Collaborative planned reviews: can partnership between academics and teachers enhance children’s literacy outcomes?

Claire McLachlan, Alison Arrow, Judy Watson & Takaro teaching team
Presentation to the Winter Research Seminar, Victoria University of Wellington, 22 June 2013
Overview of this session

• This session will report the findings of a collaborative planned review of literacy in a state kindergarten in 2012 and will focus on the issue of partnership in professional learning.
• The research team of Claire, Alison and Judy worked with the teaching team in two kindergartens over a period of three school terms to support children’s literacy development.
• Data was collected in a third kindergarten which was used as a control.
• Case study data from one of the kindergartens (Takaro) will be presented today, along with data that compares children’s progress with children from the control centre. In this kindergarten, a Massey CED facilitator was also involved in the planned review.
• Implications for professional learning and policy will be explored.
Introductions

Our research partners: Wilai, Marion and Marie Takaro Kindergarten
At Takaro Kindergarten we will provide a safe, fun learning environment for children and whanau to grow in their confidence and competence.

Takaro Kindergarten Logo was created by a committee and whanau in early 2000. It embraces the wairua of this learning community. The large tree in the middle depicts the adult's position in the nurturing of children, which are the two young trees on each side. The roots of the tree are the six strands of the philosophy that permeates the life and being of Takaro Kindergarten.

Links to philosophy

- Takaro philosophy - Ako
- Takaro Philosophy - Whanau involvement
The term emergent literacy is used to: “denote the idea that the acquisition of literacy is conceptualised as a developmental continuum, with its origins early in the life of a child, rather than an all or none phenomenon that begins when children start school. This conceptualisation departs from other perspectives in reading acquisition in suggesting there is no clear demarcation between reading and pre-reading” (Whitehurst & Lonigan, 1998, p. 848).

Literacy is a complex phenomenon, which could best be described as multifactorial. It involves individual, biological, social and cultural elements and, for this reason, we have based our explanations of how literacy develops on research which draws from neuroscience and psychology, as well as from sociology, education and anthropology (McLachlan, Nicholson, Fielding-Barnsley, Mercer & Ohi, 2013, p. 4).
Components of literacy (Whitehurst & Lonigan, 1998)

Outside - in processes
- Language – semantic, syntactic and conceptual knowledge
- Narrative – understanding and producing narrative
- Conventions of print – knowledge of print format
- Emergent reading – pretending to read

Inside – out processes
- Phonological awareness
- Syntactic awareness
- Phoneme-grapheme correspondence
- Emergent writing
There are multiple literacies that children experience in their homes, communities and cultures, which shapes the ways in which they experience literacy (Makin, Jones Diaz & McLachlan, 2007).

Literacies are experienced both inside and outside formal settings (Knobel & Lankshear, 2003), within culturally specific ways.
Why is literacy important in ECE?

- Reading and writing skills serve as the major avenue for achieving the essential learning areas of the New Zealand Curriculum (Ministry of Education, 2007a) and are the foundation for learning in all subjects studied at school.
- If children do not learn to read, their general knowledge, spelling, writing and vocabulary development suffer (Stanovich, 2000).
- The National Early Literacy Panel Report (2009) identified some critical literacy understandings children need to develop to become literate at school, which include knowledge of the alphabet, phonological awareness (being aware of sounds in words), the ability to rapidly name letters, numbers, objects and colours, the ability to write their own name and to be able to remember spoken information for a short period of time.
- In addition, children need to understand print conventions and concepts, have strong oral language and the ability to match and discriminate visual symbols (NELP, 2009).
Our definition of literacy

• Follows the simple view – we are focusing on decoding.
• Includes Whitehurst and Lonigan’s (1998) ‘inside-outside’ definition of emergent literacy, the NELP (2009) findings, and a social practice view of literacy.
• Skills encapsulated in terms of literate cultural capital:
  – Alphabet knowledge
  – Phonological awareness
  – Vocabulary skills
Our framework

Early childhood education

Formal schooling

R = D x C

Alphabet knowledge

Phonological awareness

Vocabulary knowledge
• **How are children viewed?** How is children’s language and literacy development viewed in this setting?
• **What content is valued?** What types of language and literacy knowledge and skills are valued for children?
• **How is knowledge framed?** Whose language and literacy knowledge is prioritised and organised in this setting?
• **How is progression organized (or not)?** How is language and literacy progression viewed and used for structuring curriculum?
• **Who decides on the content?** Who has decided on the language and literacy content that is offered to children in this setting?
What do teachers need to notice, recognise and respond to in terms of literacy?

- Know the predictors of reading achievement and recognise when children demonstrate achievement of these
- Identify children’s linguistic capacity and in what language
- Provide opportunities to enhance literacy
- Know what literacy experiences the child has had at home and build on these
- Know which literacy resources are effective and why
Literacy in the NZ context

• Literacy is poorly defined in the New Zealand early childhood curriculum, Te Whāriki.

• Levels of literacy knowledge by ECE teachers are unknown, although Kane (2005) identified that literacy is not a large part of teacher education.

• There is a well documented achievement gap and “Matthew effects” (Stanovich, 1986) in NZ children.

• Some evidence of effectiveness of professional development with in-service EC educators (Mitchell & Cubey, 2003).

• Very little quantitative data on NZ children’s literacy knowledge and skills prior to school.
Literacy in Te Whāriki: ECE curriculum

- Major link is with Communication/Mana reo
  - Develop verbal and non-verbal communication for range of purposes
  - Experience the stories and symbols of their own and other cultures
  - Discover and develop different ways to be creative and expressive
- Minor links with Contribution and Exploration

- References on how to promote literacy are non-specific
- Does not discuss multi literacies and bilingualism/biliteracy
- Does not provide specific advice on the role of the teacher in terms of promoting reading achievement
- Never evaluated
Critiques of Te Whāriki

- Nuttall (2005) argues teachers do not simply apply a curriculum document and that there is no empirical evidence that the curriculum makes a difference to children’s learning, but there is evidence in *Kei tūa o te pae*, the ECE exemplars (MoE, 2004/2009) that teachers are overlooking children’s literacy practices in their learning stories.

- Te Whāriki has never been evaluated, unlike the National Curriculum framework (le Métails, 2002, Fergusson, 2002).

- NZ’s literacy strategy is a conglomeration of approaches designed to counter the literacy gap identified by international studies (e.g. PIRLS, PISA).
Literacy achievement gap in NZ

- Lower alphabet knowledge
- Lower phonological awareness
- Lower receptive vocabulary skills

- Children in lower SES areas have lower levels of literate cultural capital than children from higher SES areas (Tunmer, Chapman & Prochnow, 2006; PIRLS, 2007, 2012).

- These differences widen from school entry on through Matthew effects (Stanovich, 1986), leading to the achievement gap reflected in PIRLS and other data.
Implications for teaching

- Research shows that teaching letter sound knowledge and phoneme sensitivity is crucial for children who are “at risk” of reading difficulties, as they lack inside out processes (Tunmer, Chapman & Prochnow, 2006).

- Knowledge of children’s abilities, combined with knowledge of progressions associated with alphabetic and phonological awareness enables teacher to tailor programmes and instruction to children’s level of development (Anthony & Francis, 2005; Boyer & Ehri, 2011).
Literacy expectations at school entry

• Curious about language and willing to experiment with rhyme and alliteration.
• A wide vocab of nouns, verbs, adjectives and prepositions.
• Ability to talk about the past, present and future.
• Ability to tell or re-tell an experience, an event or a known text.
• Awareness of rhyme, words that start with the same sound and ability to hear some phonemes in words.
• Able to read their own name and some signs and labels.
• Some concepts about print.
• Able to recognise first letter of own name and some other letters.
• Can write their own name with correct letters in order
• Can form some other letters.
• Can securely hold a pencil, crayon or other writing and drawing tools.
Professional knowledge of teachers

- MoE has recently targeted PD funds for literacy and numeracy in low SES areas, but cut funds for all other centres.

- Cullen (2006) argued teachers need to:
  - monitor gaps, as well as strengths;
  - support skills as well as meanings; and
  - engage in professional development.
Moats and Foorman (2003) argue teachers have inadequate understandings of literacy and miss opportunities to encourage literacy in natural settings. Cunningham et al. (2004) argue that teachers do not always know what they don’t know and that further research is needed on ‘knowledge calibration’ between teachers’ perceived and actual knowledge.

Considerable evidence of a mismatch between literacies of children’s homes and literacy opportunities provided by teachers in centres and schools (e.g. Fleer & Robbins, 2005; Heath, 1983; Kennedy, Ridway & Surman, 2006; Knobel, 1999; Marsh, 2003, McNaughton et al., 2005).
• Piasta and Wagner’s (2010) meta-analysis found that letter name knowledge, letter sound knowledge and letter writing outcomes all show small to moderate effects to appropriate teaching in the ECE context.

• Phillips, Clancy-Menchetti and Lonigan (2008) found that phonological awareness could be supported in children displaying difficulties, using scaffolding and guided participation. They recommend holistic, free play curriculum with no more than 10-15 minutes per day of explicit tuition for PA.
• Justice et al. (2009) found that 106 preschool children who experienced a “print referencing” style of story reading made significant gains in concepts about print, alphabet knowledge and name writing ability.

• Justice and Pullen (2003) also argue that a dialogic (questioning) style of story reading leads to gains in oral language and emergent literacy skills. They also argue that literacy rich environments are enhanced if mediation by adults and more competent peers is part of the planned environment.
Storybook reading and vocabulary

- Storybook reading is an obvious and important way of increasing children’s vocabulary.
- Neuman and Dwyer (2009) identify evidence that effective teaching involves the following strategies:
  - Be systematic and explicit;
  - Involve a great deal of practice that is active, guided and extensive;
  - Incorporate periodic review of new words over time to check that understanding of new words has been retained; and
  - Include observation and progress monitoring assessment to inform further teaching.
- Neuman and Dwyer warn against commercial vocab packages, as most are lacking in terms of the evidence.
Literacy rich environments

- Enriching literacy in the environment works to promote literacy, but only if adult mediation is a planned part of the environment.
- Children who experience a literacy rich environment with adult mediation display greater gains in print awareness, alphabet knowledge and environmental print recognition (Justice & Pullen, 2003)
- The curriculum should include naturalistic, embedded opportunities for literacy, as well as explicit exposure to written language and phonological awareness.
- McNaughton (2002) argues that the curriculum should be wide enough to incorporate the familiar while unlocking the unfamiliar.
The implications for professional development on literacy

- Time, a supportive leader, understanding of what an effective literacy environment is and receptiveness to change (Doubek & Cooper, 2007).
- “Gap” identification (Early, 2005).
- Partnership models (Mather, Bos & Babur, 2001).
- A process vs. an event (Redman, 2005).
- Include reflective practice, trial and error, repetition and the support of colleagues facing similar challenges (Fiszer, 2004).
- Direct coaching and feedback on literacy teaching, which leads to significant gains in children’s literacy capabilities (Hseih et al., 2009; Cunningham et al. 2009; Justice et al., 2009; Phillips et al., 2008)
• Teachers espouse eclectic understandings of literacy and may be unsure about how to promote literacy (McLachlan-Smith, 1996; Hedges, 2003; Foote, Smith & Ellis, 2004, McLachlan et al., 2006, McLachlan & Arrow, in press)
• Tagoilelagi-Leota, et al. (2005) found that collaboration between centres and schools supported continuity of literacy in Tongan and Samoan children.
• ERO review (2011) of over 350 centres found that 25% of all centres used inappropriate literacy resources or pedagogies with young children.
Aim:
• To examine if collaborative planned reviews with teachers in low SES kindergartens will enhance literacy learning outcomes in children aged three to five years of age.

Research questions:
• Can collaborative planned reviews with kindergarten teachers in low SES settings increase knowledge of literacy?
• Can collaborative planned reviews with kindergarten teachers change pedagogical practices related to literacy?
• Do changes in knowledge and pedagogies in teachers relate to changes in children’s literacy knowledge, skills and abilities?
Research design

- A mixed QUAL-QUAN methodology was used. Mixed methods research designs are used when researchers need to examine many elements of a research problem and require both quantitative and qualitative data to answer research questions (Punch, 2009).
- Our design included the following:
  - Pre and post interviews with teachers
  - Pre, mid and post measures of children’s literacy
  - Parent survey
  - Meetings with teachers to discuss findings and explore options for developing the review
Research methods

- Four kindergartens in low SES areas were selected.
- Quasi experimental design: two kindergartens focussed on literacy and two on numeracy as part of planned, collaborative self-review.
- Pre, mid and post testing of children’s literacy and numeracy and teachers’ beliefs at 8-10 week intervals.
- Pre test survey of parents about child’s literacy interests and experiences at home.
- Pre and post review interviews with teachers.
On-going professional development was offered in two kindergartens using a coaching and guiding model of PD.

Each self-review was driven by teachers, with input from the research team.

At Takaro, this meant regular meetings (approx. once a month) with the teaching team and a Massey CED facilitator.

At these meetings, results from children were discussed, along with teachers’ documentation of children’s learning.

The research team located resources such as free websites for parents and articles on specific aspects of literacy.

The planned review belonged at all times to the teachers, but the Massey research team and CED facilitator became critical friends.
Relationships with parents

- Parents were invited to have their children participate in the study. Every parent agreed.
- All parents were surveyed about their literacy home practices at the outset of the study, so that opportunities for building on children’s funds of knowledge could be built on. Teachers later sent a more specific follow up survey.
- The principle researcher and teachers and CED facilitator met with families twice – for shared lunches – at which the planned review and results from children were explained. We also shared a lot of labelled photos of children engaged with different types of literacy.
Sample of children

- 27 children at the beginning of review
- 19 children at the middle of the review
- 16 children by the end of the review

- Reason for the drop in numbers is that children went to school!
- We are only reporting the children who did pre, mid and post measures here.
Measures of children’s developing literacy

- Phonological awareness
  - Rhyme
  - Onset
  - Onset labelling
  - Phonological awareness segmentation

- Emergent literacy skills
  - Letter name
  - Letter sound
  - Own name reading
  - Own name writing
  - Receptive vocabulary
  - Reading
Parents’ views of children’s literacy: preliminary results of survey

- All parents said that they read stories to children every day and most commented that children could write their name, recognise some letters of the alphabet and some showed an interest in playing games like “I spy” or rhyming games.
- About half of parents said that children used digital technology, such as computers every week.
- Most parents commented that they wanted to know more about how to support literacy in their preschool child.
- Few parents expressed any concerns about their children’s literacy abilities or the teachers’ knowledge and skills to support them.
Beginning a planned review at Takaro

- Looked at various areas within the kindergarten environment and how they were being used using photographs and videotaping of interactions with children.
- Concentrated on interactions with children.
- Looked at routines with children and adjusted these as needed.
- Emergent review undertaken with CED staff help.
Teachers’ views of literacy at the outset

- Beliefs about literacy were framed around maturational readiness.
- Provided a literacy rich environment.
- Literacy was integrated in the curriculum, except for a structured literacy time with older children, teaching alphabet, PA and high frequency vocab words.
- Most teachers were unable to name theory or research that underpins practice.
- Communication strand in Te Whāriki was used as a general framework for practice, but not specifics.
The pretest data

The initial data revealed that there were three main areas of literacy to focus on: phonological awareness; receptive vocabulary; and letter recognition.

Highlighted that half of the children had access to an I-pad and I-phone at home. Teachers were not aware of this so it threw up possible avenue of communication and the need for partnership with parents, such as giving them tips they can use at home or possible free literacy web sites.

The parent survey revealed parents were not aware of the literacy learning that occurred through play at kindergarten.
The ways in which Takaro teachers supported literacy were simple yet effective.

- Increased use of alphabet by making alphabet resources using stones and sandpaper
- Using alphabet resources inside and outside
- Purchased an I-pad
- Put writing materials inside and outside
- Increased literacy resources in the kindergarten
- Increased use of playdough and gloop for letter recognition
- Shared and collaborative practices between teachers.
In the beginning the majority of documentation was related to using literacy for a purpose, but teachers were less convinced that they were capturing critical questioning or transformation of literacy learning.

They began to question what they were documenting and asked what literacy learning looked like for children who spent most of their time outside.

Teachers decided they needed to capture children’s learning journeys in literacy – from standing back and observing through to beginning to explore different types of literacy – and to look for evidence of progression.

They also considered that they needed to make literacy learning more visible in their assessment and documentation of children’s learning.
Writing the alphabet on the computer.
Letter recognition
Having fun with letters
Tactile alphabet resource
Musical letters
Portable resources, stone letters
Writing materials for outside
Role play
Writing with chalk
Puppets, imaginative play
Music and dance
Writing, using literacy for a purpose
Imaginative play, language development
Making a Treasure map
Resources at accessible points
Mum and son, explore writing
Sound it out
Letter recognition, exploring writing
Exploring the arts
Rhythm and beat
Music – Takaro Idol
Music and movement
Exploring writing
Letter recognition
Reading

And he slammed on his brakes,
and he held tight to the tracks,
and he kept that train
but sliding down the mountain!
Playdough letters
writing
Reading books to each other
Exploring writing and drawing
Learning to write
Playdough, letter recognition
Alphabet knowledge
Reading together
Phonics
Alphabet knowledge, letter recognition
Movement, alphabet
Shifts in practice

• Teachers decided they had more literacy opportunities inside than outside. They developed portable resources that could be used outside as well as making tactical resources that children could interact with.
• They put resources at child's level and at thoroughfare points for all to see and created opportunities for intentional teaching of literacy.
• Increased their focus on high frequency words
• Increased focus on reading stories, singing nursery rhymes and waiata and songs from other languages
• Increased use of mats and cushions outside for reading
• Increased focus on selecting stories and resources to support learning of alphabet, sounds, new words
• Used resources from other cultures to reinforce children’s developing identities and support their sense of belonging.
# Children’s results

<table>
<thead>
<tr>
<th>Literacy measures</th>
<th>Centre 1 Pretest (n=16)</th>
<th>Centre 2 pretest (n=14)</th>
<th>Centre 1 Posttest</th>
<th>Centre 2 Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg</td>
<td>Range</td>
<td>Avg</td>
<td>Range</td>
</tr>
<tr>
<td>Alpha names</td>
<td>5</td>
<td>0-24</td>
<td>4</td>
<td>0-18</td>
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<tr>
<td>Alpha sounds</td>
<td>8.7*</td>
<td>2-13</td>
<td>15^</td>
<td>-</td>
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<tr>
<td>Name reading</td>
<td>8 yes</td>
<td>-</td>
<td>7 yes</td>
<td>-</td>
</tr>
<tr>
<td>Name writing</td>
<td>4 yes</td>
<td>-</td>
<td>5 yes</td>
<td>-</td>
</tr>
<tr>
<td>Rhyme (max 8)</td>
<td>2.9</td>
<td>0-8</td>
<td>3.6</td>
<td>1-8</td>
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<tr>
<td>Onset (max 8)</td>
<td>2.3</td>
<td>0-6</td>
<td>2.5</td>
<td>0-7</td>
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<tr>
<td>Vocabulary</td>
<td>95.8</td>
<td>55-124</td>
<td>101.4</td>
<td>81-120</td>
</tr>
</tbody>
</table>

**NOTES:**
*only 3 children at centre 1 completed this task at pretest and 5 completed the task at posttest
^only 1 child completed this task at each time
Thinking about multimodal learning

- Surveys of parents reinforced teacher’s view of children’s multimodal way of learning at home.
- Parents’ literacy survey revealed that a number of families (15/20 responses) tell oral stories, which made teachers question the place of oral story telling in the curriculum and how to support children’s funds of knowledge.
- Many family traditions of literacy practice were around music and drama. Teachers utilised puppets outside and oral story telling a lot more to support children’s learning.
- Teachers focussed more on the literacy knowledge children were brought to kindergarten and concentrated on how to extend it.
- They noticed that when children were helped to enact family literacies in the curriculum that their confidence and participation increased.
New entrant teacher from Takaro School:

“I can tell the children that come from Takaro Kindergarten, they are ready, willing and able to give it a go”
Teachers’ results

• Increased use of alphabet by making alphabet resources using stones and sandpaper
• Using alphabet resources inside and outside
• Purchased an Ipad
• Put writing materials inside and outside
• Increased literacy resources in the kindergarten
• Increased use of playdough and gloop for letter recognition
• Increased focus on high frequency words
• Increased focus on reading stories, singing nursery rhymes and waiata and songs from other languages
• Increased use of mats and cushions outside for reading
• Increased focus on selecting stories and resources to support learning of alphabet, sounds, new words
Teachers’ reflections on literacy

• All teachers said they were more confident about how to promote literacy in different ways and were much more intentional in their teaching of literacy within the free play environment.
• All said they had thought deeply about how to support and extend children’s literacy and how to use literacy resources more purposefully in the kindergarten.
• All considered they were supporting foundational skills like fine motor skills for writing and supporting knowledge of alphabet and awareness of sounds.
• All discussed using resources to promote specific skills, such as puppets for phonological awareness and letter name resources for alphabet and writing.
• All commented that they were looking more explicitly at the link between teaching and children’s outcomes and discussed issues related to assessment.
Conclusions

- It is possible to integrate teaching of phonological awareness and alphabet knowledge into free play ECE settings in meaningful and authentic ways, without resorting to skill and drill activities.
- Teachers’ professional learning can be enhanced by regular and provocative conversations about philosophy and practice and it does increase teachers’ knowledge of literacy.
- Collaborative planned reviews with kindergarten teachers can change pedagogical practices related to literacy. What is significant in this study is that teachers have articulated that they can incorporate intentional teaching of literacy into their curriculum without compromising children’s opportunities to participate in a free play environment.
- There is some suggestion that changes in knowledge and pedagogies in teachers relate to changes in children’s literacy knowledge, skills and abilities, although further research is needed.
Contact details

Professor Claire McLachlan
Massey University Institute of Education
Private Bag 11 222
Palmerston North
Phone (06) 356 9099, Ext 84390
Email: c.j.mclachlan@massey.ac.nz