



Miss Honey meets AI: Reimagining reflective practice in ITE

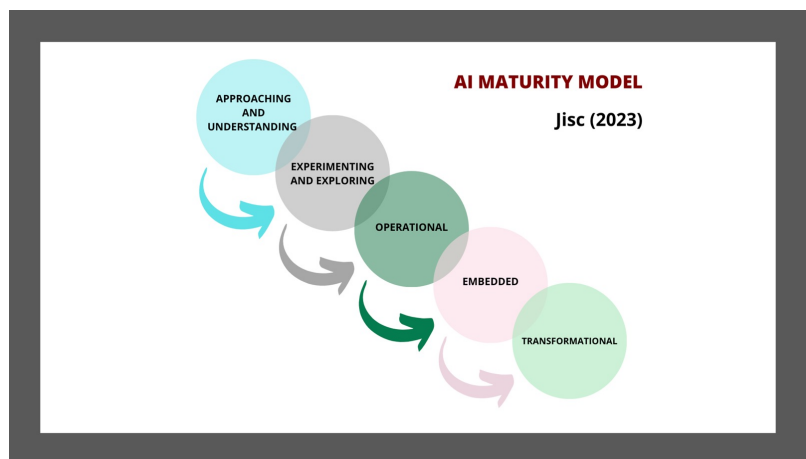
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Exploring productive and responsible use of Gen AI in education

- 2024 – Approaching and Understanding
- Sem 1 2025 – Experimenting and Exploring
- Sem 2 2025 – Operational
- 2026 – Embedded




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Steerable

Create AI agents and control how they will interact with students.




Resourced

Provide your AI agents with web pages, files, and other resources to answer more accurately.



Equitable

Provide all students with the same access to powerful AI agents.



Insightful

Understand how your students are interacting with AI agents, to inform your teaching.

"Cogniti is designed to let teachers build custom chatbot agents that can be given specific instructions, and specific resources, to assist student learning in context-sensitive ways. (Cogniti, n.d)"

Cogniti Project Unitec 2024

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Why an AI Chatbot for formative feedback on reflections?

Critical reflection is essential in initial teacher education because it empowers beginning teachers to “dig deeply into their practices,” enabling growth and readiness for the complexities of the profession (McLelland, 2024).

Ross et al., (2024) suggest that shorter tasks with formative feedback gradually build reflective writing skills. Miss Honey supports an iterative process of writing and is available when the student is.

What we have noticed:

- Many students lack confidence to submit a draft
- Miss Honey provides real time formative feedback
- Variability in feedback across visiting lecturers

Miss Honey aims to scaffold students thinking and provide equitable access to feedback while supporting academic staff to develop consistency.

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Introducing Miss Honey

The proposed AI agent, **Miss Honey**, is designed to develop critical reflection skills during practicum placements.

This can be achieved by:

- **Supporting lecturers** in providing constructive formative feedback.
- **Guiding students** to improve reflective writing by evaluating uploaded reflections and prompting deeper critical thinking.

Key Functions:

- Act as a mentor, analysing reflections section by section.
- Encourage critical thinking, problem-solving, and linking theory to practice.
- Promote use of the DATA Model and *Te Whāriki* framework.
- Ensure APA referencing and proper structure without providing direct answers



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Testing & Training Miss Honey

Training a chatbot is not just technical — it's about shaping a safe, supportive learning partner.

August 2024: Staff trials

Testing for :

- Equity
- Bias awareness
- Cultural respect
- Safeguarding children

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insufficient resources. As the older boys become more independent, they are less patient with the younger tamariki. They are frustrated when they have to share their favourite toys. Every morning we have one kaiako responsible to set up the outdoor play space based on the planning meetings. The younger children enjoy playing with the big boys. I have noticed when the children have a chance to select their own resources they will put the things they like to play with. Theorise: draft: link to Vygotsky sociocultural theory, social competence he mapuna te tamaiti and well being in te whariki.

Act: DRAFT:I think the team could find ways to develop leadership with the older Tamariki helping setting up the sandpit. They could also encourage the older Tamariki to be tuakana teina

Thank you for revising your reflection to include all four headings! Now that the structure is in place, let's work through each section one at a time to refine and develop it further. We'll start with Describe.

Describe

This section is meant to provide a clear, factual account of what happened. You've done a good job of describing the situation, but let's ensure it is as detailed and objective as possible. Here are a few prompts to help you critically reflect on this section:

1. Clarity and Detail: Could you add more detail about what the tamariki were doing before the conflict arose? For example, what kind of play were they engaged in? Were there any verbal interactions between the tamariki before the conflict started?
2. Your Role: You mentioned that you got down to the crying child's level to provide support. Could you elaborate on what specific actions you took to support the child? For example, did you use any specific strategies to comfort them or resolve the conflict?
3. Environment: You noted that the sandpit had limited toys. Could you describe the setup more specifically? For instance, how many toys were available, and what kinds of toys were missing that might have helped prevent the conflict?

Take a moment to reflect on these questions and revise your Describe section accordingly. Once you've made adjustments, let me know, and we'll move on to the Analyse section.

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That's perfectly fine! If you're happy with your Describe section, we'll move on to the Analyse section. Let's take a closer look at it together.



Analyse

This section is where you critically examine the situation, identifying patterns, underlying issues, and contributing factors. You've made some good observations, such as the frustration of older tamariki and the rushed setup of the outdoor space. To deepen your analysis, consider the following prompts:

1. Underlying Causes:
 - o Why do you think the kaiako are rushing the setup in the mornings? Is it due to time constraints, lack of planning, or something else?
 - o How might the lack of resources in the sandpit contribute to the tamariki's frustration and conflicts?
2. Relationships and Dynamics:
 - o You mentioned that older boys dominate the sandpit space. How do you think this impacts the younger tamariki's ability to engage in play?
 - o How might the relationships between the older and younger tamariki be influencing their social interactions and frustrations?
3. Your Role:
 - o Reflect on your role as the only kaiako supervising. How might this have impacted your ability to intervene or prevent the conflict?
4. Critical Thinking:
 - o Are there any patterns you've noticed over time in the sandpit or other areas of play? For example, is this type of conflict common, or was this an isolated incident?

Take some time to reflect on these questions and revise your Analyse section if needed. Let me know when you're ready, and we'll move on to the Theorise section!



I am happy with my analyse section.

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Miss Honey meets ākongā: What is an AI agent?



A software system that uses AI to support the user to complete tasks.



Think of Miss Honey as a virtual assistant you can use to guide you in writing reflection.



We have designed this agent to guide you through the DATA reflection model asking you a range of open questions to improve and deepen your written reflections.

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First workshop with ākongā

After the preliminary trial phase with staff, ākongā voluntarily opted into a small-group workshop to trial Miss Honey.

Initial reactions to Miss Honey:

"it made you think about what you're writing, not just putting it in and going perfect. So different perspectives – what I see, someone else might see it differently." (supports socratic questioning, designed to stimulate critical thinking and deeper analysis).

"The ease of use and getting instant feedback rather than waiting for a lecturer to email me back." (supports our view that ākongā struggle to wait for feedback via email from a visiting lecturer and the benefit of anytime feedback)

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Getting ready for cohort release

Ākonga in year 1, 2 and 3 Professional Experience given access to Miss Honey prior to and throughout their placement.

Supported ākonga with access and basic instructions in briefings

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Focus Group: November 2025 preliminary data



STUDENT
ATTITUDES TO AI



POSITIVE
FEEDBACK



CRITICAL
THINKING



AREAS FOR
DEVELOPMENT

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Understanding Ākonga Attitudes to AI

- **Participant six:** "I felt that I was doing something wrong because you always told that you can't use AI, but Miss Honey is acceptable, and she doesn't really give you all the answers, but she gives the guidelines to follow"
- **Participant three:** "We were being told AI's a no go and trying to remind yourself that it's an okay AI agent, and so I think the first time I feel like I was cheating. And yeah, it was just remembering that it's not like chat GPT where it's writing it out for you, it's just telling you what you're missing"

Students indicated that they wanted to have clearer boundaries about the use of AI so that they could be confident using it in. Students were clear that they wanted to have regulations in place that were sector wide rather than mixed expectations (Jisc, 2023).

- **Participant five:** "I felt a little apprehensive about using it. I remember there was a trial last year and we were given the option to try, and I didn't want to go near it. I said, no, if it's AI I will get hooked on it and then use it all the time. And then I realised, oh, it's only really for this one specific purpose, it's for reflections and nothing else"

Jisc (2023) outlined students concerns about relying too heavily on AI to support their learning and the potential impact that this may have on their knowledge acquisition and critical thinking skills.

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Formative feedback: enhance quality of final work

- **Participant two:** "This year was the first year that I've experienced it and my immediate reaction was, wow, this is so helpful. Reflections are something that I definitely struggle with the most, writing is always the most challenging part and it gave me a direct, this is the part that you're missing, instead of going back to the data model. It gave me structure, so I then only had to focus on that one part"
- **Participant three:** "I found, for me personally I would think I had all the information, and it would find the gaps. And then I'd look back at the data guide that we had, and I could see where I had missed something, and that was really, really useful for me."
- **Participant six:** "It was very clear communication for me. So, when I was submitting my reflection to the agent, it would give me very clear instructions that this, this, and this is missing. And it will ask more questions on top of the questions. You'll say what could I add, it will give me a hint, but not the answer. So, I know what I need to do, but I need to work for it."

According to Henderson et al., (2019, p.1402) "Feedback is a process in which learners make sense of information about their performance and use it to enhance the quality of their work or learning strategies" Suggestions are that students perceived GenAI feedback as easier to access, more immediate, and less risky to engage with, which contributed to reduced anxiety and negative feelings when seeking help or critique on their work (Henderson et al., 2025).

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Critical thinking

- Participant five: "I think that's the thing with AI, especially things like chat GPT, you know, they can answer anything, but kind of still have to critically analyse what you're reading. Even with Miss honey, you have to go through everything to make sure it is actually making sense and relevant to what you're trying to say"

Research suggests positive outcomes in the development of critical thinking skills when using intentional and pedagogically supportive integration. "When situated within guided, dialogic, or inquiry-based learning environments, generative AI serves as a catalyst for analytical reasoning, metacognitive development, and reflective judgment" (Raitskaya, & Tikhonova, 2025, p. 14).

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Areas to develop

Instructions and training: for staff and ākonga

Te reo Māori: Miss Honey learns to korero Māori (develop glossary)

Staff professional development: How can we use Miss Honey across other courses

Develop further agents: Find other applications of an AI Chatbot in our programme (courageous conversations, developing annotations of evidence for professional experience)

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The value of feedback: Gen AI vs Teacher

Our study considers with recent research that explores how students feel about and react to feedback from AI compared to feedback from teachers, focusing on trust, careful thinking, and emotions.(Henderson et al., 2025).

By exploring these comparisons, we aim to identify conditions under which AI feedback can complement traditional formative feedback practices, enhancing reflective learning in our context.

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