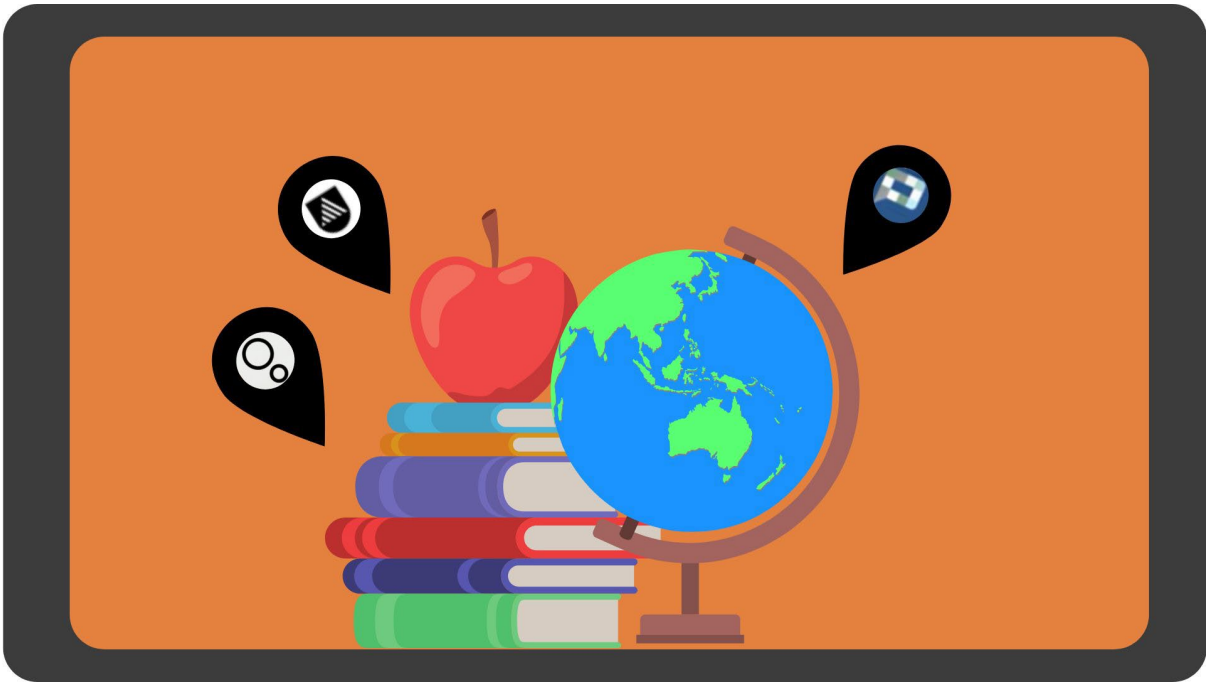
Shaping the future: AI education projects in Oceania

Article #2 of AI in Education Article Series: January 2025



Everywhere you look, New Zealand organisations are exploring Artificial Intelligence (AI). Within the educational space, most organisations are still at the beginning of their journey. However, as 2025 rolls in, a few are piloting AI tools to solve problems whose solutions have seemed dim until now.

This article is the **second in a series titled "AI tools for New Zealand's education sector"**, aimed at education providers interested in AI. The intention is for this series to act as a beginner's guide to the use of AI in education, with a particular focus on AI agents. This series is being developed as part of our project to develop an AI agent for learner oral assessment, funded by the Food and Fibre Centre of Vocational Excellence (FFCoVE). We invite you to follow along as we (Scarlatti) document our learnings about this exciting space.

The article below provides an overview of the **emerging AI projects within Oceania's education sector**. This list is not intended to be exhaustive – but provides a glimpse of the landscape and their relevance to the AI agent Scarlatti is currently developing.

Projects in delivery and assessment

Cogniti, University of Sydney

Phase: Mature

Cogniti is a generative AI platform (rather than an AI agent itself), designed to enable educators to build custom AI agents. Since its soft launch in October 2023, educators from 30 institutions in Australia, New Zealand, and Singapore have created more than 600 AI agents using Cogniti.

For example, the University of Sydney itself has built a peer-based learning tool for chemistry tutorials, a tool that provides tailored revision questions for their immunology courses, and an agent which allows students to role-play responding to racism in everyday conversations. Further examples can be found here. Cogniti has recently won Gold for Best use of Generative AI in Oceania.

Relevance for us:

- This highlights the diversity of uses for AI in education. For example, acting as a tutor, grader, test constructor etc.
- It functions similarly to how our AI agent for assessment will need to function, by pulling from things such as assessment rubrics, course materials and ideal answers.
- This demonstrates strong demand by educators in Oceania to trial AI for the benefit of themselves and their learners.
- Nevertheless, we see a gap in that there is currently no Aotearoa-specific version, built upon a New Zealand ethical framework.
- We are not aware of any examples of Cogniti being used for assessment in the same way as our project (having a verbal conversation with an AI agent), as many agents that conduct assessments require users to type into the interface and often cannot ask the agent to rephrase assessment questions.

Key person(s): Danny Liu

Sofia, University of Auckland

Phase: Launched

Sofia is an anthropomorphic AI agent being trialled with marketing students at the University of Auckland. It has a wide range of functions, including answering common questions, providing course details, acting as a tutor, and producing quizzes. Built-in analytics give teachers insights into student usage and understanding, helping identify areas for additional support. The Sofia team have recently been awarded Silver for Best Use of Generative AI in Oceania, published an academic article on their work, and been mentioned in The Conversation.

Relevance to us:

- An "assessment agent" can mean many things. For example, it might generate quizzes, assess answers, produce reports, or a combination of these.
- Analytics can be built into AI agents to help educators understand how students are interacting with the course, enabling opportunities for personalisation or intervention.

- AI agents can be a digital character, an interface you type into, or a human-like voice you speak with. Different learners may feel differently about these different options.

Key person(s): Shahper Richter, Patrick Dodd and Inna Piven

Projects in delivery (only)

Various AI agents, Toi Ohomai Institute of Technology

Phase: Launched

Toi Ohomai Institute of Technology has used Cogniti to build a wide range of AI agents, for different programmes. As part of this, Toi Ohomai have inputted law and case studies from Aotearoa to make content relevant for students. These agents have included but may not be limited to:

- Beauty therapy – AI agent for revision and note-taking.
- Nursing – AI agent for course support, mentoring and test preparation.
- Legal studies – AI agent for simulating scenarios with a legal advisor.
- Applied professional studies – AI agent that provides feedback on work.

Relevance for us:

- Despite the primary purpose of these AI agents being delivery, they demonstrate elements required for formal assessment (e.g., review of learner responses and provision of feedback).
- Toi Ohomai is one of few organisations who have well documented how they conducted evaluations of their agents, both in paper and video.

Key person(s): Josh Burrell, Jonathan Adams and Rochelle Flight

Research Proposal AI Agent, Auckland University of Technology

Phase: Launched

Auckland University of Technology has also adopted Cogniti's technology to create an agent which aids their postgraduate Nursing and Science students in writing research proposals for their Masters programme. This agent does so by bringing together a large set of example abstracts and provides students with feedback and possible edits.

Relevance for us:

- While this is not called an assessment tool, it technically is performing at least one of the functions our AI agent for learner oral assessment aims to do – it reviews someone's work, compares it to other content, and provides feedback.

Key person(s): Kiri Hunter and Lucy Macnaught

Coach M, Lever Transfer of Learning

Phase: Launched

Coach M is a text-based AI agent that workplaces can purchase to help employees learn critical skills and improve their on-the-job performance. Over eight weeks, employees engage in three 30-minute instant messaging chats with Coach M. This is possible due to it being based on a database of over

20,000 real-life coaching conversations. These sessions enable employees to reflect on goals and keep themselves accountable. Coach M then tracks their progress and provides insights on how employees are performing.

Relevance to us:

- Given that we are interested in piloting our AI chatbot for learner oral assessment, it is useful seeing how Coach M is incorporated into the workplace – with three 30-minute chats over 8 weeks. This may help us understand the best way to make the use of an AI chatbot in the workplace practical.

Key person(s): Unknown

Deakin Genie, Deakin University 

Phase: Launched

Deakin Genie is an AI agent developed in 2017 to help students throughout their academic journey, including answering questions about courses, keeping on top of their assignments and planning what to study. It employs advanced natural language processing and machine learning techniques to engage in more natural, context-aware conversations with students. This allows Deakin Genie to understand and respond to complex queries, maintain context throughout interactions, and provide personalised assistance based on individual student needs.

Relevance for us:

- While Deakin Genie is quite different to the AI agent for learner oral assessment we plan to make, it is impressive in that it was created in 2017. This demonstrates the number of years educators have been exploring AI to improve the student experience.

Key person(s): Unknown

Projects in assessment (only)

AI Generated Assessment (with state customisation), Epic Learning 

Phase: Launched

Epic Learning used LLM to overlay state-specific legislation and construction compliance on assessments, to ensure that questions were legally relevant and contextualised to each state's laws and regulations. Note that it does not interact with the learner itself, with the learner still completing the assessment in a traditional format (e.g., written assessment).

Relevance for us:

- This agent shows yet again that an “assessment agent” can mean many things. Here, it is used by the provider itself to generate sets of questions, rather than to converse with a learner.
- This agent highlights how AI can be fed content such as state-specific industry standards and legislation, and generate a customised output such as a set of assessment questions specific to a state.

- While generating a set of assessment questions is different to an agent that runs a dynamic oral assessment and provides a grade, this shows that there is an ability to generate appropriate questions.

Key person(s): Karl Hartley

AI Generated Assessment (with sector customisation), Construction and Infrastructure Centre of Vocational Excellence

Phase: In development

ConCOVE is currently developing a proof of concept using LLM with Epic Learning, to develop assessments from unit of skill standards, which can then in turn be contextualised to a particular industry, or learner needs. This is aimed at improving the resource development process in terms of time, quality, consistency, and relevance. A key part of this project for the ConCOVE is exploring how the wider education system responds to this technology, including in terms of moderation.

Relevance to us:

- This agent shows yet again that an "assessment agent" can mean many things. Here, it is used by the provider itself to generate sets of questions, rather than to converse with a learner.
- This agent highlights how AI can be fed things like sector-specific course content, and generate a customised output such as a set of assessment questions specific to a sector.
- ConCOVE are documenting how they are evaluating their AI agent.
- Given the focus on moderation, it will be important to learn from this project.

Key person(s): Eve Price

Written Assessment Grading Tool, New Zealand Qualifications Authority (NZQA)

Phase: In development

The NZQA have just finished piloting a generative AI tool that provides preliminary grades on students' written NCEA exams. It was trialled on year 10 literacy and numeracy assessments.

Relevance to us:

- The tool that NZQA is developing shows that large government organisations are open to exploring AI, when it is used for the benefit of learners and providers.

Key person(s): Unknown

NIMO, Future Makers

Phase: Launched

Future Makers are currently trialling the US-based AI simulation agent NIMO with educators for use in New Zealand. Using NIMO educators can practice engaging in challenging conversations (such as talking with parents who are worried about their child's progress or how to approach students who are struggling academically) and be assessed against several key competencies. After the simulation ends, NIMO automatically generates a full transcript of the conversation, provides an analysis of the key moments, and gives recommendations on areas where they could improve.

Relevance to us:

- Unlike many of the other AI agents we've examined which are text-based, NIMO converses with the user and assesses them against a built-in rubric which is similar to what we want our AI agent to be capable of.

Key person(s): Unknown

AI agent for oral assessment, Food and Fibre Centre of Vocational Excellence 

Phase: In development

The Food and Fibre Centre of Vocational Excellence has recently funded Scarlatti (the authors of this article) to develop and pilot an AI agent for learner oral assessment. The intention is to offer students an alternative to traditional written assessments, and providers an alternative to costly one-on-one oral assessments, potentially enabling them to spend more of their time on delivery or pastoral care. The difference between other AI agents in this article is that this one generates questions, converses with the learner (i.e., voice-based), and grades their responses.

Key person(s): Phoebe Gill, Sam Cormack, Adam Barker

Other projects

AI Contact Centre Agent, New Zealand Qualifications Authority (NZQA) 

Phase: In development

NZQA already have a chatbot that answers and manages incoming calls from students. Their next steps are to explore turning this into generative AI so that it can be more conversational.

Relevance to us:

- NZQA's project shows the openness of New Zealand government agencies to explore AI (carefully and slowly), where it benefits learners.

Key person(s): Unknown

Academic Success Monitor, UNSW 

Phase: Mature

The academic success monitor (ASM) is a digital companion for students, academics and support teams that aims to detect students at risk of failing a class early enough to act. It uses data to provide insights into a student's academic progress, identify a possible risk and offer personalised AI recommendations to the student for targeted support at the right time. If the risk of failing continues to escalate, the system alerts the education provider to intervene. ASM has recently won Gold for AI in Education in Oceania.

Relevance to us:

- While this is not formal educational assessment, it has similarities in that the system analyses a student's progress (the equivalent of assessing a student's knowledge), creates a risk level (the equivalent of a grade) and provides personalised recommendations (the equivalent of providing feedback).

Key person(s): Unknown

Scarlatti's take

Across Oceania, we are seeing a rapid growth of AI projects – although these are largely in development. Many are being undertaken with the use of the University of Sydney's 'Cogniti', but a smaller number are being built from scratch. Some are undertaking a singular role (e.g., tutor) while others are undertaking a combination (e.g., tutor, administrative support, quiz generator).

Despite all the advancements, there are very few projects exploring AI for assessment. This gap is even more apparent in the VET space in Oceania, where we were only able to find one other product (ConCOVE's AI generated assessment agent) being developed (other than our own) for use in assessments.

Questions that we are asking for our own AI agent:

- How can we incorporate the lessons learnt from other projects into our own?
- How can we build an AI chatbot for the Aotearoa context, when there is no pre-existing, easily available ethical framework (with most pilots instead using Cogniti, an Australian tool)?
- What are the differences between an AI chatbot, agent, tool, and platform?

If you are interested in following our journey into AI, we invite you to:

- **Sign up** here to receive our next article directly to your inbox.
- **Contact** the Scarlatti team here to share your thoughts or questions.

References

Mollick, E. R., & Mollick, L. (2023). Assigning AI: Seven Approaches for Students, with Prompts. *The Wharton School Research Paper*. http://dx.doi.org/10.2139/ssrn.4475995