Project 2040 – Dispatch 8: VR, Augmented Reality, and the Future of Learning

Another dispatch from 2040.

The arrival of virtual and augmented reality didn't just enhance education—it transformed it. No longer were students merely learning *about* a subject. They were immersed in it. Biology students didn't just study human anatomy; they travelled inside a virtual human body. History wasn't confined to textbooks; students walked the streets of ancient civilisations, engaging in conversations with historical figures

We had already seen the impact of VR in high-stakes training—surgeons refining techniques in simulated operating rooms, pilots mastering emergency procedures in virtual cockpits. The next step was clear: bring this technology into the classroom.

Combining our knowledge on building expertise with the hands-on experiential learning made possible through virtual reality, we were able to accelerate skill acquisition in technical courses accelerating the development of students from apprenticeship to skilled practitioners.

The quality of VR and AR experiences evolved rapidly. What started in the 2020s as crude, game-like graphics became fully immersive, sensory-rich learning environments. The range of applications was staggering:

- **Virtual field trips**—students explored the Amazon rainforest or the surface of Mars without leaving their school.
- **Augmented science labs**—from standing at the rim of an erupting volcano to observing dinosaurs in motion, to completing experiments in virtual labs.
- **Interactive historical debates**—meeting key figures in history and literature, and developing alternative stories and scenarios.
- **Virtual prototyping**—engineering and design students testing concepts before physical production.
- **Theatrical and musical simulations**—practicing with a virtual orchestra or rehearsing Shakespeare alongside AI-driven actors.

At first, we assumed that more immersion meant more learning. We flooded students with experiences, believing we were maximising neuroplasticity. But just as rest and reflection are essential to deep learning, we discovered that students needed structured pauses—time to process, discuss, and integrate these experiences into meaningful knowledge.

The real breakthrough came when students moved beyond consuming VR and started creating it. That's when the ground truly shifted.

Perhaps it's time for us to take a virtual trip back to 2025. What do you think?

Andrew Fuller
inyahead@aussiebb.com.au