



# Enabling Student Learning Through AI and XR Technologies



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## Introduction

The Trinity AI XR Hub is a strategic initiative of Trinity Business School, advancing the responsible application of Artificial Intelligence (AI) and Extended Reality (XR) in education, business and research. We use AI and immersive technologies to build the skills that matter most: distinctly human capabilities that technology can strengthen, but not replace. Our focus is on human-tech complementarity, helping people develop the judgement, communication, empathy, confidence and critical thinking needed to lead, collaborate and make better decisions in an AI-enabled world.

## Methods and Benefits

### Why VR works for soft skills



#### Embodied learning

Skills are built through doing, not watching. The body learns alongside the mind — gesture, voice, posture, gaze.



#### Presence and Immersion

Complete overlay of reality. Bodily responses, eye contact, vocal hesitation — all behave as they would in the physical world.



#### Low-stakes repetition

Learners rehearse hard conversations — interviews, feedback, sales pitches — without social cost. They can fail safely, then try again.

#### In-person roleplay

- Limited by staff availability 1-2 attempts/student
- Feedback from staff is subjective and variable
- Participants self-conscious
- Scenarios limited to what staff can roleplay
- Limited scalability beyond single cohort

#### VR + AI roleplay

- Available 24/7 unlimited practice sessions until the person feels ready
- Structured, evidence-based feedback
- Safe environment users take more risks, learn faster
- Any role, any sector, any difficulty level
- Easier to scale

**Skills:** Speaking with impact, persuasion, body language, presentation craft — built by communication experts and structured for progressive mastery.

**Theory + practice loop:** Each lesson pairs with VR practice exercises, so users immediately apply what they've learned.

**Personal AI coach:** After every practice session users reflect with the AI coach to discuss their feedback and translate insight into next steps.

## Key Outcomes & Impact

1. Embedded AI and immersive technology across undergraduate, postgraduate and MBA teaching.
2. Used AI-enabled VR roleplays in sales, mentoring and leadership to build judgement, communication, confidence and decision-making skills.
3. Engaged TCD staff through demos and exploratory sessions on AI and immersive learning.
4. Outreach sessions for primary, secondary school students, TAP and Sanctuary students.

## Student Experience

*“As a longtime VR user, I was surprised to discover how immersive and responsive VR could be for professional development. Trinity Business School's VR experience allowed me to practice leading a difficult management conversation with a simulated employee who responded in real time. The experience was far more immersive than rehearsing with another student, and I now feel better prepared to lead similar discussions in the workplace.”*

**Ashley Nichols, MBA student.**



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