

VR more engaging than video and textbooks when it comes to the classroom

December 13 2018, by Alice Scott



Credit: CC0 Public Domain

Virtual reality (VR) is the most engaging and emotionally positive learning method in comparison to textbook learning and video. VR shows great potential to supplement or replace traditional learning



methods and create new experiences according to researchers at the University of Warwick.

VR headsets are the most stimulating form of learning method according to researchers at the University of Warwick. It was closely followed by textbook learning, then <u>video</u>.

Three groups of students were assigned to three different types of learning: fully immersive VR environment, traditional textbook-style materials, or 2-D video of the VR environment. They all learnt about the same subject (biology), and had their learning, emotional response, and learning experience measured.

Researchers found that <u>positive emotions</u> were rated higher for the group who experienced the VR learning method, followed by textbook, then video learning. VR students also performed better than students learning with video, showing that the active interaction with the VR environment helped improve learning.

Multiple students reported video learning as 'basic' and 'boring' where as VR was described as 'engaging' and 'made learning more exciting."

This study shows that VR can replicate or complement traditional learning methods inside and outside a <u>classroom setting</u>. Such VR environments can also allow for learning that cannot be replicated in reality, or would be too costly to be accessible.

Devon Allcoat, a Ph.D. student from the Department of Psychology at the University of Warwick comments:

"This study showed that VR could transform classroom teaching, as you could use VR to go for a walk with dinosaurs and increase engagement in the classroom and give pupils a more positive learning experience."



The paper "Learning in <u>virtual reality</u>: Effects on performance, emotion and engagement" has been published in the *Research in Learning Technology Journal*.

More information: Devon Allcoat et al. Learning in virtual reality: Effects on performance, emotion and engagement, *Research in Learning Technology* (2018). DOI: 10.25304/rlt.v26.2140

Provided by University of Warwick

Citation: VR more engaging than video and textbooks when it comes to the classroom (2018, December 13) retrieved 26 April 2024 from <u>https://phys.org/news/2018-12-vr-engaging-video-textbooks-classroom.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.