

lumination

Future Pathways:

Preparing Tomorrow's Workforce with Immersive Technology

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In the spirit of reconciliation, we acknowledge the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

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Meet The Team



Campbell Rushton- Smith,
Business Development Manager (VIC)

With 14 years of experience as a Secondary School leader and Drama/Humanities teacher + a further 8 years working with schools across Australia implementing innovative online resources, Campbell understands the challenges both Principals and teachers face. He is passionate about student engagement, empowering teachers and linking real world skills to the classroom.



Mitchell Stapleton-Coory,
Business Development Manager (Industry)

Mitchell has a degree in law from the University of Adelaide, and has spent the majority of his career working in the technology sector as a founder and advisor. Prior to commencing with Lumination, Mitchell spent two years working in the AusIndustry Entrepreneurs' Programme as a Growth Facilitator, where he worked alongside high-growth SME's across the advanced manufacturing sector on growth and productivity initiatives.

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Our Mission

Revolutionise the way we **teach, learn & work**





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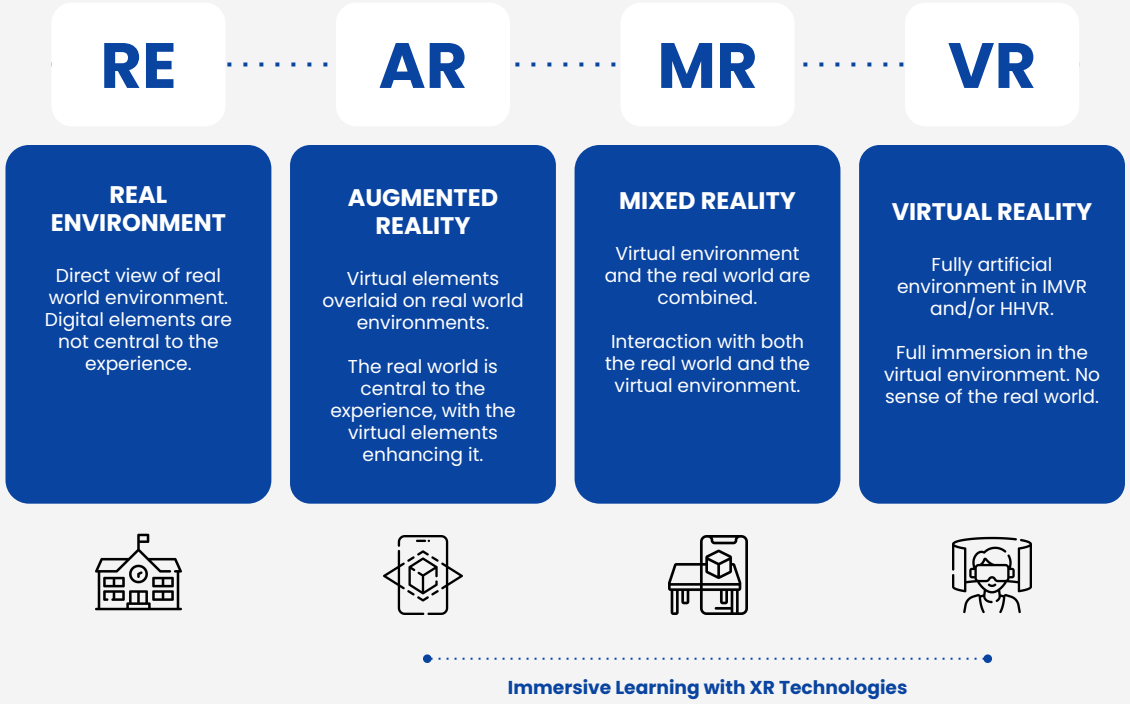
What are extended reality technologies and what do we mean by immersive learning?

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Immersive Learning

Experiential learning methodology that uses Extended Reality (XR) to **simulate real-world scenarios**.

Combines the sense **of presence** of XR with **advanced learning theory, data science,** and **spatial design** to improve effectiveness and user engagement.



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Lab Transformation - Endeavour College



BEFORE



AFTER

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Lab Transformation - Underdale High School



BEFORE



AFTER

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How are these technologies currently being used in the workplace?

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3D Product Design

Designers can be more precise with the **ability to switch between 2D and immersive 3D visualisations.**

McLaren automotive designers are using **Vector Suite to design supercars.**

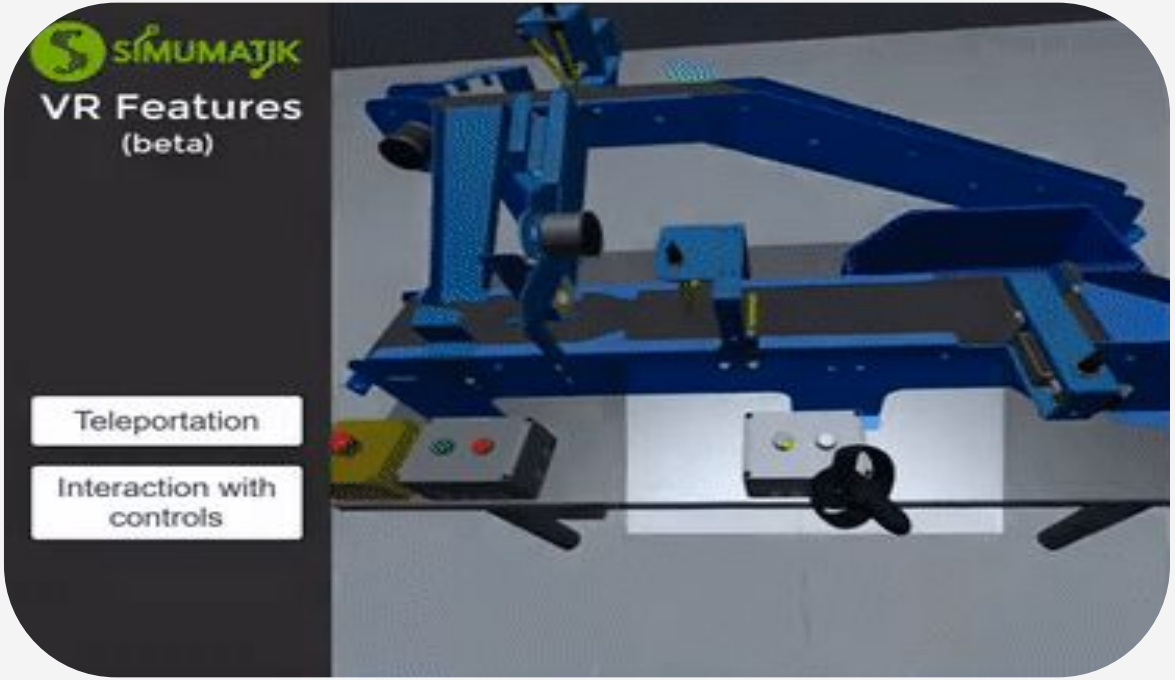


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Digital Twinning

Digital twins are digital models of a **real-world product, process or system.** XR technologies can be used to **interact with digital twins to a deeper level of granularity.**

Simumatik's concept for a digital twin of a manufacturing process.

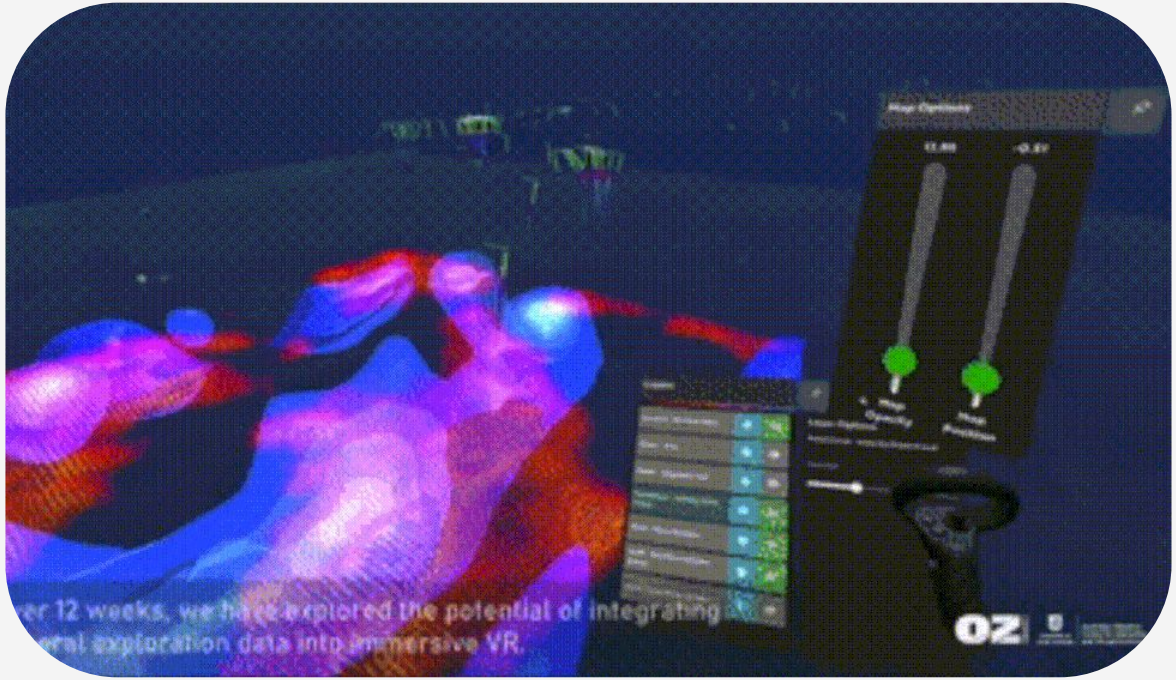


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Spatial Data

Spatial data can be digested and understood more effectively in an immersive 3D visualisation, allowing for **better and more precise interrogation of data to inform decision making.**

BHP and Project Live reviewing spatial data representing mineral deposits.

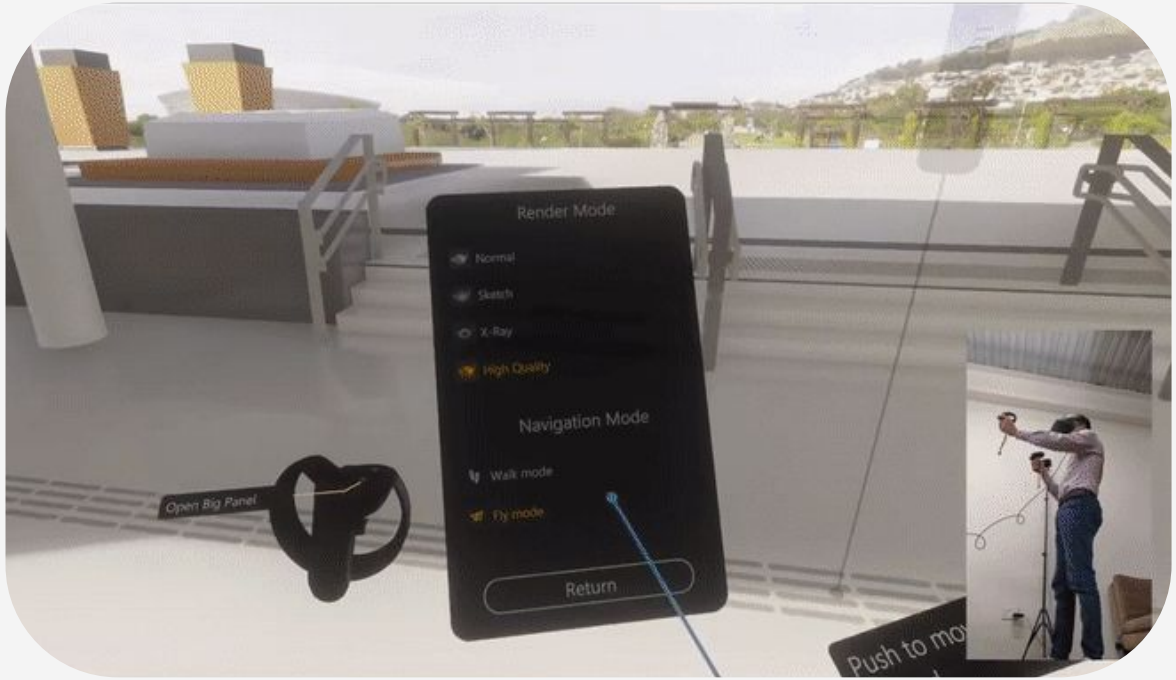


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Building Information Modelling (BIM)

BIM data is the new way **construction projects are designed and modelled**. BIM in VR allows you to view all assets and utilities within a construction project in **true 1:1 scale.**

VRCollab exploring BIM data for a construction project.



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Human Factors Engineering

Human Factors (AKA Ergonomics) is the application of psychological and physiological principles to the engineering and design of products, processes, and systems.

The Defence Innovation Hub has used VR to demonstrate the human factors relating to control systems in confined spaces using digital manikins.



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Skills Training

Skills training in VR allows for high-risk, complicated and expensive training to be delivered in a zero-risk and low cost format with endless scalability.

This is one of the most compelling industrial use cases for XR technology.

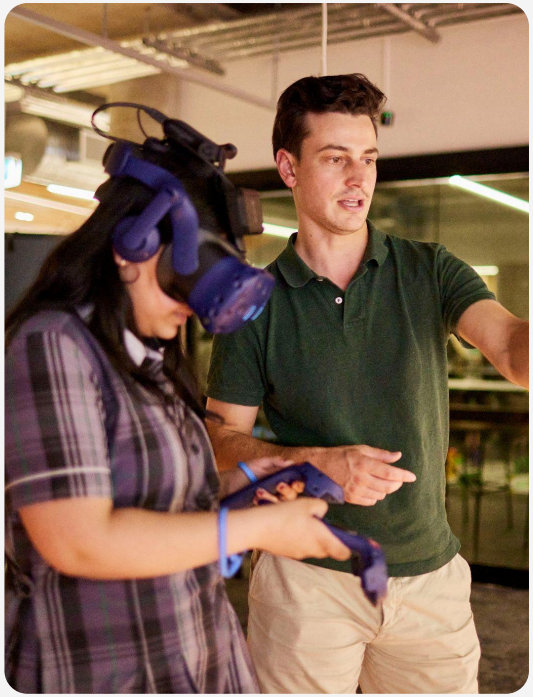


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How are extended reality technologies being used in schools?

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Adelaide Botanic High School



Students have experienced both open cut and underground mining operations at Prominent Hill (Oz Minerals/BHP) through the Lumination VR lab at their school.

The program enables students to navigate through features of the underground mine including the pump room and an open stope, providing the opportunity to discuss the mining techniques used in an underground mine.



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Showcase Experiences - Experiential Learning





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Showcase Experiences - Arkio





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Is there any extended reality content which can help prepare students for different vocations?

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Linking with Industry and Careers



Industry Partnerships (e.g. OzMinerals)



Job Exploration and Interview Simulator



Virtual Work Shadowing

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Interactive Job Shadowing



Landscape Architect

Here Sara will show you what it's like to be a Landscape Architect through all stages of a project, from the initial concept through to the finished product.

Tract

Australian Institute of Landscape Architects



Civil Engineer

Meet Matt and Kiara and find out what it's like to do their job. You'll learn how a bridge is built, talk to the site foreman, and hear about the construction of temporary works on a civil project.

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Interactive Job Shadowing



Carpentry

A carpenter’s job involves using tools to construct, repair and install structures for both residential and commercial projects. Find out what it’s like to work on a job site and build houses for a living!

MacWest



Dentist

Dentist's are tasked with the prevention, restoration, and maintenance of people's oral health. Every single day you work as a dentist you will also play the role of an educator, a leader, a tradesman, and even a psychologist.

CP DENTAL

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Interactive Job Shadowing



Firefighting

In this experience, you'll meet Julie who'll show you what it's actually like to be a Firefighter. She'll show you around the fire station and expose you to some of the demanding situations that firefighters deal with.



Physiotherapy

See what working in a Private Practice as a Physiotherapist involves. Sit in on a patient consultation, learn how Pilates is used as an adjunct to physiotherapy and explore why physios work with Ultrasonographers.

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Job Exploration and Interview Simulator









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More Information



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Discussion / Questions

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