

## ***Te Whāriki* revisited: How approaches to assessment can make valued learning visible**

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*In 2016, Te Whāriki: He Whāriki Mātauranga mō ngā Mokopuna o Aotearoa: Early Childhood Curriculum (Te Whāriki) (Ministry of Education [MoE], 2017), New Zealand's early childhood curriculum was updated for the first time in 20 years. Although the gazetted principles, strands and goals of the curriculum were not part of the update, the remainder of the curriculum was revised to meet the changing social and linguistic context, the revised national curriculum and associated documents, reviews of early childhood practice and relevant theory and research. The updated curriculum has reduced learning outcomes (from 118 to 20) and stronger guidance on the need for both informal and formal approaches to assessment to ensure children's learning in each strand are assessed. This article reflects on the changes between the 1996 and 2017 version of the curriculum in relation to assessment and the rationale for the changes. Approaches to both 'in the moment' and planned assessment are explored and the usefulness of approaches which enable teachers to reflect on 'discrepant data' and support children's learning in each strand are examined.*

### **Introduction**

In 2016 and early 2017, I was a member of the appointed writing team for the update of *Te Whāriki*. The writing team comprised both practising teachers and academics and we brought a range of expertise to the task. In addition, the Ministry had a group of internal and external experts who reviewed drafts of the document before and after it was released for consultation. Explanations of the process for the update are available on the New Zealand Ministry of Education website. I brought my research interests and expertise in curriculum design, assessment and evaluation to the rewrite, along with a platform of research on the teaching and learning of domain (subject) knowledge in early year's curriculum. Perhaps not surprisingly, I was allocated the tasks of leading the revision of the learning outcomes, and revising advice for assessment, evaluation and guidance for pedagogies for infants, toddlers and young children, along with input on the theoretical frameworks. Although each member had a portfolio of work, we had input into each section and the whole process of writing was collaborative. I have previously written about the reasons for the choice of 20 learning outcomes and the theoretical positions included (McLachlan, 2017), so here I will explore some of the things teachers may need to think about assessment as they enact the new curriculum.

### ***Te Whāriki* 1996 versus 2017: The context and rationales for change**

The Minister of Education in the former National Government, Hekia Parata, commissioned the update, based on the recommendation of the Early Years Advisory Group report (MoE, 2015) to strengthen curriculum implementation and early learning continuity. She explains on Te Kete Ipurangi (see <http://tewhariki.tki.org.nz/en/the-story-of-te-whariki/>) that the revised curriculum "includes a stronger focus on bicultural practice, the importance of language, culture, and identity, and the inclusion of all children. The learning outcomes have been reviewed and condensed to twenty to enable a greater focus on "what matters here" when designing local curriculum".

The Minister determined there would be no changes to the gazetted parts of the curriculum – the principles, strands and goals. Beyond that, the guidance of the Early Years Advisory Group report (MoE, 2015), Education Review Office (ERO) reviews, recent research and societal changes needed to be reflected in the update. The further development of *Te Whāriki a te Kōhanga Reo* (curriculum for Kōhanga Reo, total immersion Māori language nests) to become a

curriculum document in its own right (rather than Part B) was a major change, reflecting increased valuing of Māori immersion education.

The revised document includes stronger links to the *New Zealand Curriculum* (MoE, 2007), *Te Mārautanga o Aotearoa* (MoE, 2008), the national curriculum for Māori medium in Aotearoa/New Zealand, and *Te Aho Matua* (Tākao, 2010), a philosophical document that sets out principles for kura kaupapa Māori, total immersion primary schools. There is also the reduced number of learning outcomes – from 118 to 20 – and a stronger focus on assessment, progression and continuity in early learning. Kaiako (the term used for teachers, either trained or untrained) are portrayed as ‘intentional’ in the update and responsibilities for teachers are aligned to the practising teacher criteria (Education Council, 2015). There are suggestions leadership, organisation and practice, and questions for reflection for each strand. There is also revised guidance on assessment, which is the primary focus of this paper.

The revision was based on mounting evidence that the early childhood sector was struggling with implementation (ERO, 2007, 2013, & 2016). The ERO (2013) review of implementation of *Te Whāriki* in particular showed there was considerable variation in how the curriculum was implemented, and that teachers were struggling with implementing the principles and strands, assessing learning outcomes and reviewing the effectiveness of their local curriculum. Although New Zealand Educational Institute (NZEI) (2014), the teachers’ union, claimed that this was a result of increased privatisation of the sector and the reduction in funding for centres (from 100% for qualified staff to 80% under the National Government), the ERO reports revealed that centres with 100% qualified staff were also included in the percentages of centres seen to be struggling with implementation. Of particular concern was the ERO (2015) review of curriculum for infants and toddlers, which showed that centres with 100% qualified staff were included in the list of ‘least responsive’ services and were not promoting the strands of communication and exploration for children.

The Early Years Advisory Group report (MoE, 2015) stated that implementation of the curriculum had been subject to ‘drift’, the curriculum needed updating to recognise significant changes in society, needed alignment with the key competencies of the New Zealand curriculum to support transition to school, and that children’s progress needed greater attention, using assessment for learning strategies. A stronger focus on children’s learning outcomes was also recommended. An ERO (2016) review that synthesised 17 national reports identified the following features of effective practice in relation to *Te Whāriki*:

- Anchors for practice – *Te Whāriki* and priorities for children’s learning
- Designing and implementing a responsive curriculum that responds to children with diverse backgrounds and needs
- Positive foundations for children’s learning: social and emotional competency; literacy and mathematics; and transition to school
- Pedagogical leadership
- Effective teaching practice
- Assessment for learning
- Internal evaluation for improvement
- Learning partnerships for a responsive curriculum

It was with this backdrop that the revision of *Te Whāriki* was undertaken. A description of the process and the feedback received on the draft sent out for consultation is available on Te Kete Ipurangi (see <http://tewhariki.tki.org.nz/en/the-story-of-te-whariki/>). The next section will look more specifically at how assessment is conceptualised in the revised curriculum document.

## The revised guidance on assessment

The original version of *Te Whāriki* (Ministry of Education, 1996) had this to say about assessment:

The purpose of assessment is to give useful information about children’s learning and development to the adults providing the programme and to children and their families. Assessment of children’s learning and development involves intelligent observation by experienced and knowledgeable adults for the purpose of improving the programme. Assessment occurs minute by minute as adults listen, watch and interact with a child or with groups of children. These continuous observations provide the basis of information for more in-depth assessment and evaluation that is integral to making decisions on how best to meet children’s needs. In-depth assessment requires adults to observe changes in children’s behaviour and learning and to link these to learning goals. Assessment contributes to evaluation, revision and development of programmes (p. 29).

There is further advice on avoiding comparisons between children, and to be wary of generalising from snapshots or individual pieces of information collected.

There are several issues arising from this definition of assessment. First, the only named method of assessment is observation, but the types and frequency are not specified. My own doctoral research (McLachlan-Smith, 1996), completed prior to the release of *Te Whāriki*, revealed kindergarten teachers using a range of methods for assessment, which included different types of observations and teacher: child interactions over games and puzzles to check oral language and domain knowledge such as literacy and mathematics. These practices were based on their understandings of learning and development, and interpretation was mainly based on stage theories such as Piaget’s (1952). However, they did not use the dreaded checklists, which many see as the only alternative form of assessment, which feedback on the draft of *Te Whāriki* 2017 suggests.

Second, the purpose of assessment seems primarily focussed on improvement of the program, with only one sentence talking about the need for more in-depth assessment to help children’s learning needs. This focus on programme improvement, rather than supporting children’s learning may have caused confusion about the purpose of assessment. Certainly, ERO (2007, 2016) reports highlight centres having difficulties with assessment. These difficulties may stem from the focus on observation, programme improvement and the later emphasis on using learning stories as the primary tool for assessment in the assessment exemplars provided in *Kei Tua o te Pae* (MoE, 2005). Perkins (2013) has critiqued *Kei Tua o te Pae* for providing inadequate guidance on how teachers should observe children, understand the difference between formative and summative assessment, and write an effective learning story.

The *Kei Tua o te Pae* assessment exemplars, which were collected from centres around the country, and released in 20 books between 2005 and 2009, were developed to help support teachers with assessment related to *Te Whāriki*. All services received hard copies of the resource and the MoE funded professional development (PD) to support implementation during this period. In addition to this investment (\$2.5 million annually for five years), MoE funded the development of *Te Whatu Pōkeka* (Ways of knowing) (MoE, 2009), the Kaupapa Māori (Māori principles or ideas) assessment exemplars, were developed to support total immersion teachers’ engagement in assessment practices that align with kaupapa Māori approaches to assessment. *Te Whatu Pōkeka* also supports the notion of formative use of assessment information.

The Education Review Office (2007) report on assessment found wide variability in how the sector was coping with assessment using *Te Whāriki* and that teachers were having difficulties with using the learning story framework, despite the PD and the *Kei Tua o te Pae* resources. The review showed that about three quarters of centres had

attended PD on the use of *Kei Tua o te Pae*, yet one third of services were not linking their assessment practices to current theory, research and *Kei Tua o te Pae*, suggesting PD and the resources had not changed practice. Furthermore, in half of centres reviewed parents' and children's 'voices' were not visible and the documentation was descriptive and focussed on enjoyment, rather than focussed on children's learning.

As argued elsewhere (McLachlan, 2008; Blaiklock, 2008), *Kei Tua o te Pae* states that "assessment for learning implies that we have some clear aims or goals for children's learning" (MoE, 2005, Book 1, p. 9) and that *Te Whāriki* provides the framework for defining what is to be learned. *Kei Tua o te Pae* urges teachers to make sure that "assessment notes what children can do when they are 'at their best' (MoE, 2005), which may have fuelled the prevailing discourse on only documenting children's strengths and overlooking the fact that some children will need more in-depth assessment, as the curriculum advocates. However, the assessment exemplars provided in *Kei Tua o te Pae* may not have helped teachers to understand the 'how' and the 'what' of assessment as much as anticipated. Stuart, Aitken, Gould and Meade's (2008) study of services that had participated in *Kei Tua o te Pae* PD showed that although teachers' awareness of assessment strengthened, they did not always use data collected for learning stories and included snapshots of events, rather than demonstrating continuity in children's learning.

A later review by ERO on how centres were implementing *Te Whāriki* found that many centres were using it as a selective curriculum (i.e. not implementing all principles and strands) and in most of the services there was little evidence of reference to goals and indicative learning outcomes in assessment, planning and evaluation processes (ERO, 2013). As previously discussed, the synthesis of 17 reports (ERO, 2016) highlights that services that are effective are able to use "assessment for learning" approaches to assessment and to create strong learning partnerships.

The lack of clarity around assessment and the difficulties that teachers were facing in using the recommended approaches to assessment were motivation to reconsider the guidance given (MoE, 2015). One of the responsibilities of teachers in the update is to be "attentive to learning and able to make this visible through assessment practices that give children agency and enhance their mana" (MoE, 2017, p. 59). The opening statement reads as follows: "Assessment makes valued learning visible. Kaiako use assessment to find out about what children know and can do, what interests them, how they are progressing, what new learning opportunities are presented and where additional support may be required" (MoE, 2017, p. 63).

This statement indicates that kaiako will know what the valued learning is. Elsewhere in the document, it is made clear that valued learning is the 20 learning outcomes, along with the aspirations for the child of parents and whānau. The update also more explicitly explains that assessment will be both spontaneous and planned, as the following quote indicates:

Assessment is both informal and formal. Informal assessment occurs in the moment as kaiako listen to, observe, participate with and respond to children who are engaged in everyday experiences and events. It leads directly to changes in the teaching and learning environment that will help children reach immediate and longer-term goals. More formal, documented assessment takes place when kaiako write up observations of children's engagement with the curriculum. They may also take photographs, make audio or video recordings and collect examples of children's work. By analysing such assessment information, gathered over time, kaiako are able to track changes in children's capabilities, consider possible pathways for learning, and plan to support these (MoE, 2017, p. 63)

This quote and the guidance that follows shows that teachers are expected to use a range of methods to assess how children are making progress over time. Teachers also need to understand that gathering evidence, such as photos, is

not assessment and they will need to spend time synthesising and analysing any data gathered to create the assessment.

Although observation is still a valuable tool, it is not the only tool, and teachers will need to use a greater range of data gathering strategies to identify valued learning and ‘make learning visible’ (p. 63). Teachers will not be able to assess progress over time unless they use both planned and spontaneous assessment and this is a shift from the previous “minute by minute” guidance from 1996. Informal assessment thus leads to immediate changes to pedagogies, resources utilised or the organisation of the learning environment.

Formal assessment is used much more deliberately to identify if children are learning across all the strands of the curriculum and if children need support to achieve any specific learning outcomes. This will of course also mean that teachers are unable to be selective about only documenting learning in some strands of the curriculum, as ERO (2013) identified, and will need to ensure that children do get opportunities for learning in all strands. This approach also requires centres to have a system for gathering data over time and for reflection on how the information is used for curriculum planning over the short, medium and long term.

The next section will look at some ways in which teachers might think about assessment within the revised curriculum framework.

### **Moving forward: Assessing children using *Te Whāriki* 2017**

Elsewhere, I have argued for teachers to use a broader conception of assessment with young children (McLachlan, Edwards, Margrain & McLean, 2013). The reason is, as Hipkins (2007) argues, that learning is more like a roadmap than necessarily orderly and sequential and therefore teachers have to be alert to children’s diverse learning pathways and journeys. However, teachers need to know of the usual progressions in learning and development, as this can help them to identify when children are not progressing typically and may need further support.

Within this conception of assessment, the concept of ‘need’ is synonymous with ‘right’ for the very young; children have the right to be assessed appropriately and to receive focused support for any identified learning needs or to have their learning strengths extended (McLachlan et al., 2013).

The reference to the United Nations Convention on the Rights of the Child (UNCROC) in the revised curriculum signals the obligation on teachers to support children’s rights to health and education. The curriculum states: “Kaiako work to uphold and protect children’s rights, interests, and points of view from the earliest ages” (p. 61). Assessment is one of the ways in which children can have their needs and rights recognised. The dominant discourse on only assessing children’s strengths is arguably problematic, as ignoring children’s learning needs may negate their legislated rights to an education. An obvious example is the identified challenges children are facing with oral language development in early childhood (ERO, 2017); teachers must assess oral language and arrange early intervention as required.

The MoE’s Assessment Online website identifies three distinct approaches to assessment: ‘assessment of learning’, ‘assessment for learning’ and ‘assessment as learning’. Assessment of learning examines what children know or can do – it is usually retrospective and looks at learning that has occurred and skills and abilities achieved.

Assessment for learning is described as the process of gathering and analysing information as evidence about what children know, can do and understand. It is part of an on-going cycle, which includes planning, documenting and evaluating children’s learning (Department of Education, Employment and Workplace Relations, 2010, p. 17). Typically learning stories involve elements of both assessment of and for learning, as they have both summative and

formative elements. Assessment as learning focusses on children and emphasises assessment as a process of metacognition (knowledge of one's own thought processes).

Assessment as learning is an active process of cognitive restructuring that occurs when children interact with new ideas and critically assess their own progress. We are likely to see assessment as learning when children are involved in or reflect on their own assessment. The strategies of feed up, feedback and feedforward (Fisher & Frey, 2009) are useful ways to include children in assessment, plan for further learning and support children's developing mana and agency. Using these definitions, children's progress is a result of learning, development and assessment. All three approaches to learning can be used by early childhood teachers as part of assessment and portfolio development.

On-going assessment processes should document the different pathways that children take to reach learning outcomes. In order for this to occur, culturally and linguistically inclusive assessment, teaching, and curriculum practices must prevail (Bowman, Donovan & Burns, 2001; Puckett & Black, 2008). One way of ensuring this occurs is for teachers to identify what each child brings to the learning context and make curriculum decisions aimed at fostering further learning and development.

Research shows that a variety of assessment measures should be used in order to identify "what each child brings to the interaction" (Bowman, Donovan & Burns, 2001, p. 234) and to use this information for curriculum planning (Bagnato, 2007; Puckett & Black, 2008).

Ensuring that assessment is fair and meaningful is a core aspect of effective assessment of young children (Bagnato, 2007). Outside of early childhood education the effectiveness of assessment is often considered in terms of whether or not it is fair, valid and reliable (Absolum, 2006). However, in *Te Whāriki* teachers must also consider whether the assessment benefits children and their learning, is appropriate to children's age and cultural experiences, and values parental contribution.

In the sociocultural view of learning adopted in the curriculum, children are seen as active and contributing agents in their social contexts and learning and therefore also in their assessment. When teachers know what children can do, understand children's interests, are aware of areas where children require additional support, and involve children and families, they can plan curriculum that supports further learning.

Featherstone (2011) suggests that planning for assessment needs to include long-term, medium-term and short-term planning. Long-term planning looks at procedures for the whole group of children and usually over a whole year. It will include the annual review of procedures, methods, possible topics of study and the methods or resources for tracking children's progress. Medium-term planning bridges the gap between long and short-term planning and involves reflecting every six to eight weeks on whether the short and long-term plans have been achieved and if children are making progress. Short-term planning involves the day-to-day collection of observations, sticky notes, photographs and examples of children's work that are collected as part of daily activities.

Collectively this information may be used immediately for assessing 'where to next' for children's learning and later used in a child's learning portfolio for reflecting on progress over time. As part of planning for assessment, the teaching team will need to plan for how much and what type data is gathered, how often teachers have specific time for analysis of data collected and preparation of assessment documentation, and how assessment information will be shared with children and with families.

Although norm referenced assessment is rarely used with young children, because comparison or ranking of early learning is both unnecessary and extremely difficult (Bagnato, 2007), the uses of criterion referenced and ipsative

assessment are relevant. Criterion referenced assessment is used for assessing individual achievement, without reference to other children. Usually this sort of assessment is not scored, but uses a yes/no rubric and is particularly useful for screening purposes to identify if children have any specific developmental or physical issues.

As part of observation, teachers may use the learning outcomes and the ‘evidence of learning and development’ criteria in each strand to identify if children are showing signs of progression. For instance, in the exploration strand, for the learning outcome “Moving confidently and challenging themselves physically - te wero ā-tinana”, kaiako may look for evidence that children are showing “Control over their bodies, including locomotor and movement skills, agility and balance, and the ability, coordination and confidence to use their bodies to take risks and physical challenges” (p. 47). Using criteria for observation will help teachers to focus what they are looking for as evidence of children’s learning.

Similarly, ipsative assessment is a useful tool. Ipsative assessment involves assessing a child’s performance against their own earlier performance, with a view to determining whether any improvement has been made. Such assessment might involve using the same task before and after new a curriculum focus or activity to check improvement in children’s understanding, or taking note of a child’s performance on a task over a period of time to monitor change. The benchmark against which any change in performance is measured is the child’s own performance, not the performance of other children.

This idea is similar to an Individual Plan, which is used with children with special needs. In this case, however, the assessment is used with any child for whom progress over time needs to be followed. For example, my grandson is currently having difficulties with hearing and been referred to an ear, nose and throat specialist. The outcome of his hearing difficulties is that he is displaying some language delay, difficulties with pronunciation of certain words and is dropping beginning consonant sounds (for example nail for snail and pider for spider). As his teacher, it would be useful to record examples of his language at regular intervals and to match the findings of observations or recordings of his language to the MoE’s “Much more than words” book on oral language development. Strategies for helping language development are in the booklet, as well as guidance on when referral to speech language therapists should be done.

Assessment is a time consuming aspect of any teacher’s role and therefore data collection systems and analyses needs to be simple and straightforward, while also providing opportunities for ‘discrepant data’ to be gathered. Discrepant data, which both informs and surprises, can challenges teachers’ assumptions about children and can supports shifts in teaching practice (Earl & Timperly, 2015; Mitchell & Cubey, 2003).

Teachers can usefully think about the different ways that data could be collected to help with assessment of the learning outcomes in each strand and provide them with multiple ways of looking at learning. For instance, if I were assessing children’s learning in the communication strand, I would construct a list of ways of gathering data as evidence of learning. Table 1 presents some possible ways of gathering data on learning in the Communication strand.

Table 1: Assessment methods for the Communication strand

Communication/manāreo: Learning Outcomes	Possible methods of gathering assessment data over time
Using gesture and movement to express themselves   he kōrero ā-tinana	Video recordings/audio recordings of children's progress in non-verbal and verbal communication Anecdotal observations of ability to express emotion in a positive manner. Parent/whānau feedback on common gestures or movements used for communication.
Understanding oral language and using it for a range of purposes   he kōrero ā-waha	Audio/video recordings of children's language acquisition over time, particularly use of syntax, vocabulary and awareness of sounds in language, such as rhythm, rhyme and alliteration. Documentation/recordings of second language learners' use of the dominant language in a range of contexts and for a range of purposes. Feedback from parents on children's use of language and literacy in the home and centre environments.
Enjoying hearing stories and retelling and creating them   he kōrero paki	Event sampling of children's engagement with story reading and storytelling. Documentation/recording of storytelling, telling jokes, drama and singing. Observations of children retelling stories within play contexts. Children's reflections on their portfolios and retelling of events.
Recognising print symbols and concepts and using them with enjoyment, meaning and purpose   he kōrero tuhituhi	Event sampling, video recordings and other observations of children's engagement with print and emergent reading behaviours. Collection of artefacts of children's work that demonstrate increasing interest and engagement with symbols and with writing.
Recognising mathematical symbols and concepts and using them with enjoyment, meaning and purpose   he kōrero pāngarau	Event sampling, video recording and other observations of children's engagement with symbols and mathematical tasks. Collection of artefacts of children's work that demonstrate increasing interest and engagement with maths tasks, resources, puzzles and games and other evidence of mathematical thinking.
Expressing their feelings and ideas using a wide range of materials and modes   he kōrero auaha	Collection of artefacts of children's work or learning stories of children's ability to express themselves creatively through the arts. Video/audio recordings of children using materials and modes to express themselves.

Obviously, this list is not exhaustive, but may be a starting point for thinking about what formal approaches to assessment might involve to assess learning outcomes over time. Although there is contention around the use of online portfolios (Hooker, 2015), there is evidence that their use increases family/whānau engagement with assessment portfolios and enables the use of digital technologies to capture snippets of audio and video as part of the portfolio gathered and reflected on over time.



Some of the more informal, on-the-run ways that Featherstone (2011, p. 82) advocates include some the following:

- Observing children through planned and informal activities
- Tracking children and activities
- Taking photos and other recordings
- Talking with children as they play and work, asking and answering questions
- Collecting copies of children’s work
- Listening to children as they talk, read and sing
- Eavesdropping on and watching children at play
- Talking with parents about children’s achievements
- Getting children to help collect artefacts for their portfolio
- Listening to children as they report back to the whole group of children
- Talking to children about what you are finding out about their learning.

Assessment in these terms is highly dynamic – it is related to what happens this morning, this afternoon and tomorrow, while making sure that simple ways of gathering evidence of ‘valued learning’ are used.

### **Summary and conclusions**

Assessment of children’s learning is important for making valued learning visible (MoE, 2017, p. 63) in the update of *Te Whāriki*, and more importantly for ensuring that all children have the best opportunities to learn within their early childhood setting. Although many services will already have good systems and procedures in place for long, medium and short term approaches to assessment, the evidence of many ERO reviews suggests that teachers in some services have struggled with the advice and guidance provided for *Te Whāriki* 1996. I am hopeful that the stronger guidance given in *Te Whāriki* 2017 will help teachers with assessment and to understand that effective assessment is not something that can be done using only minute-to-minute approaches. A portfolio of children’s assessment data will involve using a range of different methods to collect sometimes discrepant data that provides evidence of children’s learning and development over time and challenges teachers to think critically about how to support learning and development.

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