

LEARNING DISPOSITIONS and KEY COMPETENCIES: a new curriculum continuity across the sectors?

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This year, 2006, marks an exciting new curriculum development in Aotearoa New Zealand that will affect the early childhood sector as well as primary and secondary schools. Curriculum reform has resulted in proposed changes to the school curriculum that will go out to schools for discussion during this year. One of these changes is to replace the essential skills with five key competencies that parallel the five strands of the early childhood curriculum in *Te Whāriki* (Ministry of Education, 1996). In this article I begin with a discussion of learning dispositions, briefly introduce the key competencies, and then consider three ways in which a new continuity might be forged between early childhood and primary school curricula when the proposed key competencies are put into place.

Learning dispositions and *Te Whāriki*

During early consultations for the development of *Te Whāriki*, key contributors were the Māori advisory group contracted by the Te Kōhanga Reo Trust and led by Tilly and Tamati Reedy. They laid down a challenge for the curriculum: that it should be about mana, which they set out in five realms—mana whenua, mana atua, mana aotūroa, mana reo, and mana tangata. Tilly Reedy (1995/2003) commented that those aims would “ensure that the learner is empowered in every possible way” (p. 68).

This concept provided an initial frame for *Te Whāriki*, and a key value for the early childhood curriculum. One of the curriculum principles in English was a version of the Māori whakamana: empowerment. The text reads: “The early childhood curriculum empowers the child to learn and grow.” It includes the annotation that early childhood services will assist children and their families “to access the resources necessary to enable them to direct their own lives” (Ministry of Education, 1996, p. 40).

In English, the parallel curriculum (not a translation) became: Belonging, Well-being, Exploration,

Communication, and Contribution. *Te Whāriki* then included the following commentary about “learning outcomes” associated with those five strands, emphasising learning outcomes as “working theories” and “learning dispositions”:

In early childhood, holistic, active learning and the total process of learning are emphasised. Knowledge, skills, and attitudes are closely linked. These three aspects combine together to form a child’s ‘working theory’ and help the child develop dispositions that encourage learning. In early childhood, children are developing more elaborate and useful working theories about themselves and about the people, places and things in their lives... The second way in which knowledge, skills, and attitudes combine is as dispositions—‘habits of mind’ or ‘patterns of learning’. (Ministry of Education, 1996, p. 44)

There is a wide range of ideas about dispositions, and in my view it is worthwhile to keep returning to the notion that a curriculum will assist children and their families to access the resources they need to direct their own lives. Ron Ritchhart (2002), writing about research in schools, describes dispositions as “patterns” of behaviour, thinking, and interaction (p. 9). He maintains that dispositions turn abilities into action, and says that:

[I]ntelligent performance is not just an exercise of ability. It is more dispositional in nature in that we must activate our abilities and set them into motion. (p. 18)

In a research project that followed on from the development of *Te Whāriki*, five dispositions-in-action were set out as the peaks of five learning “icebergs”, aligned to the strands of *Te Whāriki* and included in assessment formats called Learning Stories (Carr, 1998a, 1998b, 2001). These were: taking an interest; being involved; persisting with difficulty; expressing an idea or feeling; and taking responsibility.

Dispositions—an example

The following story may illustrate these dispositions. It is written by a teacher and describes an incident in which 4-year-old Freya fell off a balance beam.

DYLAN'S ENCOURAGEMENT

The sun was out, and we were ready for a fun filled morning. We had set up a wonderful obstacle course and all the children lined up eagerly to have a turn. Dylan was one of the first to attempt the balancing beam. He stepped up carefully ... arms out ... one foot ... then the other ... well done!

As Dylan returned for another go, he noticed that there were an awful lot of children on the beam at once. 'Look, Jacqui, that's too many, eh?' he said to me. I agreed and as we were about to suggest that maybe some of the children should hop down, the group tumbled into a heap on the safety matting.

One of the children who got caught up in the fall was Freya. She got up and brushed herself off with a grin, nobody got hurt, but Freya was a little apprehensive about having another go.

'Come on, Freya!' I said. 'Have another try.' Freya didn't look too convinced and watched the others for a while.

'Come on, Freya,' Dylan said with a smile. 'It's OK. I'll hold your hand if you like.' Freya was very impressed with Dylan's kindness and took up his offer. Together they worked their way across the balancing beam. Freya was up on the beam and Dylan was holding her hand, giving her words of encouragement from down on the safety matting.

They reached the end and Dylan helped Freya off the beam. Then he suggested he could document Freya's achievement so that she could remember how to do it next time. Freya thought that was a wonderful idea and together they asked me for the camera.

Dylan stood like a pro, holding the camera in one hand while adjusting his position until he had the perfect shot set up.

This story records that the children "lined up eagerly to have a turn". The obstacle course was a regular event, a favourite with many of the children at this early childhood centre. It is obvious, I think, that *taking an interest* is often the first step in being motivated to achieve a

goal—and there is research to support this idea (for example, Renninger, Hidi, & Krapp, 1992). Sometimes we tentatively take on someone else's interest before it becomes our own. Perhaps this was true for Freya: her primary interest may have been the relationship with Dylan rather than negotiating the balance beam. We come to new interests in many ways, and elsewhere (Carr, 2001) I have linked interest to culturally and historically determined "possible selves" (Markus & Nurius, 1986). The nature of our interest certainly makes a difference to our interpretations and understandings of learning opportunities. Gunter Kress and his colleagues (Kress, Jewitt, Ogborn, & Tsatsarelis, 2001) make this point, and comment that a key pedagogical question for teachers is: "What is the interest that they are expressing here, which underlies and motivates this specific representation of the issue at hand?" (p. 118).

An indication of close *involvement* was provided by the teacher's description of Dylan tackling the beam: he "stepped up carefully ... arms out ... one foot ... then the other". The story implies that Dylan is concentrating and focused. Mihaly Csikszentmihalyi (1997) claims that moments of intense involvement—"flow"—make for "excellence in life": "When goals are clear, feedback relevant, and challenges and skills are in balance, attention becomes ordered and fully invested" (pp. 31, 32). Dylan's comment "Look, Jacqui, that's too many, eh?" shows involvement at another level—he is taking responsibility for the group's safety.

This is also a story about Freya *persisting* with uncertainty and challenge, and it describes clearly the scaffolding that assisted Freya to bring her skills up to the level of challenge: Dylan's encouragement. (The balance beam is also a nice metaphor for Csikszentmihalyi's analysis of involvement as a balance between challenges and skills.) Dylan didn't just talk Freya through the challenge (giving her words of encouragement), he physically gave her support, and then he recorded her achievement. This recording, the use of the digital camera with instant feedback, added another "language" to the event, a picture that the teacher added to the text of the Learning Story so that Freya could revisit her learning. Recording and revisiting is standard practice at this early childhood centre, an aspect of the way teachers and children *express ideas and feelings* (Kress and colleagues would call it "multimodal teaching and learning").

Finally, this is also a story about Dylan *taking responsibility*. He appears to understand how Freya is feeling and tries several ways

to help her. He also takes a critical view of the context, reminding the teacher of safety considerations. The teacher acknowledges this joint responsibility when she writes that "*we* were about to suggest that maybe some of the children should hop down."

In powerful learning environments teachers explain, orchestrate, commentate, model, and document (Claxton, 2002; Claxton & Carr, 2004). Dylan's and Freya's teacher used many of these strategies—setting up an activity that could provide a balance of skill and challenge (orchestrating); agreeing with Dylan about the crowding issue and writing down the story (commentating and documenting); and modelling the notion of shared responsibility by using the pronoun "we". It is interesting that Dylan was also explaining and commentating (talking Freya through the task), orchestrating (providing a range of verbal, physical, and digital supports), and documenting. The process of turning ability into action, where skills become dispositions and knowing becomes knowing-in-action, develops through experience, practice, and immersion—as this example illustrates.

Key competencies in the school curriculum

In 2002 the Ministry of Education's *Curriculum Stocktake Report* made recommendations for revision of the school curriculum. This report included:

Item 272. The essential skills/ngā tino pūkenga should be modified from the current organisation of fifty-seven essential skills/ngā tino pūkenga in eight groupings to five groups of essential skills and attitudes to be consistent with *Te Whāriki*. (p. 62)

Later these "essential skills and attitudes" became "key competencies", in line with an OECD project called Defining and Selecting Key Competencies (DeSeCo) that consulted internationally on "key competencies for a successful life and a well-functioning society" (Rychen & Salganik, 2003).¹ The five key competencies currently proposed are: participating and contributing; managing self; thinking; using language, symbols, and texts; and relating to others.

Key competencies, like learning dispositions, are about action and are closely attached to an environment that encourages their development. The OECD project's view of a "competence" is that it results in a person taking action to complete a task or achieve a goal. "A competence is manifested in actions,

behaviors, or choices in particular situations or contexts” (Rychen & Salganik, 2003, p. 48). The DeSeCo model of competence is “that the relationship between the individual and society is dialectical and dynamic.... Actions always take place in a social or socio-cultural environment, in a context that is structured into multiple social fields” (p. 45).

A new continuity

I want to suggest three ways in which a new continuity between the early childhood and school sectors might be forged when the proposed key competencies are put into place: alignment, connection, and critique.

Continuity one: alignment across key competencies and strands

The key competencies can be aligned with the strands in *Te Whāriki* (just as the English titles are aligned with, but are not exactly the same as, the Māori strands).

The *Curriculum Stocktake Report* recommended that the key competencies should be “consistent” with the strands of *Te Whāriki*. It can be argued that there is a consistent philosophy across the key competencies and the strands of *Te Whāriki*: the notion that learning is distributed or “stretched over” enabling (or empowering) resources such as people, places, and artefacts (including language, symbols, and texts, and ways of thinking). Curriculum is then, at least in part, about assisting learners to access resources for learning such as: communities; local resources (for example, tools and routines); strategies for investigating and persevering; language, symbols, and texts;

and other people. James Wertsch (1991) has called these resources “mediational means”:

The most central claim I wish to pursue is that human action typically employs ‘mediational means’ such as tools and language, and that these mediational means shape the action in essential ways ... the relationship between action and mediational means is so fundamental that it is ... appropriate, when referring to the agent involved, to speak of ‘individual(s)-acting-with-mediational-means’ than to speak of ‘individual(s)’. (p. 12)

Box 1 provides one way of looking at the possible alignment, across learning dispositions and key competencies, of the resources that represent fundamental relationships and “shape the action in essential ways”.

“Thinking” and “managing self” are perhaps the most different in the alignments between *Te Whāriki* and the key competencies. In the Freya and Dylan example, Dylan had a view about a useful way of “thinking” or learning: “remembering” through revisiting an episode. Possibly he had developed this idea through being immersed in an educational environment where the teachers (and other children) also held and demonstrated this viewpoint. The value of this particular aspect of learning and thinking is supported by research on event representation by Katherine Nelson (1997), and by Robyn Fivush and Catherine Haden (1997), who conclude:

As narrative skills develop, so too do skills for representing events in more elaborate, coherent and evaluative forms.

Narrating the past is a critical part of representing the past. It is through narrating the personal past that we come to understand and represent the events of our lives in ever more meaningful ways. (p. 195)

Dylan also helped Freya to “manage self”, by providing scaffolding as well as illustrating the notion that it is all right to be uncertain, and that supports are available to help. Not all the supports can be described as temporary scaffolding, however—the balance beam was also mediating equipment, integral to Freya’s achievement in finding a balance between skill and challenge. It may be that on this occasion the balance beam *plus Dylan* were the significant combination. The teacher’s Learning Story is another mediating device, enabling Freya to revisit and consider her capacity to cope with uncertainty.

Continuity two: connections across learning environments

The continuity might reside not only in the alignment of learning dispositions and competencies, but also in the learning environments across the sectors. These can also be about the accessible mediating resources: communities that connect with the learners’ funds of knowledge (Gonzales, Moll, & Amanti, 2005), and suggest “possible selves” and interests; local resources (such as Dylan’s use of digital technology) and routines that can be orchestrated by teachers and learners; ways of thinking and exploring; diverse languages, symbols, and texts; and other people in a range of roles. These resources are set inside a climate

BOX 1 POSSIBLE ALIGNMENT OF RESOURCES ACROSS LEARNING DISPOSITIONS AND KEY COMPETENCIES

<i>Te Whāriki strand</i>	<i>Te Whāriki strand</i>	<i>Learning dispositions as actions</i>	<i>Key competencies</i>	<i>Mediating resources</i>
Mana whenua	Belonging	Taking an interest	Participating and contributing	Communities that connect with the learners’ funds of knowledge, and suggest “possible selves” and interests
Mana atua	Well-being	Being involved	Managing self	Local resources and routines that can be orchestrated by teachers and learners
Mana aotūroa	Exploration	Persisting with uncertainty and challenge	Thinking	Ways of thinking and exploring
Mana reo	Communication	Expressing ideas and feelings	Using language, symbols, and texts	Diverse languages, symbols, and texts
Mana tangata	Contribution	Taking responsibility	Relating to others	Other people, in a range of roles

or culture that takes a view of the learner as competent. Guy Claxton's (2002) book, *Building Learning Power*, is about "creating a climate or a culture in the classroom ... that systematically cultivates habits and attitudes that enable young people to face difficulty and uncertainty calmly, confidently and creatively" (p. 3).

Local initiatives in early childhood settings and schools are already beginning to develop these connections, climates, and cultures. For example, in a series of research projects reported under the title *Te Whāriki and Links to the New Zealand Curriculum* (Carr & Peters, 2005²), eight school teachers, five early childhood teachers, and three professional development facilitators developed some ideas about environments that reflect key competencies. Of considerable interest was the connection between the environment and both the *Te Whāriki* strand Belonging and the key competency Participating and Contributing (in the early stages of consultation this key competency was also labelled Belonging, and there was vigorous support for that label among the teachers in this project). A supportive, nurturing environment was seen as essential. This was consistent with an OECD international survey of 15-year-olds (Willms, 2003), where good student-teacher relations were an important factor in fostering a sense of belonging. Carr and Peters's (2005) report adds:

Similarly, New Zealand research has identified a key influence in the educational achievement of Māori students as the 'quality of in-class face-to-face relationships and interactions between themselves as Māori people and their teachers (Bishop et al., 2003). Macfarlane (2004) has also argued that relationship-based pedagogies and cultural centredness are key factors in Māori students' achievement. (p. 22)

The school teachers pointed out that the key competencies do not stand alone. They will be woven into the Learning Areas, but they have also invited some changes in pedagogy. A primary teacher commented that she had begun to shift her focus:

I now focus on the 'how' of learning rather than the 'what' of learning, and use the content as the vehicle for teaching skills i.e., Key Competencies. (Carr & Peters, 2005, p. 27)

Learning dispositions are also woven into topics and activities in early childhood programmes. The documentation of the observation of Freya

and Dylan's learning episode commented on both the achievement of the activity (the successful working of their way along the balance beam, with a description and photograph of the skills required) and the learning dispositions involved in it.

Continuity three: critique

Dylan was prepared to question the safety of the environment around the balance beam, and this kind of critique can be seen as an overarching aim for education in its broadest sense. The OECD group that began the discussions about key competencies maintained that "reflectivity" is an umbrella concept for key competencies (Rychen, 2003, p. 74). This includes "the need to take a critical stance" and to question what is taken for granted (p. 80). In a chapter written for an earlier publication from the OECD project (Rychen & Salganik, 2001) and subtitled "How to avoid being abused, alienated, dominated or exploited when one is neither rich nor powerful", Philippe Perrenoud (2001) said:

[K]nowing how to *identify, evaluate and defend one's resources, rights, limits, and needs* is necessary for a family member, a pupil, a patient in hospital, a defendant in a court of law, a worker in a firm, or a boxer in the ring. (pp. 130–131, emphasis in the original)

Perrenoud, a sociologist, refers to Pierre Bourdieu's notion of acting in a "social field" (a structured space in which the participants are positioned in different ways; those positions lead to dispositions, habitus, or a repertoire of competencies, transferred from one social field to another). Social fields include: parental relationships; law and justice; religion; health; education and training; and work. Perrenoud lists the critical competencies he believes are useful or indispensable in all social fields "in order to avoid being at the mercy of strategies and decisions adopted by other actors" (p. 130). These competencies include being able to:

- identify, evaluate, and defend one's resources, rights, limits, and needs;
- individually or in a group, form and conduct projects and develop strategies;
- analyse situations, relationships, and social fields;
- co-operate, act in synergy, participate in a collective, and share leadership; and
- play with the rules, using them and elaborating on them.

Critical questions can cross the sectors: from early childhood to primary, from primary to secondary, and beyond. One of my favourite

writers is Deborah Meier, the principal of Central Park East Secondary School (CPRESS) in New York's East Harlem. Deborah Meier began her career teaching 5-year-olds in an American kindergarten. I particularly like her comment that "This fortuitous opportunity to work with young children gave me a particular viewpoint and perspective that has, as much as anything else, shaped all my subsequent efforts" (Meier, 1995, p. 1). She writes about a secondary school curriculum that was not formed around learning dispositions or key competencies, but something very similar—habits of mind. These habits of mind became critical questions:

We threw together the 'CPRESS Habits of Mind' in a hurry as we realized the need to create a unity across disciplines and a focus on the essential ... It was all very well to refer to 'habits of mind', but the phrase seemed too abstract. We didn't want an endless laundry list either, so we wrote down five, based on many years of watching kids and observing our own habits, and now they are posted in most classrooms and appear regularly in our weekly newsletter ...

'How do we know what we know?' (the question of evidence)

'Who's speaking?' (the question of viewpoint)

'What causes what?' (the search for connections and patterns)

'How might things have been different?' (the question of supposition)

'Who cares?' (why any of it matters). (pp. 49–50)

Continuities across the sectors: a wish list

So here is a wish list for continuity across the sectors:

- closely aligned learning dispositions and key competencies;
- closely connected learning environments, relationships, and images of the learner, across which the dispositions and competencies are distributed; and
- learners who are ready, willing, and able to critique and redesign the curriculum and the world.

Deborah Meier (1995) comments that at the Central Park East Secondary School they play around with their critical questions, if only to remind themselves that these questions "weren't handed to us from Above" (p. 50). She adds that:

building standards based on these habits of mind takes time, takes translating

back and forth between theory and practice, between our ideas and samples of real student work ... it's an endless tension, a see-sawing back and forth between 'coverage' and making sense of things. (p. 51)

This, too, will be the work in progress for both the early childhood and the school sectors in Aotearoa New Zealand. Meier's book is entitled *The Power of Their Ideas*, which makes a nice connection to the framework of mana with which this article began.

Acknowledgements

This article is adapted from an address I gave to the national conference of the New Zealand Educational Institute in 2005—many thanks to NZEI for inviting me to present that paper, and to think about these ideas. I acknowledge with gratitude the support from the Ministry of Education for the project *Te Whāriki* and Links to the New Zealand Curriculum, which I directed jointly with Sally Peters, and thank the teachers and professional development facilitators who took part. I also thank Jacqui, Dylan, and Freya for their permission to use the balance beam story. The views expressed here are my own and are not intended to represent those of the Ministry of Education.

References

- Bishop, R., Berryman, M., Tiakiwai, S., & Richardson, C. (2003). *Te Kotahitanga: The experience of Year 9 and Year 10 Māori students in mainstream classrooms. Report to the Ministry of Education*. Wellington: Ministry of Education.
- Carr, M. (1998a) *Assessing children's experiences in early childhood* [Three videos and a workshop booklet for practitioners]. Wellington: New Zealand Council for Educational Research.
- Carr, M. (1998b). *Assessing children's experiences in early childhood: Final report to the Ministry of Education*. Wellington: Research Division, Ministry of Education.
- Carr, M. (2001). *Assessment in early childhood settings: Learning stories*. London: Paul Chapman.
- Carr, M., & Peters, S. (Eds.). (2005). *Te Whāriki and links to the New Zealand curriculum. Research Projects 2005*. Hamilton: University of Waikato.
- Claxton, G. (2002). *Building learning power: Helping young people become better learners*. Bristol: TLO.
- Claxton, G., & Carr, M. (2004). A framework for teaching learning: The dynamics of disposition. *Early Years*, 24(1), 87–97.
- Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. New York: Basic Books.
- Fivush, R., & Haden, C. A. (1997). Narrating and representing experience: Preschoolers' developing autobiographical accounts. In P. W. van den Broek., P. J. Bauer, & T. Bourg (Eds.), *Developmental spans in event comprehension and representation: Bridging fictional and actual events* (pp.169–198). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gonzalez, N., Moll, L. C., & Amanti, C. (Eds.). (2005). *Funds of knowledge. Theorizing practices in households, communities and classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kelly, F. (2001). Defining and selecting key competencies: A New Zealand perspective. Country contribution to *Definition and Selection of Competencies (DeSeCo): Theoretical and Conceptual Foundations*. Paris: Organisation for Economic Cooperation and Development.
- Kress, G., Jewitt, C., Ogborn, J., & Tsatsarelis, C. (2001). *Multimodal teaching and learning: The rhetorics of the science classroom*. Geelong, Australia: Deakin University Press.
- Macfarlane, A. H. (2004). *Kia hiwa ra! Listen to culture—Māori students' plea to educators*. Wellington: New Zealand Council for Educational Research.
- Markus, H., & Nurius, P. (1986). Possible Selves. *American Psychologist*, September 954-969.
- Meier, D. (1995). *The power of their ideas*. Boston: Beacon Press.
- Ministry of Education. (1996). *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa: Early childhood curriculum*. Wellington: Learning Media.
- Ministry of Education. (2002). *Curriculum stocktake report*. Wellington: Author.
- Nelson, K. (1997). Event representation then, now, and next. In P. W. van den Broek., P. J. Bauer, & T. Bourg (Eds.), *Developmental spans in event comprehension and representation: Bridging fictional and actual events* (pp. 1–26). Mahwah, NJ: Lawrence Erlbaum Associates.
- Perrenoud, P. (2001). The key to social fields: Competencies of an autonomous actor. In D. S. Rychen & L. H. Salganik (Eds.), *Defining and selecting key competencies* (pp. 121–150). Göttingen: Hogrefe & Huber.
- Peters, S. (2005). Making links between learning in early childhood education and school using the 'key competencies' framework. *Teaching and Curriculum*, 8, 9–15.
- Reedy, T. (2003/1995). Toku Rangatiratanga na te Mana-Mātauranga: "Knowledge and power set me free ..." In J. Nuttall (Ed.), *Weaving Te Whāriki* (pp. 51–77). Wellington: New Zealand Council for Educational Research.
- Renninger, K. A., Hidi, S., & Krapp, A. (Eds.). (1992). *The role of interest in learning and development*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ritchhart, R. (2002). *Intellectual character: What it is, why it matters, and how to get it*. San Francisco: Jossey-Bass.
- Rutherford, J. (2005). Key competencies in the New Zealand curriculum: Development through consultation. *Curriculum Matters*, 1, 210–227.
- Rychen, D. S. (2003). Key competencies: Meeting important challenges in life. In D. S. Rychen & L. H. Salganik (Eds.), *Key competencies for a successful life and a well-functioning society* (pp. 63–108). Göttingen: Hogrefe and Huber.
- Rychen, D. S., & Salganik, L. H. (Eds.). (2001). *Defining and selecting key competencies*. Göttingen: Hogrefe and Huber.
- Rychen, D. S., & Salganik, L. H. (Eds.). (2003). *Key competencies for a successful life and a well-functioning society*. Göttingen: Hogrefe and Huber.
- Wertsch, J. V. (1991). *Voices of the mind*. Cambridge, MA: Harvard University Press.
- Willms, J. D. (2003). *Student engagement at school: A sense of belonging and participation. Results from PISA (Programme for International Student Assessment) 2000*. Paris: Organisation for Economic Cooperation and Development.

Notes

- 1 See also Kelly (2001) for the New Zealand commentary and Willms (2003) for a related OECD survey on the Programme for International Student Assessment.
- 2 See also Sally Peters' (2005) paper, "Making links between learning in early childhood education and school using the key competencies' framework", and Justine Rutherford's (2005) article on the key competencies in the New Zealand curriculum.

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