Review of Ngā Pou Here: Te Pou Mātauranga me te Pou Tikanga Whakaako

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Contents

Introduction	3
Orienting concepts: fit-for-purpose assessment and assessment for learning (formative assessment).	4
Why formative assessment?	7
Review of Ngā Pou Mātauraka me Tikanga Whakaako	8
Te pou Mātauranga	9
Te pou Tikanga Whakaako	11
Miscellaneous suggestions for revisions	12
Concluding thoughts	14
References	15

Introduction

This Education Review Office (ERO) review of its evaluation indicators for early childhood education (ECE) has two imperatives: 1. To address the revision to the early childhood curriculum, *Te Whāriki* (Ministry of Education, 2017), and 2. To support the development of a seamless and coherent set of evaluation indicators for New Zealand education.

As described by ERO, the revised ECE indicators will:

- Foreground what matters most in Early Childhood Education (ECE) provision, including that which promotes equity and excellence.
- Have a greater focus on all children's progress and learning in relation to the valued outcomes articulated in *Te Whāriki*.
- Reflect the interconnectedness of conditions required to promote and sustain continuous improvement and innovation.

ERO has commissioned several discussion papers from an academic advisory group to assist with the review of its review framework, Ngā Pou Here. This paper provides commentary on two of the framework's four po, te pou Mātauranga and te pou Tikanga Whakaako, with particular emphasis on assessment for learning.

I begin the paper with a brief overview of the thinking and scholarship that has contributed to a refining of assessment practice since the introduction of *Te Whāriki* in 1996. The aim is to provide a context for subsequent discussion.

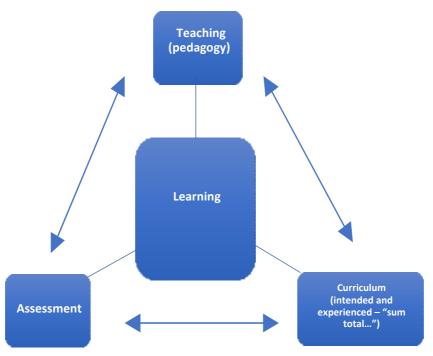
The paper will address several questions of a more generic nature that relate to how learning, curriculum, and pedagogy are constructed in Ngā Pou Here and which have implications for assessment for learning. As requested by ERO, it will also address these five specific lines of inquiry:

- 1. What is the significance of Mātauranga and Tikanga Whakaako in terms of promoting all children's learning and progress?
- 2. What dimensions of practice associated with Mātauranga and Tikanga Whakaako have the greatest impact on positive learning outcomes (as defined in *Te Whāriki*) for all children?
- 3. What do we know about the how the influences and dimensions work together to promote and support improvement in an early learning service context?
- 4. What are the implications for the conceptual framework that underpins ERO's evaluation indicators (ECE)?
- 5. What are the most important considerations in the framing, defining, identifying and selecting of the indicators, and their potential use in internal and external evaluation in early learning services?

Orienting concepts: fit-for-purpose assessment and assessment for learning (formative assessment).

Since the reform of the New Zealand education system in the late 1980s, policy has increasingly emphasised the importance of assessment practice that is localised and formative (Ministry of Education, 1988, 1994, 1996a, 1996b, 1998, 2008a, 2008b, 2008c). This is not to detract from the value and practice of summative, diagnostic, and other forms of assessment, but as policy calls for children to become strong, lifelong learners, formative assessment is seen to be crucial.

I argue that, to engage in meaningful dialogue about assessment, one must simultaneously engage with ideas and assumptions about curriculum, pedagogy and learning (see diagram). If as educators we are to make a claim about something having been learned, we must understand: how teaching contributed to the learning, what specifically designed experiences, activities, and events provided conditions for the learning, and the nature of the learning that occurred. Furthermore, if the resulting learning is what was sought or valued, and we want to continue in such a vein, we need assessment information to illustrate the deliberate pedagogical and curriculum decision making that contributed to it.



The interrelatedness of constructions of curriculum, pedagogy, assessment and learning.

Te Whāriki (2017) is replete with messaging about desired pedagogical practices of kaiako¹, especially in the sections of the document where the principles, strands, and goals are described. 'Examples of practices' leading to the kinds of learning outcomes associated with

The term *kaiako* has been deliberately used in *Te Whāriki* (2017) to refer to the adults in an early childhood service who are charged with responsibility for leading learning. I am aware that Ngā Pou Here uses *teachers*, which I do not disagree with, but to be consistent with the direction taken by *Te Whāriki*, I will principally use *kaiako*.

the strands of *Te Whāriki* also indicate preferred leadership practices. The phenomenon of learning is described through various theoretical positions although it is sociocultural perspectives that have come to be emphasised. They posit, for example:

- social interaction as the basis for learning
- learning experiences lead developmental change
- learners achieve more with others than they can do alone
- learning is a phenomenon that is distributed across people, place and things involving the take-up of cultural tools, amongst which language is critical for communication and thinking.

In *Te Whāriki* high-order valued learning involves strengthening children's mana (and that of their whānau) by positively supporting their languages, cultures and identities (including their learner identities).

Te Whāriki defines curriculum as "all the experiences, activities and events, both direct and indirect, that occur within the ECE setting" (Ministry of Education, 2017 p. 7). This definition recognises learning as situated, and as emerging from children's direct and indirect engagement with everything, not all of which kaiako necessarily plan for or condone. In its definition of curriculum, the original Te Whāriki (Ministry of Education, 1996b) located curriculum "within an environment designed to foster children's learning and development" (p. 10), which arguably puts greater emphasis on intentional decision making and teaching. Nevertheless, the point remains: curriculum – that through which children in early childhood education settings are expected to learn valued things – is pretty much everything that happens, intended or not. Every 'thing' is a potential learning event whether by design or happenstance, including for example, practices of assessment and documenting for learning.

From these conceptions of pedagogy, learning and curriculum, a sense of fit-for-purpose assessment to be emphasised in Ngā Pou Here can emerge. Where there is conceptual and practical alignment across a service's assumptions, values, and beliefs about pedagogy, learning, curriculum and assessment, there is a sound basis for practice that may promote valued learning. So, taking *Te Whāriki's* lead, fit-for-purpose assessment must involve the take-up of sociocultural and ecological, formative, self-referenced, situated, and inclusive practices. Ngā Pou Here should therefore, through its design and indicators, support kaiako, leaders, and early childhood services to do the same.

The ideas, concepts, and valued knowledge about learning, education and child, family and community development promulgated in *Te Whāriki*, along with the research, scholarship, and practice developments that have followed, draw on long histories and a range of worldviews. Some of these have been previously explained. For example:

 Walker (2008) describes how and why a kaupapa Māori underpinning of assessment practice is essential for understanding, planning for and progressing the success of Māori learners in early childhood education.

- Kei Tua O Te Pae Assessment for Learning: Early Childhood Exemplars (Ministry of Education, 2004/2009) explain how key learning theorists have influenced pedagogy and assessment in New Zealand early childhood education.
- Te Whāriki (2017, pp. 60–62) describes thinking and theories that underpin the
 document, including knowledge derived from te ao Māori, Pasifika cultures, western
 developmental and learning sciences, and later twentieth century critical perspectives
 on learning, power and privilege. Sociocultural perspectives on learning and
 development are central.

In New Zealand early childhood education services, assessment is positioned as integrated within curriculum (Carr & NZCER, 1998). Curriculum is to be locally negotiated and implemented in ways that allow members of the ECE community to have their hopes and aspirations for individual and community development realised. The emphasis has been on valued learning, with community members having a say about what is of value (Carr, 1998a, 1998b; Ministry of Education, 2004/2009, 2009), how it will be recognised, and how it will be documented. The revised Te Whāriki (Ministry of Education, 2017) expands these expectations by explicitly calling for kaiako and ECE leaders to work with their community to translate the specific learning outcomes (LOs) associated with each of the curriculum strands into versions that align with community values and the aspirations that family/whānau have for their children (2017, p. 23). It is to be expected therefore that different ECE services will emphasise different learning intentions and outcomes; their assessment practices may also look different. While the exact shape of curriculum and assessment will vary, assessment is to be a mana-enhancing process (Ministry of Education, 2009) that strengthens community, continuity, and competence (Cowie and Carr, 2009; Ministry of Education, 2004/2009). This will require kaiako to work with children and their families, in community, to recognise, respond to, and enhance children's identities as learners (Carr & Lee, 2012). Assessment will also make visible how the service is contributing to the high-order learning outcomes of developing children's learning dispositions and encouraging children to develop working theories about the world (*Te Whāriki*, 2017, pp. 7 & 22).

To support such work, successive Ministry of Education initiatives in both the ECE and school sectors have sought to develop teachers' assessment literacy. In the ECE sector this has included significant investment in *Kei Tua O Te Pae Assessment for Learning: Early Childhood Exemplars* (Ministry of Education 2004/2009) and *Te Whatu Pōkeka Kaupapa Māori Assessment for Learning: Early Childhood Exemplars* (Ministry of Education, 2009). These two professional learning and development resources are designed to help practitioners understand and operationalise concepts that are central to *Te Whāriki*, including formative assessment and how assessment can be used to improve learning in both Māori- and English-medium ECE settings. These resources address the high-order outcomes of *Te Whāriki* as well as the more specific learning outcomes that sit under the strands (pp. 24-50).

The development of strong learning identities and an understanding of how "knowledge and power set ... [one] free" (Reedy, 2013, p. 49) have long been central to desired ECE practice in Aotearoa New Zealand. The curriculum principle of Whakamana | Empowerment has been

described as the first of four touchstones for judging the effectiveness and quality of assessment practice, the others being: holistic, inclusive of diverse perspectives, and reflective of the particular relations between people, place and things that sustain valued learning (Carr & NZCER, 1998; Ministry of Education, 2004/2009, Book 1, p. 19). *Te Whatu Pōkeka* overtly concerns itself, and by implication the profession, with assessment practices that are first and foremost "enhancing the mana of the Māori child and their whānau" (p. 52). For these reasons, Ngā Pou Here should help kaiako, leaders and owners articulate how they are working to achieve these high-order outcomes as well as those that are directed at the individual child in their family and community context.

Recognising that children's own sense making holds implications for identity, including identity as a learner, the curriculum acknowledges that, "... by the time this [early childhood] period is over, children will have formed conceptions of themselves as social beings, as thinkers, and as language users, and they will have reached certain important decisions about their own abilities and their own worth" (my italics, Donaldson, Grieve & Pratt (1983) cited in Ministry of Education, 2017, p. 23). It is up to practitioners and leaders to understand and articulate the contribution that ECE experiences can make to children's sense making. Ngā Pou Here is an important tool for helping them do this – and helping them improve their practice in these directions.

Why formative assessment?

Both *Te Whāriki* and the curricula for schools (*The New Zealand Curriculum* and *Te Marautanga O Aotearoa*) aspire to set children on a path to lifelong learning: capacity for learning is at least as much the focus as acquisition of certain facts, knowledge and skills. A highly publicised 1990s UK review of literature on assessment for learning showed that formative assessment was the most effective form of assessment for improving learning at school (Black & Wiliam, 1998a, 1998b). Based on this evidence, pedagogical strategies were developed, implemented, and evaluated. These included providing timely feedback to learners and, based on the formative assessment, making modifications to the teaching programme to better support achievement of the learning goals. Formative assessment was deemed to be any assessment activity that first and foremost served the purpose of promoting learning (Black, Harrison, Lee, Marshall & Wiliam, 2002). Furthermore, it was understood that *any* assessment could be used to improve learning *if* the information gleaned from it was used by teachers and learners to modify what they were doing in the service of their goals. Whenever assessment evidence was used to adapt teaching programmes to better meet learning needs, such uses were understood to be formative.

Interpreting all feedback as formative assessment, Carr and NZCER (1998) went on to assert that, in their estimation, early childhood teachers would routinely engage in excess of 900 assessment activities on any given day. The point was well made: in the context of a play-based, child-teacher-community-led early childhood programme, any deliberate act of feedback giving designed to help learners understand their progress towards immediate and longer-term goals was a form of assessment. To make this assessment work and valued learning visible to parents and others, teachers would from time to time document this

process using narrative forms such as the learning story. The narrative approach is supported by Bruner's (1991) work, where narrative comprehension is understood to be among the earliest powers of mind to appear. Bruner argues that we organise our memory and articulate our experiences in the form of narrative. For young children in organised early learning, "narrative became an accessible and recognisable mode of exchange through which learning could be discussed and planned for" (Gunn & de Vocht van Alphen, 2011, p. 34). Furthermore, narrative is an accessible form of exchange through which kaiako, children, families, and community members can dialogue over learning. Collated over time, narrative assessments can demonstrate to children and parents the learning that is valued in their particular ECE community, teacher actions that have supported learning, and changes that have taken place as a result. Documented narrative forms of assessment can also be put to formative use, where they lead to changes in teaching and learning programmes and when they assist in reifying for children their learning strengths and identities.

A government-funded evaluation of assessment practices (Stuart, Aitken, Gould & Meade, 2008), a national report by ERO (2007), and Carr & Lee's (2012) book on learner identities in early childhood education show that assessment practices have changed over time. Stuart et al. (2008) concluded that ECE services had made significant steps towards building communities of learning, that assessment was made visible in practice, and that educators had made steps towards linking assessment and planning. They noted, however, that while kaiako reported child engagement in assessment practices the documented assessments rarely recorded such child engagement or its outcomes. Furthermore, Stuart et al. asserted that documented assessments often did not show continuity of learning or how parents engaged with teachers over assessment processes. The national evaluation confirmed aspects of what ERO had reported in 2007 and suggested that educators needed more time to understand and implement formative assessment processes and practices. In this context, Ngā Pou Here has the potential to be an important source of guidance and sector learning for ECE leaders and kaiako. I will now provide commentary on ngā pou Mātauraka me Tikanga Whakaako, with the intention of provoking thinking about how the framework might fulfil this function.

Review of Ngā Pou Mātauraka me Tikanga Whakaako

As explained within *He Pou Tātaki: How ERO reviews early childhood services* (ERO, 2013), these pou centre on 'valued knowledge' and 'quality teaching practices'. The related descriptions privilege te ao Māori concepts and constructs, which suggests that ERO subscribes to Bishop's (n.d.) view that what's good for Māori will also be good for all.

The concept *ako*, described as reciprocity in teaching and learning – "teachers are learners and learners are teachers" (p. 17) – is key to how teaching is constructed within the pou framework. Additionally, 'the inseparability of learners from whānau and educators within

² Jerome Bruner is one of several western paradigm learning science scholars whose views on learning and child development were highly influential in the development of *Te Whāriki* (Carr & May, 1991).

the learning relationship' is accepted as a fundamental premise and reflective of Bronfenbrenner's (1991) accounts of the ecology of human development which features prominently in *Te Whāriki*. Both pou ask the important question, 'Whose knowledge is valued here? which reveals the political and contested nature of educational endeavour, learning and change. These interrelated ideas are useful starting points for an assessment-oriented review of the framework, which should also address the situated nature of learning and the diversity of stakeholders in that learning in the early childhood education setting.

Te pou Mātauranga

Te pou Mātauranga begins with a priority question: "What does the service know about the effectiveness of its curriculum (design and planning) ..." (ERO, 2014, p. 32). Bearing in mind my earlier argument about the interconnectedness of curriculum with pedagogy, learning, and assessment, and *Te Whāriki's* constitution of curriculum as 'everything', I think there is an even earlier question to be asked: 'What is ERO's understanding of *curriculum* and how consistent is it with the definition found in *Te Whāriki*?' Further priority questions for Mātauranga suggest to me that curriculum is understood as 'intended' rather than 'actual' learning. Such a reading is not only possible, it would be likely if the reader was unfamiliar with the *Te Whāriki* definition, or the need for conceptions of curriculum, pedagogy, assessment and learning to be closely aligned. Reading curriculum as 'intended' would be inconsistent with, and could undermine deep and coherent engagement with, *Te Whāriki*.

Within the pou, curriculum is positioned as belonging to the service: 'What does the service know about the effectiveness of *its* curriculum (design and planning) ...?' 'To what extent does *this service's curriculum* recognise and build on the knowledge ...?' 'How effective is self-review in evaluating the impact of *the service's curriculum* in promoting ... *for* all children?' *Te Whāriki*, on the other hand, defines curriculum to include all that the children (and others) experience, both directly and indirectly, in the ECE setting – some of which the service cannot determine or control.

The suggestion that the service is sovereign in curriculum matters appears again in the supporting evaluation question, 'To what extent is *the* curriculum based onteachers' ...?' Here curriculum is construed as singular, but given *Te Whāriki's* definition, there is no 'one' curriculum in play. Rather, on any day each learner's particular trajectory of intended and unintended, direct and indirect experiences, activities and events, intersects with that of others and is sustained by kaiako, child, and whānau interests, prior knowledge, values, happenings and priorities. Curriculum is never the purview of the service or kaiako alone. The indicator, 'Teachers can explain how *their curriculum* aligns to the principles and strands of *Te Whāriki* (p. 33), could also be read as service- and kaiako-centric. Reworded, it might read: 'Teachers can explain how their curriculum decision making aligns with the principles and strands ...' This puts the focus onto the unique and deliberate contributions that kaiako make to curriculum provision, while recognising that curriculum provision is not altogether up to them.

I have raised the possibility that some of the current indicators could suggest a service- and kaiako-centric view of curriculum for two main reasons. First, there is a risk that ECE leaders and kaiako (many of whom are not qualified early childhood teachers) could think it is their role to decide, without involving children, parents or whānau, what learning is valued, and to mandate experiences or activities to be planned and delivered. Second, while it is true that kaiako are responsible for creating conditions for learning, viewing the curriculum as 'theirs' (and the service's) ignores the sociocultural perspectives advanced by *Te Whāriki*, which regard learning as cultural, social, negotiated, distributed, and situated.

Changes could relatively easily be made to the priority questions (p. 32) so that they better reflected the perspectives advanced by *Te Whāriki*. For example, omit the word 'its' from the first question, omit the words 'this service's' from the second, omit the words 'the service's' from the third. Alternatively, 'programme' could replace 'curriculum' if the aim is to separate out the part that leaders and kaiako play in shaping the learning environment. It may also be possible to reorient the questions using the term 'curriculum as experienced'.

Turning our attention to the higher-order learning outcomes, it seems to me that the indicators could be changed to more explicitly address 'mana enhancing practice' and 'learner identity development'. For example, (curriculum and subject content knowledge): 'Teachers have ... sufficient knowledge, including subject and general knowledge ... strengthen mana, to build on children's existing understandings, and support learner identity by extending children's working theories and designing learning environments to encourage valued learning dispositions. The elements, 'knowledge of learning and of children as learners' and 'knowledge of children's rights' could similarly be reviewed. Under the 'rights' element, I would consider changing 'support' to 'empower' in recognition that empowerment/whakamana is the first touchstone for any evaluation of ECE practice.

With such adjustments this set of indicators would, I think, better align with *Te Whāriki* and the ideas it promotes about learning, pedagogy, curriculum and assessment.

Modifications to the 'assessment and identity/processes/purpose' elements could also be made to better align them with *Te Whāriki's* higher-order (mana and identity) and strand-related learning outcomes. In particular, it would be good to explicitly reference 'working theories', 'learning dispositions', 'identities' and 'mana' in the indicators. Note that *Te Whāriki* describes disposition in the generic sense while also noting dispositions that have been positively associated with learning (p. 23).

Te Whatu Pōkeka highlights learning dispositions that have particular meaning for kaiako, whānau and children in Māori-medium early childhood education; Assessing Children's Learning in Early Childhood (Carr, 1998a) identifies learning dispositions associated with the development of lifelong learning and several of these are reflected in the English texts of Te Whāriki. Both are useful resources when considering how services and kaiako might work with children and whānau to support the development of learner identities. I would like to see the indicators refer to 'learning dispositions' instead of 'dispositions' as at present; this

would reinforce for kaiako and leaders that their remit is to provide an education that is mana enhancing and develops in every child a strong learner identity.

The 'assessment processes' element could better reflect sociocultural perspectives on how learning happens. At present, it seems to engage only partly with the *Te Whāriki* principle of Ngā hononga | Relationships, in that 'relationships' are construed as *the/an* object of learning. As a result, the understanding that learning is distributed across people, places, and things (and, therefore, inferring the relationships between) is potentially lost. If kaiako are to understand how what they do contributes to learning, assessment information should reveal the people, places, and things on which a child's learning is contingent. How this child, at this time, in this place, with these things, resulted in this valued learning, should be evident. When kaiako have this information they are in a position to make curriculum decisions that result in learning *progress*, which is what ERO is working with ECE services, leaders and kaiako. to achieve.

It seems to me that the 'assessment processes' element does not ask kaiako to build up a picture of what children *think*. Including such an expectation would (a) more deliberately connect assessment to the cognitive aspects of sociocultural learning theory and (b) bring children's rights to have their perspectives, views, and thoughts on matters that involve them – including their learning – to the fore. It is my view that the 'assessment purposes' element should engage more fully with principles of formative assessment and children's right to increasing self-determination over their learning by addressing the omission of children in the indicators at this point. It would be entirely acceptable to add an indicator that said, for example, 'Children regularly practise self- and peer-assessment'.

It would be useful to reconsider the 'curriculum planning' element in its entirety, given my earlier critique of the use of the term 'curriculum'.

Te pou Tikanga Whakaako

There are two references in te pou Tikanga Whakaako to 'deeper learning', but it is not at all clear to me what this means. 'Valued' or 'significant' learning might well be better, but it depends on what was intended. In the 'relationships and interactions with children' element, children's talk appears as an object of kaiako practice, but not all children use speech as their primary form of communication so it may be timely to broaden the construct. Given that supporting bicultural competence is policy, consideration could also be given to rewording the current indicator that references te reo Māori to contain the expectation that kaiako will use te reo Māori as an everyday language.

The 'effective teaching practice' element might usefully contain calls for mana-enhancing teaching. Furthermore, to underscore sociocultural perspectives advanced in *Te Whāriki*, assessment practices might be expected to show evidence that kaiako are drawing on expertise to be found in the wider ECE community. I would suggest that kaiako be encouraged to identify how they have been mediating learning opportunities as this would better reflect sociocultural perspectives on learning and assessment. Given that the revised version of *Te Whāriki* is more explicit about some aspects of domain knowledge, I would

suggest the indicators include reference to ICT and children as global citizens. 'Play' seems currently to be missing from this element, but as play experiences are learning experiences, it should be expected that assessment practices will show how children's play shapes their learning.³

The 'learning environment' element also appears to lack any direct reference to play, which seems odd, given that, in most ECE services that operate within a western paradigm, play has long been considered central to young children's learning. Furthermore, when the term 'environment' is used, it seems to refer primarily to the built or material space/place: as a stage upon which learning may occur. There are two problems here. First, the western paradigm is only just beginning to catch up with different worldviews about how the natural and material world may be perceived. Thurlow (in Gunn et al., 2004) writes for instance, "every classical Māori theory of explanation rests on whakapapa and uses the metaphor of procreation to make meaningful links with natural phenomena ... [this paradigm is used] to explain the origin of the natural world. Rocks, fish, trees and plants all have their own whakapapa ... (p. 301). Increasingly, the natural and material worlds are seen as changing, as interconnected, as having histories past and present, and as influential with rather than simply influenced by human activity. A recent chapter by Bateman, Carr and Gunn (2017) surfaces this thinking in relation to the 'things' in an ECE environment: a ball becomes a character in a child's story, directs the flow of the story, and and brings it to its abrupt conclusion. The point here is that 'environment' is more than 'stage', and 'things' are more than objects to be played with. Assessment evidence should show this dynamism as it relates to how and what children learn.

Second, the 'sensory environment', which is akin to climate and comprises how the service sounds, feels, smells, looks, tastes, as well its effects on the vestibular system, thermoception, interoception, proprioception and nociception (McAnelley, 2018), is largely absent from the learning environment as described under Tikanga Whakaako, both generally and in relation to the learning of children up to two years of age (p. 41). I encourage ERO to address this absence in the revision process.

Miscellaneous suggestions for revisions

If the pou Mātauranga and pou Tikanga Whakaako are to support ECE practice in which children, parents, whānau, kaiako and other community members work together to realise the higher-order learning outcomes and local learning priorities, they must enquire into how the strand-related learning outcomes (*Te Whāriki*, pp. 26-50) have been translated into the local context.

³ I will note however that play as a universal basis for early childhood pedagogy is not an uncontested or static idea, as Brooker, Edwards and colleagues explore in their book *Engaging Play* (2010).

In te pou Mātauranga, use 'programme' to describe what kaiako and leaders do promote learning; the term is an appropriate descriptor for the kinds of actions and decision-making processes that ERO looks to evaluate and support.

An indicator on page 33 reads: 'Leaders and teachers work in partnership with parents of children with special needs to improve and enhance their learning.' To improve the fit with *Te Whāriki* it may be useful to also foreground that kaiako have a responsibility to engage effectively in inter-professional work with others who are supporting the health, wellbeing, and learning of children. *Te Whāriki* explicitly states that 'kaiako have a role to play in coordinating ... perspectives and aligning them with [this curriculum document]" (p. 64).

It may be prudent to update some of the language relating to learners who might access additional support: the notion of 'additional' is problematic in that it 'others' some children and families. *All* children need learning support to a greater or lesser extent; depending on the context and learning goals, this may or may not involve specialist help from the wider community.

The 'supporting evaluative questions' for Tikanga Whakaako (p. 36) could better reflect *Te Whāriki*'s strong focus on bicultural curriculum, which includes the expectation that kaiako will play a role in protecting and promoting tikanga and te reo Māori and will understand and model the benefits of bilingualism.

Te Whāriki imagines a culturally competent child "who is able to move confidently between te ao Māori and te ao Pākehā (2017, p. 52). Research relating to bilingual and immersion education (see for instance, Harvey, Hedges, Keegan and Podmore, 2016; Skerrett & Gunn, 2011) suggests that, for this to occur, the curriculum (which in *Te Whāriki's* terms includes kaiako teaching practices) must be weighted towards the non-dominant culture.

In the interests of diversity, the 'prompts for investigation' examples might omit reference to 'other cultural heritages' (p. 36) in favour of 'multiple' or 'different cultural heritages'.

In the 'contributing elements' under Tikanga Whakaako, it might be appropriate to make reference to (a) children's local and global citizenship and (b) kaiako deliberately seeking out and taking account of children's points of view instead of simply talking to them about decisions that affect them. The latter would strengthen assessment practice and pedagogical decision making by reinforcing the expectation that kaiako view curriculum and learning as a collective responsibility.

In the 'inclusive practices' element under Tikanga Whakaako it may be timely to expand the conception of gender. I would argue the 'gender roles' notion reinforces a gender-binary construct. The dominance of the gender binary is now well questioned. The indicator might suggest instead that kaiako support children to explore gender in ways that are non-stereotypical and open-ended.

Concluding thoughts

ERO asked which dimensions of practice associated with Mātauranga and Tikanga Whakaako might have the greatest impact on positive learning outcomes (as defined in *Te Whāriki*) for all children. For me, this concerns the means by which the ERO evaluation process can orient the thinking of kaiako and leaders towards children's experiences and valued learning. Valued learning outcomes can only be agreed on, recognised, and planned for through close negotiation between children, whānau and kaiako. Translating the learning outcomes in *Te Whāriki* into the local setting should therefore be a priority for inquiry in both self- and external review.

It is important to keep in the foreground the idea that, in Ngā Pou Here as in *Te Whāriki*, 'curriculum' is constructed to mean 'the curriculum as experienced' because, if kaiako are to be asked about what they contributed to valued learning outcomes they will need to distinguish between what they intended and what actually occurred. Quality assessment that describes the socially-situated nature of the learning will include such evidence.

As to what we know about how the influences and dimensions might work together to promote and support improvement in an ECE context, the focus must be on seeing *Te Whāriki* in practice. Ngā Pou Here can be a lens through which *Te Whāriki*'s policy aspirations, high-level learning outcomes and imperatives can be observed on the ground. If the indicators describe what *Te Whāriki* aspires to, ERO's evaluation processes will be fit for purpose in much the same way, as I have argued, assessment practice must be.

I believe that Ngā Pou Here is serving ERO very well in terms of establishing a framework and touchstones for evaluation questions. While the reference group did discuss revising the graphic on page 15 to better represent the interconnectedness of the pou and their interdependence in children's experience, my view is that the representation is fundamentally sound and should be retained. By refining and reconfirming the current framework, ERO will support kaiako and leaders as they endeavour to expand and strengthen the provision of culturally appropriate, learning-oriented early childhood education in Aotearoa.

ERO's final question for contributors was 'What are the most important considerations in framing, defining, identifying and selecting of the indicators and their potential use in internal and external evaluation in ECE services?' My view is that the framework and indicators (Mātauranga and Tikanga Whakaako) need to be more theoretically coherent and targeted at the higher-order conceptual level (consistent with *Te Whāriki*). One potentially useful approach would be to set up matched pairs of indicators; for example, an element in te pou Mātauranga relating to formative assessment could be paired with an element in te pou Tikanga Whakaako describing expected formative assessment practices. In this way the indicators may serve to strengthen and align the thinking and practice of kaiako, leaders and owners by keeping the focus on outcomes and on learning that is locally and culturally appropriate.

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