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AUTHENTIC TEACHING AND ENGAGED LEARNING

Trish Chaplin-Cheyne

A warm welcome to this sixteenth issue of *Scope: Contemporary Research Topics (Learning and Teaching)*. This year, our main issue returns to an open theme, although last year's focus on generative AI continues to be a topic of discussion. Our authors come from polytechnics and universities across Aotearoa New Zealand and Australia. Overall, the eight articles in this issue explore the challenges and opportunities currently facing vocational and tertiary educators. Whether by offering reflections on practice or evidence-based original research, the contributions to this year's journal show how kaiako and support staff continue to adapt and evolve in a fast-changing world.

Catering to diverse learners

As in previous years, we begin *Scope (Learning and Teaching) 16* by considering our ākonga; specifically, those learners who may be in the minority at higher education institutions. The opening contribution from Rachael Burke considers international postgraduates on an early childhood education programme. International students bring a range of experiences and backgrounds to their education and training in Aotearoa New Zealand, itself an increasingly diverse country. However, some learners can find the unfamiliar context and bicultural curriculum of teacher training in this country difficult to navigate. In her article, Rachael Burke reflects on three strategies she has used to prepare international master's students for practicum in early childhood centres, and for wider success in their study.

The second contribution from Warren Granger considers how we support non-traditional tertiary students aged 25 and over. For many people, the 'traditional' path from school into tertiary learning is no longer the norm. Career changes, professional development, and lifelong learning bring increasing numbers of learners into vocational and higher education. Many international students also fall into this group beginning or returning to education later in life. Warren Granger's research hypothesised that self-efficacy was key to success for these learners. His contribution reports perspectives from both teachers and learning support staff on how to foster academic self-efficacy in our non-traditional tertiary students.

In the classroom

The next two contributions to this issue take us into the classroom and pedagogy in action. First, Edgar Burns from the University of Waikato describes how to use micro case studies in business education. His flexible, time-saving method engages students in discussions grounded in real business stories, allowing them to grasp and apply concepts in a user-friendly way. The technology involved can be as simple as photocopying newspaper articles or can be adapted to online learning environments.

Although the technologies discussed in John Mumford's article are considerably more advanced, the principles underlying good critical engagement with course content remain. Mumford reflects on information technology students' use of AI, and how these tools both help and hinder critical thinking in learners. He points out that AI tools have the potential to enhance students' critical thinking, but not without costs if used unwisely. Both authors' approaches encourage kaiako to develop learners' confidence in their own problem-solving and work-ready skills.

Course design and assessment

The issue now moves into course design and assessment, where artificial intelligence is also reshaping practice. The next article comes from lecturers in business at Otago Polytechnic's Auckland International Campus who have had to rethink learning design and assessment in the light of developments in AI. While experiential learning was already embedded into teaching practice at OPAIC, the authors reflect on how AI exposed assumptions around how ākonga were being asked to demonstrate their learning. Chintankumar Patel and colleagues report on how changes in technology prompted them to improve assessments and course design, and introduce their new framework to help others negotiate this process.

Despite technological advances, education in Aotearoa New Zealand remains a bicultural context guided by the principles of Te Tiriti o Waitangi. In "Authentically Weaving Mātauranga Māori into Outdoor Education," experienced educator David Williams reflects on what it means for non-Māori to enact their responsibilities under te Tiriti in a field inherently concerned with our relationships with te whenua (the land) and te taiao (the environment). In the past, outdoor education has over-emphasised individual pursuits and achievement, rather than acknowledging the histories and cultural significance of the land. David Williams's research asked outdoor educators what it might mean to take a more place-based approach to their work, one that integrated an evolving sense of identity as tangata Tiriti in partership with iwi Māori.

Professional development and evaluation of teaching quality

The final two contributions to this issue turn towards teacher identity and professional development. "Teacher Identity Shaping in Vocational Educators Transitioning From Industry to Education" reviews literature on how kaiako form and maintain an identity as teachers. Kaiako in vocational education and training (VET) often come from industry and are valued for their workplace or subject knowledge. In my review, I argue that teacher training for VET kaiako needs to take this complex dual role into account, centring the creation of teacher identity. Professional development needs to provide novice kaiako opportunities to reflect on their transition from industry expert to educator and to engage with colleagues in the co-construction of a strong teacher identity.

Closing this issue, Patrick Gillett and colleagues from Southern Cross University in Australia describe the development of an evidence- and theory-based rubric for evaluating the quality and teaching of online courses. Student evaluations of teaching are widely used but often lack theoretical grounding and are difficult to validate statistically. In this article, the authors outline the process behind their 23-item 'teaching presence' rubric. The rubric offers a structured framework for consistently assessing teaching, without losing sight of the benefits of professional judgement, collegial insights, and context-specific understanding. The authors' aim is to offer a robust resource for measuring and improving the quality of online and blended courses, while also contributing to the ongoing discussion about how best to evaluate teaching and learning.

Learning design special issue

We are also proud to present, alongside this main issue of the journal, a special issue of *Scope (Learning and Teaching)* on Learning Design. *Scope (Learning and Teaching) 17* is guest edited by Amy Benians and Daniel Fridberg of Te Ama Ako | Learning and Teaching Development at Otago Polytechnic. As Learning Design takes shape as a standalone profession in a world of increasingly flexible, online learning, this issue offers a timely account of contemporary approaches in this field. We encourage readers to discover these complementary publications and enjoy a range of thought-provoking reflections from teachers and researchers in Aotearoa New Zealand and internationally.

Trish Chaplin-Cheyne (https://orcid.org/0000-0002-2709-572X) is the Director of Te Ama Ako | Learning and Teaching Development (LTD), where she is responsible for developing and implementing the learning and teaching strategic direction and workplan to implement the goals and objectives of Otago Polytechnic's strategic plan. Te Ama Ako (LTD) are tasked with ensuring that Otago Polytechnic programmes and courses are designed to best practice standards, that our academic staff have the full range of knowledge and skills needed to facilitate learner success, and that learners enjoy an outstanding experience with Otago Polytechnic. Trish holds a Master of Educational Leadership and is the editor for *Scope: Contemporary Research Topics (Learning and Teaching)*. She is also a member of various polytechnic-wide committees, task groups and panels. Trish joined Otago Polytechnic in 2015, as a Learning Facilitator involved in the Designing for Learner Success initiative. Her areas of particular interest are curriculum and assessment design.

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PREPARING INTERNATIONAL STUDENTS FOR PRACTICUM IN AOTEAROA NEW ZEALAND EARLY CHILDHOOD EDUCATION CENTRES

Rachael S. Burke

INTRODUCTION

This article reflects on how educators can effectively prepare international students for practicum in Aotearoa New Zealand early childhood education (ECE) centres. As Aotearoa New Zealand has become superdiverse due to the arrival of migrants, early childhood settings have also become more culturally and linguistically diverse (Chan, 2020). At the same time, the nation has also seen a rapid increase in the number of international students enrolling to study early childhood education at tertiary institutions (Rana, 2020). This diversification is illustrated in the Master of Teaching (Early Childhood Education) (MTECE) programme at one tertiary institute, where most enrolments are international students. A key component of this 18-month Level 9 qualification is 90 days of practicum in an ECE centre. While a master's programme, it is also an initial teacher education (ITE) qualification. The programme follows a different structure over the three semesters. In the first semester, students attend class three days a week until the final four weeks when they complete a practicum block experience in ECE centres. For the remaining two semesters, students spend two days a week in class, and two days a week in an ECE centre.

For students who are new to the language, culture, and education system of Aotearoa New Zealand, the practicum experience can be particularly demanding. Providing opportunities for reflection can help students to build theoretical and practical understanding, as well as develop confidence in their own abilities. In a similar way, educators working in ITE programmes can benefit from reflecting on the methods they are using to ensure students, particularly those from overseas, are being adequately supported for this experience.

This reflection emerged from teaching culturally and linguistically diverse international students enrolled in a Master of Teaching (ECE) programme and preparing them for their initial four-week practicum block course. To unpack my perspectives and experiences, this reflection was framed and guided by the following question: How can students from diverse cultural backgrounds be better supported to prepare for placement?

CONTEXT FOR REFLECTION

During a professional development course, I was encouraged to critically reflect on my own teaching practice. As part of this course, Smyth's (1989) model of reflection was used to unpack some of the challenges faced by international ECE students as they prepared for their first

practicum experience in an early childhood setting in Aotearoa New Zealand. This article is a reflective account of professional practice. References to student experiences are presented in a generalised manner and no individual student is identified.

To mitigate the challenges international students experienced, the first step involved introducing three ways to support the MTECE students prior to commencing their practicum. These strategies were visiting a local ECE centre; introducing more games and activities in class that students could add to their kete (basket) of knowledge, and opening up a reflective journal on Moodle for students with formative feedback that I had given. Each of these approaches was underpinned by theoretical considerations. Drawing on the concept of situated learning (Lave & Wenger, 1991), the centre visit provided an opportunity for students to authentically engage with the bicultural, play-based context of ECE in Aotearoa New Zealand. Aligned with Brookfield's (1998) reflective model, the Moodle journal was intended to build reflexive capability, while activities such as role plays and group tasks aligned with ako, or the idea that learning is co-constructed (Pere, 1982).

PRACTICUM WITHIN THE CONTEXT OF EARLY CHILDHOOD EDUCATION IN AOTEAROA NEW ZEALAND

Practicum is a central component of initial teacher education programmes in Aotearoa New Zealand, providing a key site for assessing student teachers' readiness to meet the Teaching Council's graduate standards (Aspden & McLachlan, 2017). Within early childhood education, practicum is closely aligned with *Te Whāriki* (Ministry of Education [MoE], 2017) which reflects a commitment to Te Tiriti o Waitangi and promotes a bicultural curriculum for all tamariki (children) (Freeman & Taiapa, 2024; Siu et al., 2023). This guidance requires student teachers to develop culturally responsive practices, including increasing proficiency in te reo me ōna tikanga Māori (Māori language and its cultural practices) (MoE, 2017). Initial teacher education providers are therefore expected to ensure that graduates recognise the unique status of Māori as tangata whenua and demonstrate commitment to Te Tiriti o Waitangi in their teaching practice (Teaching Council of Aotearoa New Zealand, 2019). Practicum experiences are typically structured though triadic relationships between student teachers, associate teachers, and ITE educators. These experiences are critical for enacting bicultural responsibilities in practice (Aspden & McLachlan, 2017; Freeman & Taiapa, 2024).

However, practicum can present challenges, especially for international students navigating unfamiliar cultural and pedagogical expectations. Many have limited prior exposure to te ao Māori and may have trouble engaging with the bicultural frameworks embed in *Te Whāriki* leading to feelings of cultural disconnection (Cooper et al., 2023; Freeman & Taiapa, 2024). Adjusting to relational, play-based pedagogies and linking theory to practice can also be challenging, particularly for those whose prior educational experiences have emphasised direct instruction (Burke, 2024b; Rouse & Joseph, 2019). These challenges are compounded by the high-stakes and subjective nature of practicum assessment, as well as variability in mentoring relationships and practicum contexts (Aspden, 2017; Aspden & McLachlan, 2017). Targeted support, including explicit scaffolding of bicultural competencies and structured opportunities to integrate theory with practice, is essential to enable international students to meet Te Tiriti obligations and enact culturally responsive teaching within the Aotearoa New Zealand context (Cooper et al., 2023).

REFLECTIONS ON PRACTICE

Cultural concepts shape most of the ideas about appropriate early childhood practice and curricula, but interactions in the early learning space can often go unnoticed or unrecognised as pedagogy because they are accepted as "normal" by those familiar with them (Burke, 2024a; Burke & Duncan, 2015). Navigating these implicit cultural assumptions can be particularly challenging for students who have come from overseas, as they are negotiating their own ideas and expectations about what they perceive early childhood to be in the context of Aotearoa New Zealand.

The ECE visit: Connecting theory with practice

Of the three strategies introduced, the visit to a local early childhood centre appeared to have the greatest impact on students' confidence and understanding of practice. For many students, this was their first opportunity to observe an ECE centre in action rather than learning about it through readings or lectures. The visit provided a concrete context through which they could make sense of theoretical concepts introduced in class.

The experience showed the value of connecting theory and practice through authentic learning experiences. Drawing on the concept of situated learning (Lave & Wenger, 1991), students were able to observe relationships between kaiako, tamariki, and whānau, hear te reo Māori used in context, and see how the principles of *Te Whāriki* (MoE, 2017) were enacted in everyday practice. Following the visit, classroom discussions became noticeably richer, as students were able to draw on lived observations rather than relying solely on readings and prior educational experiences.

One event that provoked a great deal of discussion involved children climbing up a slide rather than using it in the conventional way. Initially, some students interpreted this behaviour as unsafe and questioned why teachers appeared to allow it to occur. Reflecting together on the incident created an opportunity to explore underlying assumptions about children's learning and behaviour. Through discussion, students began to recognise the view of children presented in *Te Whāriki* (MoE, 2017), which positions them as confident and competent learners and places value on exploration, agency, and risk-taking. This event became a useful prompt for critical reflection, enabling students to examine how cultural assumptions can shape expectations of teaching and learning (Brookfield, 1998; Rink, 2001).

The visit also supported students to develop a deeper appreciation of the play-based philosophy underpinning ECE in Aotearoa New Zealand. Many students came from educational systems where structured learning and academic achievement were strongly emphasised. Observing children engaged in self-directed play challenged some existing assumptions and encouraged discussion about alternative ways of supporting learning. The experience provided a valuable opportunity to consider how cultural contexts influence understandings of childhood, education, and teacher-child relationships (Arndt, 2018; Hedges & Cooper, 2018; Singh & Zhang, 2018).

Another significant aspect of the visit was the chance to observe bicultural practice. Students were able to see how te reo Māori, tikanga Māori, and whanaungatanga (building reciprocal relationships) informed everyday interactions at the centre. Rather than learning about these concepts as isolated course content, they could observe how bicultural commitments were woven through routines, conversations, and teaching practices. This helped students connect programme expectations, *Te Whāriki* (MoE, 2017) and the Teaching Council's expectations regarding commitment to Te Tiriti o Waitangi and culturally responsive practice (Teaching Council of Aotearoa New Zealand, 2019).

The visit also prompted discussion about relational approaches to ECE. Students observed the importance placed on reciprocal relationships between kaiako, tamariki, and whānau, a key feature of New Zealand ECE practice (Hedges & Cooper, 2018). For some, these expectations differed from their previous educational experiences, demonstrating the importance of understanding teaching as relational, rather than purely instructional. Discussions around ako further reinforced the idea that learning is a reciprocal process in which teachers and children learn alongside one another (Pere, 1982).

Perhaps most significantly, the centre visit seemed to reduce some of the anxiety students had expressed about practicum. Entering an unfamiliar environment can be daunting, particularly for students who are simultaneously adapting to a new country, language, and culture. Having the opportunity to observe a centre before beginning practicum enabled students to develop greater confidence and a clearer sense of what to expect. This outcome aligns with broader concerns about practicum preparedness among beginning teachers (ERO, 2024) and reinforced for me the importance of providing authentic opportunities for students to engage with practice early in their studies. Of the three strategies trialled, this was the one that most effectively helped students connect theory, practice, and professional identity.

Classwork: Introducing more games and activities in class

In early childhood education in Aotearoa New Zealand, teaching takes place as part of a collaborative team, rather than one teacher being responsible for a particular classroom or group of children. This kind of team-teaching dynamic often contrasts with the educational context in international students' home countries where the teacher might have sole charge of a class of children, resulting in more of a two-party relationship. Yet, as McNairy (1988) has pointed out, teachers can behave quite differently depending on whether they are alone in the classroom or teaching alongside a colleague. When working alongside colleagues, teachers must negotiate roles, share responsibility for decision-making, and make their pedagogical thinking more visible. *Te Whāriki* emphasises the importance of ako, which acknowledges teaching and learning as a reciprocal process (Pere, 1982). However, teachers in other countries may be positioned as the holders of subject knowledge (Han & Han, 2019). This "teacher as expert" discourse portrays teachers as the primary source of knowledge and authority in the ECE setting, rather than positioning themselves alongside children as learners.

Students from educational contexts where teachers are viewed as the "experts" by both children and parents may not be accustomed to engaging playfully or interacting with children at their level. To prepare students better for New Zealand ECE settings, I purposely introduced activities which fostered playfulness in the class. Students took part in role plays where they took on the parts of tamariki, kaiako, whānau, and centre managers, acting out and seeking resolutions to common challenging scenarios. Games, activities, waiata (songs), and karakia (incantations) were shared so that students could use these with tamariki. Students also learnt to work collaboratively in groups which replicates team teaching in New Zealand ECE contexts. For example, for one session students were asked given a range of resources and asked to work together to construct a whare (house) which taught them about working cooperatively, communication, and conflict resolution. This exercise was also a powerful and practical way to cement their understanding of Durie's (1998) Te Whare Tapa Whā model of Māori well-being (another topic they had to master as part of their studies). Feedback revealed that while students agreed that these activities were valuable, they did not rate these as highly as the visit to the ECE centre.

Opening a reflective journal on Moodle for students with formative feedback

The final approach taken in the three-pronged method was opening a journal on Moodle where students were encouraged to reflect each week on a specific event or discussion from class using one of the critical reflective models they had been taught (Brookfield, 1998; Smyth, 1989). This journal was kept private and only shared with me. The intention was to provide a safe space for students to receive personalised feedback they might be hesitant to share with the class, while also allowing them to gradually develop their reflective skills in preparation for practicum. Each week I would set a reflective prompt based around the week's topic and ask them to consider challenges and successes. My own feedback was centred around unpacking students' understandings of the material and offering solutions to challenges or posing further provocations to extend their thinking.

Of all three approaches, the journal was the least successful. Students began by adding reflective feedback on the course topics, and the relationships they were building with their peers, but they gradually did this less as the weeks went by and practicum loomed. When discussing this dropoff of engagement in class, time pressures were cited as the main reason. However, as this piece of work was not graded, it seems possible that students' motivation to complete the journal diminished as pressure to meet other commitments rose. Although the journal was not widely used, critical reflection still occurred through alternative formats, particularly through class discussions, role plays, and the centre visit. While these opportunities were less formal, they still aligned well with Smyth's (1989) model and provided valuable insights into students' developing understanding.

REFLECTION

Smyth's (1989) model of reflection is based on four key concepts: Describe (What do I do?); Inform (What does this mean?); Confront (How did I come to be like this?), and Reconstruct (How might I do things differently?). This section of this article draws on Smyth's model to critically reflect on my practice, employing the first person in line with autoethnography's emphasis on lived experience and educator positionality (Ellis et al., 2010). This reflection is situated within a culturally responsive framework that acknowledges belonging, relationality, and cultural "Otherness" (Arndt, 2018). Arndt argues that ECE teachers from other or minority cultures are often positioned as outsiders to normative assumptions of practice. This reflection recognises that international students entering practicum in Aotearoa New Zealand negotiate marginalisation as they grapple with new ways of knowing and being in early childhood settings.

Describe

Feedback from previous cohorts of students in the MTECE programme revealed that they had not felt adequately prepared for their initial placement experience in a New Zealand early childhood centre. In response, as described previously, I trialled a three-pronged strategy with a new group of MTECE students prior to their first four-week practicum block. This included an ECE centre visit, more playful, collaborative classroom activities, and a reflective Moodle journal with formative feedback.

Inform

Students' cultural beliefs influence how they perceive and interact with children in early childhood settings (Arndt, 2018; Tong, 2023). *Te Whāriki* advocates for child-centred, play-based pedagogy

(MoE, 2017), and these discourses influence the approaches of early childhood kaiako. However, international students who are new to Aotearoa New Zealand may not be familiar with these prevailing early childhood education discourses (Burke, 2024a). Arndt's (2018) work helps frame these students not as lacking, but as negotiating "cultural Otherness" where their prior knowledge can become a point of tension. Culturally responsive pedagogy involves educators creating space for students to examine their own cultural realities and transformations as professionals. In the case of my students, an initial reflective activity became the catalyst for regular, sustained opportunities to reflect on events from practicum, coursework, and pedagogy during each class and through graded assessments on critical reflection tasks and skills using the models developed by Brookfield (1998) and Smyth (1989). This worked to foster students' confidence and deepen their understanding, encouraging them to examine their assumptions and connect theoretical concepts to lived experiences while considering Aotearoa New Zealand's early childhood pedagogies.

Confront

Through this reflection, I realised that I had unconsciously assumed a baseline familiarity with young children that many of my international students did not possess. Unlike domestic students, few had experiences with younger siblings or whānau or ECE settings in Aotearoa New Zealand. Even those with their own children viewed education through different cultural lenses. Initially, I was reluctant to use class time for games or excursions in a Level 9 programme. My academic orientation, combined with prior experience teaching in Asian contexts, made me value theory and rigour, perhaps at the expense of experiential, relational learning. Given my social anthropology background, I also realised that my own lack of confidence in ECE-specific knowledge led me to lean on the perceived authority of academic literature. At the programme level, staff had underestimated how challenging the transition to life and study in Aotearoa New Zealand would be. Although students attended orientation sessions, these were not sufficient to bridge the cultural divide, particularly in relation to unfamiliar notions of play, biculturalism, and relational teaching.

Reconstruct

As discussed earlier, I have embedded ECE centre visits into the first semester of the programme. These not only help students contextualise theory but promote embodied learning and relational connection which are essential components of culturally responsive pedagogy (Arndt, 2018). Role plays and scenarios now feature more prominently, allowing students to explore unfamiliar dynamics in a safe and collaborative environment. I also changed from managing practicum preparation alone to inviting the Practicum Coordinator into class. Recognising the collective expertise of my team helped me embrace ako with both my colleagues and my students. This reflective process aligns with the autoethnographic view that personal experiences are embedded in wider social, cultural, and political contexts. Examining these experiences can be a powerful way to question dominant norms and foster more equitable educational practices. Regular reflection remains a vital tool for reassessing my teaching in ways that honour students' diverse ways of knowing while supporting their growth as kaiako.

CONCLUSION

This reflective article has identified the importance of targeted support for international students preparing for practicum in Aotearoa New Zealand's early childhood education (ECE) settings. The diverse cultural backgrounds of students have an impact on their beliefs around the purposes of education, play, and learning, and the role of the ECE teacher. Understanding these factors is crucial for promoting culturally responsive practice (Arndt, 2018) and providing quality practicum experiences (Whatman & McDonald, 2017). This reflection highlights several challenges that may be faced by international students, including cultural dissonance, unfamiliar pedagogical approaches, and anxiety about practicum expectations.

The three-pronged approach—ECE centre visits, interactive class activities, and reflective journaling—proved effective to varying degrees in addressing these concerns. Centre visits emerged as particularly valuable, enabling students to bridge theoretical knowledge with real-world practice while fostering critical reflection. Additionally, role-playing and interactive activities in the classroom helped students to understand the play-based, child-led philosophy of *Te Whāriki* (MoE, 2017). Reflective journaling proved to be the least engaging. While the journal was less successful, largely due to time constraints and students' unfamiliarity with ungraded reflection tasks, its inclusion demonstrated the importance of scaffolding reflective practice. When structured reflection was embedded into authentic, contexualised experiences such as the centre visit or class discussions, students engaged in a meaningful way and expressed greater confidence. This affirms the value of appropriately situated reflection to support international students for practicum experiences.

This article has several limitations, including its context-specific focus on international students in a single New Zealand teacher education programme. Applying frameworks such as Smyth's (1989) model of reflection encourages educators to continuously assess and refine their teaching strategies, ensuring they are responsive to diverse student needs. This reflective piece highlights the importance of embedding into teacher education culturally responsive pedagogies and relational approaches that support international students' transitions into ECE contexts. Moving forward, greater emphasis on practical, immersive experiences alongside structured opportunities for critical reflection can enhance the preparedness and confidence of international student teachers, ultimately enriching the diversity and inclusivity of Aotearoa New Zealand's ECE sector.

AI statement

Microsoft Copilot was used during the preparation of this manuscript to suggest edits for clarity and style. All final content, interpretations, and conclusions are the responsibility of the author.

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UNDERSTANDING THE ROLE OF ACADEMIC SELF-EFFICACY AND OUR NON-TRADITIONAL TERTIARY STUDENTS

Warren Granger

INTRODUCTION

This article represents research conducted within the context of the Aotearoa New Zealand tertiary education sector, with a specific focus on understanding academic self-efficacy experiences and perspectives of teachers and learning support staff who work with non-traditional students. Academic self-efficacy (ASE) is grounded in Albert Bandura's (1977) model of self-efficacy. Non-traditional students represent a distinct cohort, defined by socio-demographic factors that differentiate them from their younger counterparts. Chung et al. (2014) noted that the term non-traditional student is often used interchangeably with "mature student," typically referring to individuals whose educational journeys diverge from a more conventional path. Age is frequently cited as a common criterion for identifying non-traditional students, with 25 years and older serving as a widely accepted benchmark (Beckworth, 2023).

This study is informed by the researcher's professional interactions with students aged 25 years and older within the Aotearoa tertiary environment. These interactions led to the hypothesis that the academic success of non-traditional students is significantly shaped and underpinned by teacher and learning support staff knowledge of self-efficacy; specifically, how Bandura's four sources of self-efficacy along with early, incremental, task-specific achievements, lay the foundation for future academic success.

BACKGROUND

Non-traditional students who engage in tertiary education later in life often enter environments that are historically designed for traditional students; in other words, students who transition directly from secondary school to tertiary study (Stamou et al., 2024). These learning environments potentially marginalise non-traditional students and, however inadvertently, fail to acknowledge the distinct learning needs of this group. In Aotearoa, these non-traditional students include Māori and Pacific Peoples and an increasing number of international students (Scott & Ali, 2024).

In Aotearoa, enrolment rates for students aged 25 years and over, as of 2024, were twice the OECD average (Scott & Ali, 2024), reflecting a trend toward lifelong learning and career transitions, particularly in the post–COVID-19 era. These enrolments span a range of qualification levels, including foundation, degree, and postgraduate programmes. Non-traditional students bring a wealth of experience, life skills, and practical knowledge to the learning environment,

enriching classroom discussions and contributing to a culturally diverse and inclusive academic culture. Non-traditional students also contribute differing perspectives to the understanding of academic self-efficacy; therefore, it is imperative that their unique learning needs are recognised to enable their success.

Self-efficacy is a central concept in Bandura's (1977) Social Learning Theory and refers to an individual's belief in their ability to successfully complete specific tasks. Such beliefs stem from and are shaped by mastery experiences, emotional responses, social persuasion, and vicarious experiences. These sources do not operate in isolation; rather, they interact dynamically within the learning environment. Pearman et al. (2021) note that individuals with a strong sense of self-efficacy tend to exhibit greater resilience, perseverance, and motivation when confronted with a task. In contrast, those with lower self-efficacy are more likely to avoid complex or challenging tasks. Schunk and DiBenedetto (2022) further emphasise that self-efficacy significantly impacts student effort, persistence, and academic achievement. Academic self-efficacy focuses on the context of the student within the academic environment, including formative and summative assessment, and their integration into the broader tertiary learning environment. It is considered a key predictor of academic success, second only to individual ability (Wiederkehr et al., 2015).

However, non-traditional students face unique challenges that can impact their academic self-efficacy. These challenges align with Bandura's (1977) sources of self-efficacy and include family responsibilities, connections and support (social persuasion), imposter syndrome (physiological/emotional feedback), navigating an unfamiliar academic culture, and overcoming previous negative educational experiences (mastery experiences and vicarious experiences).

The effectiveness of supporting academic self-efficacy in non-traditional students depends on the knowledge and understanding of teachers, learning support staff, and tertiary institutions. The ability of these key stakeholders to foster learning environments that promote academic self-efficacy, through encouragement and culturally responsive teaching, is crucial (Khine & Nielsen, 2022).

METHODS

The research question that guided this study was: What are tertiary teachers' and learning support staff (LSS) understandings of the role of academic self-efficacy in the success of non-traditional students and how do they attend to this in their practice?

The research employed a mixed method, reflective approach and involved 32 participants who provided feedback via an online survey. The survey targeted both tertiary teachers and learning support staff currently working within the Aotearoa university and polytechnic environment. An anonymous online survey was employed as it provided both broader quantitative data (for example, Likert scale and demographic questions), and narrower qualitative responses (for example, to open-ended questions on personal experience and opinion), to analyse participants' practices for supporting academic self-efficacy.

Participants

The 32 participants surveyed included 20 Learning Support staff (identified below as 'LSS' with a number) and 12 lecturers or teachers (identified as 'T'). The average professional experience of participants in these roles was between six and seven years. The participants held a range of academic qualifications: doctorate degree (n = 4), master's degree (n = 18), bachelor's degree (n = 4), postgraduate certificate/diploma (n = 4) and adult teaching certificate (n = 2).

Ethical approval for this study was granted by the Massey University (Aotearoa New Zealand) Human Ethics Committee. Consent to participate in this research was gained through the teachers' institutions academic research committee and learning support staff organisations' committee approval process.

Experience range (years)	Number of participants (n)
0–2	2
3–5	14
6–10	9
11+	7
Average experience (years)	6–7

Table 1: Participants' teaching and learning support staff experience.

Data analysis

Qualitative data were analysed using thematic analysis, which facilitated the identification of recurring themes, patterns, and ideas within participants' responses. Codes were generated inductively from the data, grounded in the language used by participants. Direct quotations served to anchor the analysis in the participants' voices and ensure that interpretations remained closely aligned with the research question's focus. Analysis emerged from manual data coding using Microsoft Excel and Microsoft Word. This thematic analysis addressed the main research question in two parts:

a. what are tertiary teachers' and LSS understandings of the role of academic self-efficacy on the success of non-traditional students?

b. how do they attend to non-traditional student success in their practice?

FINDINGS

Finding one: Most participants share a developed understanding of academic self-efficacy and their non-traditional students

Twenty-nine participants indicated that they had a "good" to "excellent" understanding of academic self-efficacy leading into the survey. Three participants indicated that they had "none" to "limited" knowledge of academic self-efficacy leading into the survey. Two of these participants recorded that they had been in their teaching role for no longer than two years and had a limited knowledge of academic self-efficacy and their non-traditional students, one teacher had no prior knowledge of this topic and indicated they had been in the role between three to five years.

Fourteen participants "strongly agreed" that they currently had the knowledge to help develop non-traditional students' academic self-efficacy. Fourteen respondents "somewhat agree[d]" with this statement while three participants "somewhat disagree[d]" and one participant "strongly disagree[d]" that they had the knowledge to help develop non-traditional students' academic self-efficacy.

Twenty-nine out of 32 participants answered the question, "What role does self-efficacy play in your non-traditional students' learning?" Participants provided a variety of responses, for example:

> "It helps them believe in themselves and their ability to take on academic tasks" (T1).

> "It's foundational—either a great enabler when present or a barrier when yet to be developed." (LSS5)

Finding two: Academic self-efficacy is a catalyst for transformational learning in non-traditional students

Participant responses highlighted the transformational aspects of academic self-efficacy for their non-traditional students. Transformational learning in this context involves the process of empowering a student so they can reflect on their own position within the learning environment and analyse personal assumptions and beliefs in order to thrive academically. The finding suggests participants believe that positive academic self-efficacy development enables non-traditional students to reshape and strengthen their academic identity, and more effectively navigate systemic academic barriers, which in turn supports continued growth in their academic confidence. Overall findings indicate that participants believe developing academic self-efficacy also influences motivation, resilience, autonomy, and personal growth.

The process, one participant says, is "Different for different ākonga. For some they arrive with existing academic self-efficacy, for others they need reconciling, or having their sense of self rebuilt over time" (T7). Some participants highlighted that positive academic self-efficacy provides a means of personal change. One participant stated that positive academic self-efficacy: "supports motivation and hence engagement, persistence and resilience, an ability and willingness to seek support as required, supports mana Motuhake and ako, long term success and achievement" (T12).

Finding three: Academic self-efficacy in non-traditional students is attended to through relationship-based, reflective practice

Data indicated that teachers and learning support staff aim to foster confidence, autonomy and positive academic self-efficacy by building genuine and consistent, relationship-based partnerships with non-traditional students while creating and facilitating meaningful, reflective, supportive learning environments. Participants were asked to consider what they believed to be the most important factor that influences the academic self-efficacy development of their non-traditional students. Ten participants favoured the concept of ako, or reciprocal teaching and learning practice, when supporting academic self-efficacy in their non-traditional students. These participants often used the word "holistic" to describe this process. Eleven participants indicated that they favoured one-on-one mentoring practice when supporting academic self-efficacy. As highlighted by one participant: "There is confidence grown through group discussions, but most appreciated is the one-to-one discussions with kaiako during or after class" (T4).

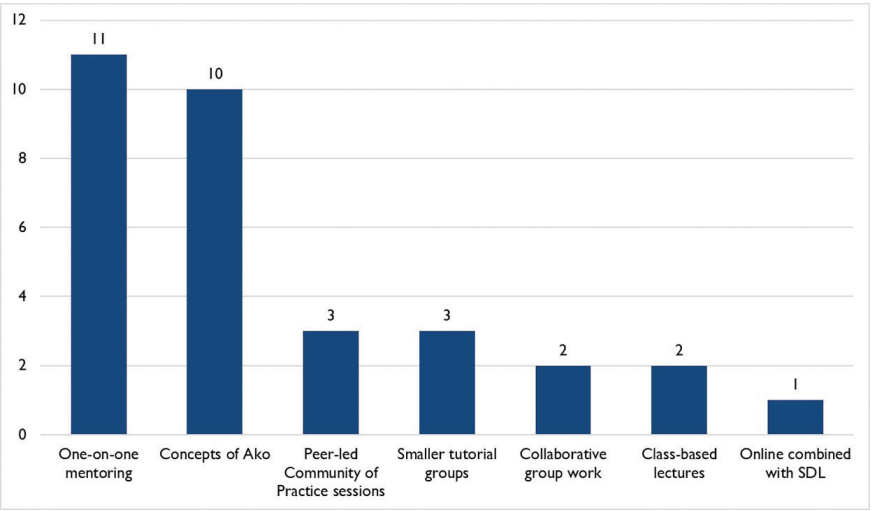


Figure 1. Learning concepts that influence academic self-efficacy in non-traditional students.

DISCUSSION

Understanding of academic self-efficacy

Based on the data from finding one and participant personal academic achievement, it is important not to assume that a higher level of academic qualification naturally implies that teachers at tertiary level have a foundational knowledge of the sources of academic self-efficacy, especially if teachers and learning support staff are new to the tertiary environment. Adjustment to new teaching philosophies and cultures can involve a protracted process of developing and understanding teaching values (Masterson & Edwards, 2022).

Implications for practice include developing the inclusion and further understanding of Bandura's sources of self-efficacy within adult teaching qualifications and professional development. This inclusion by institutions should also integrate te ao Māori and Pacific Peoples' views on this key area of academic development. Participants also revealed that their non-traditional students included a proportion of international students. This potentially broadens the scope for addressing academic self-efficacy in not just a bicultural learning environment, but also a multicultural one. Cultural educational differences within the Aotearoa tertiary environment significantly impact the ASE of non-traditional students and the understanding of teachers and learning support staff.

Cultural diversity within Aotearoa's tertiary education context may also influence the operation of Bandura's four sources of self-efficacy. Variations in physiological responses, vicarious and mastery experiences, and the degree to which social persuasion is naturally integrated within a culture into learning processes, can each shape how non-traditional students develop academic self-efficacy.

Responses suggests that although most participants are comfortable with the concept of academic self-efficacy, some are less certain about the adult learning-based strategies required to intentionally build it amongst their non-traditional students. These responses may also indicate that for some teachers and learning support staff, the promotion of ASE comes in the form of offering encouragement and support while not consciously linking to Bandura's mastery

experiences, vicarious learning, or social persuasion (Gale et al., 2021). The diverse examples of understanding and application within the data align with Karim et al.'s (2021) findings that as the education practitioner develops their own teaching and facilitating experiences and self-efficacy, it allows a deeper level of confidence and a willingness to understand how professional practice can be developed, leading to improved ASE and achievement among the practitioner's students.

What participant teachers and learning support staff understand about ASE in relation to their non-traditional students is very much steeped in their own belief in effectively developing teaching and facilitating tasks that are tailored to the non-traditional student (Watson & Marschall, 2019). At times, this can be seen as teaching practice that deviates from the norm when focusing on the non-traditional student within the adult teaching process.

Transformational learning

Transformational Learning Theory in the context of the second finding involves enabling teachers, learning support staff, and non-traditional students to reflect on their own position within the learning environment, critically reflect on assumptions and personal beliefs, engage in discourse within a peer group, and integrate new perspectives into the learning experience. These new perspectives can lead to personal growth and change within the learning environment (Mezirow, 1997).

The literature supports academic self-efficacy as not just a belief in an individual's academic capabilities, but a dynamic interaction of social and emotional factors (Gebresilase et al., 2025; Percy, 2017). How participants understand this topic indicates that developing ASE for non-traditional students empowers the student to rethink and adjust individual perceptions of the tertiary learning environment and engage in their learning journey at a deeper level. Gebresilase et al. (2025) state that ASE in this context also mediates the relationship between teacher, student, and academic achievement.

Early experiences within the school system can significantly shape academic self-efficacy for non-traditional students, particularly when they enter tertiary study for the first time. Wiederker et al. (2015) argue that the development of ASE at both primary and secondary school, functions as a strong predictor of academic success, especially in subjects such as mathematics and students from low socio-economic backgrounds. Negative learning experiences during this key period can be enough to impact perceptions of further education. Key understandings demonstrated by participants in the present study, highlighted the transformational potential of academic self-efficacy for non-traditional students within the tertiary environment. Participants described developing non-traditional students' self-efficacy as foundational to developing motivation, resilience, autonomy, and growth within both an academic and personal development context.

The development of "persistence" and "resilience" emerged as a common theme across the dataset, with early intervention and targeted support playing a pivotal role in enabling non-traditional students to navigate the initial stages of tertiary study. Pearman et al. (2021) similarly argue that elevated academic self-efficacy builds the perseverance and resilience required to manage academic challenges, which is a pattern often observed among non-traditional students entering tertiary study for the first time. Developing resilience is a direct response to being persistent within the tertiary environment and connects to Bandura's mastery experiences source. Passing assessments and overcoming anxieties related to failure and workload management can be perceived as incremental successes that can influence the likelihood of the non-traditional student

engaging in the task long enough for them to achieve mastery. Huang and Kou (2025), state that mastery experiences are, in fact, the most dominant among Bandura's four sources of self-efficacy as they provide tangible evidence that ongoing success is possible.

Academic self-efficacy as a transformative force for non-traditional students is deeply woven into participant responses. This was reflected in the frequent use of key words within the responses such as "support," "confidence," "motivation," and "growth." Participants described practices that encouraged risk-taking and persistence, noting that when these practices were introduced early in the term and facilitated effectively, they contributed to the development of academic self-efficacy and broader personal growth. In this way, early scaffolded experiences based on the unique needs of the non-traditional student appeared to link initial academic perceptions with the development of life-long learning.

Relationship-based, reflective practice

Finding three highlights that teacher and learning support participants use several key strategies to attend to academic self-efficacy in their practice. These strategies are primarily driven and underpinned by relationship-based, open reflective practices. Some participants, for example, favoured reciprocal teaching and learning and peer-led communities of practice. These approaches enable non-traditional students to draw on and apply their existing life skills, including collaboration, communication, active listening, and time management skills. Within the initial stages of establishing these strategies, participants did highlight the need for informed and well-practiced facilitation skills. Skilled facilitation employed by the teacher and academic support staff ensures that less confident non-traditional students do not feel isolated and unheard.

This finding links to the physiological elements of Bandura's (1977) framework, which highlights that emotional responses to the learning environment are a key component to developing and understanding ASE. These initial physiological responses relate to the ability to manage the overwhelming effects of stress and anxiety, especially when presented with deadlines, the complexities of technology, and finding one's place in the tertiary environment. This is especially so for the non-traditional student who may already be experiencing low confidence, low self-esteem and, potentially, dealing with imposter syndrome. Due to the unique stage of their learning journey, this group can be more sensitive to positive and negative interactions within the learning environment due to external pressures that come with being a non-traditional student. Landberg and Langdon (2026) refer to these external influences as "general realities of life" (p. 6). With this in mind, teachers and learning support staff are in a position where they can facilitate and promote ASE through a deep level of understanding of the concept itself, their non-traditional students, and the place of collective learning (Meijer et al., 2020).

Communities of practice (COP) that assist in the development of ASE in non-traditional students within smaller groups can be self-directed or initiated by teachers and student learning support. These COP are consistent with the concepts of reciprocal learning (ako) that involve smaller group environments, where, if appropriate, learning is guided by the tutor or academic support staff. Bandura's (1977) vicarious experiences are being utilised here and, as identified by participants, can be a powerful element in strategies to develop ASE. However, not all non-traditional students thrive within a COP environment, and this emerged as a divergent theme within the data. Some prefer to work independently and rely on their own capacity to navigate the tertiary environment. This independence can be both positive and negative, depending on

academic outcomes and previous experiences working within the COP space. Comparatively, research undertaken by Beckworth (2023) relates that some non-traditional students are more transient within the tertiary environment compared to their traditional counterparts. This is due to some non-traditional students having other responsibilities external to the learning space that require developing minimal attachment to 'place' as a learning resource and minimal attachment to the group process.

Relationship-based learning is a key component to developing ASE in non-traditional students. It is at the forefront of an equitable learning and teaching philosophy that has the student at the centre of the Aotearoa tertiary learning environment. This student-centred approach was a recurring theme that ran through participant responses. Frequently used words such as "support," "confidence," "mana," and "engagement" appeared when participants reflected on their interactions with non-traditional students. Bandura's (1977) self-efficacy source of social persuasion is very much a key component in the relationship-based development of ASE. Effective social persuasion built on trust, relationship-based interactions, and the credibility of staff and institution, can strengthen the non-traditional student's belief that they are capable of succeeding within the tertiary environment. Timely and meaningful affirmation within this interaction is ideally supported by a genuine understanding of the non-traditional student within the tertiary environment. Relational dynamics between teacher, learning support staff, institution, and the non-traditional student, underpin the sensitivity and understanding needed to support the development and maintenance of academic success (Situmorang, 2022). Social persuasion also sits within the student's immediate social sphere, where family, peers, and the wider social group all play a part in developing and supporting academic self-efficacy.

CONCLUSION

The non-traditional student is a key element of the tertiary learning environment. They bring mana and life experiences to both the classroom and institution. Thriving within the tertiary environment for this group requires skilled and intentional facilitation to promote sustainable academic self-efficacy by knowledgeable education professionals who are willing to further their personal understanding of this area. Therefore, the first few months of any programme of study for the non-traditional student are key in establishing connections with teacher, support staff, peers, and the institution. The implications of this study highlight the complex nature of both the non-traditional student, ASE, and the relationship between the two. Teachers, learning support staff, and tertiary institutions play a key role in facilitating this interaction.

The concept of academic self-efficacy was widely understood by most participants, who described it as a key aspect of how non-traditional students engage and persist in learning, and understand their academic capabilities. Most participants felt somewhat confident in supporting the development of academic self-efficacy, although a small group reported they currently had limited knowledge of this area. Findings indicate that ASE acts as a catalyst for transformational learning, which enables the non-traditional student to enhance motivation, resilience, and autonomy.

Participants highlighted that ASE development varied across learners, ranging from non-traditional students with some academic confidence to students requiring careful, sustained rebuilding of self-confidence and self-belief. Relationship-based practice emerged as a key driver of ASE, with both teachers and learning support staff prioritising holistic support and one-to-one engagement to foster confidence and independence. A common theme highlighted by participants was the

use of ako, or reciprocal learning, in fostering and developing ASE, along with smaller group and individual interactions with their non-traditional students. The concept of ako and communities of practice adopt a holistic view of learning development, where there is shared knowledge between teacher, learning support staff, and student, and the promotion of connection within the bicultural and multicultural learning space. The findings in this study indicate that although participants have an intimate knowledge of their craft and understanding of their non-traditional students, further exploration of the intricacies of ASE, could be warranted.

It is important to remember that tertiary staff are in a position of influence. Therefore, teachers and learning support staff working with non-traditional students should invest time in furthering their own facilitation and academic self-efficacy knowledge, as inattention to these can have lasting consequences for the non-traditional student. This can be achieved by developing their own honest, critical reflective practice, understanding ASE, and fostering a relationship-based, student-centred approach, enhancing their capacity to support the non-traditional student.

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USING MICRO CASE STUDIES TO CREATE LIVELY, INTERACTIVE BUSINESS CLASS DISCUSSIONS

Edgar Burns

INTRODUCTION

Micro case studies (MCS) flexibly reduce instructors' efforts in preparing and delivering classroom learning at each level of business education from certificate or diploma level to graduate school. I have used versions of MCS in classes at each of these levels. They offer holistic and culturally adaptable teaching moments that engage students. These small business case studies can be stretched or compacted to fit available class contact time. They help translate ideas into actual business practice, and they link students' theoretical learning to real-world contexts by introducing relevant human-interest examples for student-teacher discussion (Shapira et al., 2026). In the second half of this article practical guidance is provided for these active learning exercises. Suggestions are given for how to create class interaction through a process of to-and-fro questioning by the instructor, student responses to questions, explaining points in the text, and commentary on views expressed, while encouraging and responding to students' reactions. Busy instructors can deliver these MCS discussions at different levels of conceptual 'unpacking' in different learning environments for their intended teaching purposes.

A micro case study can be defined as a brief written story that illustrates one or more business concepts told in narrative form in news, magazine, or social media reporting. These short accounts in a popular register are used to help students assimilate the larger implications of, and business concepts associated with, successful or failed management practices. Instructors will vary the elements of MCS used in the presentation of this pedagogy. Short written texts of less than one hundred up to several hundred words in length or one-page articles or news reports are all satisfactory story formats. Having a photograph may add interest for students. As flexible classroom resources MCS can be used occasionally or regularly depending on instructor purpose and topic relevance. Micro case studies can be introduced at different points in classes to suit teaching plans, depending on the mix of components in the teaching.

The use of case studies is well-known within business education. Their common teaching aim across different fields such as marketing, entrepreneurship, finance, and management, is to link students' understanding of business concepts to real-world situations, encouraging them to organise and analyse evidence for making decisions and developing strategy (Andersen & Schiano, 2014). Over the decades case studies have been in use, some have become complex and detailed, requiring sustained group or individual study and calculations for assignments or examinations (Rendtorff, 2015). Methodological analyses of business case studies include statements such as "case studies must be designed and produced with scientific rigour" (Dul & Hak, 2008, p. xv; Levant et al., 2016).

Micro case studies differ from the more formal and elaborated scenarios that many case studies genres have become. Like simulations, they are half-way towards addressing McCarthy and McCarthy's (2010) challenge that "case studies are not enough" and more experiential learning is needed. This is still true for MCS, which are not fieldwork nor work placement, but avoid the set-piece formality of complex case studies that can overshadow the immediacy of decision-making and responding. They aim to capture the interactive frisson of students in the classroom having to think on their feet as in actual work environments. They are responding in the moment to questions and answers, and countering arguments to sort out what they think and how they would react to a situation that is incompletely described. Micro case studies provide a defined introduction to an actual rather than hypothetical situation but are shorter and more flexible than the more formal scenarios, and hence easier to integrate into the flow of teaching.

The present instructional technique of MCS does not simply vary classroom tempo but includes interesting though less tangible elements of business teaching. These elements are not usually front-of-mind for many students but offer broadening perspectives for learning and integrating business concepts with practice. For example, a related focus is Slocum et al.'s (2024) somewhat apologetic description of their "'micro-insertion' approach, as a practical and effective method to teach ethics at business schools" (p. 45).

Using MCS initially emerged from teaching evening classes for an Introduction to Small Business course for small and medium-sized enterprises (SMEs). The course typically attracted individuals who had established, or managed, local businesses. Weekly teaching used a general textbook on SMEs, covering topics such as production, human resources, marketing, financial planning, budgets, and retail. Teaching a three-hour evening session catering for people coming from their day's work, often without having eaten an evening meal, made engaging students a challenge. Micro case studies solved this problem. Recounting tales from my own business journey, enriched by using micro case studies, gained students' interest (Moeran, 2021). This has for me now become a core teaching practice that combines what are often seen as contrasting principles—learning that is student-centred while teacher-directed (Lancaster, 2017; Murphy et al., 2021; Yoshida et al., 2023).

THEORETICAL BACKGROUND: DIALOGIC LEARNING

Using short case studies is not out-of-the-box pedagogy; similar approaches exist in the academic literature, such as *The CASE Journal*. However, the media provenance, references to local organisations, and non-systematised evidence in the MCS offer accessibility, immediacy, and authenticity. The present discussion of deploying MCS is based on the pedagogical principle of dialogic learning: engaging students such that learning is in a key sense created in the classroom exchange itself, not passively received. Micro case studies lower the formal amount of input required, using interaction with other students and the instructor questioning the content and reasons in the MCS exercises (Barak, 2024; Teo, 2019). Such active teaching and learning boosts student understanding as well as engagement (Ewarawon & Sylvester, 2025).

Micro case studies offer one route towards this pedagogical goal as part of the teacherly science and art of working out what assists students to learn in their classroom environment (Bain, 2004; McDonald et al., 2022). In addition to teacher passion and skill, active learning is typically the outcome of adapting teaching exercises, creating new flexible teaching activities, or describing business practices, each of which can be re-used in different settings (Dal Mas et al., 2021).

Repeatedly 'translating' business principles for different learner cohorts makes active learning pedagogy a foreground consideration (Bell & Bell, 2018). I have found micro case studies to fuel students' active learning across four learning settings: technical college SME business evening classes; seminar-style teaching to front-line managers at Heinz Wattie's food-processing plant; teaching service organisation youth leaders, and lecturing first-year business degree students. The MCS as active learning enables 'hands-on' understanding for non-traditional learners while also positively engaging students familiar with academic routines (Carreira & Lopes, 2021; Hsu & Hamilton, 2008).

Each learning environment requires illustrating and putting into context the core concepts of the particular class and semester course (Hakala et al., 2020). This in turn involves using examples, different modes of instruction, and interactional styles in each situation to translate and bring to life core ideas about business management, marketing, finance, and so on. Learning gains value if students can see how such ideas are applied or misapplied in a workplace or organisation. Another way of describing this dialogic pedagogy is relational learning (Stewart et al., 2025). Micro case studies, along with lectures, seminars, and group exercises, contribute to flexible classrooms that enable interpersonal connections (Gashoot & Mohamed, 2022). This is a shift away from relying on lecture-hall or static classroom learning environments in business and related disciplines such as law (De Diana & de Vries, 1990).

USING MICRO CASE STUDIES

I use portable micro case studies to generate active participation and learning. Before a session, I select from my scanned collection and print the one-page article I have chosen for that session. This can be done quickly, between administrative and other duties. I prepare a copy for each student from my folder of class materials, to be taken to class along with the textbook, sticky notes, slides, and other materials I have chosen to use.

When I use the case studies in class is flexible. I can easily decide as the class proceeds at what stage to introduce a micro case study exercise, considering such factors as: What best fits the energy of the class today? Should we spend fifteen minutes or longer? Pragmatically, what else do we need to fit into today's class and how will the case study discussion pace and retain attention and learning? When I do introduce a MCS, as discussion of the case study progresses, I keep a mental track of whether it is continuing to be productive for students relative to the learning I as instructor am trying to achieve. I have used this approach online, with students accessing the loaded MCS from the teaching platform, and it can work well. The issue can arise of some students making their laptop screens blank and not fully participating in the virtual classroom, which requires resolving for MCS to work well.

Teaching objectives

By presenting and leading with a micro case study, an instructor will have achieved, quickly and with little effort, substantial student participation and interaction with case study material. They will have both elicited and enlarged students' business knowledge, in many cases to their surprise. Micro case studies help re-engage tired or inattentive class members, lifting the class atmosphere from passive reception to lively discussion in which the instructor actively listens to and interacts with students and they in turn respond to their fellow students' questions and answers. As class members collectively examine and comment on the narrative of a current business example, this introduces a sense of immediacy. Often students bring family or local snippets of knowledge to the conversation that enrich the discussion and affirm their participation.

Learning objectives

Participating in the brief case study enables students to identify key parts of the business depicted and how these are related. Students' comments expand their understanding of the case study business's strengths and weaknesses. They can also recognise incomplete or missing business information in the micro case study and consider how this matters for assessing this example business and other businesses' viability. Discussing case studies with other students who may have different national, cultural, and socioeconomic backgrounds, or ambitions, enables students to hear from those who might see different opportunities and have different views on how well this business is doing and its further growth.

Regularly using micro case study analyses in the classroom strengthens instructors to succeed both in the ease of delivery and through achieving benefits from student interaction (Howell, 2021). For students, it embeds the logic of applying business principles to each new case study: how would the marketing plan from last week work in this week's scenario? It brings learning from beyond the classroom into the classroom (Maczynska & Feilla, 2020). I have found that repeated MCS use fosters recognition and interest: when students hear a MCS announced they know this will be a detour interesting in itself, and that it will also illuminate the larger classroom topic.

Instructions for running the exercise

Overview

Instructors can develop a habit of collecting short accounts—in effect, examples or tiny case studies—found in newspapers, online and social media, or local (community or regional) 'news rags.' Other sources include airline or tourism magazines with short business success stories. Introducing these in the middle of a class shifts the mode of student engagement, activating student opinions and motivation. Every student can at least ask a question or issue a challenge. Instructors can use MCS as one or more segments to structure class time-flow, varying this from week to week to fit in other elements such as class guests or exam preparation.

Flow of the case study exercise

1. *Flexible MCS:* The instructor brings to class, ready to hand out, one case study from their collection. It has been scanned from the source and printed on a single sheet of paper (online options work in some situations, but not all). As an academic self-discipline, when collecting a suitable article to use as a future MCS, I write on it the source, date, and page number, and the URL if online. Students have these reference elements visible for their use. These are published materials, so copyright is not an issue, and no private documents are used. Instructors may note on their own copy points they wish to raise in discussion; this frees them from further preparation. However, with a prepared mind, the aim is to go with the flow of discussion.

2. *Classroom step change:* During class, the instructor announces the class activity shift: "Here is a new one-page case study for us to look at. It's pretty short. Pass them around so everyone has a copy. It's yours to take home. Write on it and underline/circle/highlight things you want to note, ask about, give us your opinion about, or challenge. I'll give you a few minutes to read through. Quiet conferring with a friend is okay but no disturbing others still reading."

3. *Reading and discussion time:* The exercise is based on reading here-and-now by a mix of stronger and hesitant readers. After 5 to 10 minutes the instructor brings the class to order. A series of

instructor questions, and explaining unfamiliar terms, requires little preparation but allows the instructor to draw out students' responses and reactions to the text. The instructor manages the length of case study discussion to fit class timetables and break times. Depending on the MCS and time available, a 15- to 40-minute plenary session is readily achieved.

4. *Involve everyone:* A useful open-ended start is to go round all students in the class by inviting each in turn, "Tell me something you've noted in the article. It can be a question, just something you don't understand, or that you find interesting or weird." This brings in diffident or quiet students as well, especially class members from another culture or linguistic group. Another useful prompt is, "Is there a word that you or others in class might like to see if I can explain?" Students like putting heat on the instructor!

5. *Basic description of text:* I often also start by drawing out basic description from students—what does the text of the case study actually say? Setting aside what they think about the business, what is being asserted? What is that paragraph or sentence telling us? This commits students to at least minimal participation. It generates interaction but disciplines the conversation by focusing on evidence and claims the text makes. More capable or confident students can be asked advanced questions about how business principles apply.

6. *Basic explanations:* The instructor can then ask (or respond to) questions about terms and jargon or how the story illustrates a business concept, encouraging shyer students and asking the class what they think about the article statements. Open-ended questions can be useful—such as, "What else do we need to know?" or "What aren't we being told here?"

7. *Discussion strategies:* One strategy to generate conversation is to widen a student exchange (for example, a comment, opinion, or reaction), by bringing in other students and asking what they think. Another dialogic technique is to make connections for students (or invite them to make connections) between the MCS and textbook or lecture concepts and ideas already presented in the course. Instructors keen to develop their own skills in generating and guiding active class discussions can reflect on in-class work or class preparation, asking themselves: How does drawing out assumptions implied in student questions or asking them what is *not said* in the case studies sharpen students' critical thinking about the MCS content? This may involve probing for reasons behind students' thinking to open further aspects for discussion which are not explicit in the case studies.

8. *Possible discussion questions:*

	Action or issue	Possible starter questions
1.	Including all students by going around the class asking each in turn, or every second or third one.	"Tell me something you're seeing in this case study? What makes that interesting to you?" If a student says, "Same answer as him," then perhaps ask, "Tell me your reasons for agreeing?" "Tell me something else you've noted" (if an obvious, or already offered, point has already been said). "How is that connected to what was said before?" "What does this sentence/paragraph mean?" This question technique can be used as a main theme, discussing and explaining each short paragraph.

2.	Making sure there is a good level of class understanding.	"I'm seeking students to point out any bigger terms in the case study text." "What business concepts or ideas does the case study illustrate?" The instructor explains a term or may choose to get students to work on this, adding further information as needed. The instructor needs to be attentive to language efforts by international students; explaining English language concepts and idioms is often beneficial to all students.
3.	Eliciting knowledge of core concepts.	"Which of our key business concepts do you see in the case study?" The instructor can ask any questions of interest one at a time to elicit various responses that can be further commented on and gathered into a fuller and better answer. "What do students see in the case study about… [any one of] marketing, finance, production, manufacturing, retail, supply chains, staffing, accounts and payroll…?"
4.	Implicit comparison to tap students' present understanding.	"What is the strength of this business?" "What are the risks for this business?" "How would you address weaknesses and make use of the strength(s) if you were put in charge?" Gently challenging with further follow-up questions guides students' thinking and can enliven discussion about one strategy or another.
5.	Drawing out omissions and bias.	"What is the writer of the case study *not* telling us?" "What seems to be the writer's angle or purpose—how might that be distorting what they write?" "What would a fuller account show?" "Bluntly, what is *missing* from this case study we would need to know to act on it?" The instructor reminds students that this is a piece of journalism. We are not looking at the raw form of the business.

Table 1. Actions and discussion questions.

With greater instructor confidence, *ad hoc* questions and possible answers and new suggestions about the text can be invented in the moment, responding to students' comments about the content of the MCS. This allows the instructor to steer the discussion in the preferred direction towards the learning objectives and appropriate level of detail without derailing student willingness to participate.

Debriefing the exercise

Summing up helps students connect what this MCS article has shown to previous MCS and the class concepts we have examined together, and to compare different case studies. This reinforces the learning and builds a broader perspective on the business world. Students commonly find debriefs interesting. Those students disinclined to participate in summing up have at least had the multiple interactions with the micro exercise which avoid the need to confront their reluctance. In any case, the formative discussion often overcomes this reluctance by eliciting positive comments from engaged students. At the end of the session, some students may want to individually debrief, seeking more detail or sharing an aspect of their own work environment.

Potential limits need to be acknowledged for those running these MCS exercises to make sure they are run successfully. An instructor may fail to use the structure of allocated time or a schema of questions to be addressed, even briefly, and may lose the narrative of change. As

always with discussion, instructors should be alert to dominant or loud students gaining control of the conversation at the expense of other students. Politically polarised students can sometimes disrupt and resist more even-handed debates. Instructors should encourage students to change their assertions to questions so they free themselves to learn new things. Having the humility to be comfortable with the limits of your own knowledge needs to be turned into modelling—in the classroom interaction itself—the desirable characteristic of being open to new ideas.

Possible alternative uses of MCS

Alternative uses of micro case studies include:

- Group exercises: Micro case studies are adaptable as more conventional group class exercises, especially for larger class cohorts.
- Summative tests: A case study attached to a test or examination can assess comprehension, using similar questions to and echoing the familiar previous class MCS discussions.
- Comparison: Two case studies can be used as a "constant comparison" for more advanced groups—perhaps with one emphasising legal or financial implications while the other focuses on marketing or supply chain logistics (Smith & McKeever, 2015).
- Online: During COVID-19, I applied the logic of this exercise to online iterations of a related course. There, rather than micro cases studies, short weekly readings used a similar mix of questions and responses as the interactive base for developing student interest and active learning. Online materials work equally well if students can see be seen with laptop cameras turned on and are participating.

CONCLUSION

Using micro case studies offers instructors an additional tool in their teaching enterprise. Their benefits include convenient size, adaption on the fly, engaging students, and localising general course principles. Pedagogically, the use of MCS fits dialogic learning focused on what the learner is learning rather than requiring professorial levels of instructional knowledge. This exercise can be conducted by new and less experienced instructors. A minimal knowledge base is sufficient, letting instructors grow their skills as they present and explore the case studies with students. Using guiding questions draws out students' ideas, inviting them to integrate their understanding of how businesses function into the discussion without the instructor needing to disclose or rely on their own degree of understanding. More experienced teachers will bring general knowledge, business and industry stories, and other examples to this to-and-fro of classroom dialogue as teacher and students jointly analyse the information presented. In this way, content and communication come together in active student engagement and learning.

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AI AND CRITICAL THINKING DURING STUDENT PROGRAMMING TASKS AND PROBLEM-SOLVING

John Mumford

INTRODUCTION

Artificial Intelligence (AI) use has become common in modern educational contexts. During a core course focused on Operating Systems fundamentals at the Southern Institute of Technology (SIT), students write, run, and debug small programmes that solve a series of simple computer laboratory exercises in Operating Systems management. The students commonly use a blend of course provided materials, Google searches, and ChatGPT or Microsoft Copilot, to support the efficient completion of these summative tasks. Institutional policy permits AI use if a declaration is completed, signed, and attached to the uploaded work. SIT, as a tertiary education provider, is keenly aware of the importance of work-readiness for its students and encourages the use of multiple approaches to problem-solving in the modern AI context. However, developing critical thinking skills and dispositions is also a key goal of this course and all undergraduate courses in Information Technology (IT) at SIT.

When student work has been outsourced to some extent to AI, students can often struggle to understand why the AI standard feedback and solutions work. They can display weak content knowledge of the programming concepts, especially during exams and other controlled assessment events. Their ability to think critically can also suffer. Gerlich (2025) states that "Critical thinking is a multifaceted cognitive process that involves the capacity to think clearly and rationally, understand logical connections between ideas, evaluate arguments, and identify inconsistencies in reasoning." (p. 3). Alsaleh (2020) found that "C[ritical T[hinking] can be defined as an individual thought process that begins with the intent to solve a problem or to answer a question, by examining different options and choosing the most suitable and logical one" (p. 21). Critical thinking is not only a set of skills that can be taught but requires an intention or disposition to pursue it. Notably, Tari and Rosana (2019) acknowledge "six capabilities (interpretation, analysis, evaluation, inference, explanation, and self-regulation), 16 sub-abilities, and 19 dispositions" (p. 4) related to critical thinking skills. Thus, critical thinking is vital for self-directed learning and the building of a student's intellectual independence.

If students are taught to explore the tensions between beneficial and problematic AI use, there is potential to develop their critical thinking skills, leading to enhanced work-readiness in the IT industry. AI provides many benefits to students including reduced cognitive load, increased productivity, and enhanced self-sufficiency (Choudhuri et al., 2024). However, AI creates some challenges for students including cognitive offloading, reduced skill retention, and excessive and often uncritical reliance on the outputs of such systems (Shen & Tamkin, 2026). In addition, Zhang et al. (2024) explored AI dependency and factors which represented problematic AI usage,

including laziness, the disseminating of misinformation, and reduced critical thinking. This reflective piece aims to explore some benefits and some challenges of AI in relation to the development of critical thinking for IT students. Consideration of underlying educational assumptions which inform teaching practices, and the interplay between AI use and critical thinking, will be related to practical classroom teaching.

CONTEXT

The context under consideration involves adult learning in a tertiary education setting. A formal, structured teaching approach, informed by the principles of andragogy and complemented by the affordances that heutagogy provides for online learning, forms the pedagogical foundation of this reflective piece. Andragogy as a theory of adult learning typically includes a set of assumptions about how adults, as distinct from children, learn. Andragogy typically assumes, for instance, that learners are self-directed, draw on accumulated experience, possess a readiness to learn, and desire immediacy and relevance in knowledge that can be applied to solve problems and increase internal motivation to continue learning (Loeng, 2023, p. 41). Heutagogy as an adult learning theory is described as "an extension of andragogy's reinterpretation, and perhaps the distinction is the same problem when one visibly attempts to differentiate between pedagogy and andragogy" (Lapele et al., 2022, p. 155). Newfield (2025, p. 1) argues that "Heutagogy, or self-determined learning, is an innovative educational approach emphasizing learner agency, autonomy, and a continuous, self-directed learning process." As such, heutagogy emphasises improvement in learning how to learn, non-linear approaches, and double-loop learning, where the learning contexts blend formal and informal aspects and students decide what and when to learn. SIT students include younger adults and older mature learners, and AI use via online resources has become commonplace amongst both these cohorts. Thus, at SIT, in the context of the Operating Systems Management course, students exercise the freedom to mix and match AI use on campus and off-campus, to find unconventional ways of getting their work done, and complement classroom work with personal research and experimentation.

AI: HELPING CRITICAL THINKING

When students are completing summative assessments, the stakes are higher than those for formative assessments. Given that time constraints apply to all summative work, students are necessarily motivated to seek out tools to increase their productivity and reduce the cognitive effort required to complete such tasks. Choudhuri et al. (2024, p. 3) found that students interacting with conversational agents such as ChatGPT during software engineering tasks reported a lower cognitive load than students who used alternative resources. Also, the authors found ChatGPT positively affects students' productivity and self-efficacy. The students were able produce working results quickly, with less mental effort and with more independence from the teacher. The operating systems tasks involved problems to solve, the examination of different solution options for the programming tasks, and choosing the solution most suitable to the set task. So, in this respect, AI use somewhat supports limited critical thinking which aligns with the Alselah (2020) definition. However, the deeper criteria of the Gerlich (2025) critical thinking definition would not seem to be met with this task in this context.

Shen and Tamkin (2026) found distinct AI interaction patterns on programming tasks involving generation of possible solution options, prompted explanations of why the solution worked,

efficient debugging, and evaluation of logic errors. The tasks required students to identify and diagnose code errors, explain how the code worked, and respond to questions about the programming concepts. This process aligns a little more closely with the ability to think logically through code generation, understand connections between ideas represented in programming principles, and evaluate the inconsistency of logic errors during debugging. AI in this setting is being used to help students to complete assessment tasks which have been designed to incorporate opportunities to develop critical thinking.

Moguš (2025) performed a systematic review of research between 2023 and 2025 related to the contribution that careful chatbot prompt engineering can make to the development of critical thinking skills in higher education. Moguš (2025) found that "well designed prompts essentially stimulate the higher-order cognitive processes, which are the ones that involve the critical thinking skills of analysis, creation, and reflective reasoning and also that they lead to increased engagement and metacognitive awareness" (p. 235). Students can use prompts to ask the chatbot for more detailed explanations of the solutions provided and prompt the chatbot to evaluate these solutions according to set criteria. However, this approach assumes that the student will know how to frame their prompts based on their existing content knowledge. As the student responds to the feedback provide by the chatbot, they naturally refine the wording of their inputs to get closer to their goal of task completion. Notably, Moguš (2025) also points out that content knowledge, critical thinking, and iterative design form the basis for effective chatbot prompt design. Therefore, some initial content knowledge and an ability or disposition to think critically acts as a starting point, from which the student can iterate and gradually build on their content knowledge and increase their levels of critical thinking. The chatbot interaction process is multifaceted, where non-linear phases of back-and-forth actions and responses also support experiential learning (Kolb & Kolb, 2017). Thus, students can use AI to support their critical thinking skills and dispositions through the rapid feedback provided by such systems, which can motivate them to keep asking questions and evaluating the outputs from their continually refined prompts.

AI: HINDERING CRITICAL THINKING

The use of AI tools such as chatbots to provide support to novice programmers in developing essential programming skills does raise some concerns about hindering students from improving their critical thinking skills. Zviel-Girshin (2024) studied AI tool usage during a first-semester introductory programming course and identified several key concerns including students' overreliance on the tool's capability, potentially leading to surface learning of programming concepts and reduced ability to solve problems independently. Surface learning and less independent thought would tend to undermine the rigour of critical thinking.

Other researchers highlight further concerns such as cognitive offloading. Bandam (2025) defines cognitive offloading as "the process by which humans delegate cognitive tasks to external tools or systems" (para. 2.) Unless a learner actively maintains skills, it is likely that they will degrade with time. Task delegation can introduce additional decision making to the AI user, so that they pay less cognitive attention to the deeper and more reflective demands of critical thinking. AI use can also hinder critical thinking due to the volume and scope of its feedback to the user, potentially generating more cognitive burden. Increased cognitive burden could lead to students taking shortcuts to their solutions and increasingly relying on AI, acting more like a skilled operator than an IT graduate with specialist problem-solving and critical thinking skills.

Gerlich (2025) studied the relationship between AI tool use and critical thinking skills and found "a significant negative correlation between frequent AI tool usage and critical thinking abilities, mediated by cognitive offloading" (p. 1). When learners rely excessively on AI technology to outsource cognitive tasks and blindly accept the outputs from such systems without critical evaluation, they may weaken their abilities to perform deep analysis. Also, since chatbots tend to continually generate output that is narrowly tailored to the user's prompts, it may close off learners to wider perspectives. Content that naturally aligns with the learner's beliefs may hinder them to engage with the multiple perspectives that critical thinking requires.

Work-ready students need to use AI as it increasingly becomes common in the modern workplace. However, wise use of AI, balanced by other methods that require personal cognitive engagement, is also important to mitigate the negative effects of AI tool use on students' critical thinking skills. AI output is often convenient to use and efficient in providing quick solutions to complex problems. However, this may obscure deeper learning approaches that typically involve critical thought. The Organisation for Economic for Co-operation and Development (OECD) explored effective use cases of Generative AI (Gen AI) in Education and found that "many students are clearly turning to Gen AI tools for academic purposes. However, their primary motivations often center on convenience and efficiency rather than deeper learning" (p. 16). This research also included teachers' opinions about AI making incorrect assumptions. Uncritical AI tool use may add an additional cognitive burden for students as they need to determine if an assumption is incorrect or not. If assumptions cannot be questioned or validated, the logic of argument, which underpins critical thinking, is likely to be weakened or invalidated.

OPERATING SYSTEMS CLASS

Having reviewed the interplay between AI use and critical thinking, this section contextualises these reflections in a practical classroom setting. The session occurred on a weekday afternoon in the computer laboratory with 20 students. The class consisted of young adults with varying prior knowledge of operating system programming. A broad student demographic, including international learners, was represented in the class. This presented an opportunity to draw on prior studies in programming as we navigated our way through the course. This variety of backgrounds informed my teaching of operating system administration in a personally relevant way. Some students might be revisiting semi-familiar material from their prior programming courses or work experience, or computing courses at secondary school. Older students would be returning to tertiary education after some years in the workforce and perhaps had never dealt with this topic in a tertiary academic setting. Those more familiar with IT and building software solutions would find the lab tasks less challenging than students who had only had prior academic exposure to programming. This was an opportunity to present the lab tasks and lecture material with a questioning approach, emphasising critical thinking from the beginning to enhance student engagement and stimulate curiosity. This would also make theory and practice more logically and personally connected. It was also a situation to appreciate the students' life experiences as a central part of the learning process in the classroom or laboratory.

The lab work was concerned with solving simple programming problems and some systems administration tasks working with the Linux operating system and its in-built scripting environment. This non-Windows operating system environment provided challenges to all students and somewhat levelled the playing field for the class. Students were able to use a broad range of resources including course materials, the internet, and AI tools to solve problems and support

their answers to set questions. AI chatbot use facilitated a sharing culture, where students would team up and help each other to find resources and solve problems.

The first section of the lesson involved explaining the lab tasks in enough detail so that the students could identify what resources they needed to complete the tasks. Apart from course materials and Google searches, these resources included ChatGPT and Microsoft CoPilot. The emphasis remained on students' needing to understand why their solutions worked. It was pointed out that the Linux scripting environment contains help facilities, although these are not user-friendly or intuitive to use when debugging errors in the students' programming code. Example programming code was walked through, and some limited live testing attempted. Some quiet class discussion developed, and students started working on their lab tasks. Students raised some brief questions about the need to comprehend the programming solutions to the lab tasks, and whether they would need to understand these solutions in a controlled practical test situation, which naturally led into the second part of the teaching session.

The second section involved the core learning activities for this lesson, which involved a set of lab tasks for which the students needed to develop working solutions and document their results. The tutor circulated in the lab to provide support to each student as they engaged in writing, testing, debugging, and finishing each task. Students who made frequent use of AI tools produced working results more quickly than students who used AI tools less. In rare cases, students elected not to use AI tools. Often students used AI tools in bursts of activity, for example following a hand code, a quick test, and a debug, with the use of AI tool to assist debugging and then more testing, in sequence. Notably, some AI solutions to the lab tasks exceeded the stated requirements in the assessment and included programming code techniques that had not been covered in their previous classes or been presented in this course.

Reflection on the literature and on my teaching practice revealed several key points. One such point was that students wished they had a better grasp of programming to solve the problems without having to outsource most of the cognitive effort required to complete the work. Another key insight was that students experienced rapid feedback and help from tools such as ChatGPT and it is likely that these AI tools had taught them something of value. However, the additional cognitive effort involved in formulating the right prompts to the AI tool, for instance to find out why the proposed solution did not work and what the errors meant during debugging, could demotivate students to expend extra effort in then applying critical thinking skills to the solutions produced.

The third and final section of the lesson involved the tutor's wrap-up summary of what tasks had been presented, giving an opportunity for students to share what they had learned and what they might need to work on for the next task that they were expected to complete. The tutor reinforced the need to understand the solutions that they had arrived at; not only that the solutions worked, but that the students had a grasp of the underlying programming code principles. The students were encouraged to always ask: why does a particular solution work or not work? Could I develop a different solution that would work equally well? Is my solution flexible so that it can be maintained for future use? Does the solution meet the set task requirements precisely? Such questions are important for IT students who need to become familiar with a customers' requirements in IT industry work contexts.

CONCLUSION

The research explored in this reflective piece suggests that, if students are taught to negotiate the tensions between beneficial and problematic AI use, there is potential to develop their critical thinking skills, enhancing their work-readiness in the IT industry. This article also highlights that the use of AI tools to solve programming problems can involve some aspects of critical thinking, if properly directed by educators. Deliberately guiding students in careful and critical use of AI offers a balanced way forward for academics to encourage students to develop critical thinking skills as they increasingly rely on AI and chatbots to solve problems (Zhang et al., 2024). Additionally, contextual teaching and learning is essential to develop critical thinking skills, and in wider terms involves constructivism, inquiry, questioning, learning community, modelling, reflection, and authentic assessment (Tari & Rosana, 2019).

We have briefly explored selected literature which cites AI use to support students' critical thinking. In contrast, we have also surveyed literature that raises significant issues around AI tools, such as where AI might hinder the development of students' critical thinking due to cognitive offloading. There is evidence that AI tools have ample potential to support students to enhance their critical thinking skills, but not without real, and sometimes far-reaching, costs if not used wisely.

It is important to point out that appropriate use of AI tools requires a student to have developed a certain prior level of critical thinking skills and some technical knowledge. There are also significant risks involved with reducing the technical competency of future IT workers from software engineers to AI tool prompt operators who lack deep content knowledge and a strong set of critical thinking skills. The potential for AI tool use to undermine critical thinking is also a significant risk to AI users if they practice overreliance, using AI too frequently and potentially weakening their disposition to remain critically aware and independently minded.

A balanced approach to using and continually evaluating AI tools will be important for the foreseeable future. AI tool usage needs to balance task automation with task augmentation, where AI tools support and extend human skills (Sabherwal & Grover, 2024). There has never been a greater need for educators to teach, promote, and foster critical thinking skills in their students and themselves. As tertiary educators in the AI era, our students have a powerful set of AI tools and may seem to be able to solve almost any problem presented to them. However, tutors need to deliberately teach and model critical thinking in action, support our students to develop strong academic identities, and to grow students' confidence in their own thinking. Thus, graduates will be able to use AI strategically to augment human skills rather than replace them, which is likely to result in cognitive atrophy and a loss of empowerment.

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RETHINKING ASSESSMENT AND LEARNING DESIGN IN THE AGE OF ARTIFICIAL INTELLIGENCE: A REFLECTIVE PRACTICE FROM BUSINESS LECTURERS IN NEW ZEALAND

Chintankumar Patel, Rajeev Chawla and Krish Naidu

INTRODUCTION

The emergence of generative artificial intelligence (AI) has become one of the most significant topics of discussion in contemporary higher education. Much of this discussion has centred on academic integrity, assessment security, and the implications of AI-generated content for traditional forms of assessment. While these concerns are important, they have also prompted many educators to revisit more fundamental questions about how learning is demonstrated and how assessment provides evidence of student capability.

Within Level 7 Applied Management education in Aotearoa New Zealand, these questions have become increasingly relevant. The programmes in which we teach are designed to develop capabilities such as critical thinking, problem-solving, professional judgement, and the application of knowledge to authentic organisational situations. These expectations have not changed with the emergence of AI. What has changed is the ease with which students can access tools capable of producing coherent written work. This prompted us to ask not simply whether AI was affecting assessment, but whether some of our existing assessment approaches provided sufficiently rich evidence of the capabilities they were intended to assess.

At the same time, our institution had already begun encouraging greater use of experiential learning and active participation across programmes. Rather than relying primarily on lectures and written assignments, there was increasing emphasis on learning activities that required students to discuss ideas, solve workplace problems, apply theory in context, and reflect on their decision-making. Experiential learning emphasises learning through experience, reflection, conceptualisation, and application (Kolb, 2015). Although these developments preceded the widespread adoption of generative AI, they provided an important foundation for many of the changes that followed.

The intersection of experiential learning and generative AI became the catalyst for this reflection. AI did not suddenly create concerns about assessment validity or authentic learning. Instead, it brought existing questions into sharper focus. As we redesigned learning activities and assessments, we found ourselves returning repeatedly to questions such as: How do we know meaningful learning has occurred? What kinds of assessments provide convincing evidence of student capability? How can learning activities support authentic engagement in an environment where AI is readily available?

This article presents a reflective account of how these questions influenced our teaching practice across several Level 7 Applied Management courses. Rather than evaluating a specific intervention or reporting empirical findings, it examines how ongoing reflection shaped changes to classroom teaching, assessment design, and the use of experiential learning in response to an evolving educational environment.

The paper argues that AI acted as a catalyst for re-examining long-standing assumptions about teaching, learning, and assessment. Through this reflective process, we also developed the EAST framework (Evidence, Alignment, Scalability and Sustainability, and Trust and Transparency) as a practical reflective tool to support educators when considering changes to learning design and assessment in rapidly changing educational contexts.

REFLECTIVE APPROACH

This paper adopts a reflective practice approach to explore how our thinking about teaching, learning, and assessment evolved as experiential learning initiatives intersected with the rapid emergence of generative AI. Rather than attempting to evaluate the effectiveness of particular teaching strategies, the paper seeks to understand how professional judgement developed through ongoing experience, uncertainty, and adaptation.

Our approach is informed by Schön's (2017) concept of the reflective practitioner, particularly the complementary processes of reflection-in-action and reflection-on-action. Reflection-in-action occurs while teaching is taking place, as educators respond to unexpected situations, modify activities, and make decisions in the moment. Reflection-on-action occurs afterwards, when experiences are reconsidered to identify assumptions, evaluate decisions, and inform future practice. These ideas have been widely recognised as valuable approaches for supporting professional learning and pedagogical development within higher education (Mann et al., 2009; Ryan, 2013).

The reflections presented here draw on our collective experiences of teaching Level 7 Applied Management courses in Aotearoa New Zealand over several years. During this period, our institution progressively encouraged greater use of experiential learning, while discussions surrounding AI increasingly influenced conversations about assessment, academic integrity, and learning design. Rather than resulting in a single course redesign, these influences prompted numerous small changes that accumulated over time. Some changes were deliberate, whereas others emerged unexpectedly through classroom experience and subsequent reflection.

These reflections are informed by professional observations, collaborative discussions among colleagues, iterative course redesign, and repeated teaching experiences across multiple course deliveries. They do not draw on formal empirical data, student surveys, or the results of systematic research. Consequently, the purpose of this article is not to present generalisable findings but to provide a transparent account of how teaching practice evolved within one educational context. Readers may recognise similar experiences within their own practice while reaching different conclusions appropriate to their settings.

Reflection is presented throughout as an ongoing process rather than a linear sequence of events. Looking across these experiences, we found that changes rarely occurred because a single solution was identified. More often, they emerged through questioning existing assumptions, testing

alternative approaches, observing unexpected outcomes, and gradually refining practice. It was through this continuing cycle of experience and reflection that the EAST framework eventually emerged—not as a predefined model, but as a practical way of making sense of the decisions we found ourselves making repeatedly.

THE TRIGGER: WHEN FAMILIAR PRACTICES BEGAN TO RAISE NEW QUESTIONS

Looking back, it would be inaccurate to say that generative AI suddenly transformed our teaching. Many of the teaching approaches discussed in this paper, including case-based learning, classroom discussion, authentic assessment, and experiential activities, were already part of our practice. Similarly, the programmes we taught had long emphasised analysis, evaluation, and application rather than simple knowledge recall. The arrival of AI did not replace these approaches; instead, it prompted us to look at them differently.

As educators, our initial concerns were similar to those expressed by many in higher education institutions. Conversations with colleagues often focused on academic integrity, assessment security, and whether students could produce assignment work using AI tools without demonstrating their own understanding. These concerns were understandable, particularly because many assessments relied on written submissions completed outside the classroom. Like many educators, we initially found ourselves asking how we could protect existing assessment practices.

However, as these discussions continued, a different set of questions began to emerge. Rather than asking how AI use could be prevented, we started asking whether our assessments were actually providing evidence of learning. If a student submitted a well-written report, how confident could we be that the report demonstrated the reasoning, judgement, and decision-making capabilities expected of a graduate? These questions were not entirely new, but AI made them much harder to ignore. Recent reviews have similarly suggested that generative AI is encouraging educators to reconsider how assessment provides evidence of learning, rather than simply how they might prevent inappropriate technology use (Weng et al., 2024; Xia et al., 2024).

Around the same time, our institution was placing greater emphasis on experiential learning and active participation across programmes. This encouraged us to redesign classroom activities so that students spent more time discussing authentic organisational problems, justifying decisions, and applying concepts in context. As these activities became more central to our teaching, we noticed that they often revealed aspects of student understanding that were less visible in traditional written assignments. Students could explain their reasoning, challenge one another's assumptions, defend their recommendations, and adapt their thinking as discussions unfolded. These observations gradually shifted our attention away from the final product towards the learning process itself.

This change did not occur through a single redesign initiative. Instead, it developed gradually through numerous small decisions made across different courses and teaching periods. Some ideas worked well immediately, while others required refinement after observing how students responded. In many cases, classroom experience challenged assumptions that had previously gone unquestioned. What initially appeared to be a discussion about AI increasingly became a broader reflection on assessment, learning design, and the kinds of evidence that best demonstrate meaningful learning.

REFLECTION-IN-ACTION: REFINING TEACHING AND ASSESSMENT THROUGH PRACTICE

The questions described in the previous section prompted an ongoing process of experimentation in which classroom activities, assessment tasks, and feedback practices were gradually refined over successive course deliveries. Consistent with Schön's (2017) concept of reflection-in-action, many decisions were made while teaching rather than through advance planning. Experiences in one class often influenced adjustments in the next, creating an iterative process of refinement rather than a single programme redesign.

One noticeable change involved how classroom time was used. Earlier teaching already incorporated discussion and application activities, but these gradually became the primary focus of many sessions. Greater emphasis was placed on organisational scenarios, collaborative problem-solving, structured debates, and classroom conversations where students were required to explain and justify their thinking. These activities did not replace theoretical learning; instead, they created opportunities for students to demonstrate how they interpreted and applied theoretical concepts in authentic contexts. This approach reflects the growing recognition that active engagement and contextual application remain important components of learning within AI-enabled educational environments (Salinas-Navarro et al., 2024).

Assessment practices also evolved through this reflective process. Rather than fundamentally changing programme learning outcomes, attention shifted towards how evidence of those outcomes was generated. Within the Implementing Sustainable Practice course, for example, students had always been expected to analyse stakeholder perspectives and evaluate organisational sustainability practices. During the redesign process, additional emphasis was placed on stakeholder evidence logs, structured organisational process evaluation, and clearer links between evidence, analysis, and recommendations. These refinements made students' reasoning more visible throughout the assessment process while maintaining alignment with the original learning outcomes.

Across other courses, similar principles guided assessment refinement. Greater use was made of staged activities, formative checkpoints, classroom discussions, and opportunities for students to explain the decisions underlying their work. These changes reflected a gradual shift in emphasis from evaluating completed written products towards examining how students developed, justified, and communicated their thinking. Recent literature similarly suggests that effective responses to generative AI depend less on detection technologies and more on assessment designs that encourage authentic demonstration of learning and professional judgement (Balducci et al., 2025; Chan, 2023).

Perhaps the most significant change, however, was not procedural but conceptual. Our conversations gradually moved away from asking how AI could be controlled towards asking how students could be supported to use AI responsibly while continuing to develop independent judgement. We found that discussions about ethical AI use, critical evaluation of AI-generated outputs, and transparency in learning often proved more valuable than attempts to discourage AI use altogether. This shift aligns with growing calls for the development of AI literacy as an essential graduate capability within higher education (Biagini et al., 2025; Walter, 2024).

Area of practice	Earlier approach	Revised approach	Reflection on change
Implementing Sustainable Practice (Level 7)	Students analysed stakeholder perspectives, organisational sustainability practices, and SDG implications through a structured written assessment.	Assessment tasks were refined to incorporate stakeholder evidence logs, structured organisational process evaluation, and stronger requirements for evidencing how stakeholder perceptions informed sustainability analysis and recommendations.	The revised design made students' reasoning and evidence use more visible throughout the assessment process, generating stronger evidence of critical thinking, contextual analysis, and applied judgement.
Organisational Research Design (Level 7)	Students developed research proposals that included research questions, methodology, and project planning components.	Greater emphasis was placed on iterative supervision, observation-based inquiry, project management milestones, and staged development of research components.	Learning became more visible throughout the research process, allowing students to receive feedback and refine their thinking before submission of the final proposal.
Contemporary Issues in Organisations (Level 7)	Students examined contemporary organisational issues through discussion, research, and analysis of current business challenges.	Increased use of live organisational cases, AI-related dilemmas, global risk scenarios, and future-focused decision-making activities linked directly to classroom discussions.	Students appeared to engage more deeply when concepts were connected to emerging and uncertain organisational contexts.
Assessment Design	Assessments were generally aligned with learning outcomes and required students to analyse, evaluate, and apply concepts within written submissions.	Greater use was made of staged submissions, contextualised tasks, formative checkpoints, presentations, and activities that required students to explain and justify their thinking throughout the learning process.	The focus expanded from evaluating final outputs to examining how students developed, applied, and communicated their reasoning.
Response to AI	Early discussions primarily focused on academic integrity, appropriate use, and the potential risks associated with generative AI.	Increased emphasis was placed on AI literacy, responsible use, critical evaluation of AI outputs, and assessment designs that required contextual judgement and reflection.	The conversation gradually shifted from managing risk towards supporting learning, capability development, and ethical engagement with technology.
Experiential Learning	Experiential learning activities were already incorporated within courses to support application of concepts and student engagement.	Experiential learning became more intentionally integrated through authentic organisational scenarios, collaborative problem-solving, reflective activities, and assessment-linked learning experiences.	These approaches often generated richer opportunities for students to demonstrate understanding while supporting engagement and participation.

Table 1. Examples of revised teaching and assessment practices.

These refinements did not emerge because we identified a single best practice. They emerged because each adjustment prompted new observations, new questions, and further refinement. Reflection therefore became less about evaluating isolated teaching techniques and more about continuously reconsidering how learning could be made visible, meaningful, and authentic within a rapidly changing educational environment. Table 1 presents selected examples of how teaching and assessment practices were refined through this reflective process. The examples in Table 1 are intended as illustrations rather than evidence of effectiveness. They represent practical changes that emerged through reflection on teaching experience and show how relatively small adjustments to learning activities and assessment design gradually shaped a broader reconsideration of teaching practice.

MAKING SENSE OF THE EXPERIENCE: THE EAST FRAMEWORK

Looking back across the reflections presented in this paper, one observation became increasingly clear. Although the changes described occurred across different courses, assessments, and classroom situations, the questions guiding our decisions were surprisingly consistent. We repeatedly found ourselves asking similar questions whenever we considered changes to teaching or assessment:

- What evidence tells us this change is actually needed?
- Does this change remain aligned with the learning outcomes and purpose of the course?
- Can this approach be sustained across future deliveries and different teaching contexts?
- Will students clearly understand what is expected of them, and can they trust the assessment process?

These questions eventually became the basis for the EAST framework, representing Evidence, Alignment, Scalability and Sustainability, and Trust and Transparency. Rather than being designed before the changes described in this article, the framework emerged afterwards as a way of organising and making sense of our reflective decision-making.

The EAST framework is therefore not intended to be a prescriptive model or a sequence of steps. Instead, it functions as a reflective tool that encourages educators to consider multiple dimensions simultaneously when making decisions about learning design and assessment. In practice, the four elements are interconnected, and changes in one area often influence the others.

Evidence

The first consideration is evidence. During the assessment redesign process, it became apparent that assumptions about what worked were not always supported by experience and evidence from practice. Before making changes to teaching or assessment, we found it important to ask what observations or experiences were prompting those changes. In our own context, evidence did not come from formal research data. Instead, it emerged through repeated classroom experiences, discussions with colleagues, observations of student engagement, assessment outcomes, and the practical challenges encountered during course delivery.

This emphasis on evidence helped avoid making changes simply because new technologies had emerged. Instead, it encouraged decisions that responded to identifiable issues within teaching practice. Looking back, the introduction of AI often acted as the catalyst for questioning existing

practices, but the evidence informing subsequent changes came largely from ongoing teaching experiences rather than from the technology itself.

Alignment

The second consideration is alignment between learning outcomes, teaching activities, and assessment tasks. Throughout the reflective process, we found ourselves returning repeatedly to the intended learning outcomes rather than to the assessment task itself. This prompted a subtle but important shift in thinking. Rather than asking whether an assessment was resistant to AI, we began asking whether it genuinely enabled students to demonstrate the capabilities the programme intended to develop.

This often resulted in relatively small changes rather than complete redesigns. Existing assessments were refined so that students were required to explain their reasoning, justify decisions, and apply concepts within authentic organisational contexts. These refinements strengthened the connection between learning activities, assessment tasks, and programme expectations while remaining consistent with the original educational purpose.

Scalability and sustainability

The third consideration recognises that effective educational ideas must also be practical. Throughout this reflection, many teaching innovations appeared promising when implemented in individual classes. However, further reflection required consideration of whether these approaches could be sustained across future course deliveries, different class sizes, and changing teaching teams.

This perspective encouraged decisions that balanced educational value with practical feasibility. Rather than pursuing increasingly complex assessment designs, we found greater value in making purposeful refinements that could be implemented consistently over time. Sustainability therefore became an important criterion alongside pedagogical innovation.

Trust and transparency

The final consideration focuses on the relationships that underpin learning and assessment. As conversations about AI became more common, we recognised that uncertainty often arose not because students wished to misuse technology, but because expectations were unclear. Questions frequently concerned what constituted acceptable AI use, how assessments would be evaluated, and what forms of support were appropriate.

These concerns highlighted the importance of transparency. Rather than relying primarily on surveillance or restriction, we found that clearer conversations about assessment purpose, responsible AI use, and expectations often resulted in more constructive engagement. Trust therefore became an important part of assessment design rather than simply an outcome of it.

Using the EAST framework as a reflective tool

The EAST framework is intended to support reflection rather than prescribe solutions. The four dimensions are not applied sequentially, nor is any one dimension considered more important than another. Instead, they are considered together as complementary questions that inform professional judgement.

For example, when refining an assessment task, an educator might first consider the evidence prompting the change and then examine whether the proposed refinement remains aligned with learning outcomes, whether it can be implemented sustainably across future deliveries, and whether expectations will remain transparent for students. In practice, these questions often overlap, requiring educators to balance competing considerations rather than optimise a single dimension.

The framework therefore reflects the central lesson emerging from this article: responding to AI is rarely about finding one correct solution. More often, it involves making thoughtful, context-sensitive decisions while remaining open to further reflection and refinement. EAST provides a simple structure for supporting those ongoing conversations.

IMPLICATIONS FOR PRACTICE

Reflecting on the experiences presented in this paper, several practical implications have emerged. These are not intended as recommendations that apply universally across higher education. Rather, they represent considerations that may be useful for educators who are navigating similar questions about learning design, assessment, and the increasing presence of AI in teaching.

One implication is the importance of beginning with learning rather than technology. Throughout this reflection, we found that many of the questions initially raised by AI were, in fact, questions about assessment design and evidence of learning. Focusing first on the capabilities that students are expected to demonstrate provided a more productive starting point than focusing on the technology itself. Recent literature similarly suggests that responses to generative AI are most effective when they are grounded in educational purpose rather than technological capability (Chan, 2023; Weng et al., 2024).

A second implication concerns the value of making student thinking more visible. Across several course redesigns, relatively modest changes to learning activities and assessment requirements often provided richer opportunities for students to explain their reasoning, justify decisions, and demonstrate professional judgement. These refinements did not fundamentally change programme learning outcomes. Instead, they strengthened the connection between intended learning outcomes, classroom activities, and assessment evidence.

The reflections also reinforced the importance of treating AI as part of the contemporary learning environment rather than as an external problem to be managed. Conversations with students became more constructive when the emphasis shifted from avoiding AI towards using it responsibly and critically. Developing AI literacy alongside disciplinary knowledge appears increasingly important if higher education is to prepare graduates for professional environments where AI is becoming commonplace (Biagini et al., 2025; Walter, 2024).

Finally, this experience highlighted the continuing value of reflective practice itself. Many of the changes described in this article developed gradually through teaching, observation, discussion, and repeated refinement across different course deliveries. On reflection, the most valuable outcome was not a single assessment redesign or teaching strategy, but the habit of continually questioning how learning is experienced and how student capability is demonstrated. In this respect, the EAST framework is best understood as a reflective aid that supports ongoing professional judgement.

CONCLUSION

When this reflective journey began, our attention was largely focused on the challenges that generative AI appeared to present for assessment. Looking back, however, the experience led us towards a different conclusion. AI did not fundamentally change what we believed students should learn. Instead, it prompted us to reconsider how learning could be demonstrated and how assessment could provide more convincing evidence of student capability.

The reflections presented throughout this paper illustrate that meaningful changes often emerged through small refinements rather than major redesigns. Classroom discussions became more purposeful, assessment tasks made students' reasoning more visible, and conversations about AI gradually shifted from prevention towards responsible and transparent use. None of these developments occurred because a single solution was identified. Rather, they evolved through ongoing reflection, experimentation, and collaboration.

The EAST framework emerged from this process as a way of capturing the questions that repeatedly shaped our decision-making. It is not intended as a universal model or a checklist for redesigning courses. Instead, it offers a simple reflective structure that encourages educators to consider evidence, alignment, sustainability, and trust when making decisions about learning and assessment. Its value lies less in providing answers than in supporting thoughtful professional conversations.

This paper does not claim that the experiences described will be replicated in every educational context. Different disciplines, institutions, and student cohorts will inevitably require different responses. However, we hope that the reflections shared here encourage other educators to view AI not only as a technological challenge but also as an opportunity to reconsider longstanding assumptions about teaching, assessment, and learning.

Ultimately, the most significant outcome of this reflection was not the development of a framework or a revised assessment strategy. It was a renewed appreciation that effective teaching depends on continual reflection, willingness to adapt, and careful attention to the learning experiences of students. Those principles are unlikely to change, regardless of how rapidly educational technologies continue to evolve.

AI statement

Generative AI tools were used to support early drafting, structuring, language refinement, and editing. The reflective experiences, conceptual interpretation, examples of teaching practice, EAST framework, final analysis, and author judgement are the work of the authors. The authors reviewed, revised, and take full responsibility for the content, originality, and integrity of the submission.

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AUTHENTICALLY WEAVING MĀTAURANGA MĀORI INTO OUTDOOR EDUCATION

David Williams

INTRODUCTION

> *Kotahi te kākaho, ka whati; ki te kāpuia, e kore e whati.*
> *When reeds stand alone, they are vulnerable,*
> *but when bound together they are unbreakable.*
>
> Kīngi Tāwhiao

Honouring Te Tiriti o Waitangi requires educators in Aotearoa New Zealand to move beyond acknowledging Māori perspectives towards authentically embedding mātauranga Māori within teaching and learning (Ministry of Education, 2007). While recent educational reforms, including *Mana Ōrite mō te Mātauranga Māori*, have reinforced the importance of recognising mātauranga Māori within national education policy (Ministry of Education, 2020), many tangata Tiriti educators remain unsure about how this should be embodied in practice. Questions surrounding authenticity and cultural responsiveness continue to create uncertainty, often limiting meaningful partnerships with Māori communities.

Tangata Tiriti refers to non-Māori whose right to belong in Aotearoa New Zealand is founded upon Te Tiriti o Waitangi. Although the term has been interpreted in different ways, it is used throughout this study to emphasise the shared responsibility of fostering partnership under Te Tiriti within education (Rātima et al., 2022). Rather than describing ethnicity alone, tangata Tiriti also suggests an ongoing identity journey in which educators critically consider their own cultural positioning, identity, and responsibilities within a bicultural nation.

Outdoor Education provides a particularly valuable context for this journey because learning occurs through relationships with people, place, and the natural environment. Unlike many curriculum areas, Outdoor Education enables Te Tiriti o Waitangi to be experienced through practice rather than simply taught as content. However, many tangata Tiriti educators continue to experience uncertainty when engaging with mātauranga Māori. Fear of making mistakes, causing offence, or misrepresenting Māori knowledge can contribute to what Tolich (2002) describes as "Pākehā paralysis," a reluctance to engage because of hesitancy rather than resistance. Moving beyond this paralysis requires humility, reflexivity, and a willingness to learn alongside Māori communities.

The purpose of this study was to explore the perspectives and experiences of Māori and tangata Tiriti outdoor kaiako to better understand how tangata Tiriti can authentically partner with tangata whenua under Te Tiriti o Waitangi and within Outdoor Education. Using a culturally

responsive qualitative methodology, this research sought practical approaches that move beyond tokenistic inclusion towards authentic and reciprocal relationships with Māori. The study was informed by the Teaching Council's *Ngā Tikanga Matatika, Ngā Paerewa – Our Code, Our Standards* (Education Council, 2017) and the *Effective Teacher Profile* (Bishop & Berryman, 2009), recognising culturally responsive teaching as relational, reflective, and grounded in genuine partnership.

Mātauranga Māori is defined as "the body of knowledge originating from Māori ancestors, including the Māori worldview and perspectives, Māori creativity and cultural practices," while te ao Māori encompasses "Māori knowledge, language, values and beliefs, and provides the context within which Māori live and interact" (Ministry of Education, 2009, p. 4). Rather than viewing these worldviews and perspectives as additional curriculum content, this study considers them fundamental to developing an Outdoor Education pedagogy that reflects the unique cultural landscape of Aotearoa New Zealand.

Outdoor Education has been recognised within *The New Zealand Curriculum* since 1999 as part of the Health and Physical Education learning area (Ministry of Education, 1999). Its purpose extends beyond technical outdoor skills to developing relationships with self, others, and the environment. These characteristics position Outdoor Education as a powerful setting in which kaiako (educators) can enact the bicultural aspirations of Te Tiriti o Waitangi through authentic engagement with people and place.

The primary research question guiding this study was:

How can tangata Tiriti authentically partner under Te Tiriti o Waitangi within Outdoor Education?

Three subsidiary questions supported this inquiry:

1. How do outdoor kaiako currently embed mātauranga Māori within their teaching practice?
2. How can tangata Tiriti authentically implement mātauranga Māori principles and tikanga?
3. What approaches support meaningful collaboration between tangata Tiriti and Māori within Outdoor Education?

To answer these questions, it is first necessary to understand the historical, cultural, and pedagogical influences that have shaped Outdoor Education in Aotearoa New Zealand. The following review of literature explores the evolution of Outdoor Education, the enduring influence of Eurocentric traditions, and the growing movement towards culturally responsive and place-responsive pedagogies that better reflect the bicultural aspirations of Te Tiriti o Waitangi.

LITERATURE REVIEW

Outdoor Education in Aotearoa New Zealand has developed within two knowledge traditions. Long before colonisation, Māori engaged with the natural world through holistic cultural practices in which physical activity, spirituality, whakapapa, and relationships with the environment were inseparable (Hokowhitu, 2007). Activities such as throwing teka (darts or javelins), flying manu tukutuku (kites), exercises with taiaha (weapons), and haka (action dance) were never simply recreational pursuits; they reflected broader cultural values and ways of understanding the world.

The formal development of Outdoor Education within New Zealand schools drew largely from British educational traditions during the mid-twentieth century (Lynch, 1999). As Outdoor Education evolved, increasing emphasis was placed on adventure, challenge, technical competence, and risk management. By the 1980s, environmental education had become progressively separated from outdoor pursuits, resulting in programmes that often prioritised activities over relationships with place (Irwin & Straker, 2014; Lynch, 2006).

This legacy continues to influence Outdoor Education today. Zink and Boyes (2006) found that school programmes remained strongly shaped by a Eurocentric pursuits-based model emphasising adventure and individual achievement. Because many of the dominant philosophies underpinning Outdoor Education originated in Britain and North America (Cosgriff et al., 2012), Indigenous ways of knowing have frequently been positioned as supplementary rather than foundational. Barker (2022) argues that Outdoor Education continues to privilege colonial perspectives, often overlooking the cultural narratives and relationships that existed long before these programmes were introduced.

Growing criticism of this model has led many scholars to advocate for Outdoor Education that is responsive to local places and communities. Cosgriff (2008) argues that authentic Outdoor Education should move beyond teaching generic activities such as climbing, kayaking, or tramping in isolation from the histories and meanings of particular places. Instead, educational experiences should enable learners to understand the stories, whakapapa, and cultural significance embedded within the landscapes they encounter. Similarly, Brown (2012) contends that place-responsive pedagogy helps learners develop a sense of belonging by recognising how relationships with place shape identity and learning.

This shift towards place-responsive Outdoor Education aligns closely with the bicultural commitments embedded within *The New Zealand Curriculum* (Ministry of Education, 2007), which explicitly recognises Te Tiriti o Waitangi as one of its foundational documents. Rather than viewing Outdoor Education solely as a vehicle for personal challenge, a bicultural approach positions it as a context where relationships with whenua, iwi, hapū, and local communities become central to learning.

Developing culturally responsive Outdoor Education therefore requires more than incorporating Māori language or tikanga into existing programmes. Washbourne (2018) argues that meaningful change depends upon genuine partnerships with Māori communities and a willingness to address the ongoing impacts of colonisation. This requires tangata Tiriti educators to engage in ongoing reflection regarding their own cultural assumptions and educational practices.

One barrier to this process is the persistence of "Pākehā paralysis" (Tolich, 2002). Feelings of uncertainty, fear of causing offence, or concerns about cultural authenticity can discourage educators from engaging with mātauranga Māori. Milne (2017) suggests this paralysis often reflects deeper uncertainty surrounding identity and responsibility rather than opposition to biculturalism itself. At the same time, Glynn et al. (2001) argue that because Pākehā culture occupies a position of institutional power, responsibility for meaningful change rests primarily with tangata Tiriti educators rather than with Māori communities.

Collectively, this literature suggests that authentic engagement with mātauranga Māori requires more than curriculum reform. It calls for tangata Tiriti educators to undertake their own identity journey, develop reciprocal relationships with Māori communities, and reimagine

Outdoor Education as a place where Te Tiriti o Waitangi is lived through everyday educational practice rather than acknowledged symbolically. It is within this context that the perspectives of experienced Māori and tangata Tiriti outdoor educators become particularly valuable.

METHODOLOGY

This study employed a qualitative research design to explore how tangata Tiriti can authentically weave mātauranga Māori into Outdoor Education. A qualitative approach was appropriate because the research sought to understand participants' lived experiences, perspectives, and reflections on culturally responsive practice within the unique educational context of Aotearoa New Zealand. Rather than seeking consensus or generalisability, the study aimed to develop a deeper understanding of the relationships, values, and experiences that shape authentic engagement with mātauranga Māori.

Recognising that the research was undertaken by a tangata Tiriti researcher within a mātauranga Māori context, the study was guided by culturally responsive research methodologies. These approaches acknowledge the importance of respecting participants' cultural knowledge, experiences, and values while ensuring research is conducted in ways that are relational, ethical, and culturally appropriate (Berryman et al., 2013). They also require researchers to critically examine their own assumptions and positionality throughout the research process.

As an experienced Outdoor Education educator in Aotearoa New Zealand, I occupied both insider and outsider positions throughout this study. My professional experience enabled shared understandings with participants regarding Outdoor Education practice, while my identity as tangata Tiriti required continual reflection when engaging within a mātauranga Māori space. Reflexivity therefore became central to the research process, requiring ongoing consideration of how my own identity, experiences, and assumptions might shape data collection, interpretation, and representation (Finlay, 2002; Savin-Baden & Major, 2013). Rather than attempting to remove researcher bias and subjectivity, reflexive practice sought to make the influence of positionality visible and able to be critically examined.

To strengthen the cultural integrity of the research, the study was informed by the IBRLA framework (Initiation, Benefits, Representation, Legitimation, and Accountability) (Macfarlane & Macfarlane, 2018). Guided by the principles of partnership, participation, and protection under Te Tiriti o Waitangi, the framework provided a culturally responsive structure for engaging with participants and ensuring Māori perspectives were represented respectfully throughout the research process.

Data were collected through semi-structured kanohi ki te kanohi interviews with four experienced Māori and tangata Tiriti Outdoor Education educators. Purposeful sampling was used to identify participants recognised for their experience within Outdoor Education and their engagement with mātauranga Māori in educational settings (Patton, 2002). Semi-structured interviews provided consistency across participants while allowing conversations to develop naturally as participants shared their experiences and perspectives (Longhurst, 2003). Following transcription, each participant reviewed their transcript to confirm its accuracy and could amend or clarify responses where required.

Interview data were analysed using reflexive thematic analysis. Through repeated reading, coding, and reflection, patterns were identified across participant narratives before being refined into broader themes that captured shared understandings while recognising individual experiences. Four interconnected themes emerged: identity, relationships, Outdoor Education as a context for bicultural practice, and moving beyond tokenism through authentic partnership. These themes provide the structure for the findings presented in this paper.

Ethical considerations

Ethical approval was granted through the University of Waikato, whose Charter recognises Te Tiriti o Waitangi and affirms a commitment to partnership with Māori. The study was informed by *Te Ara Tika: Guidelines for Māori Research Ethics* (Hudson et al., 2010) ensuring that cultural integrity, participant wellbeing, and respectful engagement remained central throughout the project.

All participants were initially approached either in person or by telephone before receiving an information sheet, consent form, and invitation to participate. Participation was voluntary, and informed consent was obtained before interviews commenced. Following each interview, transcripts were returned to participants for member checking, enabling them to confirm accuracy and amend their contributions where necessary before analysis.

FINDINGS

Thematic analysis identified a series of interconnected themes relating to identity, relationships, authenticity, and culturally responsive practice. These findings are presented through participants' voices before being interpreted in relation to the wider literature.

Although each participant brought different experiences and perspectives, they shared a common belief that authentically weaving mātauranga Māori into Outdoor Education begins with educators rather than the curriculum. Participants described authenticity as an ongoing process grounded in identity, relationships, and reciprocal learning, rather than the addition of isolated cultural practices. The four themes presented below reflect these shared understandings.

Identity for authenticity

The strongest finding across all interviews was that authentic engagement with mātauranga Māori begins with an educator's own identity journey. Participants consistently argued that tangata Tiriti cannot authentically engage with Māori knowledge without first understanding their own cultural identity, values, and relationship with Aotearoa New Zealand. One participant stated that "If we can understand … where we sit, through whakapapa, through genealogies in our space, then we can start respecting it [mātauranga Māori] a lot more and taking care of it a lot more." Rather than viewing identity as something fixed, participants described it as a continual process of learning and reflection. Several spoke about the importance of acknowledging personal privilege, recognising the ongoing impacts of colonisation, and developing a genuine sense of belonging that did not depend upon appropriating Māori identity. Establishing one's own tūrangawaewae (place to stand) was viewed as creating a stronger foundation from which respectful relationships with Māori communities could develop. Another participant reflected that "by understanding my own cultural identity, even spiritual identity, I started seeing outdoor ed through a different lens and felt super inspired."

Participants also challenged the tendency for educators to search for practical "how-to" strategies before undertaking their own personal reflection. As one participant suggested, authenticity cannot be achieved through resources or lesson plans alone; it develops through humility, curiosity, and a willingness to remain a learner.

Relationships foster connections

Participants consistently returned to the importance of relationships as the foundation for culturally responsive Outdoor Education. Rather than describing mātauranga Māori as content to be delivered, they viewed it as something experienced through meaningful partnerships with people, communities, and place. "Everyone in this country came over or on the ocean," one participant said, "Whether it's past or present, the ocean connects us."

A Māori participant stressed that a genuine relational exchange "isn't just people sharing what they know, it's people learning off each other through reciprocity, which is an important part of te ao Māori." Building these relationships requires time and trust. Participants emphasised that meaningful engagement could not occur through one-off cultural activities or isolated consultation. Instead, educators were encouraged to develop ongoing relationships with local iwi, hapū, kaumātua, and whānau, recognising that knowledge is inseparable from the communities from which it originates.

Most participants acknowledged that many tangata Tiriti educators possess positive intentions but remain hesitant to engage because they fear making mistakes. However, participants suggested that respectful action, undertaken with humility and openness, was preferable to inaction. Genuine partnership was therefore characterised by a willingness to listen, learn, and grow alongside others.

Outdoor Education provides a unique context

Participants consistently viewed Outdoor Education as uniquely positioned to honour Te Tiriti o Waitangi because of its inherent relationship with te taiao (the natural world). Unlike classroom-based subjects, Outdoor Education enables learners to experience relationships with people and place in authentic settings.

This idea was particularly evident in one participant's observation: "Outdoor Education is a natural and authentic space for embedding mātauranga Māori due to the deep connection of te ao Māori and te taiao."

Participants contrasted this potential with what they perceived as the dominant Eurocentric model of Outdoor Education, where technical competence, adventure activities, and risk management often overshadow relationships with place. Several questioned whether activities such as kayaking, climbing, or tramping achieve their full educational potential when disconnected from the cultural histories and values of the environments in which they occur.

Participants went on to describe Outdoor Education as providing opportunities to embed tikanga, whakawhanaungatanga, and local narratives naturally within learning experiences. This positioning was seen as one of the discipline's greatest strengths and an opportunity to better reflect the bicultural foundations of Aotearoa New Zealand.

Beyond tokenism

Across all interviews, participants distinguished between symbolic inclusion and authentic partnership. They expressed concern that some educational approaches remain confined to surface-level inclusion of te reo Māori or isolated tikanga without addressing the deeper relationships and responsibilities that underpin mātauranga Māori.

One participant described tokenistic practice as "really just trash, like when kaitiakitanga is picking up rubbish," arguing that superficial cultural inclusion and literal translation risks diminishing rather than strengthening meaningful contribution. The participant continued by explaining that "it just starts with the reo bro, I reckon it starts with te reo..., a lot of the secrets and understanding can be unlocked with te reo Māori." This implies that te reo is not just about knowing the kupu, but also about understanding the deeper meaning beyond a superficial translation.

Participants consistently argued that authentic partnership requires tangata Tiriti educators to embrace ongoing learning, engage with te reo Māori, challenge existing assumptions, and accept responsibility for contributing to educational change. This included seeking guidance from Māori communities and recognising that culturally responsive practice is never complete but continually evolving.

Rather than presenting authenticity as a destination, participants described it as an enduring commitment to partnership under Te Tiriti o Waitangi. For many, this represented a shift from asking, "How do I include mātauranga Māori?" towards asking, "How do I build relationships that allow mātauranga Māori to be shared appropriately?"

Collectively, these findings suggest that authentically weaving mātauranga Māori into Outdoor Education is fundamentally relational rather than transactional. It was consistently found that identity, relationships, place, and reciprocal partnership are prerequisites for meaningful practice. The following discussion considers these findings in relation to the wider literature on culturally responsive pedagogy, Outdoor Education, and Te Tiriti o Waitangi partnership.

DISCUSSION

This study explored how Māori and tangata Tiriti educators perceive the authentic weaving of mātauranga Māori into Outdoor Education. The findings suggest that authentic engagement with mātauranga Māori is fundamentally a relational and reflective process rather than simply a transactional one. Rather than being achieved through the inclusion of cultural content or activities, participants consistently described authenticity as emerging through self-awareness, reciprocal relationships, and a willingness to remain learners. These findings suggest that the challenge for tangata Tiriti educators is not simply learning more about mātauranga Māori but reconsidering how they position themselves within educational relationships.

The prominence of identity reinforces Tolich's (2002) argument that tangata Tiriti educators must first understand their own cultural positioning before meaningfully engaging with Māori worldviews. However, this presents a challenge, as participants viewed identity not as a destination but as an ongoing journey of reflection and humility that underpins authentic bicultural practice. As one participant reflected, "Understand yourself first because once you understand yourself, you can understand others." This aligns with Bishop and Berryman's (2006) assertion that

culturally responsive practice begins with teachers recognising the beliefs and assumptions they bring to educational relationships. Rather than striving to become experts in mātauranga Māori, participants viewed authentic engagement as a continual process of learning, consistent with the reciprocal principles of ako (Macfarlane & Macfarlane, 2018).

Closely connected to identity was the importance participants placed on relationships. Consistent with Bishop and Berryman (2006), participants viewed whakawhanaungatanga as the foundation of authentic bicultural practice. Relationships with Māori communities were not described as a means of accessing cultural knowledge but as partnerships characterised by trust, reciprocity, and shared responsibility. This was captured this through the metaphor of "having your hand up before having your hand out," emphasising that educators should first contribute to relationships before seeking guidance or support. This reflects the principles of ako and manaakitanga, where learning occurs through reciprocal exchange rather than the one-way transmission of knowledge. Authentic practice, therefore, is shaped less by what educators know than by how they engage with people and communities.

Participants also identified Outdoor Education as providing a distinctive context for authentic bicultural practice because relationships with people, place, and te taiao naturally intersect. Participants' statements on the inherent connection between te ao Māori and the outdoor learning environment support previous research advocating for place-responsive Outdoor Education (Cosgriff, 2008; Washbourne, 2018). They also extend the findings of this literature by suggesting that Outdoor Education provides opportunities to enact the intentions of Te Tiriti o Waitangi through meaningful relationships with local communities and place, rather than through activity alone. Participants recognised, however, that authentic engagement is not an automatic consequence of learning outdoors. Instead, it depends on educators intentionally fostering reciprocal partnerships and contextual learning grounded in local environments.

Participants were equally clear that authentic bicultural practice cannot be achieved through tokenistic approaches to embedding mātauranga Māori. Consistent with Bishop and Glynn (2003) and Smith (2012), they challenged approaches that reduce mātauranga Māori to isolated cultural activities or symbolic inclusion. Instead, participants emphasised that authentic engagement requires sustained relationships, critical self-reflection, and genuine partnerships with Māori communities. These findings reinforce that culturally responsive practice is not an additional teaching strategy but an ongoing commitment to relational accountability.

Overall, this study suggests that authentically weaving mātauranga Māori into Outdoor Education depends less on implementing specific teaching strategies than on developing educator dispositions grounded in humility, reciprocity, and partnership. While situated within Outdoor Education, these findings have broader implications for tangata Tiriti educators seeking to engage authentically with mātauranga Māori across Aotearoa New Zealand. Rather than offering a prescriptive model or framework, this research highlights authentic bicultural practice as a continual journey of reflection, relationship building, and responsiveness to people and place.

Implications for future research

While this study provides insight into the perspectives of experienced Māori and tangata Tiriti educators, it also highlights several opportunities for future research. The small participant group and qualitative design were appropriate for exploring lived experiences but limit the transferability of findings beyond this context. Future studies could investigate how these findings resonate across

a broader range of educational settings, including schools, tertiary institutions, and community-based Outdoor Education programmes.

Longitudinal research following tangata Tiriti educators throughout their professional careers would provide valuable insight into how cultural confidence, identity, and relationships evolve over time, rather than capturing perspectives at a single point. Further research should also explore the perspectives of ākonga, iwi, hapū, and educational leaders to better understand how authentic bicultural practice is experienced by those who participate in, and are influenced by, Outdoor Education programmes. Finally, evaluating professional learning initiatives that support educators to move beyond cultural awareness towards sustained relational practice would provide an important next step in translating these findings into meaningful educational change.

CONCLUSION

> *Ehara taku toa i te toa takitahi, engari he toa takitini.*
> *My strength is not as an individual, but as a collective.*

This whakataukī has framed this study from its outset and, ultimately, reflects its central message. Authentic engagement with mātauranga Māori cannot be achieved in isolation. Rather, it is cultivated through relationships founded on trust, humility, reciprocity, and a shared commitment to learning alongside one another. These qualities cannot be reduced to a teaching strategy or embedded through curriculum alone; instead, they emerge through an ongoing willingness to reflect, listen, and respond to people and place.

As educators continue to navigate what it means to honour Te Tiriti o Waitangi in meaningful ways, this study suggests that authentic bicultural practice begins not with having all the answers, but with the willingness to engage respectfully with others, to recognise one's own cultural positioning, and to remain open to continual learning. In this sense, authentically weaving mātauranga Māori is not a destination to be reached, but a lifelong journey of relationship, reciprocity, and shared responsibility.

One participant captured this aspiration when reflecting: "Let's find the things we have in common. Let's protect the things that are worthy of protection."

These words capture the enduring message of this research. Authentic bicultural practice is not about diminishing difference or claiming expertise in knowledge that is not one's own. Rather, it is about building relationships that honour diverse ways of knowing while working collectively towards shared educational aspirations. It is within this spirit that educators can continue to strengthen partnerships, uphold the intent of Te Tiriti o Waitangi, and create learning environments where both Māori and Western knowledge systems are respected.

AI statement

ChatGPT was used in the drafting phase to condense and prioritise material and to improve the flow and structure of sections once the article was written. All content remains the original work of the author.

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TEACHER IDENTITY SHAPING IN VOCATIONAL EDUCATORS TRANSITIONING FROM INDUSTRY TO EDUCATION

Trish Chaplin-Cheyne

INTRODUCTION

At Otago Polytechnic, all kaiako (educators) are supported to complete a tertiary teaching qualification within their first three years of employment. When the Graduate Diploma in Tertiary Education (GDTE) Level 7 was first introduced in 2012, it reflected a traditional teacher training approach, emphasising conceptual frameworks and the application of theory to teaching practice. Over time, this model was critiqued for not fully preparing novice vocational education and training (VET) kaiako for the real-world complexities of tertiary teaching (Beauchamp & Thomas, 2009; Trautwein, 2018; Walne, 2020). In response to stakeholder feedback, the GDTE was redeveloped in 2019, and was eventually replaced in 2024 by the New Zealand Certificate in Adult and Tertiary Teaching (NZCATT) Level 5.

The NZCATT is better positioned to equip novice kaiako, especially those transitioning directly from industry, with foundational teaching skills. It provides a valuable entry point for individuals who bring subject matter expertise but limited, if any, classroom experience. Designed around a practice-based pedagogy, the programme situates novice VET kaiako within their own teaching context, allowing them to evidence their learning *in* and *through* work.

While this work-based approach offers greater relevance and contextual alignment, it is not without limitations. One key challenge is the development of a teaching identity. Identity formation, alongside the acquisition of skills and knowledge, plays a critical role in strengthening pedagogical practice, deepening "understanding of the teacher's roles and responsibilities" (Cobb, 2020, p. 1), and building meaningful relationships with ākonga (students) and colleagues.

This identity shift is particularly significant for vocational educators who enter teaching from industry roles. Walne (2020) highlights that the transition into tertiary teaching often requires practitioners to renegotiate their professional identity, moving from expert practitioner to novice educator while simultaneously developing pedagogical knowledge and teaching confidence.

This raises the overarching inquiry question of this article: under what influences does a subject matter expert, such as an automotive mechanic, begin to identify as a teacher of automotive rather than a mechanic who teaches automotive? This review of the literature seeks to understand the factors that influence when, and under what conditions, VET kaiako shift from identifying primarily as industry experts to recognising themselves as teachers and will

consider how these insights can inform the content that should be included in tertiary teaching professional development programmes.

To explore this issue, the article examines three guiding questions. First, how is teacher identity conceptualised for vocational educators? Understanding how identity is defined provides a foundation for considering its relevance within vocational teaching contexts. Second, what personal and professional factors influence the development of teacher identity for vocational educators? This question considers the interplay between personal beliefs, prior experiences, and the expectations of the institution. Finally, how can institutional professional development programmes influence the shaping of teacher identity in vocational educators transitioning from industry to education? Addressing these questions highlights the role institutions play in deliberately supporting the professional development that explicitly shapes teacher identity.

REVIEW OF THE LITERATURE

Defining teacher identity

Although teacher identity is widely discussed in the literature, there remains limited guidance on how it should be deliberately supported within vocational teacher education programmes. This lack of practical direction is particularly problematic in VET contexts such as Otago Polytechnic, where many kaiako enter teaching with strong occupational identities but limited pedagogical preparation.

Rodrigues and Mogarro (2019) argue that this complexity is not just a phenomenon for novice kaiako but remains a constant tension throughout one's teaching career. Many vocational educators enter teaching as a second career, resulting in a dual professional identity that merges occupational and educational roles (Beijaard et al., 2004; Bükki & Fehérvári, 2024; Van Lankveld et al., 2017; Zembylas, 2003). Initially, this identity leans toward their occupational background, as novice VET kaiako view their subject-matter expertise as giving them credibility, but over time industry experience must strike a balance with developing pedagogical skills (Walne, 2020). Bükki and Fehérvári (2024) describe this as "boundary crossing" (p. 400) and argue that dual professional identity enhances the authenticity of vocational pedagogy. This dual professionalism highlights why teacher identity in vocational education must combine both pedagogical expertise and subject-matter knowledge. It also reflects the broader process through which vocational educators negotiate their personal beliefs and experiences alongside professional expectations as they transition into teaching.

Tyler and Dymock (2019) along with Bükki and Fehérvári (2024) and Van Lankveld et al. (2017), argue that while a balance is required, in practice industry currency is often prioritised. This tension illustrates how identity is negotiated in practice, with the professional self-concept shaped by experience and expertise. Tyler and Dymock (2019) also highlight the importance of experienced practitioners transferring skills and knowledge to others in a way that assists them in their professional growth and capability development. This suggests that teacher identity is not only developed through individual experience but is also shaped through participation in professional communities and the ongoing exchange of knowledge.

At another level, identity can be viewed as the interplay between the personal and professional self, and expanded to include self-knowledge, perceptions, and the meanings individuals attach

to teaching (Rodrigues & Mogarro, 2019; Zembylas, 2003). Novice vocational kaiako may enter teaching bringing their beliefs shaped by early classroom experiences or from workplace-based teaching, such as training apprentices (Beijaard & Meijer, 2017; Bükki & Fehérvári, 2024; Chen et al., 2018). As they transition from industry experts to kaiako, these beliefs may alter as new pedagogical understandings emerge. Sometimes this shift can cause tension between what novice VET kaiako find is relevant to them personally and what is considered relevant by the profession—these tensions, if not resolved, can impede development and may lead some novice VET kaiako to leave the profession (Beijaard & Meijer, 2017).

Considering the continuous, adaptive, and contextually influenced process of becoming and remaining a VET educator, terms implying a fixed or stable nature do not capture the complexity of teacher identity. Beauchamp and Thomas (2009) therefore argue that commonly used terms such as identity "construction" or "formation" are contradictory to the fluidity associated with identity development and instead propose the more appropriate notion of "shaping" identity (p. 178). In recognition of this, the term "shaping" is used throughout this article.

In VET, a teacher's identity is dynamic and socially constructed, requiring ongoing negotiation between the personal and professional selves. This dynamism aligns with a social constructionist perspective in which identity is continually co-constructed through interaction with others and reshaped in response to changing institutional, disciplinary, and policy contexts. Within the NZCATT programme at Otago Polytechnic, this fluid view of identity suggests that professional development must support kaiako not only to acquire pedagogical skills but also to actively reinterpret their existing industry identities within a teaching context.

PERSONAL AND PROFESSIONAL FACTORS INFLUENCING TEACHER IDENTITY

What then are the personal and professional factors that influence the shaping of teacher identity in vocational educators? Cobb (2020) frames teacher identity as a "merging of the professional and personal self" (p. 1) and, along with Trautwein (2018), emphasises the significance of critical reflection, sense-making, and relationships, particularly between novice VET kaiako and their more experienced colleagues. Leeferink et al. (2019) explain that the personal self pertains to one's beliefs, values, and prior educational experiences, while the professional self emanates from the demands of the workplace or educational institution. They describe identity shaping as a friction between these two selves, with this friction often producing transformative moments. For VET kaiako, such moments arise from the challenge of maintaining industry currency while developing pedagogical knowledge, or from difficult classroom experiences, such as with disengaged ākonga (Tyler & Dymock, 2019). While such experiences can lead to positive shifts in practice, they also expose kaiako to emotional strain and frustration, making resilience a critical factor in identity shaping.

Emotional strain

Day (2018) and Zembylas (2003) emphasise the role of emotional investment in kaiako professional lives, especially in the classroom. They explain that because kaiako give part of themselves to understand others, and through this "willingness to be vulnerable" (Zembylas, 2003, p. 230), they develop and sustain authentic relationships. However, this same emotional investment by kaiako in interactions with ākonga and the institution can deplete reserves, reduce resilience, and potentially undermine their ability to maintain a strong sense of identity.

Similarly, Rodrigues and Mogarro (2019) argue that "classroom experiences are pivotal" in shaping novice kaiako, but caution that the positive and negative experiences arising from work-based learning environments can cause "tensions and ethical dilemmas" (p. 8). These fluctuating experiences may create emotional strain, influencing a sense of belonging for novice kaiako in the profession. Here, Day's (2018) notion of the "collective influence" (p. 61) of identity, emotions, and resilience is central to buffering against the fragility caused by emotionally taxing experiences. For career-changing professionals, these findings highlight resilience as a central factor in identity shaping and in sustaining long-term teaching careers.

Resilience

Sappa et al.'s (2019) work is particularly valuable in the VET context because it explicitly links resilience with the negotiation of dual professional identities, a challenge frequently faced by educators transitioning from industry. They argue that resilience is essential for novice kaiako, supporting them to manage a range of challenges while developing their teaching skillsets. Importantly, resilience and teacher identity are not only closely aligned but influence one another, with the potential to impact each other both positively and negatively.

These authors further explain that resilience and the formation of teacher identity are multi-dimensional, dynamic, and ongoing processes shaped by tensions between the personal and professional selves. These complexities are heightened in the VET context, where the demands and role requirements differ from those in primary and secondary education, making "the boundaries of [one's] professional identity … difficult to define" (Sappa et al., 2019, p. 1673). For programmes such as the NZCATT, this suggests that resilience should not be assumed to develop incidentally through teaching experience alone, but should instead be deliberately fostered through reflective activities, mentoring relationships, and structured opportunities to interpret challenging classroom experiences.

Identity-agency

This negotiation between resilience and action brings into focus the concept of identity-agency, which is described as critical to shaping a teacher identity, especially when a novice kaiako is challenged through the "conceptualisation of their professional self" (Cobb, 2020, p. 2). Agency can be understood as kaiako having ownership of their professional decisions, with opportunities to build confidence through practicums, critical reflection, and a level of autonomy in their actions (Beijaard et al, 2004; Beauchamp & Thomas, 2009; Cobb, 2020; Day, 2018; Zembylas, 2003). Beauchamp and Thomas (2009) refer to the broader identity literature when highlighting the link between identity and agency, while Sappa et al. (2019) and Broad (2019) stress that agency must be within authentic educational contexts and supported by the institution to be meaningful.

Cobb (2020) agrees with others that identity shaping is a "fluid and dynamic" (p. 2) process and emphasises that novice VET kaiako continually negotiate or renegotiate their identities in response to professional experiences. She explains that this negotiation can follow three possible pathways: (1) an experience may align with their original identity and require no negotiation, (2) it may be challenging enough to prompt significant change and identity is reshaped, or (3) it may be resisted, with renegotiation rejected. This highlights how agency interacts with teaching contexts to determine where identity change occurs.

Building resilience and agency in VET kaiako requires "social recognition" (Sappa et al., 2019, p. 1671), where they are valued, respected, and engaged as active contributors to the VET institution. These supportive conditions buffer against burnout and reinforce a strong, enduring teacher identity.

Socio-cultural development

Many of the personal and professional elements that shape teacher identity are reinforced within socio-cultural contexts, highlighting the importance of collaborative and reflective professional environments. A key theme throughout the literature is the value of a social constructionist perspective in enabling VET kaiako to make sense of, interpret, and reinterpret their experiences, while building professional relationships grounded in shared language, understandings, and practices (Beauchamp & Thomas, 2009; Carrinus et al., 2010; Cobb, 2020; Rodrigues & Mogarro, 2019; Van Lankveld et al., 2017; Zembylas, 2003). For novice kaiako, such relationships function as socio-cultural spaces where beliefs and values can be challenged, supported, and renegotiated, positioning identity shaping not as an isolated task but as a collective and relational process.

While these collaborative spaces provide an initial socio-cultural grounding for novice VET kaiako to reshape their identities, broader disciplinary and institutional contexts play a role in supporting or hindering how teacher identity matures over time. Within a social constructionist perspective, identity is not only co-constructed through shared meaning-making but remains adaptable and responsive to contextual change. For VET kaiako, shifts in institutional priorities, policy directions, or industry expectations require ongoing renegotiation of identity, reinforcing its dynamic and evolving nature (Beauchamp & Thomas, 2009; Zembylas, 2003).

Trautwein (2018) argues that academic identity is socially constructed through subject-matter discipline, social interactions, and pedagogical training. To achieve this, she supports the implementation of "constructivist learning theories" (p. 1005) in training programmes through the role of relationships, particularly between the personal and professional self and with more experienced colleagues. Initially, teaching is often focused on content delivery; but for VET educators, this shift toward learner-centredness involves developing both pedagogical confidence and industry knowledge into meaningful teaching moments.

Overall, the literature suggests that teacher identity in VET is influenced by personal and professional factors. Personal beliefs, emotional investment, resilience, and identity-agency, combine with professional demands such as industry expectations, mentorship, pedagogical development, and the culture of the institution. These factors are interconnected, demonstrating that teacher identity cannot be shaped alone, but is co-constructed through personal commitments, professional practice and institutional influences, and wider socio-political contexts. Within the NZCATT context, this highlights the importance of designing programme activities that foster collegial dialogue and shared reflection among kaiako, rather than positioning professional learning as an individualised process.

TRANSITIONING FROM INDUSTRY TO EDUCATION – THE INSTITUTION'S ROLE

This section explores how institutional educator development programmes influence the shaping of teacher identity in vocational kaiako. Trautwein (2018) discusses the development of kaiako as multi-dimensional, "complex and career-long" (p. 997), involving ongoing reflection

and reassessment of practices and goals. Yet she and Broad (2019) caution of a general scarcity of literature on how tertiary teaching programmes influence identity shaping. Beauchamp and Thomas' (2009) article further highlights a gap in current kaiako training programmes, arguing that explicit guidance on the shaping of teacher identity is lacking, or at best, peripherally connected to content. Beijaard and Meijer (2017) and Beauchamp and Thomas (2009) advocate for teacher identity to be an intentional component of professional development programmes (or curriculum), supported through work-based practices that enable self-exploration within authentic teaching contexts.

In addition, Tyler and Dymock's (2019) research explored VET professional development provision in the Australian context and found inconsistencies across institutions. Although VET educator programmes in Australia are mandatory, they are frequently criticised for failing to adequately equip their kaimahi with the necessary knowledge and skills required to teach. While VET professional development provision is not mandatory in New Zealand, what is available is also inconsistent across institutions. Walne (2020), examining the New Zealand ITP sector specifically, similarly notes that many vocational educators begin teaching with little formal pedagogical preparation and rely heavily on institutional professional development to develop their teaching capability. This reinforces the importance of programmes such as the NZCATT in supporting both pedagogical skill development and teacher identity formation.

Beijaard and Meijer (2017) emphasise that if certain factors are not included within kaiako training programmes, identity shaping could be impeded. To place teacher identity at the core of professional development, they propose embedding three concepts: "agency, ownership, and sense-making" (p. 4). These authors advocate for the role of educators of kaiako to support and facilitate the identity transformation process through recognising times of tension and facilitating dialogue, acknowledging the challenge of shifting long-held beliefs, putting respectful engagement first, and ensuring that both agency and reflection are prioritised.

A key point from Broad's (2019) literature review is that a one-size-fits-all approach to training fails to meet the complexity of discipline-specific knowledge and the challenges that VET kaiako face in maintaining industry currency and adapting their expertise to teaching. They identify three characteristics of effective pedagogy, consistent with Beijaard and Meijer's (2017) concepts discussed in the previous paragraph. Agency and ownership align with the first two themes that follow, while the third, sense-making, is what Broad (2019) describes as "hidden pedagogical practices" (p. 1770), and is reflective of the inconsistent nature of professional development in VET. Tyler and Dymock (2019) argue that inconsistent provision of kaiako training highlights a need for VET specific professional development frameworks that balance pedagogical skills alongside industry currency.

Work-based learning

Consistent with wider literature (Bükki & Fehérvári, 2024; Chen et al., 2018; Leeferink et al., 2019; Rodrigues & Mogarro, 2019; Walne, 2020), Tyler and Dymock (2019) emphasise that effective professional development programmes must be applied, and work based. They argue that professional development opportunities must incorporate explicit processes of self- and peer reflection and are to be situated within collaborative learning environments. In this way, identity shaping is anchored in the lived experiences of the classroom, rather than in abstract training. Rodrigues and Mogarro (2019) emphasise the importance of supervised practicums that incorporate scaffolded reflection practices.

Cobb (2020) further supports the importance of high-quality work-based classroom experiences that provide novice kaiako with opportunities to practice agency over their actions. However, she cautions that positive outcomes are dependent on the quality of the mentor. Mentors, generally senior VET educators, play an important role in validating and supporting the novice's practice. Building on this, Carrinus et al. (2010) and Sappa et al. (2019) take the argument for mentoring novice kaiako a step further, advocating for a collaborative institutional culture to not only support identity development but also resilience.

Finally, Broad (2019) and Day (2018) extend the conversation by linking work-based learning to agency and resilience at the institutional level. They argue that providing opportunities to express agency through learning *in* and *through* work that is supported at institutional level strengthens resilience, minimises emotional strain, and encourages the development of a responsive and inclusive teaching identity. Together, these perspectives position work-based learning as more than training, but as a socio-cultural process through which novice VET educators shape their professional identities.

Socio-cultural professional learning

Rodrigues and Mogarro (2019) examine the importance of the wider institutional community in supporting the social aspects of learning. For example, communities of learning can be useful in helping novice VET kaiako recontextualise industry knowledge in a learning and teaching context (Bükki & Fehérvári, 2024; Sappa et al., 2019; Van Lankveld et al., 2017; Zembylas, 2003). Broad (2019) adds that collaborations with colleagues are "richer and not bounded by notions of formal learning. Learning [in this way] is informal and ongoing [facilitated] through discussions, consultations, and sharing [of] materials and ideas" (p. 1772).

Consistent with the literature, teacher identity is widely understood as shaped through socio-cultural contexts that emphasise collaborative and reflective professional environments (Van Lankveld et al., 2017; Zembylas, 2003). Relationships play a key role in this process, particularly in negotiating the personal and professional self and through engagement with more experienced colleagues (Cobb, 2020; Trautwein, 2018). In the vocational context, however, these relationships extend beyond the educational setting to include maintaining authentic connections with industry, such as through professional associations (Broad, 2019). This industry context highlights an additional consideration for professional development programmes in VET, particularly in supporting kaiako to sustain dual professional identities.

Dual professionalism

Broad (2019) points to the limited literature on pedagogical development for VET kaiako and argues for the importance of promoting a "dual professional identity" (p. 1772). They claim that both novice and experienced VET kaiako should maintain currency in their industry discipline while simultaneously developing pedagogical experiences. A strong dual identity can enhance the authenticity of vocational teaching by allowing kaiako to connect learning activities to real-world practice.

To address this, teacher educators must ensure there are authentic and regular opportunities for VET kaiako to maintain both their industry and pedagogical proficiency. This requires structured and targeted professional development programmes that not only value industry experience but also enhance teaching practice. In this way, dual professionalism is not left to chance but is deliberate, supported by the institution, and enhances both the credibility and resilience, and therefore, identity forming for VET educators.

DISCUSSION

The literature broadly conceptualises teacher identity in VET education as a dynamic, socially constructed process of negotiating the personal and professional self. This reinforces that identity development is not simply an individual process, but one that is relational, socially mediated, and continually negotiated in response to changing contexts. In the VET context, personal aspects such as beliefs, values, prior experiences, and emotional resources intersect with professional aspects such as industry expectations, institutional culture, collegial relationships, and pedagogical demands. These intersections often create tensions that should not be viewed as barriers to, but as essential drivers of, identity shaping. While the literature consistently recognises the tensions inherent in developing a vocational teacher identity, there is less clarity regarding how professional development programmes should respond to these tensions. For programmes such as the NZCATT, this suggests the need for deliberate curriculum design that explicitly addresses identity negotiation, rather than assuming identity development will emerge organically through teaching experience.

Current studies highlight the importance of recognising the vast experience novice VET kaiako bring with them from industry. While authentic learning is recognised as essential for building confidence and enhancing ākonga engagement, there is little evidence of how prior experiences, such as training apprentices, might be formally recognised against the graduate profile outcomes of teacher education programmes. This is a risk for professional development designers as they must consider ways to recognise and integrate prior knowledge and skills, ensuring industry-based expertise is not overlooked but is central to identity development.

The literature supports the *in* and *through* work model currently used in the delivery of the NZCATT at Otago Polytechnic. This encourages moving away from a one-size-fits-all professional development model toward a more flexible approach that provides opportunities for practical teaching activities and collaboration with colleagues, often afforded through work-based learning (Broad, 2019; Canrinus et al., 2010; Cobb, 2020; Day, 2018). However, the literature rarely acknowledges inequities in how these opportunities are experienced. Those designing professional development must consider kaiako who are part-time or teaching at a distance, for instance, and ensure the appropriate affordances are made. These considerations must be driven at the institutional level, addressing diversity to ensure equitable practices to multi-discipline novice VET kaiako.

Some concerns were identified with the knowledge base. A limitation of the existing literature is that much of the foundational research into teacher identity, (for example, Beauchamp & Thomas, 2009) predates contemporary VET reforms and is not specific to vocational contexts. This lack of empirical evidence leaves a gap in understanding the challenges of dual professionalism. Ongoing research is needed to further guide professional development designers and institutional leaders in ensuring that teacher identity is not left to chance, but deliberate and explicitly supported through institutional culture, robust mentorship, and formalised professional development programmes.

CONCLUSION

For institutions such as Otago Polytechnic delivering the NZCATT programme, these findings suggest that teacher identity should not be treated as a peripheral outcome of professional development but as a central organising principle. Programmes must therefore create structured opportunities for novice kaiako to reflect on their transition from industry expert to educator, engage in collaborative professional dialogue, and integrate pedagogical knowledge with their existing vocational expertise. Teacher identity is not formed in isolation but co-constructed through ongoing interaction with colleagues, institutional contexts, and wider sector and policy changes. By intentionally embedding these elements within professional development curricula, institutions can better support the emergence of confident dual professionals who are able to sustain both industry credibility and effective teaching practice.

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DEVELOPING A TEACHING PRESENCE RUBRIC: THEORY-BASED EVALUATION OF ONLINE COURSE AND TEACHING QUALITY IN HIGHER EDUCATION

Patrick Gillett, Tina van Eyk, Patrick Bruck, Carolyn Seton and Kylie Day

INTRODUCTION

The use of student feedback to evaluate course and teaching quality in higher education has a long and contentious history (Alderman et al., 2012; Cunningham et al., 2023; Richardson, 2005). In particular, while it is well-accepted that the student perspective is an essential input for continuous improvement, strong criticism has been levelled at the most common feedback method: student evaluation of teaching (SET) surveys.

The negative position on SET is extensively supported by rigorous studies, including those that have identified serious validity concerns. These issues include response bias (see Heffernan, 2022), low participation rates (see Lipsey & Shepperd, 2021), and limited generalisability (see Curby et al., 2020). Research by Esarey and Valdes (2020) also reveals that, even when these concerns are accounted for, SET data is associated with a high error rate. This result adds further weight to the argument put forward by Nargundkar and Shrikhande (2014) that student ratings of course and teaching quality are substantially influenced by non-instructional factors such as class size, discipline type, and course level.

In addition to the strong quantitative data, criticism of the SET method is also supported by qualitative analysis, with Cunningham et al. (2023) and Lakeman et al. (2022) both providing disturbing examples of offensive student comments in SET reports. Although the number of objectionable remarks is small, the impact on instructor well-being can be substantial. To avoid potential harm, Lakeman et al. (2022) posit that many instructors ignore feedback altogether, thereby rendering it worthless for continuous improvement.

While research undertaken to date offers good reason to question whether SET is an appropriate method for evaluating course and teaching quality, its ongoing use in higher education is unlikely to end. This is largely because institutions have come to rely on it for its role in accreditation compliance and as an endorsement for academic appointments (Cunningham et al., 2023). Recognising its multifunctionality, many have argued for SET to be used alongside other course and teaching evaluation methods (Alderman et al., 2012; Esarey & Valdes, 2020; Lakeman et al., 2022). As detailed by Esarey and Valdes (2020), a diversified strategy can lead to more reliable evaluation outcomes as the inherent limitations of one particular method are unlikely to dominate the collective result. Among the few methods that may be suitable to complement the SET is the course evaluation rubric (Gregori-Giralt & Menéndez-Varela, 2021; McInnes et al., 2024).

COURSE EVALUATION RUBRICS

Increased attention in the higher education literature to the assessment of online courses and teaching quality has led to the development of numerous course evaluation rubrics (also referred to as "course quality" rubrics). Notable examples include the Quality Matters Higher Education Rubric, Seventh Edition (Quality Matters, 2023), and the SUNY Online Course Quality Review Rubric (SUNY, 2023). While such instruments have considerable merit, they also possess several limitations that should not be ignored. Among them is the lack of statistical testing to substantiate the rubric's validity and reliability (Yuan & Recker, 2015) and the absence of a theoretical foundation to support the rubric design (Lee et al., 2020). In terms of the latter, the rubrics are based on a 'best-practice' approach, which involves using subjective interpretations of quality to establish the evaluation targets and their individual standards. What constitutes "quality" in higher education, however, is a widely contested topic (McInnes et al., 2024). Consequently, there is considerable potential for variability in the application and interpretation of the instruments due to a focus on irrelevant or indistinct criteria. Rather than strengthening the evaluation result, adopting a diversified strategy that includes an existing course evaluation rubric is likely to introduce further credibility concerns.

AIM

This research project aims to develop a robust 'theory-based' rubric to aid the evaluation of online course and teaching quality. The research context is higher education programmes delivered entirely online as well as blended types, with the latter being restricted to their online components. The number of fully online and blended courses was not recorded separately; both were analysed together, and delivery mode was not examined as a separate factor. The online context was chosen over traditional 'in-situ' programmes due to ongoing concerns regarding its effectiveness and lasting appeal (see Brown, 2023). In particular, lower retention and completion rates are often associated with online programmes (Stone & Springer, 2019), which suggests that the students who take part in them are less successful and less satisfied with their educational experience. The research aim explicitly follows the strategy specified by Garivaldis et al. (2022), which is to address such concerns by demonstrating how established theories can be applied to advance the management and practice of online education.

The Quality Improvement Collaborative (QIC) model was used to establish a multi-disciplinary team for the research and to create the Teaching Presence rubric. The theory considered most appropriate for the research aim was Garrison et al.'s (2000) Community of Inquiry (COI) model. Recognised as one of the most heavily cited theories in the online education literature (Caskurlu, 2018; Richardson et al., 2012), COI contends that an effective educational experience is characterised by meaningful inquiry and deep learning, and that these outcomes are best achieved through the active engagement of students in a community-type learning environment. To facilitate this setting, the model gives attention to three central components: teaching presence, social presence, and cognitive presence. While social presence fosters meaningful connections, cognitive presence enables critical enquiry and knowledge construction.

When examining the COI model, it became evident to the project team that incorporating all three components into a single rubric would result in an extensive and unwieldy instrument. Although the rubric might be theoretically sound, the substantial administrative burden would severely limit its practical value. A rubric based on the single "teaching presence" component was

chosen as an effective alternative for two key reasons. The first is the strong interrelationship that exists among the three COI components, while the second is the widely held view that teaching presence acts as a unifying force that binds all three components to create a community of inquiry (Garrison et al., 2000; Vaughan et al., 2013). Consequently, the focus on teaching presence maintains the research aim while also offering greater practical value. As detailed in the following sections of this article, the design and validation of such a rubric followed a systematic process, beginning with an extensive review of the teaching presence literature.

TEACHING PRESENCE

Anderson et al.'s (2001) model was selected as it provides the foundational operationalisation of teaching presence within the Community of Inquiry framework and directly defines the three functions assessed by the rubric. The research team determined early that Anderson's model was best for our practical analysis of learning environments as the model is universally applied by teaching scholars. It recognises the critical role of three particular teaching functions in achieving "personally meaningful and educationally worthwhile learning outcomes" (p. 2). The three functions—design and organisation, facilitating discourse, and direct instruction—encapsulate the work undertaken to plan and administer the course, advance the cognitive engagement of students, and disperse subject knowledge. The higher education literature supports the positive influence of teaching presence on student satisfaction and perceptions of learning (Arbaugh, 2008; Caskurlu et al., 2020).

The three teaching functions can involve contributions from multiple course stakeholders. For example, the "design and organisation" function will benefit from a coordinated effort involving the programme director, course instructor, and instructional designers. Vaughan et al. (2013) also point out that it is not just the course instructor who can lead conversations on the course content and provide direct instruction. Guest presenters, for example, can also make meaningful contributions. It is this potential for collaboration and purpose among key stakeholders that underscores the strength of the Teaching Presence model.

In this sense, the project is concerned not only with measurement but also with developing a shared, theory-informed language for discussing online teaching quality in higher education. This is particularly relevant in contemporary tertiary learning and teaching contexts, where institutions are increasingly seeking evaluation approaches that move beyond student satisfaction alone and instead support reflective practice, peer dialogue, and course enhancement. By developing a rubric grounded in Teaching Presence, this paper contributes to scholarship on learning and teaching as both a practical and collegial field of inquiry.

Design and organisation

Anderson et al. (2001) describe the design and organisation function as a collection of teaching activities undertaken to establish "the process, structure, evaluation, and interaction components" of an online course (p. 5). The function effectively provides a "grand design of the course," one that is explicit and transparent in terms of its learning goals and the actions students should undertake to achieve them (p. 6). Explicitness and transparency are particularly important for online students as the awareness of learning expectations and related norms that often accrue through classroom attendance may not be available to them (Anderson et al., 2001).

As detailed in Table 1, a targeted review of the higher education literature was conducted to identify and synthesise teaching activities associated with the teaching presence functions. Specifically, the review examined how scholars have conceptualised and operationalised the design and organisation function in contemporary learning environments. This process revealed seven distinct teaching activities that directly support design and organisation.

While many of the activities identified are consistent with those initially proposed by Anderson et al. (2001), the collection has been expanded with the inclusion of two topics of more recent research: "equity and inclusion" and "constructive alignment."

Activity	Contributors	Description
Course Aim	Programme Director, Course Instructor	A concise description of the critical course features, including: 1) the subject matter, 2) the method(s) used to explore the subject matter, 3) the breadth and depth of study, and 4) why the course should be studied (Macquarie University, 2022).
Course Learning Outcomes (CLOs)	Programme Director, Course Instructor, Instructional Designer	Individual statements identifying "what a student will be able to do or demonstrate at the completion of a certain sequence of learning (course, program)" (Popenici & Millar, 2015, p. 4). Each statement should be framed by three distinct components: 1) action verb, 2) content, and 3) context (University of New South Wales, 2022).
Module Design	Course Instructor, Instructional Designer	The chosen learning material for each course module is presented in a manner that effectively enables a particular CLO to be achieved. This objective can be assisted by 'signposting,' which clearly establishes the relationship between particular sections of module content and other course material, such as learning activities and assessments (Mayer, 2019).
Learning Activities	Course Instructor, Instructional Designer	Clearly explained activities with timely feedback to encourage student engagement with the learning material and other course participants (Chi & Wylie, 2014).
Equity and Inclusion	Course Instructor, Instructional Designer	Initiatives to support greater access, engagement, and learning outcomes for disadvantaged and under-represented students. Key examples include the provision of closed captioning and audio transcripts with lecture recordings (Martin et al., 2021), and the use of Open Education Resources (Willems & Bossu, 2012).
Assessment Design	Course Instructor, Instructional Designer	Establishing a clear purpose for undertaking the assessment task by explicitly targeting one or more CLOs (Bearman et al., 2016). A strong purpose is further enhanced by assessments that are relevant to, and apply, the particular learning, as these allow students to develop specific work-relevant skills (Bretag et al., 2019).
Constructive Alignment	Course Instructor, Instructional Designer	Teaching and learning quality are achieved through a focused curriculum design process (Biggs, 1996). In particular, student engagement is stimulated when clear and mutually reinforcing links are established between key course design elements, such as the content, learning outcomes, activities, and assessments (Biggs, 2014).

Table 1. 'Design and organisation' teaching activities.

In the examples in Table 1, we distinguish between course instructors and instructional designers. Roles performed by the former include drawing on their subject matter expertise to ensure seamless live facilitation of the courses with a focus on student learning and engagement while the latter are typically brought on at the design phase of course development to focus on interactive activities, assessments, and multimedia. In the design of courses, they generally work together to finalise the course offerings and delivery.

Facilitating discourse

Akyol et al. (2011) describe the "facilitating discourse" function as "enabling and encouraging the construction of personal meaning as well as shaping and confirming mutual understanding" (p. 232). Through this process, students are empowered to make the content their own and are thus more able to understand and apply it effectively. The term "discourse" is adopted over "conversation" to distinguish communication with a learning focus from communication with a social orientation (Anderson et al., 2001).

The distinct teaching activities associated with facilitating discourse that emerged from the literature are presented in Table 2. As the descriptions show, achieving a positive learning outcome is aided by instructors' efforts to encourage and guide discourse among students, and between themselves and students (Garrison & Akyol, 2013; Oliver & Shaw, 2003; Shea et al., 2003).

Activity	Contributors	Description
Instructor Immediacy	Course Instructor	Instructors create an active, open, and focused learning environment by making themselves psychologically available to students (Mehrabian, 1969). For example, by posting their contact details and available meeting times on the LMS, instructors show that they are welcoming and approachable (Caskurlu et al., 2021). Stronger familiarity and immediacy can be achieved by providing a biography and recording a welcome video message (Kelly & Zakrajsek, 2021; Martin et al., 2018).
Encouraging Discourse	Course Instructor, Guest Presenter	For discourse to be encouraged, the opportunity to participate in dialogue with others must first be made available. Liu et al. (2007) identify two distinct methods for doing so. The first involves instructors' informal efforts to reach out to students and ask whether they need help with the course material. The second is a planned learning activity in which the instructor sets a specific question aligned with a course or module learning outcome.
Guiding Discourse	Course Instructor, Guest Presenter	While participant interaction is a fundamental tenet of the Community of Inquiry framework, it does not by itself ensure that an effective learning experience is realised (Garrison et al., 2000). Online discussions, in particular, require the active involvement of instructors to guide and shape the discourse toward the desired learning outcome (Anderson et al., 2001).

Table 2. 'Facilitating discourse' teaching activities.

Direct instruction

When describing the direct instruction function, Anderson et al. (2001) emphasise the responsibility teachers have for providing "intellectual and scholarly leadership" (p. 8). While facilitating discourse plays a largely supportive role in learning, in "direct instruction" the teacher is a skilled expert, adept at directing and scaffolding the online learning experience to achieve a positive educational outcome (Garrison & Akyol, 2013; Vaughan et al., 2013). As reported in Table 3, the higher education literature reveals five distinct teaching activities that directly embody these skills.

Activity	Contributors	Description
Orientation Module	Course Instructor, Instructional Designer	An orientation module targets specific course-level needs, such as raising students' awareness of the course purpose and structure (Martin et al., 2019). Fundamental details include the class timetable and assignment schedule, while deeper support identifies the key challenges students are likely to face and how to manage them.
Teaching and Learning Methods	Course Instructor, Instructional Designer	To establish an effective online learning opportunity, Richardson et al. (2012) emphasise the importance of orienting students to the role of the online learner. Advice should be given on the methods to be used to deliver the course content and maximise learning outcomes. This information is particularly important when unfamiliar learning technologies are involved (Oliver & Shaw, 2003).
Instructor Insights	Course Instructor	Learning materials drawn from a range of sources reflect the instructor's strong understanding of the discipline and are particularly effective when insights and analogies are grounded in personal experience (Caskiurlu et al., 2021).
Instructional Quality	Course Instructor	Effective subject matter is of little value without the instructor's ability to discuss it coherently and in a structured manner. An added challenge for online instructors is to attain the required standard of communication using an electronic video conferencing platform, such as Zoom or Microsoft Teams. Among the advice given is for instructors to keep their webcam on (Kelly & Zakrajsek, 2021) and to position the camera at eye level, as this increases students' perception of credibility (Ramlatchan & Watson, 2020). The quality of lecturing is also improved when the content is well organised and the speaker makes eye contact, whether that is in person or online. Ensuring eye contact online can be achieved by consciously looking directly at the camera lens rather than at the faces on the screen and by ensuring that the video window is as close to the lens as possible.
Feedback	Course Instructor	Providing high-quality feedback is a fundamental requirement in higher education due to its strong influence on student learning (Evans, 2013; Hattie & Timperley, 2007). Factors that contribute to poor feedback include insufficient detail and an overly authoritative tone (Jonsson, 2013), being late, ambiguous, or irrelevant (Henderson et al., 2019), being unbalanced (for example, lacking positive recognition), and being unfair (Lizzio & Wilson, 2008).

Table 3. 'Direct instruction' teaching activities.

METHOD

Several principles of a Quality Improvement Collaborative (QIC) were used to establish the project team and to create the Teaching Presence rubric. Common in the healthcare sector, QICs emphasise a shared learning approach where stakeholders from multiple areas (usually teams of experts) come together to exchange knowledge and insights on a particular topic (Wells et al., 2018). In keeping with this tenet, the project team drew one member with recent online teaching experience from five separate faculties within the same university. Establishing the team in this manner ensured that a range of discipline-specific perspectives would be considered and suited the 'learning by doing' approach adopted by the team. Described by Schouten et al. (2008) as a key QIC principle, this technique involves repeated cycles of testing, sharing details of the experience within the team, and analysing results to further refine the quality improvement effort.

Procedure

After obtaining approval from the university's Human Research Ethics Committee (2022/053), a multi-stage course evaluation procedure commenced. During the first stage, the project team developed an initial 15-item Teaching Presence rubric based on findings from the literature review (reported above in Tables 1, 2, and 3). Four courses from different programmes of study that fell within the specialist disciplines represented by the team members were then selected by all five team members to pilot test this initial rubric. Before testing the rubric, permission to evaluate each course was obtained from the respective course instructors.

The team then met to comprehensively review the results of the pilot-stage rubric and evaluation procedure. Much of the discussion focused on a small number of rubric items that received different ratings from multiple team members or were flagged as difficult to evaluate. To address the concerns raised, amendments were made to clarify the purpose, meaning, and criteria of these particular items. Extra rubric items were also added to target distinct components of several teaching activities. For example, the "course learning outcomes" item initially developed was broken down into four separate items. At the end of this first stage, the updated rubric with improvements to the criteria wording now totalled 21 items.

In Stage 2, the 21-item rubric was tested independently by all five project members on a new set of eight courses drawn from across the university's five faculties. These courses were distinct from those examined in the previous stage. As with the first stage, permission to do so was obtained from each respective course instructor. During this second stage, a panel of experts convened from within the university reviewed the design to ensure the content validity of the rubric and its items. The panel consisted of three Associate Directors of Education (ADE) for a particular faculty and three experienced learning designers. One-on-one interviews conducted by the project lead and lasting approximately 60 minutes were undertaken with each panel member.

The expert panel review, together with analysis of the stage two rubric results, highlighted the need to refine the wording of several rubric criteria. The review also indicated that the existing "module design" and "assessment design" items each encompassed multiple dimensions. To improve clarity and measurement precision, these two items were separated into distinct criteria that captured their different components. After doing so, the rubric now contained 23 items. Upon completing the project's second stage and expert panel review, the finalised 23-item version of the Teaching Presence rubric was ready to be comprehensively tested. Twelve undergraduate courses from across the five faculties and including first-, second-, and third-year levels, were selected for this purpose.

In addition to testing a larger number of courses, the third and final project stage included a procedural change to reduce the cognitive load on project members. In Stages 1 and 2, all five project members applied the rubric independently to each course. In Stage 3, differently constituted teams of three project members independently applied the rubric to each of 12 courses. Team membership was rotated so that 10 of the 12 courses were evaluated by a different combination of raters. This variation enabled the project team to examine the consistency of ratings across differently constituted teams; substantial disagreement among raters would have indicated that further refinement of the rubric was required. Stage 3 produced 36 completed rubric administrations for analysis. The procedural variations across the three stages are summarised in Table 4.

Project stage	Number of courses tested	Number of raters per course	Number of rubric administrations	Number of rubric items
1	4	5	20	15
2	8	5	40	21
3	12	3	36	23

Table 4. Project stages and procedural details.
Note: Each stage involved a distinct set of courses.
Across the three stages, the rubric was tested on 24 unique courses, resulting in 96 rubric administrations.
Findings from each stage informed the subsequent refinement of the rubric.

Statistical analysis

The rubric criteria described five distinct quality levels (Exemplary to Ineffective). Poorly designed rubrics with ambiguous, lengthy descriptors are often open to misinterpretation, leading to wide score ranges among raters and inaccurate evaluation outcomes. Measures of inter-rater agreement address this concern by statistically testing how closely two or more raters agree when evaluating a particular phenomenon (Quarfoot & Levine, 2016). A high level of agreement provides confidence that the rubric descriptors have been interpreted consistently and accurately by the raters.

Inter-rater agreement for the ordinal rubric ratings on the five-point scale was assessed using Gwet's Agreement Coefficient 2 (Gwet's AC2) and the Real Statistics Resource Pack for Microsoft Excel (Zaiontz, 2023). Gwet's AC2 values range from 0 to 1, where 0 indicates absolute disagreement and 1 indicates perfect agreement. Values below 0.20 are categorised as a poor level of agreement. Gwet's AC2 values between 0.21 and 0.40, 0.41 and 0.60, 0.61 and 0.80, and 0.81 and 1.00 are categorised as fair, moderate, good, and very good to perfect levels of agreement, respectively.

RESULTS

As reported in Table 5, Gwet's AC2 coefficients for the ratings assigned to individual rubric items ranged from 0.218 to 0.956. An item-level appraisal based on the inter-rater agreement analysis produced the following profile:

Very good (VG): Items 1–6, 8, 10–14, 17, 19–20, 23
Good (G): Items 7, 15, 16, 18, 22
Moderate (M): Item 9
Fair (F): Item 21.

Gwet's AC2 coefficients indicated good to very good inter-rater agreement for 21 of the 23 rubric items. Agreement was moderate for Item 9 and fair for Item 21. These two items also had comparatively large standard errors and wide confidence intervals, indicating greater uncertainty in their agreement estimates. The findings suggest that the wording or application of Items 9 and 21 may require further examination in future iterations of the rubric. All remaining items demonstrated good or very good inter-rater agreement.

Rubric item (rated on a five-point scale)	Gwet's AC2	Interpretation of agreement	Standard error for subjects	95% confidence interval for subjects	Standard error overall	95% confidence interval overall
Item 1	0.885	Very good	0.036	0.803; 0.968	0.069	0.732; 1.000
Item 2	0.849	Very good	0.053	0.733; 0.966	0.085	0.663; 1.000
Item 3	0.916	Very good	0.021	0.869; 0.962	0.022	0.868; 0.963
Item 4	0.915	Very good	0.039	0.829; 1.000	0.046	0.812; 1.000
Item 5	0.880	Very good	0.048	0.775; 0.986	0.090	0.683; 1.000
Item 6	0.897	Very good	0.046	0.797; 0.993	0.071	0.740; 1.000
Item 7	0.717	Good	0.085	0.531; 0.903	0.090	0.519; 0.915
Item 8	0.926	Very good	0.036	0.847; 1.000	0.045	0.827; 1.000
Item 9	0.584	Moderate	0.156	0.239; 0.928	0.301	-0.080; 1.000
Item 10	0.916	Very good	0.048	0.812; 1.000	0.053	0.799; 1.000
Item 11	0.828	Very good	0.075	0.664; 0.993	0.132	0.538; 1.000
Item 12	0.843	Very good	0.048	0.737; 0.949	0.122	0.574; 1.000
Item 13	0.840	Very good	0.054	0.722; 0.959	0.094	0.634; 1.000
Item 14	0.943	Very good	0.023	0.892; 0.994	0.029	0.878; 1.000
Item 15	0.647	Good	0.135	0.349; 0.945	0.178	0.256; 1.000
Item 16	0.613	Good	0.091	0.413; 0.813	0.237	0.091; 1.000
Item 17	0.808	Very good	0.049	0.700; 0.902	0.102	0.584; 1.000
Item 18	0.741	Good	0.165	0.377; 1.000	0.260	0.168; 1.000
Item 19	0.851	Very good	0.051	0.739; 0.962	0.056	0.727; 0.975
Item 20	0.839	Very good	0.084	0.656; 1.000	0.145	0.521; 1.000
Item 21	0.218	Fair	0.231	-0.291; 0.728	0.439	-0.748; 1.000
Item 22	0.712	Good	0.081	0.534; 0.900	0.135	0.414; 1.000
Item 23	0.956	Very good	0.016	0.922; 0.990	0.023	0.904; 1.000

Table 5. Gwet's AC2 inter-rater agreement for ratings of rubric items.
Note: Agreement coefficients indicate the consistency of the ratings assigned by raters to each rubric item using the five-point scale. Interpretation thresholds were poor, ≤ 0.20; fair, 0.21–0.40; moderate, 0.41–0.60; good, 0.61–0.80; and very good to perfect, 0.81–1.00.

DISCUSSION

The aim of this research project was to develop a robust theory-based resource to aid the evaluation of course and teaching quality, while also contributing to contemporary scholarship and practice in tertiary learning and teaching. The need for such a resource follows extensive criticism of SET surveys and their use as a standalone evaluation method in Higher Education. Complementing SET with a dissimilar evaluation method can yield a more reliable outcome, as the combined result is not affected by the inherent limitations of a single technique. Such a complementary resource will have widespread appeal given the substantial growth of online and blended programmes in recent years and their importance to the educational strategy of many higher education institutions worldwide (Brown, 2023). A limitation is that the number of fully online and blended courses was not recorded separately. The two delivery contexts were analysed together, so rubric performance could not be compared by delivery mode.

The resource developed from this project, a Teaching Presence rubric (available on request), achieves the stated aim in several ways. Most notably, the instrument is based on a well-regarded theoretical framework explicitly designed for online teaching and learning. The rubric items and criteria were derived from teaching activities identified in the higher education literature rather than from unsupported assumptions about good practice. Its strong theoretical basis distinguishes the rubric from other course and teaching evaluation instruments that are predominantly based on perceptions of good practice.

Contributing to the rubric's efficacy is the meticulous procedure employed in its development. Starting with a careful review of the literature, 15 activities across the three teaching presence functions were identified (see Tables 1, 2, and 3), expanding the scope of activities established by Anderson et al. (2001) in their Teaching Presence framework. The activity descriptions guided the development of the rubric criteria with five distinct quality levels (Exemplary to Ineffective). Administering the rubric over two initial project stages and analysing the experience further improved the criteria wording. The concerted effort to establish clear and concise evaluative criteria is critical to the utility and effectiveness of the rubric method in general (Davidson, 2005) and to higher education course evaluation rubrics specifically (Gregori-Giralt & Menedez-Varela, 2021).

The rubric criteria enable clear decisions about quality, as evidenced by generally strong inter-rater agreement. This feature further underscores the robust approach taken to develop the instrument as few rubrics in the higher education literature had undergone statistical analysis (Yuan & Recker, 2015). Rating scores for all but two of the 23 rubric items achieved a "good" to "very good" level of agreement. The strength of the findings is supported by the number and diversity of courses included in the final testing stage, the use of three independent raters per course, and the rubric's five-point scoring scale. The generally good to very good levels of inter-rater agreement indicate that most rubric items were interpreted and applied consistently across raters. This provides preliminary evidence that the wording and intended meaning of most items were sufficiently clear to support comparable ratings. However, the lower agreement and greater uncertainty associated with Items 9 and 21 indicate that these items may require further examination and refinement.

A further contribution of the project lies in the way the rubric supports collegial and interdisciplinary engagement with teaching practice. Because the instrument makes explicit the design features and pedagogical activities associated with Teaching Presence, it offers more than a technical scoring

framework. It provides a structured basis for peer review, shared interpretation, and reflective discussion about online teaching quality. In this respect, the rubric may help foster the kind of professional community that learning and teaching scholarship depends upon.

Further improvement to the rubric can be achieved by clarifying items 9 and 21, which recorded "moderate" and "fair" levels of agreement, respectively. Both items focus on features of the learning activities presented in the individual course modules. Item 9 targets their design, while Item 21 targets the feedback provided to students. In terms of the criteria for item 21, post-hoc discussions among the project team revealed some uncertainty about the "Limited" grading category and its reference to the quantity and value of feedback provided. It is suggested that future users of the rubric amend the grading category to emphasise and target at least one module learning outcome.

In terms of its practical application, the Teaching Presence rubric offers considerable value. In particular, faculty teams can employ the rubric to evaluate courses identified as underperforming by SET data. This peer approach to course and teaching quality leverages a valuable asset not captured by the SET method: the knowledge, skills, and experience of teaching and learning design professionals. Importantly, the rubric provides faculty teams with considerable purpose and structure by targeting specific elements of course and teaching quality, as informed by the Teaching Presence framework. Used in this way, the instrument can also support staff development by informing reflective conversations, peer-supported course reviews and Performance Review and Planning discussions. In this respect, the rubric may help foster the kind of professional collaborative learning community that learning and teaching scholarship depends upon. This reflects the project team's experience of administering the rubric, particularly the insights gained from reviewing courses outside their disciplines and encountering unfamiliar approaches to teaching presence.

One practical aspect of implementing the rubric is the time required. Administration times for the 36 rubrics collected ranged from 105 to 132 minutes. While this is not considered excessive, given the valuable outcomes achieved, it followed an extensive period of familiarisation. Familiarisation occurred through repeated application of the rubric, team discussion of rating differences and iterative review of the item descriptors during the first two project stages. These activities provided practical training in the rubric's purpose, design and implementation. After familiarising themselves with its items and level descriptors, future first-time users should set aside at least three hours to apply the rubric effectively to a course.

CONCLUSION

In line with its aim, the project has produced a practical, theory-based instrument for evaluating course quality and teaching in online and blended higher education programs. Developed and tested through a rigorous process to ensure validity, reliability, and minimisation of bias, the Teaching Presence rubric offers a valuable non-student perspective to complement SET data. Its strong theoretical grounding in the Community of Inquiry framework, together with the consistency demonstrated through inter-rater reliability testing, distinguishes it from many existing course evaluation rubrics and strengthens its value for higher education practice.

Beyond its evaluative function, the rubric contributes to tertiary learning and teaching by supporting structured peer review, professional reflection, and course renewal. It provides educators, instructional designers, and faculty teams with a shared framework for discussing the

quality of online and blended learning environments in explicit, theory-informed, and practically applicable ways. This is particularly important in a sector where student evaluation data often remains dominant despite its limitations, and where there is a growing need for complementary approaches that can better support scholarly teaching practice.

Conceptually, the rubric translates observable teaching practices and relational dimensions of teaching presence into a structured framework for evaluation. Its value lies in supporting consistent assessment while retaining the professional judgement, collegial interpretation and contextual understanding required to evaluate teaching practice. Ultimately, the rubric offers institutions, instructors, and instructional designers a valuable resource for evaluating and improving the quality of online and blended courses, while also contributing to broader conversations in learning and teaching scholarship about how educational quality is understood, discussed, and enhanced in higher education.

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