

New-entrant classrooms in the re-making Pro Bono Charitable Research Fund project

Keryn Davis

November 2015

What is this all about?

Children transitioning into school are often confronted with formal teaching and learning approaches that contrast sharply with what they have experienced in contemporary early childhood education (ECE) settings.

This research project contributes a perspective on how junior school teachers might improve continuity for children moving from ECE to school. The transformation of the new-entrant and year-1 classes at Mairehau Primary School provides powerful insights into what is possible when teachers embrace play as a valid and worthwhile form of learning for young children new to school.

There are a number of implications for practice for teachers interested in continuity of learning between home, ECE, and school. These include:

- > Allowing children time and space within the classroom timetable to develop a sense of belonging and relationships is likely to support children's wellbeing and positive attitude towards school.
- > Creating a balance between the priorities of creativity, agency, belonging, relationships, and children's interests and inquiries, and literacy, and mathematics is possible.
- > Creating this balance for young children by valuing and encouraging purposeful play and authentic inquiries as part of the school day.
- > Recognising that young children bring interests, experiences, and expertise with them to school. They are often most competent when they are able to do some of the 'driving' of the programme.
- > Placing a greater emphasis on authentic engagement and agency, and valuing children's prior-to-school learning and experiences can contribute to children being more settled when starting school.

Finally, the shifts in classroom practices illustrated by this case study owe much to the teachers and school leaders, and the dispositions they hold about their role. Such significant transformation was possible because teachers and school leaders had:

- > the curiosity to seek out new approaches
- > the willingness to rethink their approaches to teaching
- > a belief that adopting the new does not necessitate discarding the old
- > a high level of trust in one another to do what they believe is best for children, and the confidence to give things a go.

About the author:

Keryn Davis

Senior Researcher CORE Education

Keryn Davis is a senior researcher at CORE Education in Christchurch, New Zealand. Her interests include collaborative practitioner research and change, effective pedagogy, curriculum design, working theories, dispositions, creativity and assessment for learning. 20-years experience in the education sector as a teacher, facilitator, teacher educator, writer, and researcher Keryn has a broad understanding of the sector, policy, curriculum, and teaching and learning.

CORE Education's Research Reports

CORE Education is a New Zealand based not-for-profit organisation that has been providing world-class professional learning and development, research, and thought leadership for over ten years. CORE has a strong desire to transform education, and we believe that new technologies are an exciting way to engage learners across all education and training sectors. The CORE Education research reports are intended to provide helpful information for improving education in New Zealand and the world. They provide insights, promote discussion, and inform school leaders and teachers about educational themes and trends.

Introduction

New Entrant classrooms in the re-making is a collaborative, classroom-based research project undertaken by new-entrant teachers at Mairehau Primary School and Keryn Davis (CORE Education, Senior Researcher).

The project:

- > Contributes a perspective on how juniors school teachers might better support continuity for children transitioning between early childhood education (ECE) and school.
- > Explores ways teachers could become more responsive to young children's modes of learning and the funds of interest, expertise, and experiences these children bring with them to school.
- > Emphasises teacher pedagogy and the creation of rich learning opportunities that encourage thinking, creativity, and play-based inquiry.
- > Places a particular emphasis on relationships between children, teachers, families, whānau, and the wider school to support successful transition to school.
- > Picks up on ideas about engagement and motivation of young learners.

The project builds on research undertaken in ECE and school settings in New Zealand on children's working theories (Davis & Peters, 2011), learning dispositions and Key Competencies (Carr, Peters, Davis, Bartlett, Bashford, Berry, Greenslade, Molloy, O'Connor, Simpson, Smith, William, & Wilson-Tukaki, 2008), and transitions from ECE to school (Peters & Paki, in press). The project also draws on connections to research and literature from similar projects in other parts of the world such as Northern Ireland (Walsh, McGuinness, Sproule & Trew, 2010), and Scotland (Martlew, Stephen & Ellis, 2011).

Why is this project important?

Much has been written about the need to shift teaching and learning into the knowledge and 'knowing' era (Gilbert, 2005). This requires a redesign of schooling away from the industrial traditions most of us have experienced because this approach to schooling does not serve the needs of all of our peoples (Bishop, Berryman, & Wearmouth, 2014), or the needs of our world now and into the future (Bolstad et al, 2012). As educators take a more identity-focused and future-focused approach to teaching and learning, those interested in supporting successful transitions to school are challenged to build on, and make connections to, children's prior learning and experiences from home and ECE (Ministry of Education, 2007).

Children transitioning into school are often confronted with formal teaching and learning methodologies that contrast sharply with the approaches to teaching and learning of contemporary ECE settings these children are likely to have experienced (Carr, Smith, Duncan, Jones, Lee, & Marshall, 2010; Peters, 2010). In those settings, play, interests, strengths, dispositions and working theories of learners are the modus operandi (Ministry of Education, 1996). Limited research has been undertaken in new-entrant classrooms where these modes of learning and teaching are embraced as worthwhile, meaningful, and rich sites for learning and teaching.

The context: Mairehau Primary School, Christchurch

The project was based in the three new-entrant classes of Mairehau Primary School. Located in northeast Christchurch, Mairehau Primary is a school of approximately 420 children new entrant to year 8 (5–13 years). As a result of a series of major earthquakes in 2010 and 2011 Mairehau Primary School was, like many schools in Christchurch, challenged to re-think and redesign their school, and with this, engage children, families, whānau, and the wider community in explorations around new pedagogy, curriculum, and



environment design.

In late 2013, the new-entrant teaching team (Simone Whalley, Jenny Layton, and Tracey Weekes), had become interested in transforming the nature of the learning and teaching experience of young children entering school. They were interested in how they might provide greater continuity for children transitioning from ECE to school by making changes to the physical environment, the pedagogy, and what learning is valued (and how this learning happens) for children in their first years of school.

The catalyst for change: Simone's story

Simone was a major driver of the transformation at Mairehau. A teacher for 20 years, Simone had started to question whether there was a better way to support children new to school. Her own son Joseph had transitioned from ECE to school in the year previous, and, while he made the move to school easily, she knew this wasn't the case for many children she had taught. Simone was beginning to see the contrast between Joseph's ECE experience and his early school experience differently from how she had in the past.

Before her son's transition to school, she had understood the differences between the more informal, child-led experiences of ECE and more formal, teacher-led experiences of school as important and necessary for children. She believed that children needed to get used to these differences and would eventually navigate them with the support of their teacher. While she saw that for some children this difference was challenging, she trusted that all children would get used to school and eventually settle.

However, her new understanding of ECE through her own child's experience meant she now saw this change through new eyes:

By the time he left kindy, Joseph was making up imaginary games outside and drawing other children into his games. They all had roles and the oral language was expressive, clear, and very purposeful. The children were constantly problem solving and using their interests to further their learning and social skills. As soon as I dropped him off, Joseph would become engaged in his learning.

On Joseph's first day at school I watched, a bit sadly, as he sat beautifully on the mat for long periods of time listening to the teacher. I suddenly realised the huge step between good early childhood experiences and beginning school as a five year old.

While Joseph's ECE days were social and interest-based, characterised by freedom, play, creativity, and problem-solving, she knew that his early school days were not. Furthermore, she knew from experience that this was the case for many children. Simone could see value in establishing greater continuity for children in all areas of learning, and began to question what was important for children to learn at school. She was particularly interested in this for those children she recognised were facing challenges at school:

Personally I felt that most of these children were simply not ready for the formal style of learning expected of them at school. [...they] were rebelling against this, as they were finding that school was not enjoyable, purposeful, or manageable for them.

Simone began to consider what she should change about her teaching to support success for all children. She spent time reflecting and speaking with other primary and ECE teachers about this. With the support of school leaders she experimented with some ideas, incorporating into her classroom more of the elements she appreciated about the ECE settings her own child had experienced. Simone knew that

she wanted to include more opportunities for children to play. She saw play as an obvious opportunity for the key competencies, and also as a valid and worthwhile mode of learning for young children.

During 2013 Simone developed a play session for her class. She ran this every morning for one hour, giving children freedom to choose what to do and with whom, and with an emphasis on the key competencies. She provided basic play resources such as dress-ups and blocks, and utilised the equipment she already had. Sometimes she set up specific activities, but she was keen not to have too many "fixed" table-top activities she had seen in other new-entrant "play-based" programmes. Soon Simone began to see how these changes to her programme were impacting on children's experience of school, and how these changes had created new opportunities for learning:

The children loved it, and it smoothed the transition between their early-childhood setting and our classroom. I also began listening to the conversations of the children and realised the rich learning that was happening. The children were in natural social situations and solving issues that were naturally coming up. When situations became 'icky' they had an adult nearby to help them with the words they needed to use. There was also a lot of 'learning off each other' happening.

By late 2013, Simone had begun discussing her observations with other teachers and the leader-ship team. This professional discussion and debate was an important feature of the process for her. So too was the support and trust of the principal (John Bangma) and assistant principal (Tracey Weekes). Simone was ready to pick up the pace and scale up her project to include the rest of the new-entrant team and classes.

The research project

The teachers and the researcher documented and analysed the development of the three new-entrant-year-1 classes over the course of the 2014 school year. The research was framed around the following questions:

- > How might teachers design curriculum (and environments) that support learning outcomes described in the New Zealand Curriculum that also:
 - > Supported children's transitions from ECE to school?
 - > Responded to young children's interests and motivations?
- > What teaching pedagogies encourage children's thinking, creativity and inquiry in new-entrant classrooms?

The researcher met with the teachers to discuss, track, and reflect on the decisions teachers made, the shifts in their thinking, and their informal observations of the ways children were responding to the changes being made. The researcher observed the teachers and children in action in the two (then later, three), classrooms. These observations included the researcher tracking three children at different times across the year, using the *Leuven Involvement and Well Being Scales* (Laevers, 2005) to look closely at the nature of the participation of these children at school. *The Leuven Involvement and Well Being Scales* are an interval-based observation tool designed to focus on the nature of children's engagement (Involvement) and emotions (Well being) in the classroom.

A set of guiding intentions and ideas

While the teachers were influenced by many well-known ideas, methods, and theories about design curriculum for schools, they were keen to break some new ground and look beyond any ready-made programme or formula. Instead, a set of ideas or intentions began to emerge that informally guided their decisions.

These included:

- > prioritising children's sense of well-being and belonging, and their relationships with each other, the teacher, the environment, and routines
- > positioning play as worthwhile, meaningful, motivating, and necessary for children
- > trusting children to bring, find, and create interests with, and alongside, others
- > placing greater emphasis on creativity, and accepting that creative learning is often messy and can, at times, be loud
- > focusing on children's engagement rather than compliance
- > emphasising the development of key competencies as powerful influences on learning in all curriculum areas.

The teachers retained a high focus on literacy and mathematics, but left behind prescribed notions of inquiry and the traditions of "topic". They instead designed a play-based programme they called, "Relating to Others Time", to run each morning of the week from 8.30am, when children started arriving at school until 10.15am. The teachers felt the name, "Relating to Others Time", reflected the emphasis on relationships in action and provided a strong link to the key competencies as being central to learning in every area (Ministry of Education, 2007).

Major findings

Changes in children's engagement and belonging

From the very first day the teachers introduced "Relating to Others Time", the children initiated and engaged in their own creative interests. While teachers set up some activities for children, they often positioned these as provocations, and they found children readily engaged in the programme with little need for redirection or support. The teachers were excited by the children's learning, and noticed significant differences between this group of children and the previous classes they had taught. For example, the teachers felt children new to school settled much more quickly than in the past. Very few children appeared to be showing any distress or unhappiness about being at school. Only on one occasion during classroom observations did a child new to school become teary in the afternoon and ask when they would be collected. In another situation, a child arrived with their family for their first school visit, and within a few short minutes ran off to join in. Children for whom English was a new language also seemed to find their place easily, and quickly connected with other children through play. One teacher commented on two children — one on their first school visit — as they happily played together despite not having a common language.

"Look at that. Play is universal. You don't need to speak the same language to play."

Simone, new-entrant teacher

The teachers believed that the familiarity of the play-based programme for children, with its emphasis on relationships and on providing children the freedom to make real choices about where, what, and with whom to participate, meant children were more relaxed and excited about coming to school. The predictability of a relaxed and fun start to the day seemed to invite children to engage and, therefore, helped set the tone of the day. The teachers felt they were now able to give children time to develop a sense of belonging at school and, as a result, they actually settled more quickly. Furthermore, what went on at "Relating to Others Time" provided the teachers with prompts for conversations and discussions so that they could get to know the children better, too, as well as for making connections to other aspects of the curriculum. It was also evident in some children's creative writing that interests explored, or projects developed, at "Relating to Others Time", provided inspiration in this aspect of the curriculum.

Teachers felt that there were fewer concerns with children's behaviour. Not only were they seeing very few new children demonstrating serious behaviour difficulties, those in year 1 who had previously needed significant support (including interventions from Resource Teachers of Learning and Behaviour), no longer needed this level of

guidance. While changes to the classroom culture and programme may not have been the only influences in the changes in behaviour, the teachers felt these were a major contributor to the engagement of all children.



The teachers also noticed how competent the children were. The teachers wondered if the children were more competent thinkers and communicators than the new entrants in past years or whether they were becoming more competent as a result of the programme. As Simone said: 'I've never had children ask questions like this before.'

They also reflected on whether they were seeing the children as more competent because they had allowed them the chance to show their competence. Regardless, the teachers could see shifts in many children's identities, and dispositions for learning, which impacted on attitudes and achievement in other learning such as literacy and mathematics. They saw these shifts as directly linked to the experiences the children were having in the programme.

Simone: He will become literate and numerate, and I believe that's because he's discovered he's really clever at lots of things, and he didn't think that before.

Jenny: He'll be the innovative designer or something. He'll be the next John Britten.

Simone: Well, he wants to be a scientist. He's very adamant that he wants to be a scientist. If you ask him what he wants to be when he grows up he says he wants to be a scientist....Wow! Do you think if I'd asked him that last year that he would have said 'scientist'? I don't know.

Close observations of three children using the *Leuven Involvement and Well-being Scales* undertaken across the school day on different occasions, showed children were more engaged and happier during 'Relating to Other Time' than at other times during the day. What's more, these observations showed children chose a range of cross-curricula activities to engage in when given the freedom to choose. While these observations represent only a 'snapshot' of the child's whole experience of school, they nevertheless provide interesting insights into where and when children were most focused. They also disrupt traditional views about how long young children can stay focused across the school day.

Children's creative inquiries and projects

I feel really excited. I never thought I would be able to bring in so much creativity due to increasing pressure on reading, writing and mathematics. Especially now with National Standards.

Jenny, new-entrant teacher

The teachers were frequently surprised and inspired by the children's creativity. The hands-on approach to learning meant the classrooms were busy places, and during observations all children appeared engaged in the programme. While the children seemed to enjoy ideas and activities provided for them by teachers, the projects initiated by the children were often more creative, collaborative, and sustained than those provided by the adults. The teachers recognised that the children were usually more creative than they were, and that they came up with ideas that they would "never have thought of".

Teachers recognised children were expressing themselves creatively in ways they hadn't seen before. Often children learnt from one another, and the interests and projects of one often drew others in. For example, one child who was an experienced hip-hop dancer regularly gave lessons to others interested in his moves. Another child interested in satellites inspired others to construct models with and alongside him. These satellite models were

elaborate junk constructions that later prompted an inquiry about the surface of the moon, which included the design and constructions of rockets.

This project and interest sharing by children in informal, authentic ways through play and conversations had flow-on effects in relation to children's confidence and social competence. Some children who usually liked to work on their own were becoming more comfortable playing and interacting with others. Over time, one child who used to choose to work on his own, became a creative leader in the class, and learnt to enjoy working with others.



Because he's so good at what he does, he has these great ideas ... he draws other children in because he comes up with really great ideas, 'Can I do this?', 'Can I get this?'. All of a sudden he's like this bee with honey, they're [the other children] all attracted to him. So now, he's discovering, as a result, the joy of other people. Which is really lovely, because all of a sudden he wants to play with other children.

Simone, new-entrant teacher

The children developed innovative ways to use the available equipment. While these were simple innovations, such as finding ways to construct designs with magnetic sticks to hang from the metal-legged chairs, or manoeuvring the entire set of Mobilo across the room by designing a circular "trailer" that was strong enough to tow all the pieces at once across the carpet, they typically involved several children and the ideas were adopted later by others.

As the children's creative inquiries and projects developed, so too did teachers understandings of the children. The connection between these, knowing the child well, and rich learning was being cemented in the minds of the teachers.

On reflection the one thing that stands out the most for me is how much I have learned about the children during this time and what I would possibly not know about the children if we were not undertaking this collaborative, inquiry, modern approach to learning. I look at the concentration and determination on their faces, I hear the thought provoking discussions, I see children happy at play, constructive play! And I see some amazing strengths. The children are developing important skills within our key competencies as well.

Jenny, new-entrant teacher

Teaching for agency

The teachers were required to rethink their approaches to working with children when their goals were so firmly focused on shifting the balance of power towards the children's ideas and motivations, thinking, and creative inquiries. Giving agency to the children meant, at times, that some teachers felt redundant, as they weren't needed (nor wanted) in children's play. At other times, they provided important scaffolds that meant children could become successful in their pursuits. Putting children in the driving seat during this time often allowed teachers the chance to observe carefully how children were going about their projects and play with others. Teachers were able to listen carefully to daily conversations between children, and watch carefully for examples of the key competencies in action, something that was more difficult to do when they were doing all the driving. In one "Relating to Others Time" observation, Simone played all of the following roles:

- Challenger
- > Helper
- > Advisor
- > Enforcer (class rules, etiquette and so on)
- > Tidier (re-presenting areas)
- > Approver (giving permission to use resources if asked)

- > Reinforcer (of positive behaviours and actions, competencies and so on)
- > Watcher (watching over)
- > Co-creator
- > Observer (closely observing)

The teachers saw themselves as the "makers" of the culture in their classrooms. In order to cultivate the desired outcomes, they each adapted and tested out new ways of working. This included doing less of the talking and steering of ideas, and placing less emphasis on compliance and more on motivating, facilitating, and providing feedback. While they wanted their practice to be more agentic, they also recognised the opportunities for curriculum integration:

You can bring all the reading, writing and maths into that creative inquiry learning in the morning. We can still do strand maths, we can bring that into making things ... the oral language skills, we don't have to sit down and do a boring news circle ... like at the beginning of the term I'm going to get the children down [on the mat] and I'm going to say, "What do you want to learn about? and "What would you like to find out about

Jenny, new-entrant teacher

While Simone didn't see herself as an overly creative person, she quickly began to recognise the ways she could value the everyday, real classroom problems that emerged as opportunities for authentic inquiry. This required her to slow down and consider how she might turn the "ordinary" into opportunities for children to puzzle and wonder about together. One example was the approach she took to the issue of ants in the classroom. Early in the year it was discovered that ants were entering the classroom, but no one was quite sure how they were getting in. In the past, Simone was likely to have arranged, without hesitation, for the school caretaker to solve the problem. Instead, she sought children's ideas about why the ants were in the classroom and what they were doing there. The children experimented with feeding the ants, and theorised together about where they were getting in. At the end of the year the ants still featured in the classroom and the theorising continued.

As the year progressed and more children started school, a third classroom was established. Simone's room became a reception room, the classroom where all children new to school started their school lives. Tracey took over the room that was con-



nected to Simone's by a door, and Jenny went on to develop the new third classroom for year-1 children. Jenny wanted this room to be a "making and creating" room that would provide an extra level of creative challenge for children — and it did. As in the first half of the year, children were free to move between any of the three rooms at "Relating to Others Time".

At this time the decision was made to employ an early child-hood trained teacher as a teacher aide in the reception room to strengthen the "Relating to Others Time" programme, and support Simone in the reception room. A job-share arrangement was established between two early childhood teachers, who proved to be invaluable to Simone and Tracey, not only for their skills in presenting and creating play opportunities for children,

but also for what they learnt from these teachers about how to engage in rich conversations with children.

We've learnt such a lot from them. Just by watching them and listening to their words, how they speak to children, their interactions. How they redirect children, how they listen to them. They know where the children have come from.

Tracey, assistant principal and new-entrant teacher

In Jenny's making and creating room, the simple decision to allow children's work to be left rather than tidied away at the end of "Relating to Others Time", meant children were able to return to their projects. This resulted in more elaborate creations and constructions and opportunities for children to practice being persistent and focused. As

a result, some of the children's projects continued throughout the duration of the year. For example, one child's potion-making led to complex experimentation by others. Jenny let them set up their "lab" in the art sink, and before long the children were describing themselves as scientists. Bubble mixtures were developed and tested over days before a new class recipe was developed and introduced for everyone to use. A new dough recipe followed, and later a 'real' adult scientist was invited in to show the children some of her experiments.

Another example was the complex construction systems the children built from blocks, cars, and other objects. These systems were not packed up but rather became never-ending, evolving structures that multiple children worked on at any given time. When Jenny drew children's attention to the problem of these systems stretching too far across the floor taking up the mat area, they came up with the solution of building vertically, to use less floor area.

To overcome the problem of how to protect work in between opportunities to make and create, the children placed project work on a piece of paper with a name. On the block systems these names were littered throughout



the structure. This method worked well, and it was rare for someone's work to be intentionally damaged. The level of children's respect for one another's projects was evident during an observation of Jenny's classroom. Two children had started a new block construction in the middle of a thoroughfare but ran out of time to finish it. For the rest of the day the construction sat where it had been left. The children walked around this piece for the next few hours to wash hands, get lunch boxes and drink bottles, and blow noses. At 3pm when the bell sounded for the end of the day, the construction was still just as it had been left, undisturbed and ready for the next morning.

Conclusion

The transformation of the new-entrant and year-1 classes at Mairehau Primary School provide powerful insights into what is possible when teachers embrace play as a valid and worthwhile form of learning for young children new to school. The "re-making" of the new-entrant experience for children meant the young children at Mairehau Primary School were provided with opportunities to develop playfulness, confidence, creativity, thinking, and resourcefulness — important capabilities for learning and for life — at the same time as becoming literate and numerate.

The children taking risks and experiencing new challenges was important to the teachers in the project. They believed strongly that the breadth of the experiences provided over the course of the year meant children were experiencing a broader, more balanced curriculum than they would have in a traditional new-entrant/year-1 programme, as well as an altogether more motivating experience of school. In a short period of time the teachers at Mairehau established a culture of creativity, thinking, and relationships. They did this by working collaboratively, treading carefully, and taking a risk by giving something a go that they believed in their hearts and heads was right for young children. They also trusted in the children's abilities to create, imagine, dream, and think — and they weren't disappointed.

As a result of the teachers' actions the children were happy. They enjoyed school. They were able to pursue interests they found fascinating and motivating. They were able to experience an exciting curriculum. They were able to see themselves as successful across a range of disciplines. These aspects of education are all at risk in the high-pressure environment of National Standards, school-entry assessment, and responses to increased pressure to get children "moving" from their first day of school. There is much yet to learn about how to provide greater continuity for children's learning between home, ECE, and school. Any consideration of this issue must first look to how young children learn, because, to ignore play is to ignore the child.

Acknowledgements

My sincere thanks to the children and families of Mairehau Primary school for allowing us to include your stories and experiences in this project.

To John Bangma (Principal), thank you for being open to playing around with the ideas and for your trust in the teaching team and in me.

To Simone Whalley, Jenny Layton, and Tracey Weekes, your contributions to this project have made it what it is - a significant and timely story of what is possible when teachers dream, aspire, and innovate to make teaching and learning a more meaningful and worthwhile experience for young children. Thank you for being so open and generous with your thinking and time.

Thank you also to my colleagues Sally Peters and Margaret Carr (University of Waikato) for their insights and wisdom, and the Wilf Malcolm Institute of Educational Research (University of Waikato) for supporting this collaboration.

Finally, this project would not have been possible without the generous support of the CORE Education Charitable Trust. Thank you for providing this opportunity to support the team to push the boundaries of educational possibility.

Keryn Davis — Project researcher, CORE Education

References

- Bishop, R., Berryman, M., & Wearmouth, J. (2014). Te Kotahitanga: Towards effective education reform for indigenous and other minoritised students. Wellington, New Zealand: NZCER.
- Bolstad, R., Gilbert, J., McDowall, S., Bull, A., Boyd, S. & Hipkins, R. (2012). Supporting future-oriented learning and teaching a New Zealand perspective. Report to the Ministry of Education. Wellington: Ministry of Education.
- Carr, M., Smith, A. B., Duncan, J., Jones, C., Lee, W., & Marshall, K. (2010). Learning in the making. Rotterdam, The Netherlands: Sense.
- Carr, M., Peters, S., Davis, K., Bartlett, C., Bashford, N., Berry, P., Greenslade, S., Molloy, S., O'Connor, N., Simpson, M., Smith, Y., William, T. & Wilson-Tukaki, A. (2008). Key learning competencies across place and time: Kimihia te ara tōtika, hei oranga mō to aō. Teaching and Learning Research Initiative Final Report. Retrieved from http://www.tlri.org.nz/tlri-research/research/research/research/research/research/research-completed/ece-sector/key-learning-competencies-across-place-and-time
- Claxton, G., Chambers, M., Powell, G., & Lucas, B. (2011). The learning powered school: A blueprint for 21st century education. Bristol, England: TLO.
- Cowie, B. & Carr, M. (2004). The consequences of socio-cultural assessment. In Anning, A., Cullen, J., Fleer, M. (Eds.), Early childhood education: Society and culture. London: Sage.
- Davis, K. & Peters, S. (2011). Moments of wonder, everyday events: Children's working theories in action. Teaching Learning Research Initiative Final Report. Retrieved from http://www.tlri.org.nz/moments-wonder-everyday-events-how-are-young-children-theorising-and-making-sense-their-world/
- Dweck, C. S. (2006). Mindset: The new psychology of success. New York, NY: Random House.
- Gordon Commission on the Future of Assessment in Education. (2013). To assess, to teach, to learn: A vision for the future of assessment. Technical Report. Retrieved from www.gordon.org
- Graue, E. & Walsh, D. (1998). Studying children in context: Theories, methods and ethics. London: Sage Publications.
- Gresalfi, M. S. (2009). Taking up opportunities to learn: Constructing dispositions in mathematics classrooms. Journal of the Learning Sciences, 18, 327–69.
- Holliday, A. (2002). Doing and writing qualitative research. London: Sage.
- Howard-Jones, P., Taylor, J. & Sutton, L. (2002). The effect of play on the creativity of young children during subsequent activity. Early Child Development and Care, 172 (4), 323–328.

- Kemmis & McTaggart, (2000). Participatory action research. In N.K. Denzin & Y.S. Lincoln (Eds.), Handbook of Qualitative Research (2nd ed., pp. 567–605). London: Sage.
- Ladd, G., & Dinella, L. (2009). Continuity and change in early school engagement: Predictive of children's achievement trajectories from first to eighth grade? Journal of Educational Psychology, 101(1), 190–206.
- Laevers, F. (2005). Deep-level-learning and the experiential approach in early childhood and primary education. Katholieke Universiteit Leuven Research Centre for Early
- Childhood and Primary Education. Retrieved from http://cego.inform.be/InformCMS/custom/downloads/BO_D%26P_Deep-levelLearning.pdf
- Martlew, J., Stephen, C. & Ellis, J. (2011). Play in the primary school classroom? The experience of teachers supporting children's learning through a new pedagogy. Early Years: An International Research Journal, 31:1, 71-83. http://cego.inform.be/InformCMS/custom/downloads/BO_D%26P_Deep-levelLearning.pdf
- Ministry of Education. (1996). Te Whāriki. He whāriki mātauranga mo nga mokopuna o Aotearoa early childhood education. Wellington, New Zealand: Learning Media.
- Ministry of Education. (2007). The New Zealand curriculum. Wellington, New Zealand: Learning Media.
- OECD. (2012). Equity and quality in education: Supporting disadvantaged students and schools. Retrieved from http://www.oecd.org/education/school/50293148.pdf
- Peters, S. & Paki, V. (in press). Learning journeys from early childhood into school. Retrieved from https://www.tlri.org.nz/tlri-research-progress/cross-sector/learning-journeys-early-childhood-school
- Taylor, S. & Bogdan, R. (1998). Introduction to qualitative research methods: A guidebook and resource (3rd Edn.) New York: John Wiley & Sons.
- Walsh, G., McGuinness, C., Sproule, L., & Trew, K. (2010). Implementing a play-based and developmentally appropriate curriculum in Northern Ireland primary schools: what lessons have we learned? Early Years: An International Research Journal, 30:1, 53-66.