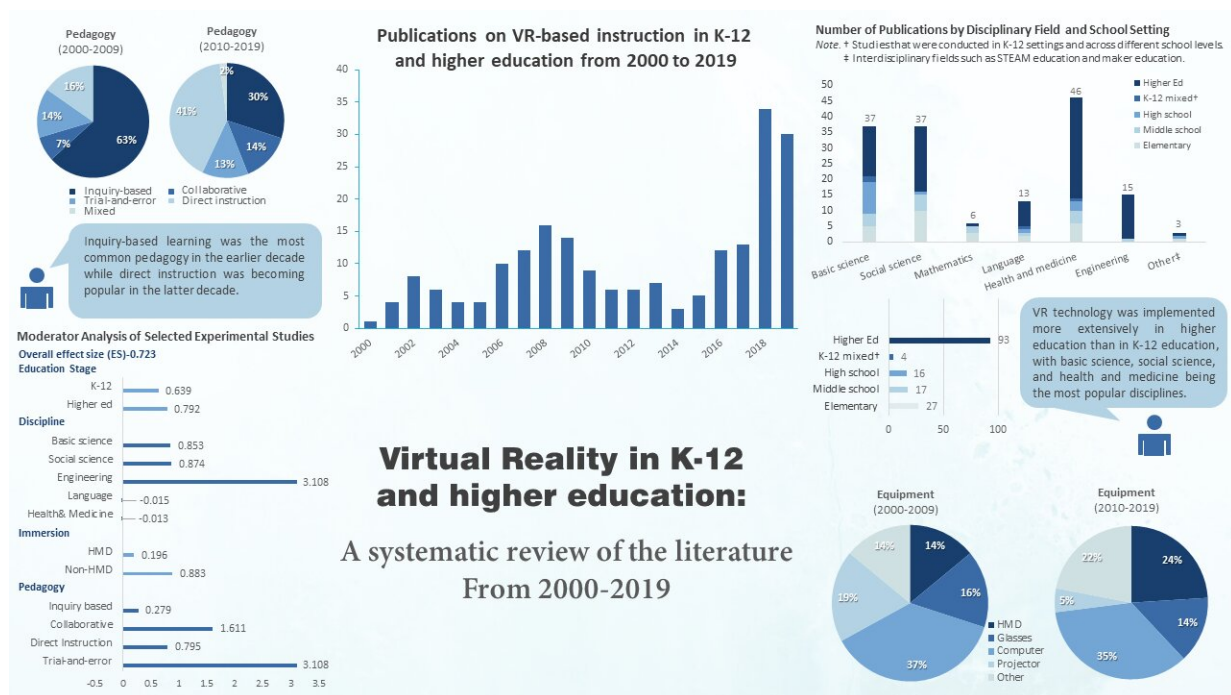


20 years of research on the use of virtual reality in education

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An analysis published in the *Journal of Computer Assisted Learning* highlights 20 years of research on the use of virtual reality (VR) in K-12 schools and higher education. Credit: Heng Luo

An analysis published in the *Journal of Computer Assisted Learning* highlights 20 years of research on the use of virtual reality (VR) in K-12 schools and higher education.

Investigators examined 149 articles from 2000-2019 from three major academic databases. They found that VR technology was implemented more extensively in [higher education](#) than in K-12 education, with [basic science](#), [social science](#), and health and medicine being the most popular disciplines. Desktop-based VR interventions were most often used for inquiry-based learning while immersive VR interventions enabled by commercial head-mounted displays have led to an increase of direct instruction. Overall, VR interventions had a medium effect on learning, with discipline, level of immersion, and instructional design influencing this effect.

The review provides some practical implications for K-12 and university teachers, and the authors propose an agenda for future research on the use of VR in education.

"Previous research has established the effectiveness of VR usage in education, the next step is to understand the reasons behind it so that it can be further improved," said lead author Heng Luo, Ph.D., of Central China Normal University.

More information: Heng Luo et al, Virtual reality in K-12 and higher education: A systematic review of the literature from 2000 to 2019, *Journal of Computer Assisted Learning* (2021). [DOI: 10.1111/jcal.12538](https://doi.org/10.1111/jcal.12538)

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