



## Is Virtual Reality Becoming a Reality in Schools?

Imagine taking 15 first graders on a trip to the depths of the sea for an up-close-and-personal look at the world's only marine laboratory. Or accompanying a group of high school juniors as they journey to Peru to explore the sacred architectural site of Machu Picchu. While these kinds of field trips have until now been largely impossible due to logistical concerns ranging from time to budget, today's powerful and sophisticated virtual reality (VR) technology, such as [Google Expeditions](#), is now putting these adventures -- and nearly-endless others -- within easy reach of schools and their students.

### From Novelty to Teaching Tool

When we think of virtual reality, "entertainment" and "science fiction" are usually the first words that come to mind. However, VR is not only very real, it can also serve a higher purpose in the educational sphere.

This begs the question: Why is VR technology now positioned to make the leap from novelty to teaching tool? Lesley University professor of education technology Maureen Brown Yoder recently told the Center for Digital Education's [Converge magazine](#), "VR has been around for many years, but I don't think it was very widely used at all in education. But the real difference is that now there's better content."

Additionally, the arrival of inexpensive cardboard headboards on the scene -- an alternative to more costly headsets -- promises to support more widespread adoption moving forward.

Leveling the Playing Field

The vast majority of K-12 students will not have the opportunity to travel the world during their formative years. However, this doesn't mean they can't see it. As Janice Mak, a Phoenix area instructional coach and teacher told *Converge* of VR, "It provides equity in access. I've taught in Title I [a federal program to provide funding to local school districts to improve the academic achievement of disadvantaged students] places where kids have never traveled outside of Phoenix, even to the Grand Canyon. VR is about bringing the experience to students everywhere."

But VR doesn't just expand learning opportunities; it also enhances them by removing classroom distractions and allowing students to completely focus on the intended content through the VR viewer.

And then of course, comes something even less quantifiable: the fun factor. Certainly happy students are easier to teach, but they also learn better. [According to the Northwest Evaluation Association \(NWEA\)](#), "Research has historically indicated strong correlations between student engagement (typically defined as attention to the area of focus, active participation in learning, and time on task) and student achievement. These correlations remain strong for all levels of instruction, across all subject areas, and for varying instructional activities."

### Helping Teachers Teach Better

Research indicates that teachers, too, come out ahead when they incorporate VR into their lesson plans. In fact, [data published in the journal](#), *Nature Biotechnology*, reveals that learning outcomes increased by a whopping 76 percent when "gamified lab simulation" was introduced to the presentation of content. When fused with traditional teaching methods, this figure spikes to 101 percent.

One caveat? Education experts do caution that VR adoption in the classroom is only as effective as the training teachers get pertaining to its use. Continues Yoder, "The teachers who use this thoughtfully and effectively will figure out how to enhance what they're already doing. Virtual reality needs to be embedded in a meaningful way if it's going to work."

### Raising Better Citizens

Experts even suggest that VR does more than help students perform better in school; it can also help schools nurture the development of better human beings when used as a "platform for social justice, and to expose people, from school-aged kids on up, to large-scale, global issues that are hard to grasp if they can't see them for themselves," [according to Smithsonian magazine](#). In other words, says Google Apps for Education product manager Jen Holland, "VR is a really powerful empathy tool."

Despite all of the advantages of VR, non-profit organization Project Tomorrow's most recent [Speak Up Research Project for Digital Learning survey](#) indicates that the majority of K-12 teachers aren't using VR or AR (augmented reality) technology in their classrooms, which is attributed to skepticism from parents, teachers, and school administrators.

But while the education industry may be slow to adopt, technology experts say it's just a matter of time. Instructional technology coordinator Jaime Donally told *Converge*, "We must recognize that our kids have to have these types of experiences to become who they need to be in the future. VR can help kids become more well rounded and be ready to make it in their future. It's not just a fun thing to have, it's necessary."

### Learn More About VR

Troxell believes in the benefits of virtual reality when used effectively in the classroom. Contact your local rep today to learn more about innovative VR options available to your school.