Assessment for learning   Te aromatawai mō te akoranga

Noticing, recognising, and responding

In this project, assessment for learning is described as "noticing, recognising, and responding". This description comes from Bronwen Cowie's work on assessment in science classrooms (2000). It was useful to the teachers in her study, and early childhood teachers have found it useful as well. These three processes are progressive filters. Teachers *notice* a great deal as they work with children, and they *recognise* some of what they notice as "learning". They will *respond* to a selection of what they recognise.

Mary Jane Drummond's (1993) definition of assessment can be adapted to add more to this description of assessment for learning:

> [the] ways in which, in our everyday practice, we [children, families, teachers, and others] observe children's learning [notice], strive to understand it [recognise], and then put our understanding to good use [respond].
>
> page 13

The difference between noticing and recognising is the application of professional expertise and judgments. In particular, a powerful role for exemplars is to help teachers to recognise some of what they notice as learning (that is, to develop their ability to recognise learning). Sometimes recognising the learning occurs in retrospect, some time after the event. However, if there is a time gap between noticing and recognising, the teacher can't act (respond) in the moment. The exemplars have been published to assist with closing the gap so that many more responses will be immediate and professional and all members of the learning community will be better able to notice, recognise, and respond to children's learning.

The early childhood exemplar books use the term "assessment for learning". Many writers call this "formative assessment". Philippe Perrenoud (1991) says that "Any assessment that helps the pupil [child] to learn and develop is formative" and adds:

> Development and learning depend on countless factors that are often interrelated. Any assessment that helps to optimise one or more of these factors, to however small a degree, can be considered formative.
>
> page 80

Perrenoud includes children's motivation, their social identities as learners, their views about learning, and the learning atmosphere among these "countless factors".

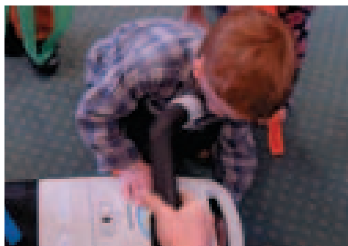
One important connection between assessment and learning is feedback. Research tells us that feedback to learners improves learning. Some of this feedback will be through documentation (such as assessments that families and teachers can read back to children and photographs that children can "read" themselves). Some of it will be verbal. Some will be non-verbal (through a gesture, a nod, or a smile). Feedback tells the learners what outcomes are valued in the learning community and how they are doing, and it acknowledges the goals that children set for themselves.

Teachers share stories as well as feedback, and this enriches their noticing, recognising, and responding. A teacher in a childcare centre, discussing the sharing of stories at a team meeting, commented, "We've followed on. Jackie did one, and then from reading hers, Sheryl saw something happen and was able to follow it up."

Electricity in the wall

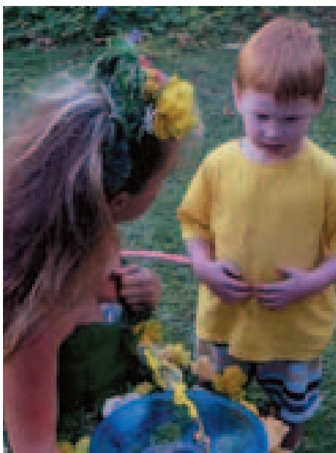
Tim is interested in vacuum cleaners. The record of this interest includes layers of noticing, recognising, and responding by the teacher and by Tim himself over a number of days.

Noticing: Tim arrives at the early childhood centre and tells Julie, the teacher, in some excitement, "I've seen a Dyson." Another teacher hears the comment and explains to Julie that a "Dyson" is a vacuum cleaner.



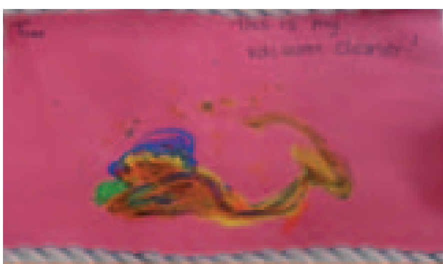
Recognising: Julie has a conversation with Tim and discovers that vacuum cleaners are of great interest to him. She recognises that for Tim, vacuum cleaners provide many opportunities for learning.

Responding: Julie fetches the centre's vacuum cleaner, and they take it apart and try an experiment to find out how many plastic plates it can suck up before the warning light goes on. A number of children also become involved.



Fairy Claire visits the early childhood centre. "Do fairies have vacuum cleaners?" asks Tim. "Yes, of course," she replies. "Can I see it?" She explains that she has left it at home.

The teachers have already noted Tim's early attempts at drawing. Julie recognises this as another learning opportunity and encourages Tim to draw a picture of the vacuum cleaner.



He also completes a painting.

Perhaps feeling that the two-dimensional drawing and painting are not enough to portray what he wants to represent, Tim decides to make a three-dimensional model of a vacuum cleaner.

The learning environment is widened when Tim goes on a visit to a vacuum cleaner shop. Tim notices the engines at the shop and later has a conversation with the teacher about motors and electricity.

Tim: Some vacuum cleaners are connected to motors.

Julie: Can a vacuum cleaner go if it doesn't have a motor?

Tim: No. If the motor's out, the vacuum cleaner might not go.

Julie: What do you think makes the motor go?

Tim: Um ... don't know.

Julie: What about the plug?

Tim: You plug it into the wall, because there's lots of electricity in the wall.

Julie: How do you think the electricity gets into the wall?

Tim: Don't know. When the cord is plugged into that plug, how does the electricity attach to the plug inside the wall?

Julie: Um ... what do you think?

Tim stood up and slowly walked towards the office, looking for clues. Julie followed behind, wondering where this would lead us. He came to a stop at the office door and peered in and up at the switchboard.

Tim: That's where the power comes in.

Julie: Yes, I think you're right – that's the control panel. And, look, here's a light switch.

Tim: I turned the light switch on and off.

Julie: Well, if that's the control panel, how does the power actually get into the box?

Tim went outside and looked about. He pointed to the power lines.

Tim: Through those wires?

Julie: Um ... maybe. I'm not sure. Let's get some other people's opinions – do some research.

We went back inside and asked Ali in the office what she thought. She thought, yes, those lines probably did carry power.

Then the sandpit called, and Tim went to dig another water channel.

Isn't it amazing where a journey with a child can lead! From baby Dysons to power lines. And the journey isn't finished yet. Where to next? – Julie

This is an example of *Te Whāriki* in action. Tim is gaining new information about vacuum cleaners and electricity. At the same time, he is gaining skills and developing dispositions about being a learner. He finds that learners explore ideas by asking questions, experimenting, observing (looking for clues), representing (in a range of ways), developing working theories (for example, the electricity is in the wall), and asking others. The teachers and Tim himself notice, recognise, and respond to opportunities to learn.

Having clear goals

Assessment for learning implies that we have some aims or goals for children's learning. *Te Whāriki* provides the framework for defining learning and what is to be learned. The goals and indicative learning outcomes are set out in strands.

Well-being – Mana Atua

> The health and well-being of the child are protected and nurtured. Children experience an environment where their health is promoted, their emotional well-being is nurtured, and they are kept safe from harm.
>
> Ko tēnei te whakatipuranga o te tamaiti i roto i tōna oranga nui, i runga hoki i tōna mana motuhake, mana atuatanga ... Kia rongo ia i te rangimārie, te aroha, me te harikoa, ā, kia mōhio ki te manaaki, ki te atawhai, me whakahirahira i a ia me ōna hoa, me ōna pakeke.

Te Whāriki, pages 46 and 35

Belonging – Mana Whenua

> Children and their families feel a sense of belonging. Children ... experience an environment where connecting links with the family and the wider world are affirmed and extended; they know that they have a place; they feel comfortable with the routines, customs, and regular events; they know the limits and boundaries of acceptable behaviour.
>
> Ko te whakatipuranga tēnei o te mana motuhake, te mana tūrangawaewae, me te mana toi whenua o te tangata ... Ko te tūmanako mō te mokopuna. Kia mōhio ia ki ōna tūrangawaewae, ki ōna marae, ki ngā pepeha hoki o ōna iwi ... ki te mana o te whenua.
>
> Kia mōhio ia ki te manaaki, ki te tiaki i te whenua, nō te mea, i ahu mai te oranga i te whenua.

Te Whāriki, pages 54 and 36

Contribution – Mana Tangata

> Opportunities for learning are equitable, and each child's contribution is valued. Children experience an environment where there are equitable opportunities for learning, irrespective of gender, ability, age, ethnicity, or background; they are affirmed as individuals; they are encouraged to learn with and alongside others.
>
> Ko te whakatipuranga tēnei o te kiritau tangata i roto i te mokopuna kia tū māia ai ia ki te manaaki, ki te tuku whakaaro ki te ao ... Kia mōhio ia ki ōna whakapapa, ki te pātahi o ōna whānau, ki ōna kaumātua me ōna pakeke ... Kia mōhio hoki ki a Ranginui rāua Papatūānuku, ā rāua tamariki, me ngā kōrero mō rātou.

Te Whāriki, pages 64 and 35

Communication – Mana Reo

> The languages and symbols of their own and other cultures are promoted and protected. Children experience an environment where they develop non-verbal and verbal communication skills for a range of purposes; they experience the stories and symbols of their own and other cultures; they discover and develop different ways to be creative and expressive.
>
> Ko tēnei mea ko te reo, he matapihi e whakaatu ana i ngā tikanga me ngā whakapono o te iwi ... Kia mōhio te mokopuna ki tōna ao, ki te ao Māori, te ao o nāianei, me te ao o āpōpō, mā te reo Māori.

Te Whāriki, pages 72 and 36

Exploration – Mana Aotūroa

> The child learns through active exploration of the environment. Children experience an environment where their play is valued as meaningful learning and the importance of spontaneous play is recognised; they gain confidence in and control of their bodies; they learn strategies for active exploration, thinking, and reasoning; they develop working theories for making sense of the natural, social, physical, and material worlds.
>
> Ko te whakatipuranga tēnei o te mana rangahau, me ngā mātauranga katoa e pā ana ki te aotūroa me te taiao. Ka ako te mokopuna i tōna ōritetanga me tōna rerekētanga ki te taiao. Ka titiro whānui, ka titiro whāiti ki ngā taonga o te ao … Kia mātau ia ki tōna aotūroa mai i te rongo ā-taringa, rongo ā-whatu, rongo ā-waha, rongo ā-ihu, rongo ā-ringa, rongo ā-kiri, ā, mai hoki i ōna whatumanawa.
>
> *Te Whāriki,* pages 82 and 37

There are particular dimensions for considering Māori educational advancement.

In 2001, Mason Durie set out a framework for considering Māori educational advancement. He introduced three goals, emphasising that they are concurrent – a "parcel of goals" – that should all be pursued together.

Goal one – to live as Māori

This goal takes as its starting point the view that learning and education "should be consistent with the goal of enabling Māori to live as Māori", including being able to access te ao Māori (the Māori world) – its language, culture, marae, and resources. To the extent that the purpose of education is to prepare people for participation in society, preparation of Māori for participation in Māori society is an educational goal that imposes some responsibilities upon the education system.

Goal two – to actively participate as citizens of the world

Durie says that education is also about "preparing people to actively participate as citizens of the world". He reminds us that Māori children will live in a variety of situations and that they should be able to move from one to another with relative ease. He emphasises that this goal does not contradict the goal of being able to live as Māori.

Goal three – to enjoy good health and a high standard of living

The third goal is linked to well-being. Durie looks at the correlation between education, income levels, and health and concludes: "Education should be able to make a major – if not the major – contribution to health and well-being and to a decent standard of living."

Documenting assessment

Some assessment will be documented, but most of it will not. There should be a balance between documented and undocumented interactions, and the two kinds of interaction should be in tune with each other.

The phrase "assessment for learning" implies an assumption that we develop ideas about "what next?". (The exemplars include many examples of planning from assessments.) Usually the child will decide "what next?". For example, a child may decide whether to repeat an attempt on a jigsaw that was successfully completed yesterday or to try a more difficult one. Teachers, often in negotiation with a learner, will also make decisions about "what next?" and how to respond to what the learner does. Most teachers' decisions or negotiations will be undocumented and spontaneous, but there are good arguments for documenting some of the possible next steps.

The following documented assessment provides an example of an everyday context and routine being used as an opportunity for interaction and feedback – for noticing, recognising, and responding.

Blinking and clicking on the changing mat

The teacher (Sue) writes the following observation:

Jace was lying on the changing mat while I was changing him. I was blowing kisses with my mouth.

Jace began to imitate me and do the same action with his mouth.

I then winked at Jace and made a clicking sound with my mouth. Jace once again imitated me and carried out the actions also.

It was really amazing to watch Jace as he looked, listened, and then repeated the actions he saw and heard.

What next?

As well as making facial expressions and sounds, we can add words to what we are doing and encourage more oral language. This can be done throughout all aspects of routines and play.

Everyday contexts

The exemplars in these books are about assessments carried out in everyday contexts. A major purpose of documentation is that it will inform everyday, undocumented, interactive teaching and spontaneous feedback, making children's interactions richer and more reciprocal. The curriculum is at its best when activities and conversations are sited in meaningful contexts.

The following is an example of a typical everyday episode in a childcare centre, which happened to be recorded by a visiting researcher.

Where's Kirsty?

There are two teachers named Kirsty at this childcare centre. One of them is away. The interaction began with Zena asking Margaret (the visiting researcher) a question. Jade and Kirsty are teachers.

Zena: [To Margaret] Where's Kirsty?

Margaret: Where's Kirsty?

Zena: Yeah.

Margaret: I don't know.

Zena: [Calling to Jade, a teacher] Where's Kirsty? Um, Jade, where's Kirsty?

Jade: [From across the room] Who, sorry?

Zena: Kirsty at my daycare.

Jade: Kirsty Smith?

Zena: No. Kirsty.

Jade: Can I ask you which Kirsty you mean? Can you come and have a look at the board and show me? [They go together to look at a photo board of all the teachers.]

Zena [Points] That.

Jade: Oh, she's not here today.

Zena: Why?

Jade: She's got Friday off. She'll be at home.

Zena: Sick?

Jade: No, she's not sick. She's just having a day at home doing some jobs. Are you missing her?

Zena: Yeah.

Jade: She'll be in next week on Monday, though, when you come on Monday.