Mapping Assessment Tasks and Lecturer Considerations: A Case Study of a NZ Primary Teacher Education Programme

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Abstract: Initial teacher education programme and paper assessments need to encompass university degree requirements and attest to student mastery of teacher professional competencies. This article reports one aspect of an investigation of the nature and principles employed in the design of assessments for a three-year Bachelor of Teaching (Primary) programme. The assessment tasks included in the 2022 academic papers were mapped and paper leaders interviewed; practicum and placement papers were not included because these were being redeveloped at the time. Findings are consistent with assessment design principles associated with authenticity and equity of access to the demonstration of understanding through tasks that double as a learning experience. Paper leaders responsible for curriculum learning areas deliberately designed linked dependent sequences of tasks to scaffold student engagement with teaching as inquiry. Our analysis highlighted the temporal dimension of assessment design; recognition that tasks in and across papers and the programme have a history that reflects shifts in external requirements, leader and team composition, research, and student task performance and feedback. Findings indicate that there is value in alerting initial teacher education programme and paper leaders to the complexity and interaction of factors that may underpin assessment design decisions.

Introduction

Assessment is a key influence on teaching and learning in every educational setting. It provides visible evidence of what is valued within curriculum. More than a snapshot, the whole of students' curriculum and assessment experiences impact on what they come to see as valued. In a university setting, initial teacher education programme leaders need to consider the requirements of governing agencies, university degree requirements, and formal sector expectations of teachers as professionals. Addressing the requirements of these different stakeholders whilst maintaining a focus on providing students with rich and accessible opportunities to demonstrate what they know and can do poses a substantial design challenge for lecturers. Despite this, while student experience of assessment in higher education has been explored, lecturer views have received limited attention (Evans, 2013; Villarroel et al., 2018). In this article we report on part of a study which mapped the assessment tasks in the 17 compulsory theoretical papers that were part of a three-year primary Bachelor of Teaching progamme in New Zealand. For each assessment the task foci, representational modes,

social organisation, linkages, and authenticity were identified. Professional experience placement papers were not included in the mapping since they were in a development phase to meet new external requirements. Paper convenors (leaders) were invited to participate in interviews to probe their priorities for assessment task design and the in-class scaffolding they provided. Findings are consistent with assessment design principles associated with authenticity and equity of access to the demonstration of understanding through tasks that double as a learning experience and provide opportunities for the use of feedback. Leaders of curriculum subject learning area papers often designed sequences of linked tasks that they intended to scaffold student engagement with teaching as inquiry. Our analysis highlighted the temporal aspects of assessment design - tasks individually and collectively, both within a paper and across the programme, had a history that reflected shifts in external professional requirements, research, and student task performance and feedback. Findings raise the need for programme leaders to have an overview of assessment task design, including the rationale for individual and paper task design and how tasks connect, cohere and evolve in relation to the programme goals and teaching staff.

Mapping the Curriculum and Assessment Agenda

Within the university tertiary education setting, lecturers are required to juggle multiple curriculum and assessment demands, particularly when a degree is a pathway to a professional qualification such as engineering, law or teaching (Charlton et al., 2022). In this case, degree programme curricula and assessment need to support the development of the attributes the university deems essential in its graduates, to encompass the knowledge and skills of relevant subject disciplines, and to address professional body requirements. Currently, the development of graduate attributes is receiving greater attention (Page et al., 2019; Wong et al., 2022). The push for this can be linked to pressure from governments and employers to enhance student employability through the development of personal attributes in addition to the knowledge and skills specified with a degree (Tran, 2019). Communication, teamwork, problem-solving, technological skills, creativity, interpersonal skills, leadership skills, self-management and flexibility/adaptability are commonly listed as desired graduate attributes (Oliver & Jorre de St Jorre, 2018; Osmani et al., 2015). However, several studies have shown that despite this high-level focus on graduate attributes these are not always an explicit curricular or assessment focus due to lack of lecturer time, resources and confidence (Hughes & Barrie, 2010; Oliver, 2013).

Running in parallel with this development there has been a move to more tightly specify the knowledge, skills and attributes expected of teachers, including graduate and beginning teachers. For example, the UK, USA, Australia and New Zealand have established teacher professional standards (Australian Institute for Teaching and School Leadership [AITSL] 2017; Department for Education 2011; Education Council 2017; National Board 2022). Pertinent to this paper, initial teacher education programme accreditation has shifted from analysis of programme inputs (anticipated learning outcomes) to an audit of programme outputs (Pullin, 2017). That is to an audit of assessment tasks and criteria as a means of accrediting programmes and gauging the 'readiness' and quality of graduates. This shift has served to direct greater attention to paper and overall programme assessment task design.

A substantial body of research in higher education has focused on individual task design based on a concern for student diversity expressed through principles such as access, equity and inclusion, and alignment (e.g. Charlton & Newsham-West, 2023). This research has scoped the need for tasks with multiple modes of representation, forms of social

organisation and choice. Paper and programme-wide assessment design has received less attention but is nonetheless worthy of attention because graduate attributes and workplace skills such as critical thinking, communication and problem-solving are developed over time (Baartman et al., 2022; Charlton & Newsham-West, 2023; Whitfield & Hartly, 2019). Programme-level assessment aims to support the "sequential development of discipline knowledge, transferable skills and their application to ensure that graduate attributes and professional standards are demonstrated" (Charlton & Newsham-West, 2024, p. 1075). Put another way, assessment design decisions at the programme level aim to encourage students to connect their learning both horizontally and vertically across their degree (Bearman et al. 2017; Charlton & Newsham-West, 2024; Van der Vleuten et al., 2012). As such programme-wide assessment design can provide a broader and more holistic picture of student capabilities (Tai et al., 2023) and support student assessment for learning (Charlton et al., 2022). It comes with the potential for a more cohesive and connected student learning and assessment experience, one where students see the value of assessment in feeding forward to support learning from one task to future tasks and other papers (Charlton et al., 2022). When assessment tasks are designed to require students to make connections and or to revisit previous content students have opportunities to monitor and progress their learning and develop self-confidence (Baartman et al., 2022; Charlton & Newsham-West, 2023; Kerdijk et al., 2015; McArthur et al., 2022). Paper assessment task sequences designed so that students can use their learning and feedback from one task to inform and enhance their work on the next can support student learning as coherent and cumulative (Carless & Winstone, 2023; Ibarra-saíz, Rodríguez-gómez, & Boud, 2021; Whitfield & Hartley, 2019). Similar benefits can accrue at the programme level when assessment is informed by understanding of programme learning outcomes and tasks are designed to encourage students to use feedback and see holistic connections between papers (Charlton & Newsham-Weat, 2024). In this article we adopt the terminology proposed by Hughes (2013) and describe such task sequences as 'linked dependent'; they have also been described as integrative (Whitfield & Hartley, 2019)

In the case of professional degrees, authentic assessment has a particular role to play in bridging university and the workplace, and hence in paper and programme assessment design (Charlton & Newsham-West, 2023). Authentic assessments replicate some aspect/s of workplace tasks and contexts (Villarroel et al., 2018), including acceptable ways a task can be completed in a workplace context. Authentic assessments have been shown to assist students to develop and demonstrate the practices, knowledge and attributes pertinent to the target workplace (Sokhanvar et al., 2021; Whitfield & Hartley, 2019). Adding complexity for paper and programme assessment design in initial teacher education, Hamodi et al. (2017) point out that the literature on assessment in ITE emphasises that if student teachers are to implement robust assessment strategies in their own teaching, they need to experience a range of assessment approaches including for example group-assessment.

In this article we are concerned with paper leader assessment design decisions. Fernandes and Flores (2021) exam the views of assessment of programme directors at a Portuguese university via a questionnaire. Their participants came from a variety of professional categories but not education specifically. Participants reported they employed a variety of assessment methods influenced by the year of study, the type of course, the nature of the programme and the institutional regulations. Barton and colleagues (2020), investigated staff perceptions of assessment practice within an initial teacher education programme in an Australian university, and identified that assessment design and practice is complex and takes time, particularly programme design.

The New Zealand Context

In New Zealand (NZ) initial teacher education [ITE] is provided mainly through university programmes, with some polytechnic and private provider offerings. All ITE programmes must be approved by the Teaching Council of Aotearoa New Zealand, a semi-independent government agency, and the NZ Qualifications Authority (NZQA). In addition, university programmes need to be approved by the Committee on University Academic Programmes (CUAP). Programme approval signals that ITE graduates will be ready to teach and equipped to begin their two-year journey towards full registration (Teaching Council of Aotearoa New Zealand, 2019). To secure approval, programmes must demonstrate they have consulted with local schools and community groups and ensured that the quality of assessments will enable students to meet the national standards for the teaching profession, with support, as outlined in the document *Our Code, Our Standards* (Education Council, 2017). The six standards are designed to provide descriptors of what high-quality teaching practice looks like and what it means to be a teacher in NZ. They encompass: Te Tiriti o Waitangi Partnership (the Treaty of Waitangi is the foundation document of New Zealand as a bicultural nation), Professional Learning, Professional Relationships, Learning-focused Culture, Design for Learning, and Teaching. These requirements aim to ensure there are elements of consistency and local distinctiveness across national programme offerings.

The focus for this case study is a three-year Bachelor of Teaching programme based in a mid-size regional university in New Zealand. The academic year aligns with the calendar year. The programme provides an approved pathway into teaching in New Zealand primary and intermediate schools (catering for children from five to thirteen years of age). It consists of 17 theoretical papers, three placement / professional experience papers and three elective papers. Nine of the theoretical papers are curriculum focused, reflecting learning areas in the *New Zealand Curriculum* (Ministry of Education [MOE], 2007). Mathematics/ numeracy and literacy receive greater emphasis with two papers each in alignment with the Ministry of Education's statement of National Education and Learning Priorities (NELPs). This states every student should gain sound foundation skills in language, literacy and numeracy (MOE, 2020). The remaining eight theoretical papers address more general themes threaded through the programme, such as cultural competencies, diversity and inclusion, and assessment. The school-placement papers provide time in schools each year for students to connect theoretical content with classroom experience. The programme is supported by the Moodle learning platform, providing a central hub and housing content for each paper, such as paper outlines, links to digital reading lists, related resources and tasks, and assignment submission boxes. The Bachelor of Teaching programme is offered both face-to-face on campus and via a blended delivery mode with online learning and time in local schools. This case study focuses solely on the face-to-face programme iteration.

The programme has approval from all required agencies. In addition to professional requirements, the programme is expected to contribute to the University Graduate Profile, and the Bachelor of Teaching Graduate profile (which is designed by those involved in the programme). These two graduate profile documents set out attributes that include the capacity to collaborate and communicate with a range of people, and to honour the principles of Te Tiriti o Waitangi. The University 'Assessment principles" document states assessment tasks should be linked to the learning outcomes for a paper and consider student diversity. The University requires that paper outlines, including assessment task details, are approved by the programme's leadership team prior to the start of each trimester. Papers commonly have three assessments and student work is moderated by the teaching team for each paper. Alignment between paper learning outcomes and assessment task focus is monitored as part of the university paper outline approval processes. Programme professional accreditation

requirements monitor alignment between assessment task focus and *Our Code, Our Standards*. For these reasons we do not address the alignment between the curriculum and assessment task learning outcomes in this paper.

Research Intentions and Design

Our intention in initiating the study that informs this article was to understand lecturer assessment design intentions and the practical support they offered students for the different forms of assessment they employed. We excluded consideration of placement and practicum papers from the study since they were being redeveloped. Hence, the study was guided by the following research questions:

1. What is the nature of the assessment tasks in the academic papers across the three years of the Bachelor of Teaching (Primary) programme?
2. What were paper leader considerations when designing assessment tasks for their paper?

The study received ethics approval from the Education Ethics Committee at the University.

The Nature of Assessment Tasks

We addressed the first research question on the nature of programme assessment task design by mapping the tasks detailed in the seventeen 2022 theoretical paper outlines, 57 tasks in total. Curriculum mapping has been used in tertiary institutions to provide educators and students with an overview of the curriculum in individual papers, and across year-levels, and across the programme (Cooper et al., 2024; Spencer et al., 2012). It has been employed to embed graduate capabilities and improve programme coherence (Kertesz, 2015) and to gauge the strengths and weaknesses of teaching and assessment practices for graduate attributes (Bath et al., 2004; Johnson et al., 2015). Other uses include as a tool for promoting a collaborative culture (Lam & Tsui, 2016). Our mapping process considered assessment task focus, modes of representation, social organisation, linkages, and authenticity.

Leader Interviews

Eleven leaders were interviewed, portraying views from a cross section of papers across the three years of the programme. Six of these participants led curriculum papers, and five led papers relating to cultural competencies, human development and assessment. The group comprised three associate professors, six senior lecturers, one lecturer and one teaching fellow. All were experienced educators who had taught at either primary or secondary levels prior to entering ITE. The interviews explored leader design intentions given that only some aspects of their paper 'content' could be explicitly assessed. We asked them their view of the implications of task mode and social organisation and what, if any, role the university graduate and professional attributes played in their assessment task design. Interviews were carried out by a research team member not involved in teaching or leadership within the Bachelor of Teaching programme. We conducted a thematic analysis (Braun & Clarke, 2006) of interview transcripts with this informed by the literature detailed above.

Findings

Findings are framed by the two research questions to scope insights from both task mapping and leader interviews.

Alignment with Assessment Principles

The mapping identified that in all there were 42 written tasks with word counts ranging from 1200-1500 words in Year 1 to 2000-2500 words in Year 3. These tasks included essays, reports, position statements, working papers, academic critiques and reflections. There were 13 oral tasks involving individual and group presentations, and 14 tasks with a significant visual component including infographics, PowerPoints, posters, digital stories, links to Google sites and embedded videos. Some tasks provided a choice and or required multiple modes of presentation including written, oral, and visual forms. Presentations could be in person or digital recordings. In terms of social organisation, 39 tasks were solely individual, there were just three paired assessments and ten group tasks with group sizes ranging from three to six, but most commonly with three to four members. Three of these group tasks were accompanied by individual written reflective statements. For example, a first-year paper required students to work in a professional learning group to explore culturally responsive approaches; this was followed up by individual submission of a written evaluation detailing key insights gained.

Lecturer Analysis and Reflection

In line with current thinking about equity and inclusion, paper leader comments indicated that in planning their assessments they were careful to include a variety of task formats and social groupings. Decisions were informed by leaders' experience that students responded differently to different formats (modes and social groupings) and the provision of a variety of formats provided students with varying abilities and strengths an opportunity to demonstrate what they knew and could do.

> *There's lots of different ways that you can assess our students in relation to those learning outcomes. And I think it was finding a balance. And how could you find a balance? What was the assessment fear for the students? Offer a variety, right? Because if students who struggle with writing, but they quite clearly understand and could meet those learning outcomes in a different way. That's what I've tried to think about. (Keita/Hine)*

Task design was also informed by leaders' knowledge of school workplace expectations of graduates. The need for graduating students to be able to work in teams informed the design of group tasks; the need for graduates to have the confidence and skills to present their ideas to colleagues underpinned presentation tasks, with some assignment instructions identifying a staff meeting as an audience. These tasks met the criteria for authenticity with respect to realism in relation to teacher professional settings (Villarroel et al., 2018), scaffolding student demonstration of a competency of relevance beyond the university setting (Tai et al., 2023).

Leaders of two Year 3 papers, explained that they provided students with a choice of topic and or mode with the aim of allowing students to select what suited them and their learning needs best. An assessment task in the social science paper required students to identify and pursue an inquiry into a social sustainably issue of interest to them. The Year 3

literacy paper required students to choose a focus for inquiry that addressed a perceived gap in their content or pedagogical knowledge, in anticipation of them entering the classroom the following year (Emily). Leaders were clear these tasks provided students with an opportunity to be active participants in the assessment process thereby taking responsibility for their own learning. The approach taken by these leaders is in line with research indicating that allowing students some choice has the potential to support equity in diverse student cohorts (O'Neill, 2017), and to be empowering for students (O'Neill & Padden, 2022).

Sequences of Linked Dependent Tas

Sequences of linked dependent tasks/ sub-tasks were a feature of curriculum learning area course assessment. The mapping identified that four papers included linked dependent assessment task sequences and eight papers included assessments that had sub-tasks. Tasks/ sub-tasks could be presented in written and or multimodal formats with the work completed by individuals and or small groups. They could be due on the same day or at different times.

Lecturer Analysis and Reflection

The leaders of papers with linked task sequences explained that in designing the sequences they had an overt learning agenda of scaffolding student understanding and student sense of themselves as capable knowers and learners in their fields. Student focus and lecturer feedback on one task/ sub-task was intended to be formative for student work on the next task/sub-task. Learning area paper leaders used this approach to deconstruct the teacher-as-inquiry cycle of pre-assessing-planning-teaching-assessing-reflecting. Some such sequences began with tasks that required student teachers to analyse student data and some with the need for students to develop their own understanding. This second approach was usefully summed up by Michael who explained his assessment tasks were designed to be 'developmental'. In the first assessment students researched a science topic thus experiencing learning science themselves. For the second assessment they interviewed some children to find out what they knew about a topic and in the third assessment students taught a small group and reflected on this experience. Michael explained: "So the sequence goes: learning some science; learn how students understand this science; plan, teach and reflect on student learning of this science".
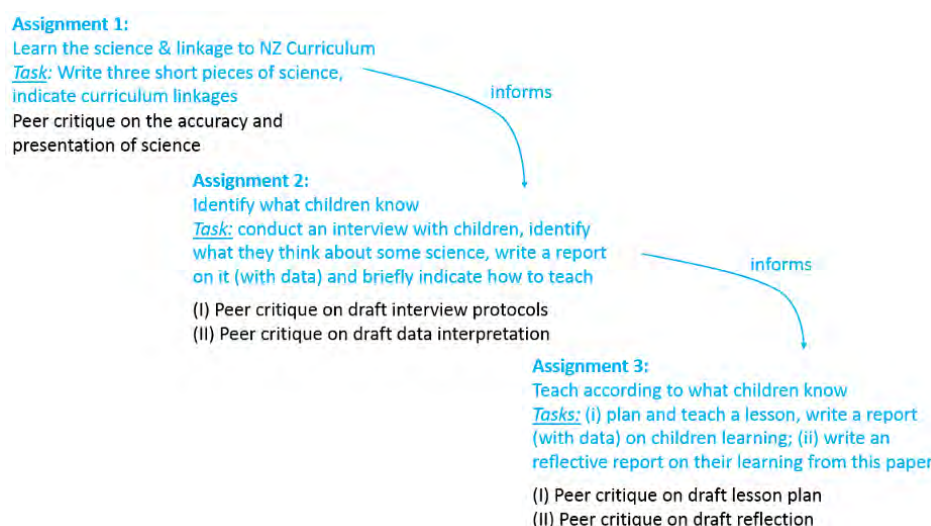
Figure 1: Michael's linked dependent task sequence (used with permission)

The second kind of linked dependent tasks aimed to connect theory to a classroom context. This approach was exemplified in the Year 3 technology education paper. The linked assessment tasks did not involve students working with children. The first task in the sequence stepped students through the technology design cycle: analysis of current practice, design, model, test and evaluate. The students worked collaboratively through these design steps, in this way experiencing an authentic sequential design process. For the subsequent task students completed individual reflections which required them to synthesise the process for themselves and consider future application in the classroom.

The Trajectory for Student Identity Development

Mapping indicated that tasks in the first trimester of the programme included a focus on transition to university whereas tasks in Years 2 and 3 focused more on teacher identity and preparation for classroom teaching. In one example of this, the first assessment task in a Year 1 paper required students to identify the enablers and barriers they were experiencing as they transitioned to being a tertiary student and how these influenced their understanding of themselves. Lecturers in another Year 1 paper modelled a group discussion to illustrate their expectation for participation and how to provide feedback to one another. In a third Year 1 paper, to support the development of student academic reading skills, Caitlin designed a task whereby students collaborated to annotate an article using a digital tool. She had designed this task to "really to make sure people are getting engaged with their reading."

A Year 2 paper focused on the cultural dimensions of education included a task that illustrates the shift in emphasis away from becoming a tertiary student. This required students to explore their own cultural positioning then work in groups to surface, research and discuss multiple cultural perspectives. This task prompted student consideration of *Te Tiriti o Waitangi* obligations within *Our Code, Our Standards*. It was specifically designed to enable students to consider the complexity of the educational context they were entering in terms of the diversity of people with whom they would be interacting.

Leaders of Year 3 papers indicated they tended to take academic skills for granted. For these leaders the focus was on providing students with experiences that would develop the capacities they would need as beginning teachers, such as assessment literacy and identification of locally relevant contexts (Peter and Robin). When the focus was on more

generic or academic skills these were explicitly positioned as relevant to practicing teachers. For example, Craig, a Year 3 paper leader positioned group processes within an assessment task as "useful to you in the future, as a teacher within a group of teachers" rather than skills for task completion, thereby alerting students the group process as a transferable skill. In another example, a leader emphasised "both the academic writing and the content of what goes into the writing" in anticipation that her students as teachers would be lifelong learners (Jane).

The Temporal Aspects of Assessment Design

In this final section we report on leader description of the overtime trajectory of assessment task design. This was not a planned focus, but the temporal aspect of design was drawn to our attention by Keita who asked if other members of her team could come to the interview, explaining that she had taken over the paper in the year of interview. She considered others were in a better position to explain the reasoning behind the design of tasks, including the trajectory of why they were the way they were. Given she drew our attention to this matter we re-analysed our data for this aspect and report on this here.

Several leaders implied that the assessment task design in their paper had evolved over time responsive to team composition. For example, in the Year 1 literacy paper the content was adjusted to increase the focus on foundational reading strategies to take advantage of the expertise of a senior researcher when they joined the team. Beyond leader and team composition, leaders identified changes in formal professional requirements as an influence on their assessment design thinking and practice. The initial tone of leader response to a direct question on policy influence was summed up by the statement: "So that's (the Graduate profile) just an assemblage of nice sounding words" (Robyn). However, when we probed leader responses several explained they had inherited the papers they were discussing and suggested that assessment task design would have been aligned with relevant policies when the papers were developed, as this alignment was required by the university and for CUAP and the Teaching Council (Teaching Council of Aotearoa NZ, 2019) approval. The following comment is reflective of how assessment design was distributed over time and people in relation to policy:

> So Our Code, Our Standards was very much in our minds when we were doing the designing of those assessments initially. I wouldn't say that we'd go back to them each time we tweak the assessments, but I think the basis of the understanding is pretty sound. (Craig)

Leaders noted that the content of papers and assessment shifted in response emerging research thinking. The fluid nature of research insights into literacy demands in relation to social, cultural, linguistic and technological diversity is a striking example of this. In Year 3, research relating to broader notions of literacy such as multiliteracies and critical literacy (Sandretto et al., 2021) has informed the inclusion of content and an assessment requiring students to select a multimodal text, analyse the modes of language within the text, then design a learning sequence that supports children to develop the associated metalanguage, create meaning and explore and critique the positioning of the text.

Some leaders described the evolution of assessment tasks in relation to student task performance and feedback during previous iterations of papers. These leaders had been responsible for the paper over several years. For example, the leader of a Year 1 paper had "made some deliberate changes to this [the paper content] and the assessment". Specifically, she had changed the first assignment from an essay because "it wasn't working, it was

horrible to mark." She had asked herself: "What was it that the first assignment was meant to do?" (Caitlin) and concluded the purpose was to develop student familiarity with the New Zealand curriculum document (MOE, 2007), which could be achieved through an online multichoice test. In sum, our reanalysis of data indicated that there are several temporal aspects that impact on leader assessment design decisions.

Discussion

The study that underpins this article was motivated by a desire to understand student assessment experiences over the course of their study. As a first step we set out to achieve this by mapping the assessment tasks across their three-year Bachelor of Teaching programme and inviting lecturers to discuss their design rationales. The decision to exclude papers and assessments relating to professional experience in schools was based on the review process in place for these papers at the time. The Culminating Integrative Assessment task for NZ ITE graduates, recently introduced by the NZ Teaching Council was also not considered (Teaching Council of Aotearoa NZ, 2019). Commentary by the 11 (of 17) leaders who participated in interviews indicated that their design decisions were informed by a concern for equity and inclusion. Leaders were attentive to the need for assessments to be equitable and inclusive by including diversity of task formats, modes, social organisation and choice. That is, as might be expected given participants were involved in teacher education, leader assessment task design decision-making was reflective of generally agreed principles for assessment. Leaders were aware that assessment can and should support student learning and benefits from being authentic in relation to future workplace demands. Counter to findings by Hamodi et al. (2017), there were no reports of leaders designing a range of assessment tasks to support variety in assessment design in students' future classrooms.

Sequences of linked dependent tasks designed by curriculum learning area leaders were the most explicit expression of a learning agenda. These sequences were distinctive in deconstructing and then requiring students to reconstruct the elements of teaching as inquiry through the way insights from one task were essential to and/ or informed the next. This design meant students had an opportunity to benefit from feedback that enhanced their knowledge and understanding of one element of inquiry before they proceeded to the next. These assessment task sequences provided an environment whereby students could progressively build their experience, confidence and sense of identity as someone who could be knowledgeable as a teacher (Villarroel et al., 2018), albeit within a particular curriculum learning area such as science. In this way, curriculum leaders provided for the linking (integration) of assessment tasks across their paper. However, no paper leaders commented on whether there were or could usefully be horizontal linkages between the assessment tasks in different papers at a given year level of the degree programme. Other than the literacy and mathematics education paper leaders, who were the only leaders responsible for multi-year papers, there were no reference to vertical linkages and progression between assessment tasks over the years of the degree. While the value of programme-level assessment as a tool to scaffold and progress student learning horizontally and vertically across a programme is recognised (Charlton, Weir & Newsham-West, 2022; Van der Vleuten et al. 2012), our findings echo those of others who have reported that programme-level assessment task coherence receives limited attention (Baartman, & Quinlan, 2023; Bearman et al., 2017; Charlton & Hewsham-West, 2023, 2024). This said, independent of a formal programme-level assessment agenda, paper leaders involved in our study identified assessment purposes linked to students' identity development over the course of the programme. These evolved from helping prepare students for a successful university experience, to a focus on support for

the knowledge and skills students would need as beginning teachers (Sokhanvar et al., 2021).

University-level and professional programme accreditation requirements which could have been expected to act as a source of horizontal and vertical cohesion received very little explicit attention in our interviews. This lack of attention suggests that they were not immediately influential in prompting or supporting programme-level development and coordination of assessment task design. There were however indications that some paper leaders were relying on the robustness of programme accreditation approval processes to address the alignment of paper learning outcomes and assessments. Our findings further highlight that the current design of assessment tasks can only be understood in relation to past and present paper leadership, external priorities, research and student responses. Design decisions are distributed over people (students, paper leaders and lecturers), time (the trajectory of task development), and external requirements (Bearman et al., 2016, 2017), and research insights relevant to paper content. While it seems likely that individual paper assessments retain their alignment with related paper learning outcomes, it is possible that assessment at the programme level loses its holistic focus and overall coherence through the process of progressive individual paper refinement of learning outcomes and assessment tasks. This highlights the need for ongoing lecturer collaboration around assessment if the goal is that assessment supports students to develop a coherent and progressive understanding of individual paper and programme learning outcomes. Focusing at the programme-level would enable lecturers to develop understanding of learning and assessment beyond their paper. Encouragingly, insights into how this might be achieved can be found in research on programme-level assessment (e.g., Charlton & Hewsham-West, 2024; Jessop & Tomas, 2017) and in research on teacher and student feedback literacy (e.g., Carless & Winstone, 2023). For us, our mapping exercise is a first step towards a more holistic approach to programme-level assessment.

Overall, our findings indicate current leader assessment design practice has many strengths but there would be value in bringing paper leaders together to develop a more holistic understanding of overall programme learning outcomes, their developmental trajectory and connections. One of our next steps is to review the programme learning outcomes for coherence and distinctiveness. Another is to analyse the nature and level of encouragement and support for students to develop and demonstrate their learning within and across paper assessments at both year and programme level. That is, to strengthen and to make more transparent the horizontal and vertical connections within and across papers and their associated assessment tasks. By so doing, students would be more likely to appreciate and use feedback from assessment to inform their learning from one task and paper to the next and develop a coherent and cumulative view of what we are intending them to learn. In seeking to achieve a shared view, indications are that it will be important to be sensitive to the history of individual paper content and assessment and to take account of current and emerging contextual influences. It will also be important to acknowledge and draw on leader and lecturer experiences of effective learning and assessment tasks, recognising that assessment needs to "benefit the learner but support the educator" (Bearman et al., 2016, p. 551; McArthur et al., 2022).

Assessment design at the task, paper and programme levels is an ongoing process that is shaped and framed by contextual and personal (individual and team) factors. Assessment design in the initial teacher education space is especially complex given that the expectations of multiple stakeholders need to be accommodated; initial teacher educators bring unique and relevant knowledge and commitment to task design. Institutions need to provide opportunities for educators to employ their expertise when negotiating assessment design decisions within programmes.

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