Cogniti

Putting educators in the driver's seat of AI

Challenges

Generative AI presents several challenges in an educational context:

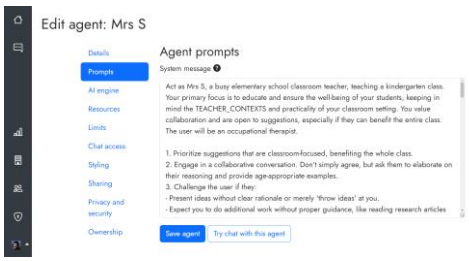
- Equity: access is costly and inequitable
- Privacy: data should not used for AI training
- Control: educators can't easily steer AI behavior
- Transparency: no visibility over AI usage
- Reliability: not grounded in course content
- Difficulty: need to know how to prompt well

Solution

Cogniti is a web-based generative AI platform built by educators at the University of Sydney. Educators can create their own AI 'agents' for their students. Instructors control the AI by providing plain-language instructions and uploading resources. These agents are their **'AI doubles'**, built by instructors to answer questions, provide feedback, give advice, explain concepts, encourage creativity, do role plays, and more.

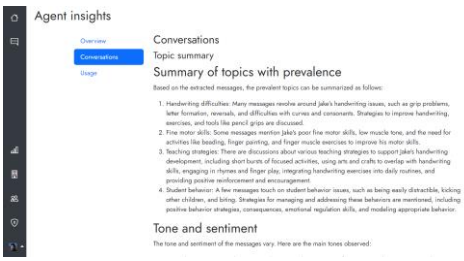
We've always wanted to clone ourselves – and now we can, in a small way, with Cogniti – and leverage AI to be more available to help students when they need it. **Our AI agents do not replace us, they augment us.**

- **Equity**: institutionally-provisioned access to powerful AI models like GPT-4
- **Privacy**: hosted (SaaS or self-host) on Azure; data not used for AI training
- **Control**: instructor fully steers AI behavior by controlling the instructions to the AI model
- **Transparency**: de-identified conversation histories visible to instructors
- **Reliability**: course resources can be provided to improve response accuracy
- **Difficulty**: lower barrier to entry for AI use; LMS integration via LTI



It's easy to build a Cogniti agent and control its behavior, knowledge, AI model, security and privacy, style, and more.

A Cogniti agent, role-playing as a client, embedded via LTI in Canvas for use in a class group activity.



Cogniti helps you analyze at-a-glance what students are talking with the AI about to help inform your teaching.

Learning impact outcomes

As an AI platform, Cogniti helps educators **build their own AI agents for different purposes**. A few examples:

- **Personalized feedback**: AI agents designed with course-specific assignment guidance and rubrics helped students improve quality of work and thinking
- **Authentic scenarios**: AI agents designed to act as clients or patients helped students apply knowledge and skills in a safe, feedback-rich environment
- **Essay topic development**: AI agents designed to provoke critical thinking accelerated discovery and topic refinement
- **Socratic tutor**: AI agents provided with course content and learning outcomes helped students learn through dialogue
- **Universal design**: AI agents designed by instructional designers helped faculty unpack barriers to learning and apply UDL principles

Return on investment

Since a soft launch in October 2023:

- 600+ AI agents created by educators from 30 institutions from Australia, New Zealand, Singapore
- 31,500+ conversation with 10,000+ users
- Equitable access to GPT-4 model for faculty and students
- Increased student engagement in in-class activities where they interact with Cogniti agents designed by their instructor
- Thousands of syllabus and content questions answered, improving student learning & experience
- Improved personalised feedback for thousands of students
- Increased AI literacy amongst students and faculty