

USING AI TO ENHANCE METACOGNITION AND REFLECTIVE PRACTICE IN LEGAL EDUCATION

ALAA CONFERENCE 2026

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Who we are...

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Our Philosophy: Embrace a 'Culpability to Capability' mindset



Artificial intelligence has been around in various forms for decades but around 2023 it started to feel like the pace of development quickened, especially in regards to the sort of Gen AI that is freely (or cheaply) available and has a far more **conspicuous relationship** between user and (mis-)use. When it comes to controlling that relationship, publicly funded institutions of learning face a familiar problem - how to spend their inevitably limited resources (human, financial and technological).

At an institutional level it seems the initial reaction to the ubiquitous rise of Gen AI was to weed out the misusers, implement detection software and waggle all sorts of fingers at students. That used up a lot of time and effort for very little R.O.I.

We CAN win some of the battles against AI misuse....but we cannot win the war by trying to legislate or design the 'threat' out of existence.



We should worry less about user *Culpability* and instead find ways to make AI a part of developing Learner *Capability*.

AI MISUSE (CULPABILITY)



- LOSS OF INTEGRITY



- LIMITED COGNITIVE DEVELOPMENT

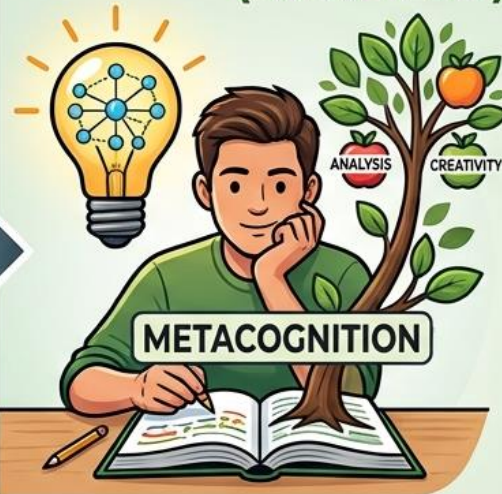


- RESPONSIBILITY FOR MISUSE (CULPABILITY)



ACTIVE METACOGNITION:
UNDERSTANDING YOUR OWN THINKING
SELF-REGULATION & REFLECTIVE PRACTICE

REFLECTIVE LEARNER (CAPABILITY)



- GENUINE LEARNING & DEEP UNDERSTANDING



- DEVELOPING HIGH-LEVEL CAPABILITIES



- ACADEMIC INTEGRITY

- EMPOWERMENT THROUGH CAPABILITY



PROBLEM - When it comes to AI use, it turns out that learners are rational actors, who make logical, self-interested decisions!!

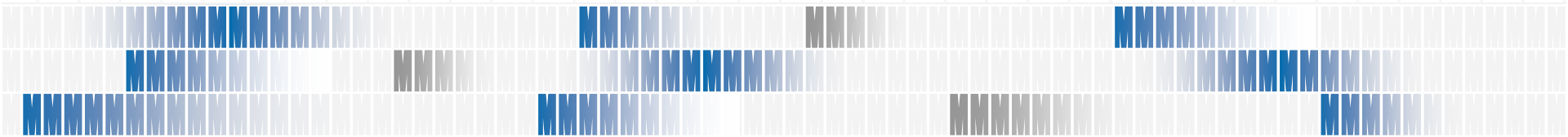
THE REWARD OF SPEED VS. THE DEPTH OF DISCOVERY



**PROBLEM - When it comes to AI use, it turns out that learners are rational actors,
who make logical, self-interested decisions!!**

Many learners seemed untroubled by the prospect that outsourcing knowledge production to Gen AI could make them less capable learners...especially when weighed against the obvious time-saving benefits of not having to conduct research, write, revise or reflect on their work.

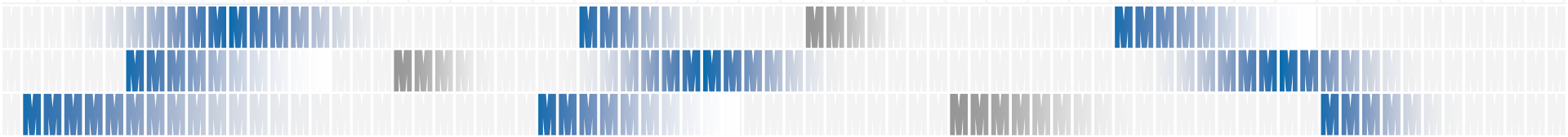
For a student who works two jobs, travels long distance to attend classes and has a real life outside of university, Gen AI was clearly not a threat to their education...it was the best thing about it!



PROBLEM - When it comes to AI use, it turns out that learners are rational actors, who make logical, self-interested decisions!!

The capacity of Gen AI to efficiently deliver convincing, comprehensive outputs with no explicit evidence of how that output was achieved is antithetical to the design of the sorts of learning activities and assessments common in Legal Pedagogy - **activities that assume learners knowingly take a number of cognitive steps...**

Whilst this is horrifying for Ed designers it is actually normal for most learners at university, as this is how they access most of their information...



Compression Culture



→ Across media, politics, and professional practice, increasing **value is placed on speed, efficiency, and clarity**, often at the expense of nuance, depth, and contextual understanding.

- In education, **Compression Culture** manifests in subtle yet consequential ways. **Learning activities are increasingly evaluated by their outputs rather than their processes**; assessments reward correctness more readily than reasoning; and students are encouraged—explicitly or implicitly—to manage workload through efficiency rather than engagement.
- Generative AI tools often align seamlessly with these values, offering **rapid synthesis and authoritative-seeming responses that mask the cognitive labour involved** in producing them.

ANOTHER PROBLEM - Learners do not have Reflection Literacy

Reflection is not really taught (or even valued) in the high school curriculum.

Traditionally, reflection was not valued by learners at university as it rarely came with marks attached. In most instances where Reflection did exist as part of an assignment it was a sort of 'bolt on'.

Even now, assignments often employ Reflection as an 'after the fact' discussion, more akin to 'review' rather than something that can be employed along the way by understanding what to reflect on and how to do it.

The efficiency of AI is built on its ability to **compress** what takes human learners much longer to do. Naturally, this is also the source of its attractiveness to learners.

We firmly believe that AI can also make learners better at being learners by improving their reflection literacy.

This requires some level of strategic intervention whereby the technology is used as more of a ***Companion*** - one that helps to *decompress* learning and make explicit the cognitive steps that are required for reflective, self-directed learning.



2024 - Cognitive Compression to Cognitive...Companionship?

At first, we had no label for what we thought AI might be able to do for learners...just a few speculative theories and potential benefits:

- AI might actively mitigate Cognitive Compression if it can require learners to be more explicit about the steps taken in their reasoning, argumentation and conclusions.
- An AI companion that is not afraid to disrupt fluency - i.e. offers immediate feedback *during* learning activities will enhance metacognitive reflection.
- Used properly, AI technologies won't *substitute* for learner activity; rather, they'll help students to consciously understand themselves as active agents in their own learning.

What could be the potential benefits of integrating AI Companionship into **Legal** Education?

- **Scaffold Complex Legal Reasoning** by drawing attention to the *process* of reasoning.
- **Cultivate Critical Advocacy Skills** by engaging learners to think within structured frameworks such as IRAC.
- **Build confidence and self-efficacy while reducing stress** because skills are tested and refined in a low risk environment.
- **Aid Transference** by using scenario and simulation-based learning to normalise the application of knowledge in new contexts.

We started by using an AI platform called **ATLAS**

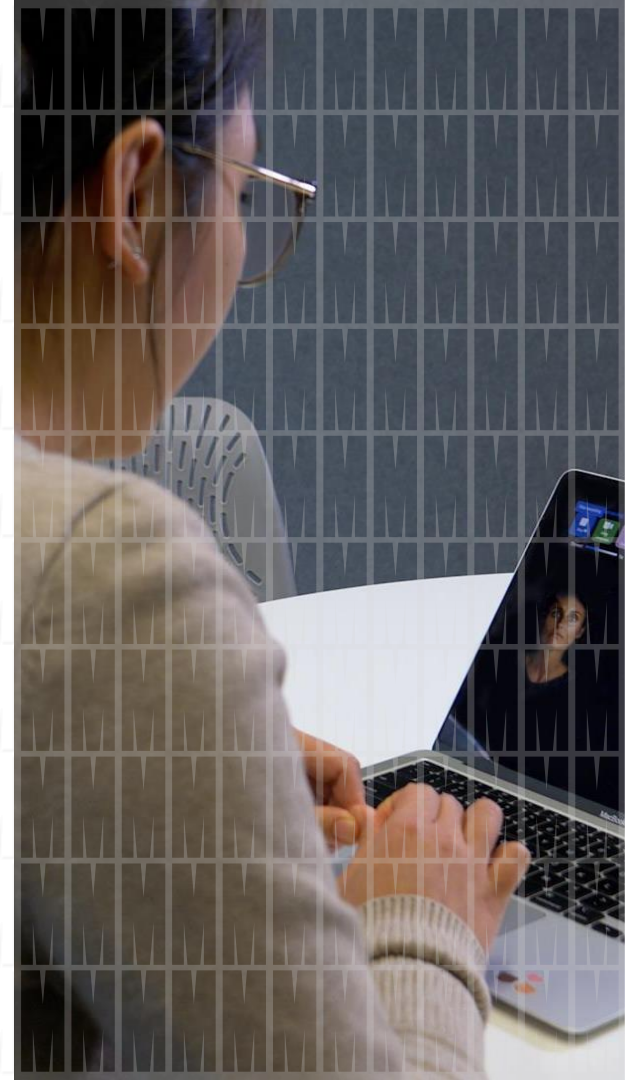
(Authentic Teaching and Learning Application Simulations)

- **ATLAS** creates dynamic, unscripted interactions that respond authentically to student questions and approaches, providing immediate personalised feedback on communication techniques.
- **ATLAS** enables students to safely practise communication and legal reasoning skills at their own pace, multiple times, without the logistical constraints of traditional role-play exercises.

- Initially, two avatars were built for the Law Clinical Program across two disciplines (Family Law and Criminal Law)
- Both Avatars were simulated clients seeking legal assistance - the sort of clients from whom Students on Clinical Placement might needed to elicit information in an initial interview.
- To build the avatars the ATLAS development team required detailed information about both the Scenario and the Avatar personas.

Clinical Skills Scaffolding

- LISTENING
- ANALYSING
- PROBLEM SOLVING
- SYNTHESISING
- DEMONSTRATING RAPPORT
- ELICITING INFORMATION
- PROVIDING PLAIN LANGUAGE EXPLANATIONS



Time Remaining: 20:00



Speed:  1x



Legal Role Play

Family Law: Scenario 1 - Domestic Violence Case

Client Background

The client has recently separated from her husband due to family violence. She fled to a women's refuge with her three children 2 weeks ago, leaving the family dog at the family home.

Current Situation

- Client has reported family violence to the police
- Police have issued a Family Violence Safety Notice against her husband
- The matter is scheduled in the local Magistrates court next week

Client's Concerns

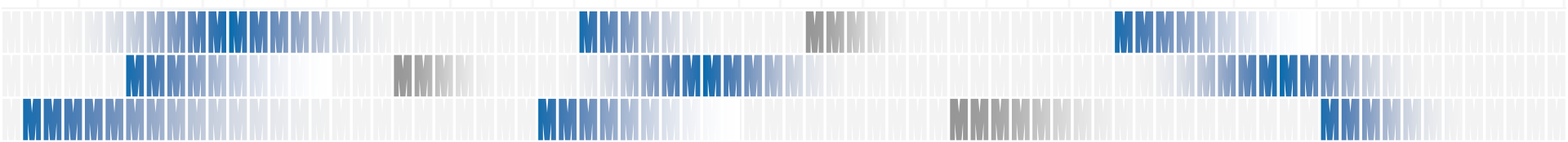
The client is seeking advice on the following:

- Preparation needed for the hearing
- Whether she needs to speak at the hearing
- If she is required to attend the hearing
- Whether her husband will be present at the hearing
- The court process and the role of the police
- View IVO Document



2025 - A Wellbeing AI Companion

- After the initial success of ATLAS in the Clinical Program we were eager to see how we might employ the technology to support learners in more conventional ‘classroom’ learning activities and assessments.
- To this end, we partnered with the Chief Examiner of Our Postgraduate Evidence Unit to create a new avatar - “Judge Jones” - in order to simulate judicial interaction. Students practised oral submissions multiple times and received real-time feedback from the platform on reasoning, clarity, and professional demeanour in a low-risk environment.
- These interactions were not used for the assessment itself, but to scaffold learner skills and confidence through a ‘companion’ approach, regularly intervening to prompt pause, reflection, reconsideration or adjustment.

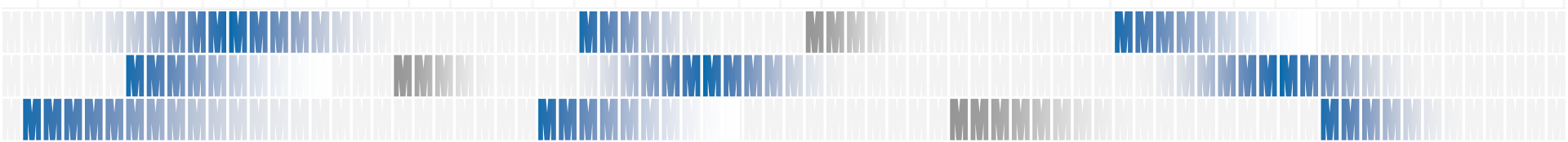


Metacognition & Wellbeing

The sort of companionship provided by the Judge Jones avatar has significant metacognitive benefits for students and we wondered how that might in turn affect their general wellbeing, especially in regard to the sort of stress and anxiety they naturally experience when doing oral assessment.

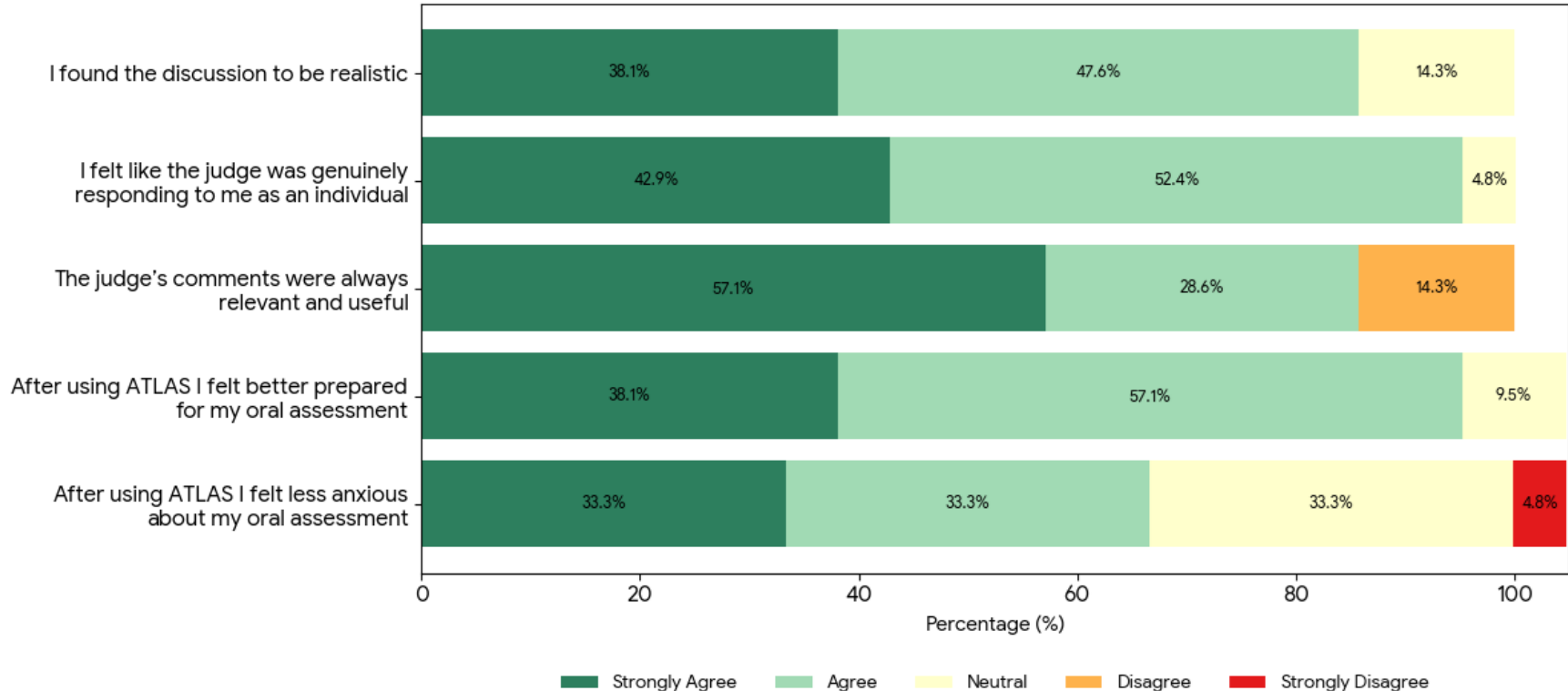
Metacognition plays a critical role in student wellbeing by fostering agency, emotional regulation, and adaptive coping strategies.

Students who understand **how** they learn, recognise their cognitive strengths and limitations and are better equipped to manage negative emotions and psycho/physical sensations such as stress, anxiety and uncertainty.



What was the feedback from Learners?

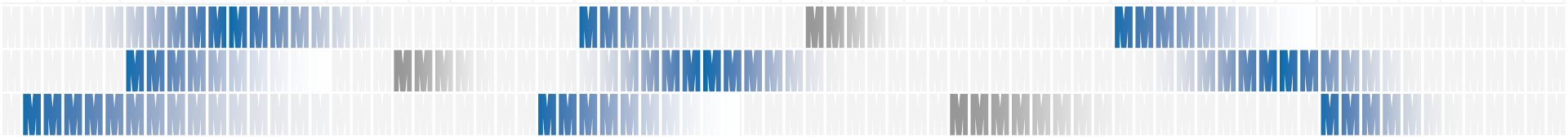
Survey Results: ATLAS User Experience



Metacognition & Wellbeing

Participants reported increased confidence, reduced anxiety, and improved preparedness for oral assessment. Some hated the repetitive nature of the scaffolding but also admitted that the interactions reduced fear of judicial questioning and helped normalise uncertainty as part of the advocacy process. In this way, the simulation supported both cognitive and affective dimensions of learning, contributing to confidence and emotional wellbeing.

My favourite bit of anonymous student feedback: *‘It helped organise my thoughts when i did the real thing’*



Vol. 2 (2026)

ARTICLES

Supporting Student Wellbeing Through AI-Enabled Authentic Oral Assessment: Evidence from a Pilot Study in Legal Education

PDF

Fiona Hum, Craig Horton

[+ More Info](#)

Published 2026-06-18

Keywords

Wellbeing, Anxiety, Metacognition, Critical thinking, Student learning

[... More](#)

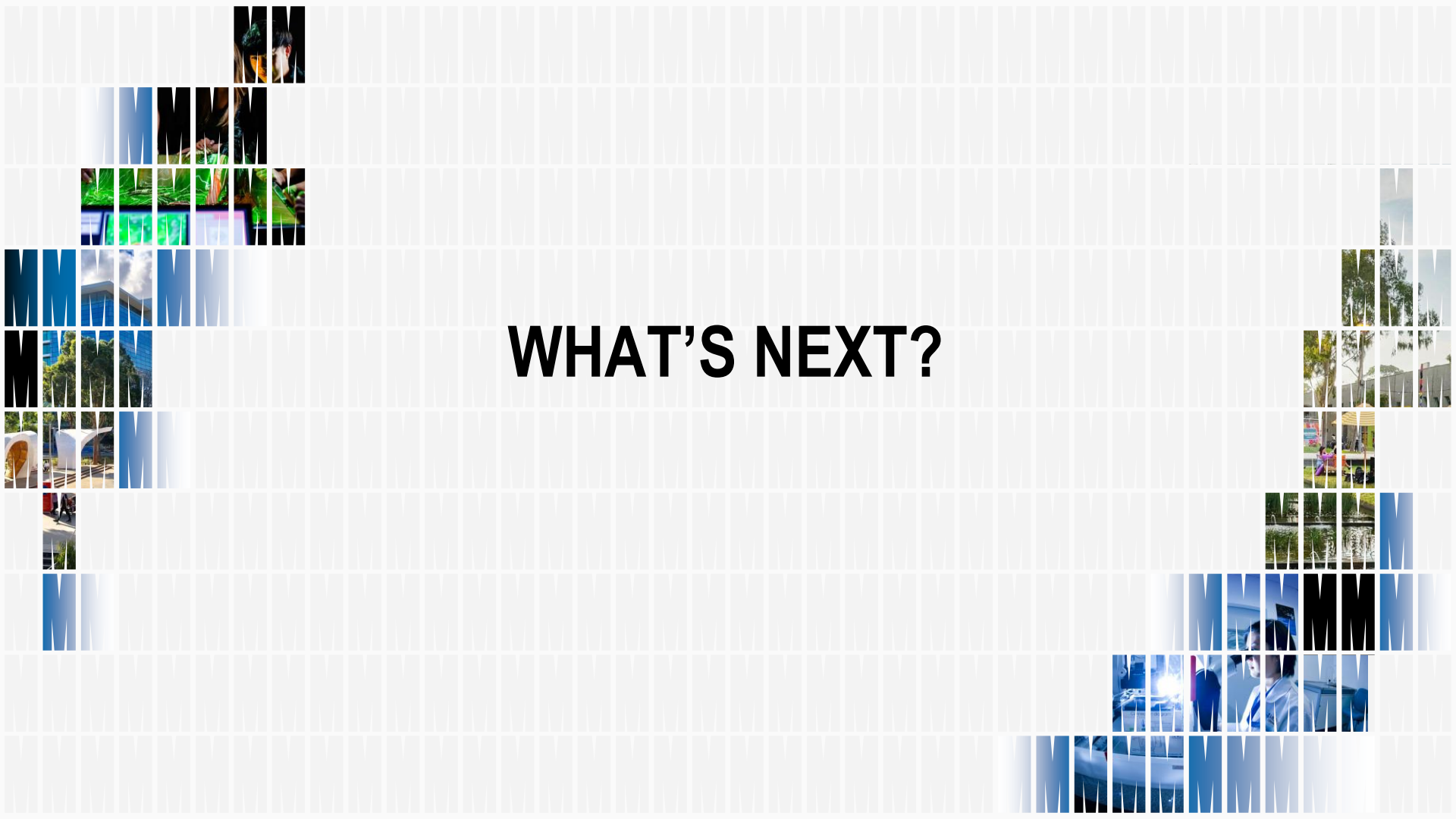
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Abstract

Central to alleviating anxiety and stress for oral assessments, Authentic Teaching and Learning Through Adaptive Simulations (ATLAS) provides a simulation environment where students can engage in realistic scenarios to enhance situational experiences, improve learning and understand people-people interactions. It has been primarily used in medicine, pharmacy and mediation contexts. The authors piloted ATLAS in the Juris Doctor Law Program, Monash University for a small cohort of postgraduate Law students enrolled in an Evidence Law unit. Data collection involved recording student interactions with an AI-generated judicial avatar ("Judge Jones") across up to five 10-minute asynchronous practice sessions, followed by a post-assessment user experience survey. While the main limitation of the pilot study was the small sample size the quantitative findings were highly encouraging and indicate a positive impact on student learning and emotional regulation whereby 95% of surveyed students agreed or strongly agreed that they felt better prepared for their final oral assessments and two thirds felt less anxious after using the AI platform.

Supporting Student Wellbeing Through AI-Enabled Authentic Oral Assessment: Evidence from a Pilot Study in Legal Education . (2026). *Wellbeing Futures: Innovation, Policy and Research*, 2, 11-21.

<https://doi.org/10.65638/2978-882X.2026.02.02>



WHAT'S NEXT?

AI AGENTS FOR LEARNING LAW

- An AI agent is a software program that goes beyond simply answering questions, it can understand a goal, formulate its own step-by-step plan, and take autonomous actions using various digital tools to get work done
- Google Gemini has the ability to easily build AI agents called 'Gems'
- The Enterprise version of Google Gemini is freely available to all Monash staff and students
- Various learning activities can be built using Gems and easily shared with teaching staff and students
- Gems for learning include: The Socratic tutor, Interactive Roleplay Partner, Case Summariser
- Google also has a pre-built 'Learning Coach' that can act as an interactive tutor for breaking down difficult legal concepts

For us - GoREACT (ECHO 360)

- [GoReact](#) is a cloud-based video assessment and feedback platform designed for teaching and evaluating performance-based skills.
- It allows instructors to create video assignments where students record or upload videos, enabling educators and peers to leave time-coded comments, critiques, and grades.
- As the video plays, instructors and peers can type text, video, or audio feedback that syncs to specific moments in the recording
- The platform incorporates AI features that provide real-time metrics, analytics, and automated feedback to enhance learning.

THANK YOU

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