

PROGRAM: 2025 Cogniti Mini-Symposium – Tuesday 18 November 2025

All times are in Sydney time (Australian Eastern Daylight Time, UTC+11)

Physical venues are on level 3 of the PNR building ([see map](#)) in the University of Sydney Darlington campus. The Zoom icon  indicates a remote presentation.

	Stream 1	Stream 2	Stream 3
9:15	[S1C1T1] Practising clinical assessment skills: using AI agents to simulate challenging patient interactions  <u>Susan Batur and Damhnat McCann</u> <i>University of Tasmania</i> Cogniti simulates patients in postgraduate nursing pain assessment scenarios, enabling both formative practice and summative evaluation of clinical communication skills. The platform creates otherwise difficult-to-replicate learning opportunities, including interactions with patients experiencing cognitive decline or language barriers that would be challenging to authentically stage in classroom settings.	[S2C1T1] Cooper Jr: 1.7 Million Words and Counting <u>James Cooper</u> <i>Scots College</i> This presentation tracks the year-long evolution of an AI teaching assistant from content tutor to comprehensive skills coach, now serving expanded cohorts with extraordinary engagement levels. The 1.7 million words exchanged between students and agent demonstrate sustained, meaningful interaction that has built student confidence and sparked broader institutional interest in AI applications. Technical updates brought unexpected consequences: the newer model's increased emotional expressiveness generated "interesting" student interactions, whilst ensuring accurate guidance on discipline-specific writing conventions required behind-the-scenes validation work.	[S3C1T1] Learning Alongside Students: Simultaneous Learning on the Potential of AI in Teacher Education  <u>Malba Barahona, Claudia Bustos, and Claudio Vásquez</u> <i>Pontificia Universidad Católica de Chile</i> Cogniti serves as a reflective partner for Chilean pre-service English teachers conducting classroom research, prompting critical analysis of coherence between research questions, evidence, and interpretations. Students report deeper thinking about their inquiry decisions and improved analytical clarity, whilst peer dialogue has emerged around AI's role in teacher research and professional agency. Implementation surfaced dual challenges: ensuring critical rather than dependent student engagement, and navigating instructor uncertainty about appropriate guidance levels when modeling AI-mediated reflection themselves; a humbling process that fundamentally questioned pedagogical roles in AI-enhanced contexts.
9:30	[S1C1T2] From Passive to Active: AI Patients Transform Nursing Tutorials  <u>Luke McLean</u> <i>Federation University</i> Traditional PowerPoint tutorials gave way to dynamic AI patient conversations, fundamentally shifting nursing students toward active clinical reasoning and communication skill development. Face-to-face sessions revealed increased curiosity and reflective depth, with culturally embedded patient characters generating authentic engagement that conventional case studies struggled to match. Implementation lessons centred on scalability and the need to explicitly teach students how to interact meaningfully with AI agents rather than assuming intuitive engagement.	[S2C1T2] From Generic Feedback to Industry Voice: Designing Jack from Auckland FC  <u>Sarah Wymer</u> <i>Auckland University of Technology</i> Meet Jack: an AI industry agent designed to mentor first-year students through the complexities of sport marketing strategy. Through Cogniti, Jack simulates the role of Auckland FC's Marketing Manager, offering personalised feedback that challenges students to refine their thinking on audience, creativity, and commercialisation. The session explores how tailored AI agents can make assessment feel more authentic, the iterative process of calibrating realism for novice learners, and practical strategies for positioning AI as a complement to, rather than replacement for, human teaching.	[S3C1T2] "It Makes You Think!": Challenging Cognitive Offloading in Language Learning  <u>Spyridon Simotas</u> <i>University of Virginia</i> This session presents an AI assistant designed to guide French language learners in revising their drafts. Unlike standard AI tools that prioritize automation, this one deliberately slows students down and requires their active engagement in the process. Students' immediate response, "It makes you think!", captures the agent's pedagogical intent. 70% of them also identified it as the most valuable scaffolding activity in their writing process — proof that intentional constraints in AI design can foster deeper learning rather than cognitive offloading.

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9:45	[S1C1T3] Three Agents to Support Students Through Placement <u>Rene Fraser, Amelia Yarwood, Celine Serrano-Diaz</u> <i>The University of Sydney</i> Three Cogniti agents support occupational therapy students through simulated placement: a Socratic tutor for reflective practice development, a supervisor feedback translator that standardises weekly feedback against learning outcomes, and a communication skills coach currently transitioning to SimuTalk functionality. The supervisor agent notably reduces staff workload whilst decreasing cognitive load for students through consistent formatting and explicit EFPC alignment, with evidence showing improved use of Gibbs reflective cycle in student writing. Design complexity varied significantly: the reflective practice agent required minimal adjustment whilst the supervisor feedback agent needed more prompt refinement to maintain specificity.	[S2C1T3] Scaffolding Reflection at Scale: Supporting the Experiential Learning Cycle <u>Corinna Galliano</u> <i>The University of Sydney</i> This presentation examines an AI tool designed to deepen reflective practice in experientially designed units where staff availability cannot meet individual mentoring demands. Portfolio quality improvements and student feedback demonstrate enhanced ability to connect practice with theory, with interaction transcripts revealing meaningful shifts in student understanding during conversations with the agent. The work has catalysed colleague interest in creating similar tools for critical thought leadership units, though implementation surfaced student concerns around conversational authenticity and required clarification about optimal interaction depth.	[S3C1T3] Scaling Feedback in Radiology Education  <u>Ryan Smyth</u> <i>Murdoch University</i> A Cogniti agent provides individualised feedback on radiology report writing using authentic cases and assessment criteria, addressing the impracticality of manually marking multiple weekly submissions. Students who engage with the agent demonstrate improved outcomes in end-of-semester assessments, though usage patterns reveal a familiar paradox: higher-performing students access it more frequently. Technical challenges included fine-tuning case retrieval accuracy, whilst the persistent pedagogical challenge remains motivating broader student engagement with the available support.
10:00	[S1C1T4] Collaborative Development of Nursing Education AI Across Three Institutions  <u>James Oldfield, Maia Topp and Sharnell Aumua</u> <i>Unitec, Manukau and Toi Ohomai Institutes of Technology</i> This inter-institutional collaboration uses Design Based Research to develop and evaluate nursing simulation agents across three tertiary providers. Early student feedback reveals positive reception of practice-focused immersive interactions, with learners actively requesting broader course integration. The work highlights a fundamental design tension: achieving high-quality conversational learning experiences requires prompt iteration time, yet this investment proves essential for pedagogically valuable student engagement.	[S2C1T4] OLiMent: Encouraging Metacognition Through Self-Assessment Sessions <u>Annie Yuan and Andrew Fang</u> <i>The University of Sydney</i> OLiMent, an agent trained on Open Learner Model approaches, facilitates structured self-assessment sessions that support metacognitive calibration. Usage patterns revealed discretionary student engagement concentrated during pre-exam periods for revision purposes, with transcript analysis showing indicators of judgement of learning and correlation between agent interaction and final exam performance.	[S3C1T4] Teaching Critical AI Engagement Through Linguistics  <u>Silvana Arriagada Anabalón and Joaquín Cárcamo</u> <i>Pontificia Universidad Católica de Chile</i> ChomskIA enables linguistics students to engage in simulated dialogues with theoretical figures like Saussure and Chomsky whilst receiving automated feedback on written work and personalised conceptual guidance. Likert survey data demonstrates high engagement levels and perceived learning support, with students reporting increased confidence in complex theory and greater motivation for academic discourse. Design challenges centred on achieving authentic yet accessible theoretical discussions and cultivating critical AI engagement rather than passive acceptance, requiring iterative usability testing to refine pedagogical alignment.
10:15	Movement break		
10:30	[S1C2T1] AI Agents for Interactive Oral Assessment Preparation <u>Benjamin Miller</u> <i>The University of Sydney</i> An AI agent simulates oral examination conditions, allowing students to practise interactive assessments with pauseable feedback before continuing their conversation. Unexpectedly, teaching staff also adopted the tool for examiner preparation, using	[S2C2T1] When AI Withholds Answers: Designing for Reflection over Resolution in Research Learning <u>Karyne Ang</u> <i>The University of Sydney</i> This session introduces SARA – the ‘Socratic Assistant for Research and Argumentation’, an AI-powered research coach developed within Cogniti to support Master of Project Management research	[S3C2T1] Scaling Cogniti to Empower Staff in AI-Enhanced Learning and Teaching  <u>Jason Cui, Metti Lampinen, Nuskiya Razeek, Dennis Yeung</u> <i>Auckland University of Technology</i> AUT is transitioning from a pilot to an institution-wide rollout of Cogniti, aiming to empower educators to design and deploy AI agents that enhance learning and teaching. Our institutional

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	it to refine questioning techniques. With over 400 conversations logged and student interactions demonstrating genuine practice in simplifying academic language, the agent successfully scaffolds assessment goals, though voice functionality creates practical constraints in shared learning spaces.	students. SARA guides students through exploratory topic development using Socratic questioning, deliberately withholding direct answers to foster critical thinking, curiosity, and independent research reasoning. Drawing on Cogniti's analytics and student-interaction data, this presentation explores how SARA acts as a thinking partner rather than a shortcut — cultivating reflective dialogue, deeper engagement, and more intentional research design. A key challenge emerged around expectation management, as students accustomed to solution-focused generative AI tools sometimes disengaged when SARA upheld its pedagogical stance.	approach builds staff capability and supports sustainable adoption through a self-guided resource framework, Communities of Practice, and coordinated institutional support. As implementation progresses, we continue to navigate challenges in balancing flexibility with quality assurance while strengthening staff confidence and independence. University-wide analysis of agent adoption informs continuous improvement, shared innovation, and strategic insights into AI's evolving role in education.
10:45	[S1C2T2] Let's TALK About It: Revealing Student Thinking Through AI voice chat <u>Angela Sun and Helen McGuire</u> <i>The University of Sydney</i> A voice-based Cogniti practice assessor now supports 440 microbiology and immunology students in rehearsing for their Interactive Oral Assessments. By “talking” with an AI, students externalise their reasoning, complete with natural pauses, and self-corrections that reveal how they think, not just what they know. Mid-semester analysis showed some students using the agent extensively, even more than attending live mock workshops, suggesting the AI lowers participation barriers for anxious learners. Reviewing these conversations provided unexpected insight into how students reason aloud and how design choices like pause tolerance, turn-taking, and transcription accuracy help shape their learning experience.	[S2C2T2] Shifting Student AI Literacy Through Feedback <u>Yanting Ruby Zhuang</u> <i>The University of Sydney</i> This presentation shares insights from developing and evaluating an AI feedback bot that aligns with course rubrics and assessment criteria. Beyond improving writing confidence, the tool fundamentally changed how students approached generative AI, encouraging critical engagement over shortcut-seeking behaviour. Trial-and-error refinements highlight a crucial lesson: overly constrained AI responses can undermine student trust, whilst carefully balanced prompt design enables both consistency and conversational warmth.	[S3C2T2] Federation University Pilot: Preliminary Findings Across 16 Units 🗣️ <u>Christopher Bridge</u> <i>Federation University</i> Federation University's semester 2 pilot engaged 10 staff creating 12 agents across 16 units, reaching over 1000 students with tutors, coaches, and role-play partners spanning numeracy, academic English, placement reflection, and clinical scenarios. Preliminary data shows largely positive student and staff reception, with conversation analysis demonstrating evidence of learning, though challenges included technical performance issues, occasional unintended agent behaviour, and approximately 20% of students expressing discomfort with GenAI for learning purposes.
11:00	[S1C2T3] Echo and Ulan: Voice-Enabled Language and Assessment Support <u>Kelly Hart</u> <i>Federation University</i> Two voice-enabled agents leverage Cogniti's speech synthesis and recognition: Echo provides multilingual academic English support across six units in three disciplines, whilst Ulan serves as an interactive oral assessment practice partner. Usage patterns differ from initial expectations; Echo generates shorter vocabulary and translation queries rather than extended tutoring sessions, whilst Ulan engagement intensifies around assessment periods with students practising exam topics verbally.	[S2C2T3] How AI Agents Support Reflective Practice and Anti-Racism Education <u>Elif Sahin and Amy McHugh</u> <i>The University of Sydney</i> This presentation explores AI agents as both pedagogical tools and research instruments, embedding scaffolds for reflective practice and anti-racism education whilst using learning analytics to trace developmental shifts in student thinking. The work challenges replacement narratives around AI, instead positioning these tools as extensions of distinctly human capacities for self-awareness and cultural responsiveness that have catalysed cross-faculty collaboration and scholarship of teaching funding. Research participant feedback reveals tensions between educational persistence and user experience, alongside practical needs for	[S3C2T3] Three Models of AI Integration: Tutors, Role-Play, and Student-Built Agents 🗣️ <u>Julian van der Kraats</u> <i>Leiden University</i> We share emerging pedagogical applications of AI across diverse learning contexts, from foundational tutoring support to immersive role-play scenarios and a novel assignment where students construct their own Stoic philosophy mentors. This session presents preliminary findings from large-scale pilots involving approximately 1500 students across multiple disciplines. The discussion focuses on the creative challenges and rewards of designing educationally sound AI interventions when established best practices are still taking shape.

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		enhanced backend analytics to support large-scale interaction data analysis.	
11:15	[S1C2T4] NiNA and EdNA: Reducing Mathematics Anxiety Through AI Support <u>Luis Camacho</u> <i>Federation University</i> We developed discipline-specific AI tutors to address a critical gap: nursing and education students often lack confidence in numeracy skills required for professional accreditation tests. The agents offer round-the-clock personalised support with contextual practice questions, fostering more positive attitudes towards mathematics in students who typically experience significant anxiety. This session discusses both the enthusiastic reception from unit coordinators and the practical obstacles of ambiguous AI policies and technical constraints in mathematical pedagogy.	[S2C2T4] Reducing Barriers While Preserving Academic Integrity  <u>Sam Elliott and Georgina Maddox</u> <i>Flinders University</i> AI Chido, a Socratic tutoring agent embedded in a first-year undergraduate course, was evaluated for its impact on student anxiety, trust, engagement, and wellbeing. Findings demonstrate that purpose-built AI agents can lower learning barriers and build trust whilst maintaining student responsibility and academic integrity, offering evidence-based guidance for the sector's ethical AI adoption. Technical access issues affected some students, highlighting infrastructure considerations for equitable implementation.	[S3C2T4] Bridging Enthusiasm and Implementation: AI Adoption Challenges  <u>Colin Webber</u> <i>Navitas</i> Our portfolio of AI teaching agents supports diverse applications including skills practice, unit navigation, and staff development in feedback provision. Where implementation succeeds, student engagement increases and staff appreciation grows, yet adoption faces consistent obstacles around time constraints and hierarchical approval processes. This session examines the gap between enthusiasm for AI tools and the practical realities of embedding them into existing teaching workflows, particularly within casualised academic workforces.
11:30	Morning tea		
12:00	[S1C3T1] Piloting Engineering Bots To Outperform ChatGPT: A School-Wide Initiative  <u>Gobinath Rajarathnam and Peter Lok</u> <i>The University of Sydney</i> We present learnings from developing and deploying custom engineering education bots across multiple junior and senior units in the School of Chemical & Biomolecular Engineering. Endeavours to date demonstrate subject-specific AI's advantages over generic tools. We share how our technical development journey evolved from document upload approaches to system instruction methods, whilst exploring implementation insights which reveal the need for active student engagement. This work has catalysed additional student-centric research projects and potential public-facing applications.	[S2C3T1] Teachable Agents and Gamification in Primary Mathematics <u>Alison Perosin</u> <i>Catholic Schools Broken Bay</i> This presentation showcases two approaches to AI integration in primary mathematics: instructor-created teachable agents and student co-designed gamified AI experiences. The student-built ANT-KING game generated exceptional enthusiasm, demonstrating young learners' capacity for sophisticated AI collaboration when given creative ownership. Staff engagement with teachable agents has been strong, while participation in co-design activities highlighted the importance of providing structured support and time for experimentation, offering valuable insights into the different needs across the implementation journey.	[S3C3T1] Safe Practice Spaces: AI Client Simulations for Legal Communication Skills <u>Nicole Landy</u> <i>Queensland University of Technology</i> BrianBot simulates a client in employment law disputes, enabling practical legal training students to practise solicitor-client communication skills in a low-stakes environment. Students conduct two telephone conversations with the AI client at key stages of a civil litigation matter, then apply their insights to written advice tasks. Feedback reveals students valued the judgement-free practice space, found their oral and written communication improved, and gained confidence for real-world client interactions.
12:15	[S1C3T2] From Misconceptions to Analogies: Learning at Scale  <u>Julie McIntosh and Suzanne Reid</u> <i>The University of Auckland</i> This large-cohort implementation in Human Cell Biology and Foundational Biochemistry demonstrates how AI tutors scale individualised conceptual support where traditional methods cannot reach. Students particularly appreciated persistent, judgement-free iterative dialogue enabling thorough concept mastery, with	[S2C3T2] From Guided Use to Student-Created Agents: Building Teacher Agency <u>Hongzhi (Veronica) Yang</u> <i>The University of Sydney</i> This agent supports pre-service teachers unfamiliar with language curriculum frameworks by demanding contextual detail before providing advice, simultaneously teaching syllabus content and differentiation principles. The approach sparked student agency: many reported feeling more confident to create their own AI	[S3C3T2] Advancing Equity Through 24/7 Law Tutoring Agents <u>Tyler Sprague</u> <i>The University of Sydney Law Extension Committee</i> This session presents the development of law tutoring agents that combine pedagogical theory with user experience design principles to advance educational equity in legal education. Students gain round-the-clock access to support that develops critical thinking and confidence, though implementation surfaced

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	interactions revealing student thinking patterns invisible in conventional large-class formats. The work generated unexpected pedagogical benefits: staff discovered effective new analogies through bot explanations, whilst implementation proved remarkably smooth beyond minor authentication challenges.	teaching tools, with several developing custom agents for specific classroom challenges. Student feedback emphasised how context-dependent prompting generated more meaningful learning than unrestricted AI access.	complex technical challenges around incorporating comprehensive legal reference materials within AI limitations. Solutions involved sophisticated metadata structuring for dynamic content retrieval, alongside continuous work to establish effective AI learning practices and maintain consistent agent behaviour.
12:30	[S1C3T3] Meet Artificial Ian: Large-Scale AI Tutoring in Psychology <u>Ian Johnston</u> <i>The University of Sydney</i> This agent, cheekily named Artificial Ian, helps students tackle core psychology and neuroscience content through weekly conversations tied to lecture material and learning outcomes. With 680 students using it, feedback came fast: early reviews were mixed, prompting quick adjustments that transformed reception from lukewarm to genuinely helpful. The 5% engagement task requiring conversation submissions created a feedback loop that accelerated improvements, whilst the agent's personality has earned it affectionate (and funny) mentions from teaching colleagues across the program.	[S2C3T3] High Impact Teaching Meets AI Tutoring  <u>Jason Szkwarek</u> <i>Carroll College Broulee</i> This session shares experiences implementing AI tutors across technical and vocational education disciplines, supporting everything from problem-solving guidance to curriculum resource development aligned with evidence-based pedagogical frameworks. Beyond direct classroom applications, the work has catalysed broader institutional awareness of responsible AI use through cross-disciplinary collaboration. Challenges centred on maintaining momentum through early technical limitations that undermined user confidence, compounded by the significant time demands of pioneering work that fell largely outside formal workload allocations.	[S3C3T3] Closing Disengagement and Success Gaps: AI Support for Struggling Law Students  <u>Michelle Edgely, Shannon Tyrrell and Claudia Barbosa</u> <i>University of New England</i> A 24/7 AI legal writing tutor addresses persistent disengagement and high failure rates in a first-year Criminal Law assignment among educationally disadvantaged students. Chat log analysis shows student queries vastly exceed traditional forum and email volumes, with usage focused on assignment structure, referencing, and substantive law as intended. Preliminary data indicates significant improvements in both average marks and pass rates across two trimesters, though implementation required careful guardrail design to prevent answer generation and override the LLM's tendency toward non-jurisdictional legal content.
12:45	Movement break		
1:00	[S1C4T1] From Overly Helpful to Accurate: Refining a Student Support Agent  <u>Jeanette Hobbs</u> <i>College of Law New Zealand</i> This presentation details the implementation of an AI-powered first-response system for student queries, drawing on institutional documentation to provide immediate guidance. Beyond answering questions, the agent functions as a diagnostic tool: patterns in student interactions expose gaps in existing communication materials and highlight areas requiring policy clarification. Initial accuracy issues stemming from the agent being "too helpful" were addressed through technical adjustments and the development of a living resource document that bridges current student needs with formal policy development.	[S2C4T1] Scaling Formative Feedback in Large Cohorts <u>Osu Lilje, Michael Widjaja, and Januar Harianto</u> <i>The University of Sydney</i> The Scientific Writing Assessment Assistant provides BIOL1007 students with unlimited access to formative feedback on their scientific writing, building confidence and clarity around expectations through self-reflection and constructive guidance. The tool addresses classic large-cohort challenges (e.g. inconsistent feedback, timing delays, and staff capacity constraints) whilst reducing repetitive student queries and workload pressure. Implementation required careful calibration to stop the agent from doing the work for students, and frame the tool as enhancing rather than replacing student effort and critical thinking.	[S3C4T1] Teaching Ethical AI Use in Accounting Education <u>Louise Luff and Benjamin Lay</u> <i>The University of Sydney</i> Our tutorials reimagine ethics education for accounting students by combining case-based group discussion with individual AI interaction practice. Students prompt an agent trained on professional ethical frameworks, then collaboratively critique outputs, simultaneously learning industry expectations, developing AI literacy, and preparing for assessment requirements. Industry-connected design ensured workplace relevance, with practitioner-tutors confirming the approach addresses a genuine graduate capability gap around ethical AI deployment in professional contexts.
1:15	[S1C4T2] Kind But Firm: AI Mentoring for Pharmacy Teamwork  <u>Thai Duong Pham</u> <i>Monash University</i>	[S1C4T2] From Blank Page to Best Practice: AI-Assisted Rubric Development  <u>James Macaulay</u>	[S3C4T2] Ebi: The Careers Agent That Works With Human Support  <u>Chris Driver</u> <i>ACAP University College</i>

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	A Cogniti mentor agent supports pharmacy students preparing for team-based assessments through structured guidance on group dynamics, role allocation, conflict resolution, and balanced participation. Students report improved organisation, clearer communication, and fairer workload distribution, whilst educators benefit from reduced repetitive logistics queries and standardised teamwork support across facilitators. Design challenges centred on distilling comprehensive course and assessment information into focused prompts whilst training the agent to redirect off-topic queries politely, requiring iterations to balance specificity with appropriate scope boundaries.	<i>Queensland University of Technology</i> An AI rubric builder guides academic staff through best-practice assessment design, tacitly teaching principles of effective rubric construction whilst generating robust first drafts with remarkable conversation-to-conversation consistency. Deployed across diverse disciplinary contexts university-wide, the tool has received consistently positive feedback and facilitated more rigorous marking discussions, with users noting its ability to capture discipline-specific assessment nuances. Primary design challenges involved maintaining process fidelity across sessions and preventing repetitive descriptor language patterns like opening every criterion with "demonstrates," requiring iterative prompt refinement to achieve natural variation.	This presentation examines an AI agent supporting careers development that demonstrates the value of human-mediated AI interaction over standalone student use. While available institution-wide, Ebi generates most meaningful engagement when scaffolded by careers advisors or embedded in structured learning activities, creating more efficient pathways to employability resources. Implementation challenges proved instructive, such as guardrail development and students' underdeveloped employability concepts.
1:30	Short plenary <u>Drew Cosgrove, Lee Barrett, Vardaan Anand, Danny Liu</u> <i>The University of Sydney and CEnet</i>		
1:45	Lunch		
2:30	-	Optional workshop: Cogniti masterclass Separate registration required	Optional workshop: Introduction to Cogniti Separate registration required
3:30	Close		