

NAVIGATING THE VIRTUAL LABYRINTH

**VR AND IMMERSIVE TECHNOLOGY DRIVE A
NEW ERA OF ELEARNING EFFECTIVENESS**

BY MARK FENNA-ROBERTS

The pandemic brought about one unexpected positive outcome: a significant shift in how businesses perceive and utilise technology, fundamentally altering the workplace landscape. This period catalysed a transformative advancement in virtual learning, as industries adapted to safe distancing and self-isolation.



VR IS NOW USED TO CREATE HIGHLY REALISTIC AND IMMERSIVE ENVIRONMENTS THAT ENABLE LEARNERS TO GAIN PRACTICAL EXPERIENCE IN A CONTROLLED, RISK-FREE SETTING.

Fast forward to today, and the focus has shifted to understanding the tangible benefits of Virtual Reality (VR) and immersive learning within the business realm.

Together, the dynamic duo of VR and eLearning has emerged as a formidable pair, rapidly reshaping the way we learn and develop new skills. This evolution is proving to be a game-changer for organisations eager to improve employee training and enhance overall effectiveness.

A Leap into the Immersive World of Virtual Reality

VR has long since moved on from the gaming world. Crossing over into the learning and development (L&D) arena, VR is now used to create highly realistic and immersive environments that enable learners to gain practical experience in a controlled, risk-free setting.

VR and other immersive technologies are reshaping the eLearning landscape in several key ways.

Realistic Simulations

One of the standout features of VR in eLearning is the ability to simulate real-life scenarios. This allows learners to immerse themselves in situations they would encounter in their jobs.

For example, medical students can practice surgeries, and handle complex patient communication (see the Holmesglen case study below). Firefighters can simulate complex rescue operations, risk-free.

Experiential Learning

The saying *'I hear, and I forget; I see, and I remember; I do, and I understand'* holds true in eLearning. Charles Jennings' 70:20:10 model states that 70% of learning comes from experience, experiment and reflection.

VR and immersive technologies take experiential learning to the next level by allowing users to interact with their surroundings—whether that's a virtual factory tour or flying a fighter jet. VR makes the learning process more engaging and more memorable. It facilitates hands-on learning that boosts comprehension, skill development and retention.

Error Tolerance and a Fail-Safe Environment

Mistakes are an essential part of the learning process. However, in certain cases, on-the-job training can be costly, dangerous and even fatal. VR mitigates these risks by providing a safe environment in which students can make and learn from their mistakes.

Getting Real About VR's Effectiveness

A study by PwC found that VR and immersive training was far more effective than traditional training methods (like classroom education or self-paced online learning) at creating an emotional bond with the content being taught, and instilling the confidence that employees need to best perform their jobs.



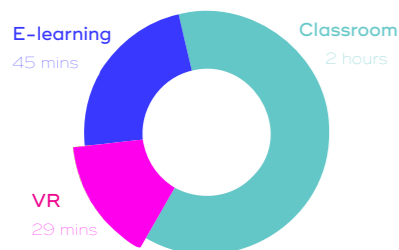
TO FURTHER ENGAGE LEARNERS, COMPANIES LIKE L'OREAL ARE GOING FURTHER, GAMIFYING THEIR IMMERSIVE LEARNING EXPERIENCES.

When it comes to soft skills—one of the most difficult eLearning challenges—VR is the go-to for L&D leaders who need to build confidence, boost retention and save cost.

PwC's research revealed that VR learners were:

- 4 times faster to train than in a face-to-face classroom
- 275% more confident to apply skills learned
- 3.75% more emotionally connected to content than classroom learners
- 4 times more focused than their eLearning peers

Time to complete training:



Case Studies: VR and Immersive Learning in Action

Our case studies showcase two Australian organisations who have been using VR and immersive as a cornerstone technology for their L&D program for some time.

Holmesglen Institute, one of the largest vocational educators in Australia, launched a significant immersive learning program using CenarioVR to train care workers in interpersonal skills, complex communication skills, decision-making, problem solving, and cultural awareness and cultural safety.

This is a prime example of how VR and immersive learning can enable international collaboration and knowledge sharing, as this program rolled out in a virtual global classroom, all while controlling assets and analytics.

The program enabled Holmesglen to create cost-efficiencies while driving powerfully effective eLearning outcomes.

According to Debra Kiegaldie, Professor, Clinical Chair – Health Workforce and Simulation and the Project Lead, “There were significant statistical improvements of knowledge and confidence across a number of items in the VR program compared to the traditional immersive simulation. That’s why preferentially, we choose this modality and our preference is to use VR for this.”

“In addition, over 1,000 students were exposed to the VR work, which is significant,” Kiegaldie added. “With our on campus immersive simulations there might be four out of 30 who are immersed, however with VR it’s actually scalable – and you’ve got everyone immersed.”

The University of Western Sydney has used VR and immersive learning since 2018 to create a range of learning courses across disciplines such as law and medicine, collaborating with educators and industry partners. They have also designed a course in VR that is accessible for people with disabilities.

Organisations like Toyota are using VR and immersive learning for logistics training, while Walmart has used this technology for customer service training for over six years. To further engage learners, companies like L’Oreal are going further, gamifying their immersive learning experiences.

The Business Impact of VR and Immersive Learning

The synergy between VR and immersive learning is transforming the way we acquire knowledge and skills.



The technology has evolved, and we can expect even more significant contributions to eLearning and organisational effectiveness in the future due to further developments in:

1. AI Integration: Artificial Intelligence (AI) already enables 360-degree image generation, and further enhances VR learning experiences by providing real-time feedback and adapting content to individual learning styles. Time-saving features like this, combined with dynamic personalisation, will make VR-based training even more effective.

2. Remote Collaboration: As VR technology advances, remote collaboration becomes even more immersive. Meetings, conferences and training sessions in virtual spaces, bringing together teams from different parts of the world as if they were in the same room.

3. Data-Driven Insights: VR platforms continue to collect data on user interactions, enabling organisations to gain insights into learner performance and progress. This data-driven approach will allow organisations to fine-tune their training programs and tailor them to meet specific objectives.

In Summary

The fusion of VR and immersive with eLearning is a transformative force for organisations.

The ability to create realistic, engaging and customisable training experiences, with data and insights, is revolutionising the way the modern learner acquires new skills. It is enabling employees to develop and improve their communication, collaboration, leadership and creative skills.

It’s a brave new world of work.



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FURTHER READING AND RESOURCES

- <https://702010institute.com/702010-model/>
- <https://www.pwc.com/us/en/tech-effect/emerging-tech/virtual-reality-study.html>
- <https://www.itclearning.com.au/elearning-development/case-study-holmesglen-institute/>
- <https://www.itclearning.com.au/articles/blog/create-a-winning-immersive-learning-strategy/>
- <https://www.automotivelogistics.media/finished-vehicle-logistics-north-america-2023-highlights/logistics-in-the-virtual-world-how-toyota-is-using-ar/vr-in-training-and-logistics-centres/44224-article>
- <https://www.forbes.com/sites/forbeshumanresourcescouncil/2021/11/03/three-ways-virtual-reality-is-revolutionizing-corporate-learning/?sh=48d927418bfc>
- <https://www.itclearning.com.au/articles/blog/create-something-as-engaging-as-instagram-and-addictive-as-candy-crush/>