5 Popular Types of Learning to Create in VR

(and why they WORK!)

elearning brothers

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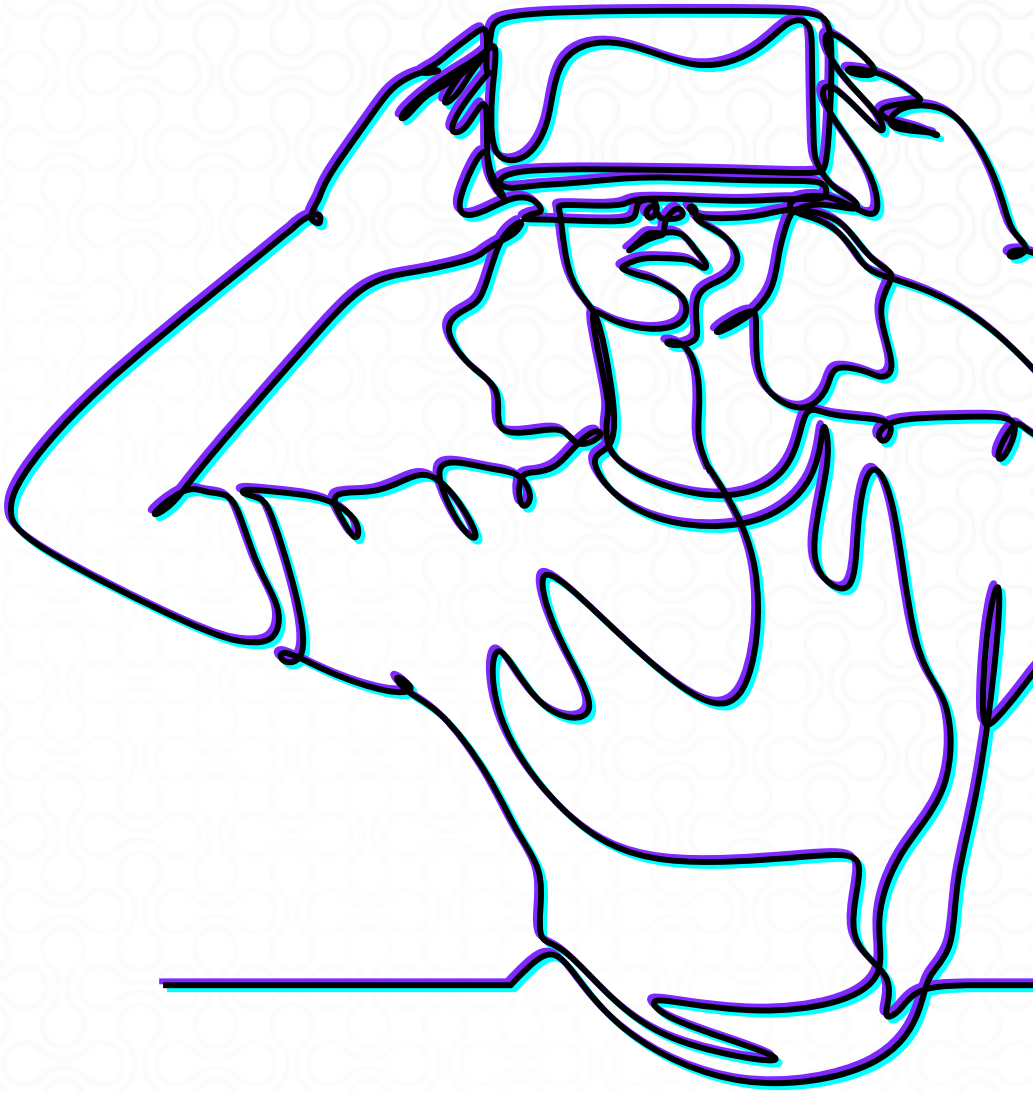
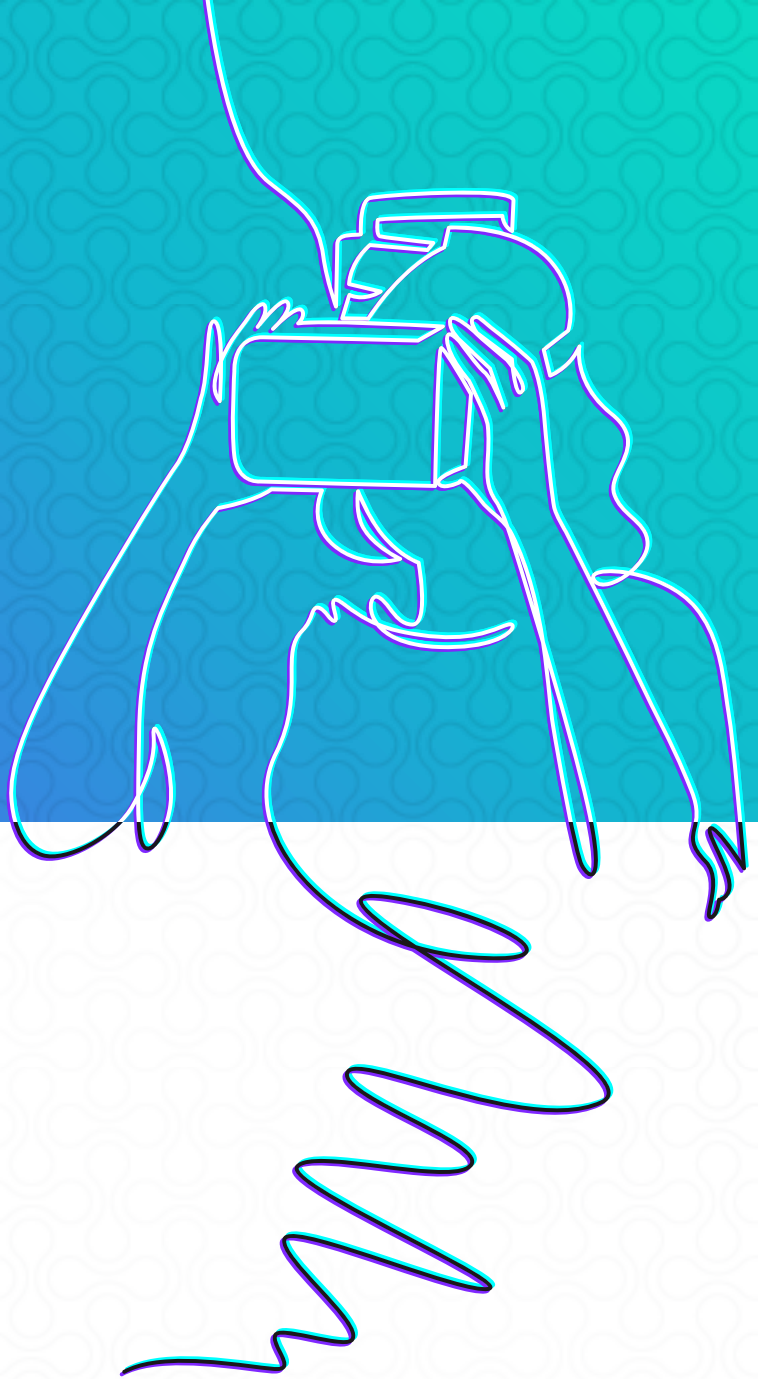


Introduction



Virtual reality technology has opened new worlds of possibilities for training our workforce. With immersive learning, you can put your employees in any location or situation imaginable. They can interact with equipment or other items that would be difficult, expensive, or impossible to have in a real-world training environment.

The only limit is your imagination.

In this eBook, we'll introduce 5 training instances where VR excels. Use these examples to draw inspiration for your own immersive learning projects. Remember, anything is possible in virtual reality!

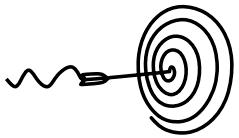
Of course, you might be thinking of the old adage, "Just because you can, doesn't mean you should." Or even, "If it ain't broke, why fix it?"

Perhaps your traditional eLearning program is going just fine.

Or perhaps, it's time to get your eLearning to ROCKSTAR status with VR!

Here are the facts:

Better Retention & Engagement

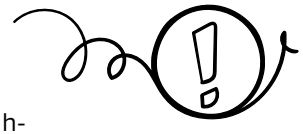


- VR has an 80% retention rate[1]
- Traditional training has a 20% retention rate[2]

Big Corporations Are Seeing Results

- 39% of large companies use AR/VR for training in simulated environments[3]
- Walmart implemented VR training and test scores improved 10 – 15%[4]

VR Minimizes Risk



- 43% reduction in injury rates occurred for high-consequence workplaces that use VR training[5]

These numbers are why virtual reality is the hot new training buzzword. They're also part of why the VR industry is booming. As of 2019, the VR market value was $15.1 billion[6] and it's predicted that by 2030, 23 million jobs will be using AR and VR in one way or another.[7]

So, how can you use VR in your workplace training?

Let's take a look at 5 different types of virtual reality training.

[1] https://learningsolutionsmag.com/articles/2427/healthcare-training-on-the-verge-of-vr-revolution
[2] https://learningsolutionsmag.com/articles/2427/healthcare-training-on-the-verge-of-vr-revolution
[3] https://www.chaostheorygames.com/blog/infographic-the-future-of-workplace-training-vr-ar-for-2020
[4] https://www.washingtonpost.com/technology/2019/07/12/walmarts-latest-tool-assessing-whether-employees-deserve-promotion-virtual-reality/
[5] https://trainingmag.com/the-impact-and-potential-of-virtual-reality-training-in-high-consequence-industries/
[6] https://www.chaostheorygames.com/blog/infographic-the-future-of-workplace-training-vr-ar-for-2020
[7] https://www.oberlo.com/blog/virtual-reality-statistics

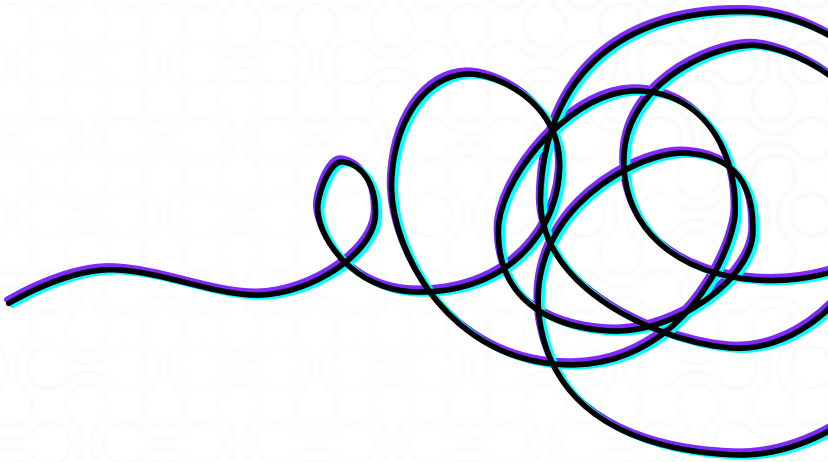
1 Equipment Training

When your employees need hands-on training with equipment or processes, but can't do so physically due to office closures, space limitations, health risks, or other challenges, VR can often replicate the experience just as effectively.

In addition to needing less equipment dedicated to hands-on training, training in VR saves you money by decreasing the wear and tear on your machines, extending their life.

Virtual reality works well for safely training users on equipment such as:

- Medical and surgical devices
- Airplanes and helicopters
- Heavy machinery such as forklifts, cranes, and excavators



1. Equipment Training

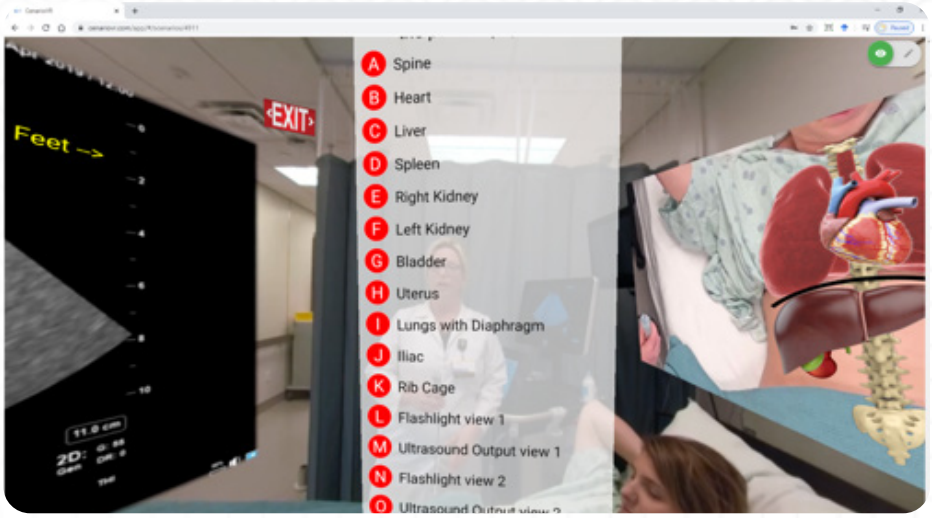
Ultrasound Training

Vanderbilt University School of Nursing's VR ultrasound training[8] is a successful example of this. The university had a growing Nursing School enrollment and point-of-care ultrasound imaging is quickly becoming an in-demand skill. However, the cost of clinical equipment and instructor availability was preventing the university from training all students on ultrasound machines.

In order to support the demand for ultrasound skills and affordably scale their clinical training environment, the professors had to think outside the box; they purchased CenarioVR®, a virtual reality course authoring application to affordably replicate the clinical setting in virtual reality.

To capture the experience of operating ultrasound equipment, three different media components were combined to simulate the clinical environment: 360-degree video of the clinician and patient interactions shown from two distinct camera angles; a top-down view with graphic, anatomical overlays; and streaming video of the ultrasound output timed to coincide with exactly how the instructor is interacting with the patient.

Each video scenario was enhanced with additional instructional elements on the top-down view of the patient, such as drawings of anatomical elements that appear when selected. Questions, annotations, buttons, and hotspots were included to enforce key concepts and quiz the students on probe placement.



In this immersive ultrasound simulation created by Vanderbilt University School of Nursing, videos and graphics are overlaid with the patient image and the learner can select different views to learn more.

[8] https://trainingindustry.com/magazine/may-jun-2020/how-vanderbilt-university-conquered-the-impossible-affordably-scaling-ultrasound-training/

1. Equipment Training

Why It Works

While eLearning can show students how to set up the ultrasound console, it cannot adequately demonstrate to clinicians how to properly use the probe on a patient, especially when trying to identify the anatomy being scanned.

By replacing much of the didactic training with virtual environment experiences, the students can interact with that content at a distance, orient themselves on the anatomical features being scanned, and view the ultrasound output in the full field of view in real-time coinciding with what the clinician is doing with the patient.

The virtual experience means all students can train at the same time, instead of waiting for an ultrasound machine or instructor to be available.

Furthermore, the chances of a student encountering patients with specific and diverse problems during in-person training sessions are low, so VR provides an opportunity to interpret multiple scenarios and patient conditions.

Since rolling out the immersive learning module in the spring of 2019, each student reported they had a more efficient training experience with the ultrasound probes. In addition, Vanderbilt University avoided the need to purchase additional ultrasound machines, and has reported $588,000 savings by not purchasing additional ultrasound machines nor hiring additional instructors.[9]

[9] https://www.learningtechnologies.co.uk/shortlist-2020/j-best-use-of-simulations-or-virtual-environments

2 Safety Courses

The stakes are high when it comes to workplace safety, anti-terrorism training, and threat identification. These situations are also difficult to realistically replicate for training purposes.

When mistakes made in real life could be costly or dangerous, virtual reality training is the perfect alternative. VR works well for many types of safety training, such as:

- Office, warehouse, or construction site safety
- Security & situational awareness
- Active shooter training
- First responder training
- Environmental threats
- Disaster planning

2. Safety Courses

Here are two very different types of safety training that both benefit from an immersive learning approach.

First Responder Training

In this South Wales Fire & Rescue training exercise developed by Video Interact, firefighters respond to the scene of a collision, where they extract and rescue a victim. Whether on a desktop or mobile device, the viewer can interact with filmed images of people, objects and the environment from multiple angles.

Features include on-screen augments and question sets, scoring, a home button, expert testimonies and action shots captured on GoPros worn by the team as they work on the rescue.

Why It Works

Immersive fire safety training can be delivered over and over without causing any additional wear and tear on personal protective equipment (PPE) and response equipment. In addition, the virtual training means that all equipment and vehicles remain available in the event of an emergency.

A simulated emergency situation allows firefighters to test their abilities without incurring any risk. 360-degree video allows first responders to see the situation from all angles and the highly visual nature encourages greater retention compared to text-based training manuals.

Scenes from a 360VR fire and rescue training created by Video Interact.

2. Safety Courses

Security: Threat Spotting

Luxury retailer Fendi hired Video Interact to engage and train 1,800 international in-store sales staff in vital health, safety and security information to reduce in-store theft, among other threats.

The training needed to be mobile-friendly and delivered in a way that sales staff would find both engaging and informative. Part of the program included an interactive 360VR module focusing on spotting security risks inside stores.

Because of the high retail value of Fendi's products, reducing theft has a huge impact on their bottom line.

Why It Works

All elements were shot on location in their London flagship store to create learning the staff would recognize and relate to. Embedding the immersive video into a mobile learning module allowed staff to complete the exercise on their mobile devices, without needing a desktop computer or VR headset.

Showing all the security lapses in virtual reality enabled staff to encounter scenarios without putting actual product at risk. Armed with this knowledge, they are able to prevent these situations from happening in the first place in their stores.

Fendi achieved a 55% theft reduction and 400% ROI from the interactive health, safety, and security training. As well as being extremely effective the course was popular with the staff, reaching 80% of its target audience within 6 months of launch (the highest number possible given the often-transient nature of the staff).[10]

In this immersive 360VR module created by Video Interact, retail staff are challenged to identify all security risks within a set time limit.

Audio or video feedback explains why each area is a security risk.

[10] https://www.videointeract.co.uk/showcase-health-safety-security

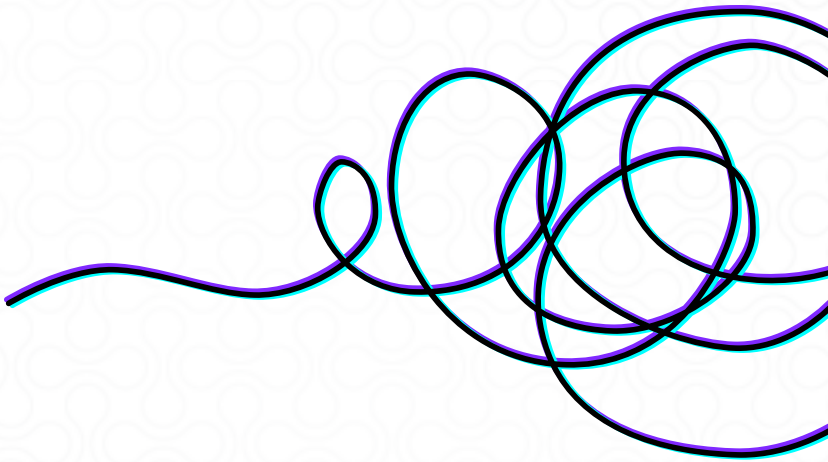
3 Virtual Events

Until recently, the adoption of remote technology for events was slow. After all, the in-person engagement and activities are what make an event special, right?

However, the abrupt cancellation of nearly all live tradeshows and conferences in 2020 due to the Covid-19 pandemic was a massive disruption.

Event organizers HAD to find alternatives, despite the fact that face-to-face interactions are widely believed to be vital to the sales funnel. Most business professionals across industries, even the younger generations, tend to prefer attending live events to virtual ones.

However, with the right technology, it's possible for virtual experiences to deliver the same value as physical ones—if not more!



3. Virtual Events

So how can you create an engaging virtual event? Here's one example.

Virtual Health Fair

The Center for Information and Study on Clinical Research Participation (CISCRP) hosts a series of events called AWARE for All—free clinical research education health fairs that include informational exhibits featuring community groups, health associations research centers, local physician and patient speakers, as well as receptions to honor clinical research participants. AWARE for All events are hosted several times each year in different cities around the country.

To replace their in-person events canceled by the COVID-19 pandemic, CISCRP hired an agency, Illumina Interactive, to create an immersive, 360° virtual reality health fair experience.

A virtual health fair booth. Attendees can scan the QR code to learn more about the exhibitor.

Illumina Interactive used CenarioVR®, a virtual reality course authoring application to create an engaging, interactive VR health fair where participants can visit over 30 virtual sponsor and exhibitor booths, learn about each exhibitor via posters, text, and short introductory videos, and visit the CISCRP theater to view a series of short videos about clinical research trials.

The virtual theater offers several short video options to replace in-person presentations.

3. Virtual Events

Why It Works

By creating an immersive learning experience, the event and educational content feels customized to each visitor and remains top-of mind.

Attendees can “walk” around at their own pace. Background audio and sound effects add to the immersive effect.

The virtual nature of the experience means it can remain live on CISCRP’s site, which provides the opportunity for continued engagement past the event date. Visitors can come back to a booth at any time to review resources and watch videos at their own pace. The potential for continued leads is a huge value-add for exhibitors.

A virtual experience still allows for interactions like videos, links to inquiry forms or calendar invites to schedule meetings with sales reps, and more.

CISCRP was able to maintain their in-person attendance and exhibitor rate, despite the switch to a virtual solution. The organization even gained more exhibitors for their second virtual event and achieved a 40% cost reduction over the cost of live events.

4 User Education

Software tools or systems, surgical devices, and even board games commonly require end user training or customer education in order for the customer to get the most out of the item they've purchased.

Over the years, user education and training has evolved from lengthy user manuals to online videos to fully immersive experiences.

Virtual and augmented reality videos are an engaging way to make customers feel more comfortable with a new product, procedure, or system.

4. User Education

Take a look at these two unique ways to use immersive learning to educate potential customers or users of your products.

Patient Education

To encourage more adults to get regular colonoscopies, Thomas Jefferson University created an interactive immersive learning module using CenarioVR, a virtual reality authoring tool, that guides patients through the exam process to get them more comfortable with it.

The immersive experience helps patients know exactly what to expect before they come in.

Colorectal cancer is the third most common cancer in the United States, but it is also among the most preventable. Colonoscopies, which can detect early signs of cancer, are the gold standard for colon cancer prevention, yet many adults avoid undergoing this procedure.

Why It Works

Taking patients through the experience virtually beforehand increases their comfort level and awareness of the procedure. This makes them more likely to schedule and complete their colonoscopy.

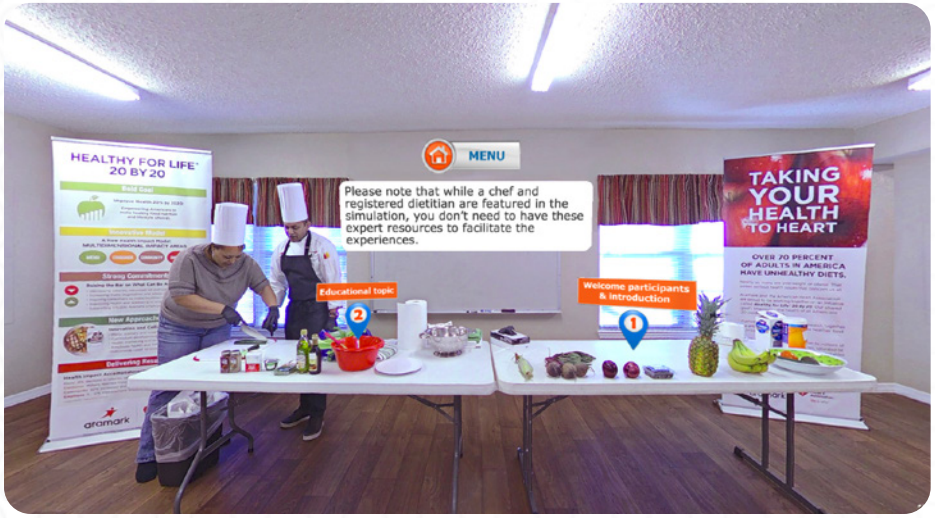
Delivering this same introduction and walk-through in person at a hospital or doctor's office would be impossible due to scheduling and logistical constraints. With a virtual experience, anyone can familiarize themselves with the procedure from the comfort of their home.

According to a Thomas Jefferson University Hospital patient survey, 57% of patients found the module to be "extremely helpful," while 14% found it "very helpful." 71% of participants also agreed with this statement "I have sufficient knowledge of the colonoscopy procedure," a 19% increase over findings on the pre-survey. Due to the success of the initiative, Thomas Jefferson University Hospital decided to roll out a similar module for mammograms.

4. User Education

Volunteer Training

As another example, instead of a text-heavy handout or printed guide, the American Heart Association created an interactive 360-degree learning experience to train volunteers on how to host Healthy for Life® Educational Experiences.



Using 360-degree photos of real Healthy for Life sessions makes the training more accurate.

The experience features 360-degree photos and clickable hotspots that open up short instructional videos.

An instructional video details how to set up a healthy eating session.

Why It Works

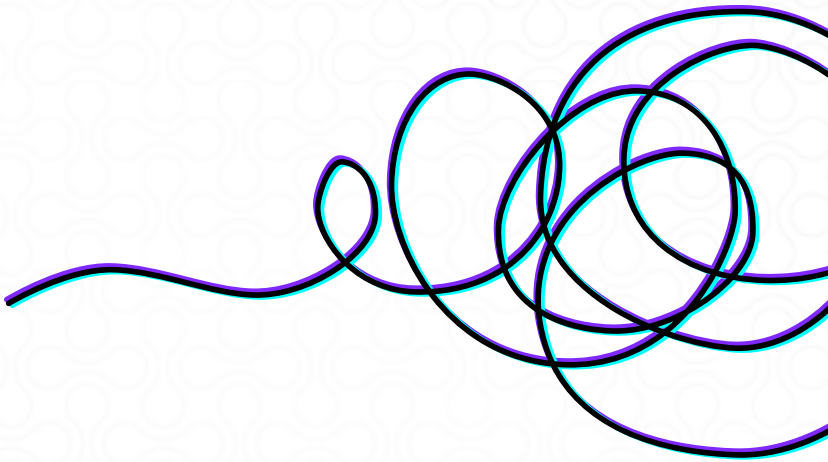
The training features real people, making the content more memorable and relatable to volunteers. It covers a lot of information, but because it's chunked into short videos and different sections, it's easily digestible.

It would be expensive for the American Heart Association to send trainers across the country to train volunteers in-person. Using an immersive learning module they can easily email to community organizers is a cost-effective way for the AHA to increase their reach and impact more people.

5 Site Tours

Whether your organization was planning to send your employees to visit a lab, factory, construction site or conference, the COVID-19 pandemic likely shut those plans down.

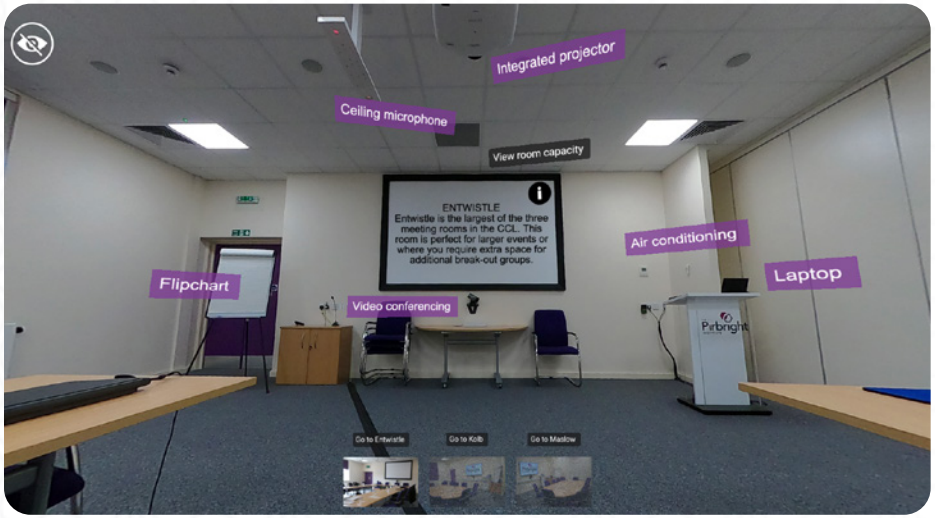
Virtual reality tours offer a way to send your employees to sites and collaborate with teammates across the country without leaving their desk (or hybrid home office/couch/dining table). They also make excellent sales collateral for event venues, real estate agents, and more.



5. Site Tours

Venue Tours for Sales Purposes

The Pirbright Institute created a virtual tour to show clients and customers what amenities the venue has, as well as where each amenity is and how to use it. Viewers can navigate to different conference rooms.



Clickable hotspots open up more information about each amenity.

Making Inaccessible Locations Accessible

Using a 360-degree camera, a Google Cardboard, and CenarioVR, eLearning Brothers Campaign Marketing Manager, Andrew Townsend created 3 immersive home tours for his father, who uses a wheelchair.

Before this VR experience, Andrew's father had never been inside his or his siblings' homes, due to the number of stairs and tight turns in the entryways. Andrew's father loved the experience of being able to visit his children's homes and see different rooms. With virtual reality, any remote or difficult to access location is at your fingertips.

With clickable hotspots, viewers are able to choose their own route through the house.

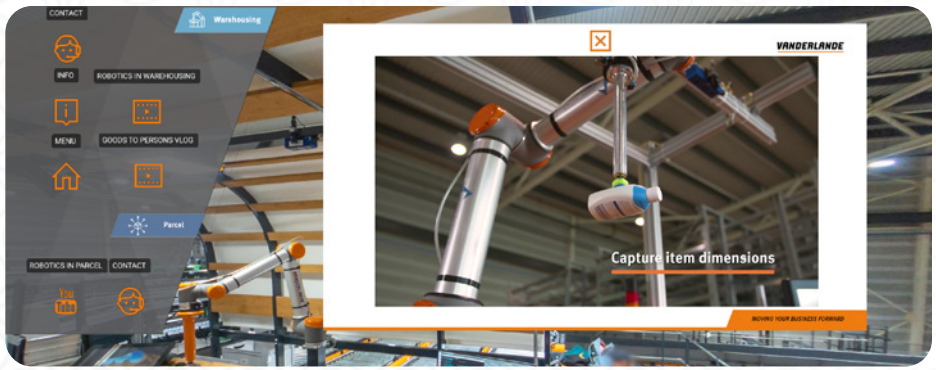
5. Site Tours

Site Tours for Employee Training or Onboarding

For large warehouses or shipping centers, a virtual tour can be given to customers, employees, or potential business partners without disrupting daily operations.

Hotspots and overlays can provide more information about a feature, or lead to another room, such as in this Vanderlande Innovation Center virtual tour.

Viewers can select a hotspot to go to the area they are interested in.



Videos show different equipment in action.

Why It Works

Offering a virtual reality tour has been many organizations' saving grace during the global coronavirus pandemic, but the benefits of immersive tours will continue long after life returns to normal.

Organizations can save money on travel. Plus, potential customers or employees can view the tours at any time without being limited by office hours, and the tours can be referenced repeatedly if further questions about a feature or room come up.

Through virtual reality, everyone can visit remote locations like the top of a volcano or the bottom of the ocean, as well making everyday sites more accessible to those with mobility difficulties.

Virtual tours are also excellent for onboarding new, remote employees who may not have a chance to visit the company headquarters often.

Conclusion

Sign up for a free trial of CenarioVR virtual reality course builder and create your own virtual training experience.

FREE TRIAL

Visit **ITCLearning.com.au** for more information about building VR training.

These are just a handful of examples of training that works well in virtual reality. While virtual reality safety and equipment training have been around the longest, more and more organizations are seeing the benefits of virtual reality for new uses, like the virtual event example shared earlier, or user education and immersive, 360-degree site tours.

360-degree cameras, VR headsets, and software tools get more affordable every day. Adding immersive learning options to your training program is now a cost-effective option with huge benefits, like the 400% ROI Fendi saw from their health, safety, and security training program or the 40% cost reduction CISCRP experienced after moving to virtual events instead of in-person.

When it comes to immersive learning, the only limit is your imagination!

What will you build in VR?