3 Ways Virtual Reality Training Is Producing Better Outcomes

Trivantis

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BETTER RETENTION
The concept of retention is fundamental to training and development. With good reason. It means that the consumable object you create is actually sticking. With virtual reality, where you’re engaging the ears and the eyes, retention takes on new meaning.

LONG-TERM RESULTS
Miami’s Children Health System is using VR to train doctors, nurses and medical personnel on medical procedures like intubation, wound care, and the Heimlich maneuver. Results show that these VR training programs offer better retention compared to traditional training. According to CEO Dr. Narendra Kini, the program showed an 80% retention rate a year after training, compared to 20% a week after traditional training.

“The level of understanding through VR is great because humans are primarily visual, and VR is a visual format,” says Dr. Kini.

IMPROVED PERFORMANCE
A study out of Beijing on the "The Impact of VR on Academic Performance" concluded the same. After providing the same class through traditional classroom education and students in the VR group outperformed across the board. The students in the traditional education group scored an average of 73% in the final test, those in the VR group scored an average of 93%. The VR group also showed higher learning comprehension and retention after two weeks. A parent of a participating student said, "VR-based teaching inspires students to learn and presents to students the abstract content that occurs in the learning process in a vivid way, making it easier for students to understand and retain complex concepts."

CRUCIAL FOR FIELD WORK
The U.S. Army Edgewood Chemical Biological Center is using virtual training to provide a higher level of immersion when learning complex pieces of equipment. The goal is to increase retention of knowledge, supplement traditional instruction, and simulate real-life scenarios. The benefits include the ability to conduct training in a shorter time frame and to do so anywhere, even overseas if needed.
IMPROVED EMPATHY
Empathy and emotion in learning have been proven to help you remember twice as much information. It’s hard to forget feelings of accomplishment, like graduating from college, all the way across the spectrum to feelings of sorrow, like placing a parent into assisted living. We make emotion-based decisions every day. So why not guide those decisions during training to provide better results for the organization in situations like customer service, leadership, and handling stressful situations.

MOVING THE MIND
How about living through the eyes of someone who has a disability like color blindness? Stanford published a study in 2013 from their virtual reality lab showing that experiencing a disability with VR led to increased empathy and an impact on future behavior. Half of the participants simply imagined being colorblind, while the other half experienced it through altered images sent to VR goggles. A system tracked their hand movements as they performed attempted to sort object based on color. While those who were asked to imagine this condition, the task was feasible, but for those who experienced the disability through VR, it was almost impossible to complete.

The study had a lasting impact. Directly after the study, participants who became impaired through VR spent nearly twice as much time helping others by volunteering to help find websites that would be hard to read in the real world. One participant wrote, “It made me realize how tough it is for them to do certain things in life.”

MEASURING RESULTS
Research also shows that virtual reality has an opportunity to impact an organization’s bottom line. Results include producing a higher retention rate, speeding up the time it takes to learn a process, reducing the number of errors, saving organizations money, and reducing the amount of time spent in training.

INCREASE TRAINING EFFICIENCY
In a recent experiment, Google’s Daydream Labs tested two groups on how to use an espresso machine, one with YouTube videos and one with VR. The VR team not only learned quicker, but also made fewer mistakes, and took less time to operate the machinery.
CUT OPERATIONAL COSTS
Engineering, industrial and aerospace giant Honeywell is using virtual reality and augmented reality training programs to onboard new employees, which has already led to a reduction of operation costs by up to 50% in some areas.

REDUCE MISTAKES
In the healthcare space, Yale University tested VR training for gallbladder dissection in contrast to conventional teaching for training surgical residents. The authors of the study found that the VR group was 29% faster and were six times less likely to cause an error in the procedure.

ELIMINATE TRAVEL COSTS
In another example, Farmers Insurance typically sends new employees to a home in California to train. With the implementation of virtual reality training, “trainees can navigate through an intuitive gamified learning course with more than 500 realistic damage combinations and scenarios” according to their news release. They predict saving $300,000 in travel costs.

THE BOTTOM LINE
Virtual reality isn’t just a trendy choice. It’s an improved way of bringing content to employees. The delivery method has been proven to increase retention, improve empathy, and show significant results.

About Trivantis
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THANK YOU.
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