

FREE EBOOK

# STEP INTO THE SCREEN: AR/VR TECHNOLOGY'S ROLE IN THE FUTURE OF ELEARNING

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# 1 5 Benefits Of Using Augmented And Virtual Reality Technologies In eLearning

Are you looking for ways to make your eLearning course stand out from the crowd? What if I told you there is technology that can help you achieve not only that but also increase online learner engagement and motivation? In this article, I'll share the most notable benefits of using Augmented and Virtual Reality technologies in your eLearning course.

### Why You Should Use Augmented And Virtual Reality Technologies In eLearning

The eLearning industry is all about making use of advanced technologies to enhance the learning experience. In the end, the basic aim is to make learning an easy and enjoyable task. Achieving that target without incorporating the latest technological tools is virtually impossible, especially since we are fully immersed in the digital era. Thus, Augmented and Visual Reality have slowly but surely been edging into the eLearning sector for some time now. These additions have been warmly accepted by modern learners because of the many benefits they offer.

If you are still unaware of these trending alternate reality technologies, then here are 5 benefits to put your view into perspective.

#### **First Things First...**

Before going on to the benefits of using Augmented and Visual Reality in eLearning, let's briefly recap exactly what alternate reality technologies encompass. The term *Virtual Reality* means recreating an experience through the use of software and specialized devices, whereas *Augmented Reality* is about combining digital information with our own environment. Unlike Virtual Reality, instead of "creating" a new learning experience it uses the existing surroundings.

#### ■ Make The eLearning Process Engaging And Exciting

The use of Augmented and Visual Reality is making eLearning courses more innovative and enjoyable. Engaging online learners within the eLearning environment is one of the biggest hurdles eLearning professionals face. Fortunately, alternate reality technologies take care of that. The idea that they can >

#### Make The eLearning Process Engaging And Exciting

(cont) actually try out what they learn without the risk of any repercussion appeals to online learners. Besides giving online learners the opportunity to develop a deep understanding of the concept under study, they also embolden them to ask questions and inquire about what they are trying to learn. They have the chance to participate in experiences that otherwise would not have been possible. Moreover, research shows that learners prefer to watch rather than read or write for learning purposes. This research also compliments the concept of kinesthetic learning, which involves physical activity to improve knowledge assimilation and retention. Augmented and Visual Reality are out of the box thinking technologies that break the conventional boring method of learning. Thus, online learners can immerse themselves in situations and take action instead of merely observe.

#### **2** Create Scenarios That Otherwise Are Impossible To Create

Augmented and Visual Reality technologies have added another dimension to the field of eLearning. They take online learners to another world and allow them to gain experience without any risk. This technology also enables organizations to incorporate environments that would be too costly to recreate in the real world. For example, paying for employees to travel to other work sites or manufacturing a Hollywood-worthy set to put things into context. Besides saving costs, training in a virtual environment also increases the levels of safety. This method ensures the online learner is clear about what they are being taught and can apply it in real life.

#### **Image:** Focus On A Practical Approach Rather Than Just Theory

For the most part, our existing education system focuses more on theory than practical approach. That is the reason why people tend to forget rotely learned concepts so easily. On the contrary, Augmented and Visual Reality make learning a practical experience. And experiences are what stick with online learners and enable them to recall the information for later use. Some concepts that in theory appear to be dry, fail to catch online learners' attention for more than 15 minutes. However, AR and VR can make them more interesting by adding practical application and *immersion* to eLearning. This also helps online learners to appreciate the importance of concepts and ideas instead of merely brushing them off as a theoretical knowledge that has no correlation with their work duties or responsibilities.

#### 4 Encourage Online Learners To Learn From Their Mistakes

Learners tend to experience some degree of confusion when they encounter new challenges or unfamiliar situations. This usually happens when their minds contradict what the theory teaches. In that case, incorporation of alternate reality technologies gives you the power to remove any doubts from the minds >

#### **4** Encourage Online Learners To Learn From Their Mistakes

(cont) of your online learners. With these technologies, you put your online learners in a situation where they can try out their own ideas and reach their own conclusions. This also ensures that the lesson learned sticks with them and creates an emotional connection.

#### **5** Allow For Self-Guided Exploration

Augmented and Visual Reality technologies give you the ability to create a safe environment for online learners to experiment and try things which would otherwise be impossible. Take medical training for instance. Imagine the pressure a medical student must face when he comes across a sensitive case for the first time. A wrong decision at this point can make the situation worse and that may even shatter the confidence of the doctor for the rest of his life. However, by replicating the same situation with the help of Virtual Reality, doctors can be prepared for such dangerous situations beforehand without having to worry about any repercussions.

Although their full implications are yet to be explored, alternate reality technologies make eLearning more engaging and productive. They are here to stay, and who knows what benefits they will bring to future learners. As the technology evolves, so too will the applications in eLearning. Which is why it's essential for eLearning pros to keep up with cutting-edge tech and think of new and innovative uses for AR and VR tools.



# **4 Best Practices To Create Online Training Courses With AR Tech**

As with all emerging technologies in their heyday, it takes time to understand their true advantages and responsible use. Augmented Reality (AR) is no different. Are you equipped to make the most of this amazing digital frontier? What is AR's true potential for online training?

### **How To Create Online Training Courses With AR Tech**

The internet was initially developed for military use. We didn't foresee it as a paradigm-shifter for society. But internet broke into mass culture, instilling itself into the daily lives of common people. Positivity and intellectual benefits were not all that it brought. It took a decade or more to adapt to this powerful tool and learn how to use it responsibly, as well as how to realize its potential for online training, social development, democratization and research. Augmented Reality is in its infancy, much the same way the internet was in the 90's, and we are just beginning to realize that it has much more to offer than Pokemon Go.

Here are 4 best practices to create online training courses with AR tech.

#### Work The Experience Rather Than Showing Off The Tech

Humans are prone to losing sight of the ends, getting caught up in charms and the coolness of the means. A great example of this is computer-generated imagery (CGI) and 3D viewing technology in Hollywood. Without naming, we can all agree that a large majority of post-millennial blockbuster cinema fell prey to the cool factor. The urge to show off the amazing things possible with the new-found power of computer graphics and 3D technology. There was a cart-before-the-horse reversal as the creative and narrative aspect began to be dictated by the technological aspect rather than vice versa. As Marshall McLuhan said "The Medium is the Massage" and the form starts to supersede the content. What we are left with is an industry of vacuous eye-candy, not meaningful content that engages with life.

When creating *immersive online training courses*, the content should drive the technology, not the other way around! Apply this wisdom by focusing on learning objectives when designing the online training course, then later see how Augmented Reality can help these. Remember, cool has a short and fickle shelf life!

Content is what people actually take home with them.

### 2 Focus On Emotional, Interpersonal, Intrapersonal And Spatial Intelligence

We can understand the nature and utility of any technology by analyzing what it offers that other technologies don't. Comprehension by comparison is an excellent tool to optimize your use of a new technology. By identifying what a non-AR online training course cannot do, you can understand what Augmented Reality can do for the online training experience. Here lies the true potential of AR-based learning. It has a unique advantage as a learning tool to develop types of *intelligences* that text and images cannot. Due to the immersive and experiential nature of Augmented Reality, online training has a true-to-life impact on human consciousness. It can allow online learners to experience difficult emotions like fear, stress, anxiety, anger, conflict and confusion. This opens up a world of new possibilities for immersive online training. Phobias and fears can be overcome, while stress coping mechanisms can be learned in an experiential way.

### Incorporate Realistic Imagery And Situations To Build Experiential Knowledge

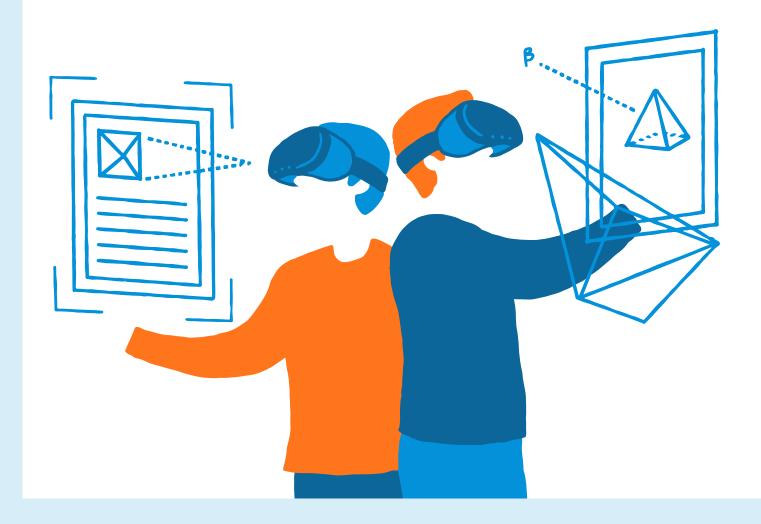
A plethora of opportunities regarding interaction, communication and observation can be developed in a state that induces realistic responses. *Augmented Reality* can redefine areas of training like police work, customer relations, paramedical, firefighting, ER scenarios and stock broking, to name a few. This is because such training requires as much experiential learning as possible. AR offers all the opportunities of real-life, hands-on training without any of the risks involved. Another way to look at AR is as a world of lucid dreaming which can be used for personal growth. A great immersion online training course must make use of this unique advantage, putting trainees in challenging environments. Below is a list of examples of how to use AR tech in online training environments:

- Crane operators, mechanics and construction workers can be helped to develop better spatial intelligence, sense of balance and a grip over fear of heights.
- Dealing stocks in a noisy, high-speed and stressful environment at a stock exchange in real time.
- Medical staff can be given a chance to experience the emotional and psychological challenges of life at the
  hospital such as disturbing sights, unpleasant experiences, death, quick responses, teamwork, dealing with
  worried relatives and seriously ill patients.
- Safety training which places industrial and aviation workers in a realistic online training experience that actually puts them face to face with disasters.

#### **4** Learner-Based Interactivity - One Size Does Not Fit All!

As human beings, we each have our own reality; that is what makes every person unique and their experiences important. AR-immersion training can incorporate this with a highly personalized and learner-centric open experience which is customizable. Think of it as every online learner being their own best teacher, making it the trainer's job to provide the tools. Incorporate interactive self-paced learning activities. Provide customization options based on the needs, existing level and psychology of online learners. This is not just more effective but also efficient. Imagine an online training course that allows corporate learners to choose focus areas and personalizes the Augmented Reality experience according to their psychological and emotional profile. Online training courses also need not be subject-fixed and employ an open source philosophy. Online learners could combine more than one type of training (e.g. medical with business management/administration) into one Augmented Reality experience.

It's also important to note that Augmented Reality is not the miracle cure to your online training pain points. It may hold a prominent place in the future of eLearning. However, the applications are primarily there to reinforce knowledge and support the subject matter. You must still provide your corporate learners with the online training resources and activities they require to master skills and absorb the key takeaways. For example, invite them to participate in an online training module that conveys the information, then use AR serious games to improve memory retention.



# **3** 10 AR/VR Activities For Microlearning To Add In Your Online Training Library

Augmented Reality and Virtual Reality are at the forefront of digital culture today, and arguably learning is their most important application. AR & VR are great vehicles for quickly developing skills and expanding knowledge. Is your microlearning online training library making the best use of these new technologies?

## 10 Types Of AR/VR Activities For Microlearning To Add In Your Online Training Library

Microlearning improves knowledge retention and makes learning more convenient for busy employees. If knowledge and skills are best learned in chunks, then they are only as good the quality of those chunks. AR and VR bring something truly extraordinary to an already cutting-edge idea like *microlearning* by providing a truly immersive and experiential learning experience that is geared for efficiency and effectiveness. The variety of AR/VR activities for microlearning grows every day as the idea gathers momentum in both corporate and educational institutions.

Let's look at 10 great AR/VR activities for microlearning.

#### Onboarding Online Tours

Combine *online training simulations* with AR tech to enhance the immersion. Give new hires the opportunity to tour the work environment before their first day on the job. They're able to see their workstations and familiarize themselves with the facility or even interact with customer personas to build experience and learn from their mistakes.

#### 2 Shrink-To-Size Product Demos

Employees become miniature versions of themselves so that they can explore the product in greater detail. Let them walk into your new device or view the chemical makeup of your latest cosmetic product. You can also use this approach in *safety online training*. For example, warehouse employees can step into heavy machinery to see how it works and how to prevent work-related injuries.

#### **3** Speaking To Thousands

Speaking in public is a difficult task for people who are not used to it, and even for some professionals. Apps like Public Speaking VR are great tools to help build confidence, experience, and practice speaking to crowds. Managers can even speak to a group of subordinates and hone their team-building and leadership skills.

#### 4 Real-World Tasks Minus The Risks

Your staff can perform job-related tasks without having to deal with real-world repercussions. This can be used for virtually any process that pertains to their work duties, from customer returns to handling dangerous chemicals. Even seemingly mundane processes can be transformed into exciting VR demos. For example, completing a sale using the new terminals while dealing with a particularly difficult customer. In this case, the employee improves their communication skills without risking low customer satisfaction scores.

#### **5** Practical Online Assessments

VR and AR are also great assessment tools. Invite employees to participate in AR/VR scenarios or online training simulations, then gauge their performance. Provide immediate feedback and then let them retry the online training activity to see how they improve. Better still, follow up with additional AR/VR activities for microlearning to bridge the newly found gaps.

#### **6** Split-Second Decision-Making Scenarios

Employees are encouraged to make on-the-spot decisions while immersed in a VR branching scenario. Each response leads them down a different path and, eventually, a negative or positive outcome. Instead of merely clicking on a response, employees are able to interact with virtual characters and environments that evoke real world emotions.

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Your staff may face countless obstacles on a daily basis, as well as the occasional emergency that requires them to stay alert. An emergency preparedness VR online training tutorial gives them the power to live through the event and come out unscathed. In the process, they gain valuable experience and test their reaction to stressful situations. These online training tools are ideally suited for microlearning because they limit the pressures your employees must endure. Rather than barraging them with a myriad of challenging tasks and dilemmas that cause cognitive overload and emotional strain.

#### **8** Step Inside Skill-Based Serious Games

These serious games can feature VR elements employees can interact with in order to complete tasks and advance levels, or full-fledged VR environments that allow them to step inside true-to-life situations and challenges. While they build vital skills, employees earn badges, points, and other intangible rewards that fuel their motivation. You can even create fictional worlds filled with interesting characters to give them a good dose of entertainment. Just make certain that the fantasy-rich settings don't overshadow the subject matter.

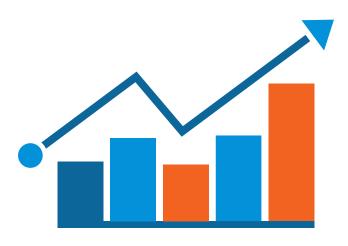
#### **9** Explorable eLearning Infographics

Infographics are already powerful online training resources that provide bite-sized bits of information. Thereby, improving knowledge retention and recall. However, AR/VR activities for microlearning makes them even more beneficial for your distributed workforce. Employees can literally explore the infographic firsthand and analyze each item in greater detail. For example, zoom in on the chart of graph to evaluate the relationship between the stats and facts. Or walk among the demographic map to better understand customer needs and buying habits.

#### **TO Emotionally-Gripping Case Studies**

Instead of merely presenting employees with a text-based case study, transform it into an emotionally-centered experience with the help of VR. Case studies tend to involve large quantities of data, such as statistics and profiles. Virtual reality brings the facts to life and enables employees to comprehend the series of events. They can determine how one factor or decision led to the outcome. As well as gain a better understanding of the context and how it relates to their work practices.

The possibilities that microlearning offers in combination with the ground-breaking technology of AR and VR are simply staggering. We might be the last generation to be trained in what will soon be the "old ways". AR/VR activities for microlearning allow us to remember information more rapidly and experience the knowledge firsthand. Microlearning allows us to continue to learn and grow along with a busy life, taking away some of the most common barriers of online training, by making it more accessible and bite sized.



# 4 How To Develop AR/VR eLearning Resources: A 7-Step Guide

Studies show that only 10% of online training is effective. Disappointing, right? Don't get too worked up because that can be changed by developing awesome AR/VR eLearning resources.

#### 7 Steps To Develop AR/VR eLearning Resources

There are many ways in which Augmented and Virtual Reality technologies can be used to make an eLearning course more productive, innovative and fun. You just need to know where and how to apply them. Some of the applications are online training simulations, branching scenarios, and serious games. However, as these technologies are of an advanced nature, incorporating them in any eLearning course requires a significant investment of both time and money. Rest assured. If done correctly, they hold the power to improve the performance and proficiency of your online learners.

Here is a 7-step guide to develop AR/VR eLearning resources from scratch.

#### Step 1. Determine If AR/VR Is The Best Approach

Sometimes it is necessary to use online training simulations or hypothetical situations to ensure that the message gets across. It is best to use Augmented/Virtual Reality when the subject matter is either delicate, has high risk involved, or is rare. For example, if you are preparing a safety online training for a construction project you can walk your users through the different hazards involved using *Virtual Reality*. In this way, you can make them see how non-conformity with safety standards can put a life in danger. Likewise, by creating an operation theater scene, a doctor or a nurse can be taught about the importance of each minor detail. All this builds experiential knowledge without putting anyone at risk.

#### **Step 2. Understand Your Target Audience**

The key lies in detailed project planning. Therefore, the first requirement is to be well aware of the needs of your target audience. Who are they and what are they looking to achieve through the AR/VR experience? That includes their background, experience level, and existing knowledge base. This will help you to figure out the best possible way you can make use of AR/VR eLearning resources to satisfy their needs.

#### **Step 3. Craft The Story**

Once you know what your users' expectations are, design a story that addresses their concerns and targets their needs. You can do that by either creating a hypothetical situation or using a real-life experience. The choice lies with you, but be sure to include the user's pain points. Also, they should be able to relate to the story so that they feel the importance of the subject matter in their own lives. It's essential to create an emotional connection that enhances the value of the eLearning experience and makes it more memorable.

#### **Step 4. Present Solutions In An Effective Way**

This step is arguably the most important, as it is going to be the decisive factor for the success of your entire eLearning course. You need to be sure that the solutions presented in the AR/VR experience are the best ones. In other words, the online learner needs to be convinced that the solutions given are practical and correct. For convincing your online learners, you can design different AR/VR eLearning resources with different outcomes. This way, you can lead them to the desired learning objective of the online training.

#### **Step 5. Develop The AR/VR Experience**

You can either outsource this step or have it built in-house. Whatever the case may be, the developer needs to understand the expectations of the end users. Then comes the technical and most time-consuming part. Usually, the duration of this stage can be anywhere from sixty days to a year. The time period for the development stage depends on the complexity of your application. Let's suppose, you want a simple VR video game; it may take only 2-3 months. However, if you want to develop a multi-player role playing activity, it will not only take at least six months to develop, but the number of developers required to complete the task will also skyrocket. Resources and launch dates are often the key determining factors. However, there is one key area you need to focus on during your AR/VR resource development stage: Keeping detailed and well-planned product documentation.

#### **Step 6. Post-Production Stag**

Another benefit of using AR/VR technology is that it can be reused for different eLearning courses. All it requires is a little modification. Hence, remember to develop your AR/VR eLearning resource in such a way that it accommodates modifications and additions. Maintenance of your AR/VR eLearning resources is another element to be considered at the post-production stage. If you outsource your development, ask the vendor about their revision/update policy. For example, they may include one or two modifications over the course of the next year.

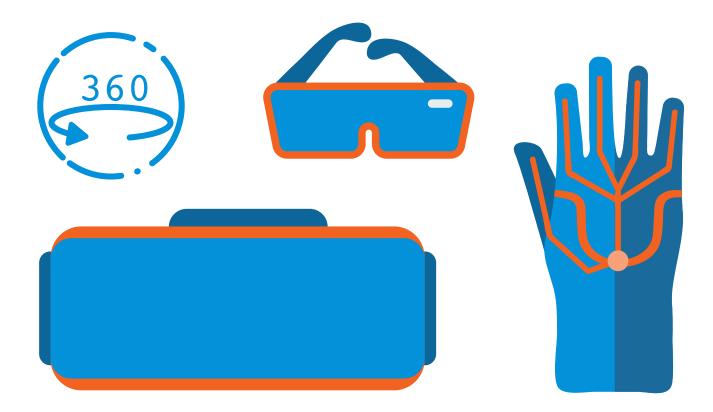
### **Step 7.** Arrange The Essential Equipment To Support The AR/VR eLearning Resources

After the developing stage is over, you will need to invest in equipment to support your AR/VR eLearning resources. There are three equally important areas to be considered in this part.

- Hardware: You need to have AR/VR capable devices e.g. workstations, head-mounted displays, mobile
  devices etc. We're not at the point where a BYOD strategy is viable, as the hardware required is either
  expensive or difficult to acquire.
- Visual: In some cases, you'll require panoramic 3D footage for the creation of virtual environments.
- Audio: Obtain an enhanced audio device for a more immersive AR/VR experience.

Once you have gathered all the above equipment, all you need to do is a little coding to provide seamless interaction with users.

This 7-step guide gives you all the information you need to incorporate AR/VR tech into your eLearning course. With these detailed guidelines, you can now make your own AR/VR eLearning resources from the ground up. Although it's a time-consuming and costly investment, it has the potential to boost your eLearning ROI. Moreover, gaining expertise in this field now can help future-proof your deliverables, especially when you use alternate reality tech wisely and seamlessly integrate it into your eLearning course design.



# Integrating AR/VR Into eLearning Courses: 5 Top Pitfalls To Avoid

Augmented Reality and Virtual Reality are the perfect partner technologies for eLearning. Yet it isn't as simple as a plug-and-play eLearning philosophy. What are the things to avoid when integrating AR & VR into your eLearning course design?

### What To Avoid When Integrating AR/VR Into eLearning Courses

We aren't always ready for a lot of the technology that enters our lives, especially at high speeds. It takes time to figure out how to reap the rewards and apply them to our work practices. Figuring out the ethics, optimization, psychological/physical dangers, and cultural effects is a gradual process. One of the emerging tech trends in the eLearning industry is alternate reality.

Here are 5 tips to avoid the most common pitfalls when integrating AR/VR into eLearning courses.

#### **11** Technology Is A Learning Aid, Not Learning Itself

A major pitfall of all tech-involved endeavors is going overboard. For example, Hollywood blockbusters that are a bit heavy-handed with special effects tend to flop at the box office. People are still looking for realism, even when it comes to sci-fi and fantasy. The same rules apply to eLearning. Overdoing it tends to happen when a technology is fairly new and carries with it a sense of novelty. But it can spell disaster for your eLearning content and its educational value. In the case of eLearning, the goal is to convey ideas and build vital skills. Thus, it's important to remember that Augmented/Virtual Reality are merely tools to achieve these objectives. Their success is determined by how much they help the delivery of eLearning content and enhance the value of the eLearning experience. Many eLearning courses nowadays spend a lot of effort on Augmented and Virtual Reality at the cost of the eLearning content.

Tip: Don't rely on AR/VR to add quality to your eLearning course. They can only help if the eLearning course is well designed, to begin with.

#### 2 Importance Of Writing And Expression-Oriented Learning

When designing the eLearning course, it's wise to innovate without trying to reinvent the wheel. One of these great wheels in learning is the written and expressive aspect. Online learners must be able to demonstrate their knowledge and skills in a practical context. In fact, reproducing and practicing what has just been learned can help cement the information. We all begrudge examinations and the performance side of learning. However, they are necessary to test comprehension and reinforce key concepts. No matter how advanced technology becomes, basic learning techniques are still an integral part of the process. In other words, Augmented and Virtual Reality are not substituting for Instructional Design theories, ideologies, or models.

#### **3 Clarity Of Purpose Behind Every Design Decision**

When you decide to integrate AR/VR into your eLearning course, you'll need to develop a purpose declaration. What are the aims and learning objectives of the eLearning course? What does the online learner need to know by the end of the eLearning course? How does this eLearning course contribute to the online learner's life and intellect? Once you have a clear agenda and a set of goals, you can make better tech decisions and incorporate AR/VR wisely. For example, determine how each AR/VR activity facilitates the aims and learning objectives or obstructs them. An alternative reality activity may be "cool", but does it really reinforce core concepts and help online learners achieve the learning goals?

Tip: Chart out the learning objectives of the eLearning course first, and then see how AR/VR can help meet those aims and learning objectives most effectively.

#### Augmented And Virtual Reality Are Supposed To Make Learning More Accessible

Why do you want to integrate AR/VR into your eLearning course? Here are some common answers: Trainers want to make learning easier. They want to make it more fun, enhancing its appeal. They want to enrich and expand the possibilities that the eLearning course can offer. These are all valid motivations for integrating AR/VR in eLearning. However, it's impossible to achieve any of these benefits without accessibility. What would be the point of integrating AR/VR if the eLearning course becomes less user-friendly? It would become an obstacle to the learning process rather than aiding it.

#### Here are 2 golden rules for integrating AR/VR in eLearning:

• Make sure that the AR/VR is user-friendly, self-explanatory and easy for people with different tech skills. For example, those who aren't tech savvy.

Online learners should never ponder whether the AR/VR part of the eLearning course is actually
necessary or just a cool tech gimmick. Remember, the purpose of AR/VR in eLearning isn't to impress,
but to impart information.

#### **5** Alpha Comes Before Beta

In the Greek alphabet, alpha comes before beta. Alpha means the first, the best! But you can't be the best until you've actually had a chance to test out what you've made. You must test drive the eLearning course yourself and enlist the aid of volunteers, friends, family, or colleagues. If you aren't satisfied with what you've designed, how can you successfully introduce it to others? Conduct some user testing to ensure that your new AR/VR tech supports the desired outcomes and is easily accessible. You can even conduct some Alpha/Beta testing to try out different versions of the eLearning course, which allows determining how to integrate AR/VR that reinforces knowledge and caters to diverse learning preferences.

AR/VR technologies will play a significant role in the future of L&D, no arguing there. Yet, it is up to us how we make use of all these smart technologies and cutting-edge gadgets. Ultimately, alternate reality tools should help online learners connect with the eLearning content and immerse real-world situations, not serve as a distraction that prevents them from absorbing the key takeaways. Use this article to avoid the most common pitfalls and integrate AR/VR activities that enhance the value of your eLearning course.rewards. Adult learners are in search for practical knowledge and skills that help them in their everyday lives. That is the common motivator that you need to bear in mind. When all is said and done, the ability to move from theory to practice is what determines a successful eLearning course.



# **8 Innovative Ways To Use AR/VR Technologies In Online Training**

Virtual Reality isn't all fun and games. At least, not in the hands of an experienced eLearning professional. In this article, I'll highlight 8 innovative ways to use AR/VR technologies in online training.

#### **How To Use AR/VR Technologies In Online Training**

Augmented and Virtual Reality technologies allow you to take online training immersion to a whole new level. Employees can walk into the workplace and apply what they've learned without even taking a step. Thus, eliminating real-world risks and facilitating mistake-driven learning opportunities.

Here are 8 creative applications for employing AR/VR technologies in your online training course.

#### Compliance Online Training Simulation

Virtual Reality and Augmented Reality are top-notch *performance support tools*. Employees are able to step inside virtual environments or interact with virtual objects in real-world settings. For example, participate in compliance online training simulations to prevent workplace injuries and ensure the safety of consumers. Simulate a compliance dilemma and see how they fare, such as a potential COI situation during a client meeting. The client offers a subtle bribe if the employee shares insider secrets regarding your newest product line. How will the employee react, and do they understand the repercussions of their actions? Will they politely decline the offer as to not offend the client?

#### 2 Interactive Task Walkthroughs

This blends simulations with *online training tutorials* to improve workplace performance. Employees view each step of the task, then perform it on their own in the virtual environment. This allows them to observe favorable behaviors and determine which skills they need to complete the process. The walkthrough, itself, should be as realistic as possible to improve immersion and so that employees can mimic every step. Another benefit of interactive task walkthroughs is challenging current assumptions. Employees may not even be aware that their approach is ineffective or that they've been performing the task incorrectly.

#### **3 Firsthand Product Demos**

Product demos usually consist of pictures or brief videos that showcase a product's features and benefits. However, you can use AR/VR technologies to let employees try it out firsthand. They're able to interact with the product in its virtual form and explore the features. You can even let them venture inside the product to see how it works and observe its individual components. Thus, they're better equipped to promote the product when it's time to craft their sales pitch.

#### **4** Geolocation Sales Floor Scavenger Hunts

Set your employees loose on the sales floor by inviting them to participate in an AR scavenger hunt. Of course, it's best to schedule this activity after closing time. *Geolocation* and AR give you the power to place objects around the facility for employees to find. Each object leads to an online training tutorial, activity, or another online training resource. You can even create a scavenger hunt assessment that tests their product knowledge. For instance, ask them to locate the top selling product from last year in your department or the item that they would recommend to a specific customer.

#### **5** Emergency Preparedness Scenarios

Nobody knows how they'll react in an emergency until disaster strikes. However, you can test their ability to handle stress and solve problems in chaotic situations with the help of AR/VR technologies. Put employees in the middle of an emergency to see how they deal with the pressure. Are they able to choose the right safety gear for the situation? Can they resolve the issue when they're under a significant amount of stress? If they aren't able to handle the strain, employees still have the opportunity to build experience through online training simulations and branching scenarios instead of having to test their mettle in actual emergency situations that are potentially life-threatening.

#### **6** Mistake-Driven Serious Games

Everyone makes mistakes. What counts is how we overcome and learn from them. Alternate reality technologies help employees identify areas for improvement and extract knowledge from past mistakes rather than letting errors defeat them. For instance, AR/VR serious games that feature memorable characters and immersive storylines. Employees must use all the resources at their disposal to overcome challenges. Then they receive feedback that highlights their mistakes, along with tips to improve their performance.

#### **7 True-To-Life Examples And Case Studies**

Real-world examples and case studies are typically text-based. Employees read the story and then reflect on the situation to see how it applies in a real-world context. But AR/VR technologies enable them to see the example in action. They can watch as the virtual characters act out the scene and deal with everyday challenges. You also have the ability to incorporate quizzes, simulations, and other bite-sized online training activities into the case studies and real-world examples. For instance, at the end of each scene employees are prompted to answer questions to test their comprehension.

#### **8 Virtual Workplace Tours**

This is a valuable online training tool for new hires, in particular. They can take a stroll through their new work environment and familiarize themselves with the tools of the trade, all without stepping foot into the actual facility. Your newest staff members are also able to interact with customer personas to reduce their first-day learning curve, as the VR/AR tour has already given them some experience of the sales floor. Another option is to incorporate your entire *onboarding online training* course into the VR tour. Employees visit different sections of the workplace to trigger activities and modules. For instance, the bulletin board on the breakroom wall triggers the compliance module.

These are just a few of the applications for AR/VR technologies in online training. The secret is to identify objectives and outcomes in order to determine how alternate reality best suits your needs. You should also take the goals of corporate learners into consideration so that you're able to cater to their personal preferences. Remember, AR and VR are support tools. They may dazzle online learners at first, but the primary aim is still knowledge retention.



# 7 Ways AR/VR Technologies Impact eLearning

Fully immersive simulations are no longer reserved for sci-fi novels. In this article, I'll discuss how AR and VR technologies will impact the future of eLearning.

### The Future Of eLearning: How AR/VR Technologies Impact eLearning

The gaming industry is already embracing AR/VR technologies to bring players into the action. What does this cutting-edge tech offer online learners in the private and corporate eLearning sectors? Today, eLearning professionals are using it to enhance the realism of eLearning simulations and *serious games*, but who knows what tomorrow may bring.

Let's explore 7 ways AR/VR technologies will play a pivotal role in the future of eLearning.

#### 1 A Whole New Level Of Simulation Immersion

Today's eLearning simulations involve a computer or mobile device screen that leaves plenty of space for distractions. Online learners must still contend with the outside world while they are in the virtual one. However, AR/VR technologies will allow them to step inside and fully immerse themselves in the situation. Headsets and audio devices enable them to block out external distractions and deal with the virtual task at hand. There may even be tactile sensors that incorporate the sense of touch. For example, they can feel the tool in their hands or pick up the product.

#### **2** Face-To-Face Training In VR Environments

Modern training forces corporate learners to choose between face-to-face and online sessions. There are video conferencing tools that provide a more blended learning experience. However, there is still a disconnect created by the lack of immersion. *VR technologies* will take it to the next level by placing corporate learners into virtual environments that mimic the real world, such as a training room where they can interact with online facilitators and instructors in real time. This may be in the form of an avatar or, as technology advances, a true-to-life recreation of themselves.

#### **Immersive Personalized Online Training Paths**

In this case, online learners are able to literally walk down their own personalized online training path and interact with online training resources. This is the ideal approach for online learners who prefer a more physical connection with the online training content. Much like an immersive video game, online learners can venture down different paths based on their gaps and goals. For example, an eLearning assessment reveals that they need to work on their problem-solving abilities. Thus, they pick the online training that centers on this area for improvement and online training activities serve as pit stops along the way. They can see the destination as they progress, which provides them with even more motivation. This same approach is also ideal for branching scenarios that involve decision-making paths.

#### 4 Insightful Analytics

Big Data will only get bigger as tech becomes more advanced. For instance, AR/VR technologies will feature more detailed analytics to track every move of the online learners. They may even be able to determine their emotional state and their level of alertness via sensors. More insightful analytics will also help eLearning professionals gauge online learner engagement with greater accuracy. Thus, provide more personalized learning materials to enhance the benefits. Bigger Big Data translates into more powerful eLearning experiences that meet online learners' expectations and help them achieve personal goals, which equates to better online training ROI for your organization.

#### **5** Group Collaborations Without Tech Limitations

In today's online training environments, online learners must use Project Management online platforms, video conferencing tools, and social media to engage with peers. In the future, they may be able to come face-to-face with fellow corporate learners and break down the current tech barriers. For example, create a virtual meeting space where they can collectively solve problems and create online training presentations.VR headsets will allow them to work together in real time and even interact with objects, such as 3D models and other online training tools. This also enables online learners to participate in VR role plays that build communication and interpersonal skills.

#### **6** Qualitative eLearning Assessments With Immediate Visual Feedback

Online learners participate in eLearning simulations, branching scenarios, and other qualitative eLearning assessments in the VR environment. The software records their performance and tracks the results. Upon completion, they have the chance to view the playback and see where they went wrong and identify their strengths. For example, they missed a crucial step in the process. >

#### **6** Qualitative eLearning Assessments With Immediate Visual Feedback

(cont) The system shows them how to correctly perform that portion of the task and allows them to retake the eLearning assessment. They immediately *learn from their mistakes* and reinforce favorable behaviors instead of memorizing incorrect ones due to delayed feedback. You can also use serious games to assess their knowledge and skills in a subtler way, and enhance the entertainment factor.

#### **7** More Engaging Gamification

Speaking of games, AR/VR technologies are sure to play a prominent role in the future of gamification. Not just in the case of serious games. These technologies will allow online learners to earn tangible badges and physically advance up the leaderboard. One of the downfalls of modern gamification is that it involves virtual rewards. Online learners are able to receive points or credits but they cannot actually interact with the rewards or hold them in their hands. AR/VR technologies change all that. They make incentives real and motivate online learners to do their best and achieve their potential. They can even walk down a virtual game board to move to the next level or put points into a VR piggy bank to keep track of their progress. It's the next best thing to gift cards. In fact, it may even be better, as your organization won't have to foot the bill for monetary rewards.

AR/VR technologies impact eLearning in numerous ways. Augmented and Virtual Reality may be in their infancy, but there's no telling how much they will transform the eLearning industry as we know it. Online learners may have the chance to step into historical settings or reach out and touch work tools in order to build experiential knowledge. They will engage with peers, attend online training sessions, and receive one-on-one support from the comfort of home.







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