Report on the Evaluation of the Early Childhood Centres of Innovation Programme

ROBYN GIBBS AND DR JENNY POSKITT
EVALUATION ASSOCIATES LTD
JUNE, 2009
© Crown copyright. This research was funded by the New Zealand Ministry of Education. The views expressed in this report do not represent the views of the Crown.

EXECUTIVE SUMMARY .............................................................................................................................4

BACKGROUND TO THE COI PROGRAMME ...............................................................................................13

COI DEMOGRAPHICS ........................................................................................................................................13
SELECTION PROCESS ........................................................................................................................................14
ECE COI ADMINISTRATION ...............................................................................................................................18
SUPPORT FROM THE RESEARCH LEADER AND RA .......................................................................................18
PARTICIPATORY ACTION RESEARCH ...........................................................................................................18
DISSEMINATION .............................................................................................................................................20
HUI .................................................................................................................................................................20

THE EVALUATION QUESTIONS ...........................................................................................................................21

WITHIN COI SERVICES (MICRO LEVEL) ...........................................................................................................21
WIDER SECTOR (MACRO LEVEL) .......................................................................................................................22

THEORETICAL BACKGROUND FOR THE EVALUATION ...................................................................................22

OUTCOMES .....................................................................................................................................................24

METHODOLOGY .......................................................................................................................................25

SAMPLING PROCESSES ....................................................................................................................................25
DATA COLLECTION APPROACH .......................................................................................................................25
ETHICS ...........................................................................................................................................................27

Informed consent..........................................................................................................................................27

Research instruments and processes .............................................................................................................28
The evaluation process ...................................................................................................................................29

ANALYSIS AND SYNTHESIS ...........................................................................................................................29

THE STRUCTURE FOR REPORTING THE FINDINGS ..........................................................................................31

EVALUATION FINDINGS .................................................................................................................................32

WITHIN COI SERVICES: EVALUATION QUESTIONS ONE, TWO AND THREE: ...................................................32

Factors that enabled successful COI involvement ........................................................................................32
Factors that hindered COI involvement ..........................................................................................................34
Distributed leadership ........................................................................................................................................35
Involvement of parents ......................................................................................................................................36
Broader community of learners .....................................................................................................................37
Umbrella group support ...................................................................................................................................38

WITHIN COI SERVICES: EVALUATION QUESTION FOUR: ................................................................................38

Further research ..........................................................................................................................................38
More time for dissemination ............................................................................................................................39

WITHIN COI SERVICES: EVALUATION QUESTION FIVE: ................................................................................40

Better understanding of children ....................................................................................................................40
Critical thinking .............................................................................................................................................40
The processes of professional learning ..........................................................................................................41
Executive Summary

The Early Childhood Centres of Innovation (COI) programme commenced in 2003. It was established as part of a broad early childhood education strategic plan\(^1\). The purpose of COI is to promote self-directed research around teaching practices and aspects of learning in early childhood services and centres\(^2\). Tenure in the COI programme is three years. A requirement of the programme is the dissemination of research findings to a broader educational community. This dissemination is usually undertaken concurrently with the research work. To be eligible to be a COI, centres should be actively involved in innovative practice. In the selection process centres outline, in their Expression of Interest, their plans for researching within a broad focus area selected by the Ministry of Education (the Ministry).

COI are supported by an experienced educational researcher (referred to as a Research Associate) and a Ministry appointed Research Leader. The COI and the Research Associate (RA) enter into individual contracts with the Ministry to carry out their respective roles. Accountabilities, in the form of milestone reports, are expected of each participating contracted party. At the time of writing this report COI was into its fifth round. As part of Budget 2009, the Government announced that the COI programme would end on 30 June 2009, with the three Round Four and one Round Five COI ending prior to completing tenure.

In June 2008, the Ministry contracted Evaluation Associates Ltd to undertake an evaluation of the COI programme. This evaluation focused on centres that were involved in Rounds One to Three – cohorts of centres that entered the programme between 2003 and 2006. It sought to address evaluation questions relevant to two main groups; (a) centres who were COI and (b) other centres who found out about the work of COI (referred to in this report as Second Wave).

\(^1\) COI is one of the initiatives undertaken as part of the Pathways to the Future: Nga Huanahi Arataki strategy plan for early childhood education.

\(^2\) To avoid unnecessary repetition we will use the term centre as a generic term for all early childhood services.
The overall questions the evaluators were charged with answering were:

- How, and to what extent, have teacher researchers and their teaching practices changed as a result of their participation in the programme? How have children’s learning outcomes changed? (effects within COI services).
- What difference is the COI programme, as a whole and elements within it, making to improve quality within the early childhood education (ECE) sector, and to outcomes for children? (effects in wider sector).

Sub questions addressed at the COI level were:

1. What factors/conditions are key in facilitating significant change (growth amongst teachers/outcomes for children and their parents) in teaching and learning at the service level?
2. How is this significant?
3. To what extent is this significant?
4. What, if any, differences are discernible ‘during COI tenure’ compared with ‘post COI tenure’?
5. How, and to what extent, does COI work contribute to improved outcomes for teacher researchers?
6. What are the outcomes for young children, toddlers and infants?
7. What are the outcomes for parents and whānau?
8. What differences, if any, are discernible between COI rounds?

Sub questions addressed at the wider sector level were:

1. What aspects of the COI work (innovative practice, action research and dissemination) have an effect?
2. For whom do these effects apply?
3. How do these effects apply?
4. What has been/is the level of dissemination of COI research findings?
5. How well, and in what form are audiences responding to it?
6. What is the impact on the body of knowledge about effective teaching and learning practices?

7. Is the movement of COI teacher researchers to other employment within the sector significant when considering the impact of the programme within the sector? What are the impacts, if any, of COI teacher researcher mobility on the sustainability of programme benefits within the COI and/or on the sharing of programme benefits with the wider sector?

Across each COI, a number of participants were involved in the evaluation. The views of these participants were collected through interviews and focus group meetings and form the basis of this report. The report is supplemented by the views of Second Wave participants who completed a paper or electronic survey. The number of people involved, and data analysis techniques used, are reported in the methodology section of this report.

Following is a summary of the key evaluative questions together with suggestions for improvements to the programme. Please note that the first three evaluation questions are combined to provide a more coherent summary.

In relation to evaluation questions one, two and three: What factors/conditions are key in facilitating any significant change (growth amongst teachers/outcomes for children and their parents) in teaching and learning at the service level? How is this significant, and to what extent is this significant?

Where COI were working well in terms of self reported positive benefits\(^3\) for teachers, parents and children, participants and/or evaluators were able to identify a number of factors that enabled these outcomes. Conversely, where teachers were less sure about the outcomes of their COI work, a significant number of corresponding disabling factors were present.

\(^3\) In a later section, the evaluators comment on the evidence that was available to them in terms of outcomes for teachers, parents and children.
In terms of evaluator judgment, the most significant enablers to successful participation in a COI programme were the knowledge, capability and dispositions that teachers brought. Other factors that contributed included effective leadership by head teachers/supervisors and RAs, and support from regional associations and umbrella groups.

Some COI entered the programme by virtue of their potential to add to a minimal body of local research rather than their proven history of successful innovation. These COI reported difficulties in terms of staying engaged in their COI projects and cited a range of personnel, infrastructural and leadership issues that impacted on them. Nonetheless, at the time of the evaluation all but one COI had completed their tenure. The remaining COI had gained an extension of its project.

Positive relationships are critical within the COI model. Where COI were successful, teachers were aware of the need to foster good relationships with parents and their colleagues. Teachers valued the collaborative relationships they had with RAs, other COI in their cohort, and non-COI organisations with which they disseminated their findings. Some centres were concerned about the lack of support they received from their regional associations/umbrella organisations. Other COI were grateful for the practical and moral support their associations/umbrella organisations provided.

Consistent with the notion of communities of learners (Wenger, McDermott, & Synder, 2002), most COI operated within a culture of distributed leadership, apportioning leadership responsibilities across team members according to the curriculum and individual personality strengths. Teachers valued this approach and believed that it had contributed to their personal and professional growth.

With the exception of a few who felt that the COI work disrupted their children’s programme, parents were highly complimentary about the COI work being carried out in their centre. They enjoyed seeing the enthusiasm of their children, and being involved in aspects of the programme.
In relation to evaluation **question four**: *What, if any, differences are discernible ‘during COI tenure’ compared with ‘post COI tenure’?*

Teachers reported that they had learned a lot about researching, and were motivated to continue researching their professional practice, but were frustrated by time pressures and inadequate resources post-COI tenure to continue further research. Many teachers found dissemination a time-consuming activity, and engaging in both research and dissemination at the same time was a challenge. These teachers believed that they would be able to do a better job of both if some of their dissemination activity was carried over to a funded fourth year.

Many teachers wanted to continue research activities post COI but were not sure of what alternative funding options were available. The evaluators recommend the Ministry consider ways to support teachers to become aware of these funding sources.

In relation to evaluation **question five**: *How and to what extent does COI work contribute to improved outcomes for teacher researchers?*

Evaluators concluded that there were many good outcomes for teachers, including opportunities to engage in critical thinking that challenged their previously held assumptions about teaching and learning. As a result of their collaborative professional learning, many teachers reported that their planning, formative assessment processes, and increased use of ICT within the learning and teaching programme were of a higher quality. Teachers reported that RAs played a significant role in exposing them to a range of theories that extended their content and pedagogical knowledge. These comments were confirmed by the Research Leader, RAs and in many of the COI milestone reports.

In relation to evaluation **question six**: *What are the outcomes for young children, toddlers and infants?*
The findings were less clear. Evaluators concluded that teachers had developed some useful processes around assessment and planning for individual children. However, it appeared that teachers knew little about the impact of their initiatives on children as a whole because they had not established processes for gathering and analysing centre-wide data.

The major recommendation of this evaluation is the tightening of processes for managing programme review so teachers are in a better position to know what practices are most beneficial for children.

To ensure better processes around centre evaluation the COI model would benefit from some structure being applied at Ministry level. The priority of operating in an evidence-based environment should be: (a) articulated in the expectations for COI as they consider entering the programme; (b) supported by the Research Leader through her work with COI; (c) actively promoted through the Participant Action Research (PAR) process by the RAs; and (d) reflected in the milestone and final reporting expectations of COI.

The evaluation focus could be further developed by drawing on the expertise of respected researchers working in the field of assessment and evaluation in the early childhood sector.

In relation to evaluation question seven: What are the outcomes for parents and whānau?

Teachers stated that being a COI provided them with the time to consider ways they could foster meaningful engagement with families. Teachers believed that, as a result of COI, there were stronger learning-focused relationships with parents in which information was exchanged about children’s learning. Parents also indicated that they felt more valued and had a greater desire to be involved in the centre programme.
Centres, however, had limited evidence of the impact of the COI programme on parents/whānau. Some services had made a good start by carrying out surveys or observations of parents within the centre. The usefulness of the information was limited; however, because these data were not followed up to find out what changes had occurred over time. This meant that centres did not comprehensively understand the impact of the COI work on parents as a group.

In relation to evaluation question eight: What differences, if any, are discernible between COI rounds?

Some differences were found. These included greater emphasis amongst later cohorts of COI on working collaboratively as they carried out their research and professional learning, and an increasing trend to disseminate in the pre service teacher education sector. Some processes at Ministry level have also improved thereby bringing greater clarity about how to implement the model.

Other key findings related to the wider sector impact that have not already been mentioned above include dissemination and recommendations about how the Ministry could improve the COI model. Dissemination is a fundamentally important component of the COI programme. COI is costly but, by virtue of the highly active programmes of dissemination that many COI engaged in, the cost can be justified. Many other services heard about COI work and have accessed their findings. The findings are valued because they have considerable relevance to the New Zealand early childhood sector. The evaluation data suggests that many Second Wave centres have made changes to their own programmes as a result of engaging with COI ideas.

In the view of the evaluators, dissemination in its many forms is much more effective in stimulating change in the sector than the movement of COI teachers between centres. The evaluators have some suggestions about how to make COI findings accessible to a wider audience, including other centres and the schooling sector that currently do not know about COI or the research they have produced.
For teachers, some valued aspects of the COI model are the financial and property resources that come to their centres through being a COI. They also valued the support they received from the RAs who mentored them through their research projects.

The report concludes with recommendations which include:

- the Ministry facilitating COI work through resourcing more quickly, and providing coordinated administrative support
- developing memoranda of understanding between COI, the Ministry and regional associations/umbrella organisation so that all parties have clear understandings of their role and responsibilities in supporting COI processes and outcomes
- providing better support to COI seeking ethics approval and access to libraries
- extending the pool of RAs to include those who are not currently employed within a tertiary institution, but who have the necessary skills to undertake the RA role effectively. The justification for this recommendation is that the funding for COI has not increased to keep pace with university expectations of staff remuneration

The eight principles of effective professional learning in ECE were used as touchstones in this evaluation. Professional learning is deemed to be effective when it:

1. incorporates participants’ own aspirations, skills, knowledge and understandings into the learning context
2. provides theoretical and content knowledge and information about alternative practices
3. involves participants investigating pedagogy within their own early childhood settings
4. involves participants analysing data from their own settings

---

4 These principles were sourced from *Characteristics of professional development linked to enhanced pedagogy and children’s learning in early childhood settings: Best Evidence Synthesis (BES)* (Mitchell & Cubey, 2003a)

5 Evaluators’ thinking with respect to data is informed by the theories articulated by Carr, May and Podmore (2000), specifically that action research should be guided by a set of action research tools that allow centres to collect a variety of data. The findings from the analysed data allow teachers to take appropriate responses. The data should be relatively easy to collect, precise, stimulate reflection, challenge assumptions, be capable of analysis and lead to action and change.

---

"Report on the Evaluation of the Early Childhood Centres of Innovation programme"
5. has as its core critical reflection which enables participants to investigate and challenge assumptions and extend their thinking
6. supports educational practice that is inclusive of diverse children and their families and whānau
7. helps participants to change educational practice, beliefs, understandings and/or attitudes
8. helps participants to gain an awareness of their own thinking, actions, and influence.

On the basis of these criteria, the evaluators conclude that COI has provided teachers with some valuable opportunities to enhance their professional practice. The following report describes these opportunities and the outcomes for children, their families/whānau and teachers.
Background to the COI programme

The COI programme commenced in 2003 and was established as part of a broad early childhood education strategic plan aimed at promoting “a deeper exploration of innovative teaching and learning processes already underway in early childhood services”. Centres chosen as COI carry out, with the support and mentorship of an experienced educational researcher, called a Research Associate (RA), action research on their innovation that will “inform and promote innovative teaching practice in early childhood education (ECE)” (Ministry of Education). The COI and each RA enter into separate contracts with the Ministry to carry out their respective roles. Accountabilities, in the form of milestone reports, are expected of each participating contracted party. In each ECE COI round, centres were chosen for the relevance of their proposal with respect to an overarching research focus area identified by the Ministry.

COI demographics

At the time of writing this report, the COI programme was into its fifth round. A sixth COI round was planned for 2011 to 2013, however in Budget 2009 it was announced that the COI programme would finish on 30 June, 2009 so the sixth round will not proceed and Round Four and Five will not complete tenure.

The programme has operated in a cyclical fashion where new cohorts of COI enter as other COI cohorts are partway through their tenure. This means that at any one time there are many COI working at various stages of their projects. The following table shows the start and completion dates for each round of COI. (As noted above Rounds Four and Five ended in 2009 rather than completing their planned tenure.)

---

6 COI is one of the initiatives undertaken as part of the Pathways to the Future: Nga Huarahi Arataki strategy plan for early childhood education.
Selection process

The Research Leader, in consultation with personnel from the Ministry, selects services for inclusion in the programme. Each potential COI puts forward an expression of interest (EoI) referenced to predetermined research foci for that round. In their EoI, services outline their history of innovation in teaching and learning and the proposal for further innovation and research. The following table provides information about ECE COI services, years of involvement (Rounds One to Three only) and their research foci.

<table>
<thead>
<tr>
<th>Services</th>
<th>Round One</th>
<th>Round Two</th>
<th>Round Three</th>
<th>Round Four</th>
<th>Round Five</th>
</tr>
</thead>
<tbody>
<tr>
<td>start</td>
<td>2003</td>
<td>2005</td>
<td>2006</td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>finish</td>
<td>2006</td>
<td>2007</td>
<td>2008</td>
<td>2010</td>
<td>2011</td>
</tr>
</tbody>
</table>
# Early Childhood Education COI involvement Round One

<table>
<thead>
<tr>
<th>Years</th>
<th>COI research foci</th>
<th>ECE centres</th>
<th>COI individual service research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2003 to June 2006</td>
<td>The use of information and communication technologies; and/or improved links between services developing as 'learning communities' and/or quality practices in Māori, and Pasifika bilingual and immersion services.</td>
<td>A'oga Fa'a Samoa</td>
<td>What helps learning and language continuity as children make transitions within and from the A'oga Fa'a Samoa? How can the key approaches that help learning and language continuity be implemented in practice?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Beginnings Preschool</td>
<td>In what ways can visual art and a project approach to implementing Te Whāriki contribute towards building a community of learners in New Beginnings Pre-school?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roskill South</td>
<td>What IT/ICT practices can be successfully integrated into everyday learning and teaching practice? What effect does this integration have on: (1) community relationships and the involvement of families in the children's learning and with the centre’s curriculum the (2) growth and development of children's competence and confidence (3) the ability of teachers to reflect back and assess, in collaboration with children, work done over time, future steps to be taken and to document connections?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Te Kōhanga Reo o Pūau Te Moananui a Kiwa</td>
<td>Working with Mātauranga Māori, what changes and actions in Te Kōhanga Reo o Pūau Te Moananui a Kiwa will: (1) enhance Te Reo Māori learning (2) contribute to strengthening Māori identity, making mokopuna feel whole (3) prepare mokopuna for success in their life's journey in the world?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wilton Playcentre</td>
<td>How does the playcentre functions as a community of learners - adults and children learning with and through each other? More specific research questions were to provide an investigation and analysis of: (1) pedagogical approaches, especially the use of schemas and learning and teaching stories with their focus on dispositions for learning, and children’s learning progressions (2) how Wilton Playcentre maintains continuity and quality across playcentre sessions and between home and playcentre (3) parent engagement and sustaining a community of learners.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wycliffe Ngā Tamahiki</td>
<td>Exploring the partnership between the Upu Amata and the kindergarten, how can learning and teaching be improved in the intercultural afternoon session. Specific questions included: (1) When is it best to add English for children who have languages other than English? (2) How does the use of ICT affect parent engagement with children's learning? (3) How does the kindergarten create a community of learners?</td>
</tr>
</tbody>
</table>

7 This information was sourced from the Ministry of Education ECE Centres of Innovation website

Report on the Evaluation of the Early Childhood Centres of Innovation programme

15
Early Childhood Education COI involvement Round Two

<table>
<thead>
<tr>
<th>Years</th>
<th>COI research foci</th>
<th>ECE centres selected</th>
<th>COI individual service research questions^8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 to 2007</td>
<td>ECE services, families, and other services working together to enhance children's learning; and/or Infants and Toddlers' care and education; and/or Processes of educational leadership in ECE services.</td>
<td>Citizens Preschool and Nursery</td>
<td>What difference does support for families make to children's learning and development in early childhood centres?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Massey Child Care Centre</td>
<td>How does the attachment-based learning programme and educational leadership, within a community of practice, impact on learning and on infants and toddlers' dispositions to learn?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Te Kopae Piripono</td>
<td>Leadership strategies that enhance the learning and development of tamariki and whānau, and weaving Te Ao Māori through Te Whāriki.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Te Marua/Mangaroa Playcentre</td>
<td>How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning? How do the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network, support collaborative relationships, and work across agencies?</td>
</tr>
</tbody>
</table>

^8 This information was sourced from the Ministry of Education ECE Centres of Innovation website

Report on the Evaluation of the Early Childhood Centres of Innovation programme
<table>
<thead>
<tr>
<th>Years</th>
<th>COI research foci</th>
<th>ECE centres selected</th>
<th>COI individual service research questions⁹</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 to 2008</td>
<td>Inclusive ECE for diverse children and families/whānau (including cultural inclusiveness and inclusion of children with special needs and gifted children; and/or Domain (content) knowledge in ECE - i.e. knowledge that encompasses the nature of learning (e.g. processes, capabilities and competencies, including dispositions) and the context of learning (including areas of learning); and/or Transitions from home to early childhood education services and from early childhood education services to school.</td>
<td>Botany Downs Kindergarten</td>
<td>How does an inclusive environment enhance the learning of all children? How do visual communication tools invite and extend engagement with children and their families? How do we support children on their journey from dependency to self efficacy?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greerton Early Childhood Centre</td>
<td>How does a question asking and a question exploring culture support children to develop working theories to shape and re-shape knowledge for a purpose?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kidsfirst Kindergarten Bush Street</td>
<td>How does story telling and drama support young children's learning?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hutt Family Day Care</td>
<td>How do beliefs, practices and systems influence learning as children move from home into home-based early childhood education? What beliefs, practices and systems contribute to a positive transitioning processes and how do these transition processes support children's learning in children's first critical life transition from their homes?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mangere Bridge Kindergarten</td>
<td>Research Focus: &quot;Crossing borders&quot;. The borders are across: (1) learning dispositions (in Te Whariki) and key competencies (in the school curriculum); (2) home languages and literacies and the kindergarten languages and literacies (including ICT); and (3) early childhood and school settings.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wadestown Kindergarten</td>
<td>What does multi-literate communicative competence mean in an early childhood setting? How do multiple literacies interact and support each other at individual, interpersonal, and community levels? How does an emphasis on multiple literacies within pedagogy, drawing from the concept of ako and involving project work, build community and children's communicative competencies?</td>
</tr>
</tbody>
</table>

⁹ This information was sourced from the Ministry of Education ECE Centres of Innovation website
**ECE COI administration**

The programme is administered by a senior person in the ECE division of the Ministry who has a designated responsibility for managing the COI contracts and providing administrative advice to services. There were several changes in personnel with respect to this role over the period during which Rounds One to Three COI took place. Practical and ongoing project support is provided by a Research Leader. The Research Leader is independent of, but contracted by, the Ministry. For some time the Research Leader role has been carried out by Dr Anne Meade. Dr Meade works as a consultant in the fields of early childhood research, writing and policy. She has authored and co-authored numerous papers related to COI and edited a series of books detailing the activities of the initial cohort of COI services.

**Support from the Research Leader and RA**

COI are supported throughout their tenure by the Research Leader who responds to their emerging needs. The Research Leader visits their centres, mentors staff and challenges teachers to reflect on their research and teaching practices. Ongoing support and mentorship is provided by RAs who are generally appointed to the role for the three year duration of the project. There is at least one RA for each COI and often two RAs work together. RAs are often approached for the specific expertise they have in particular fields of early childhood education. Some RAs have worked with many COI over the years and as a result have built a reputation for facilitating successful COI research. RAs must have post graduate qualifications and research expertise in the ECE sector. By virtue of their attachment to tertiary institutions, RAs are able to assist COI to manage the processes around gaining ethics approval for their work and provide guidance about academic study.

**Participatory Action Research**

The type of research COI carry out is participatory action research (PAR). In its usual form, PAR follows a cyclical or spiral approach involving planning, acting, observing and reflecting with a focus on improving practice and building theories. It is:
“a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out “ (Carr and Kemmis 1986: 162).

The cycle can begin in any phase and each phase is informed by the previous phase. PAR is characterised by participation, collaboration and democratic processes (Reason & Bradbury, 2001). The research is directed by the participants themselves rather than by someone external to the group, although in the case of COI, a RA works with the group. One of the roles the RA plays is to facilitate the processes around linking theory to teachers’ practice. According to Goodnough (2008), practice is informed by theory and theory changes because of practice.

In this project, evaluators found that teachers interpreted PAR in many ways. In some cases it was a process of researching several questions either in sequence or simultaneously. For other teachers, informed by the processes of teaching, learning and assessment as articulated in Kei Tua o te Pae (Ministry of Education, 2009), PAR was an iterative process of looking deeply at the learning of case study children. Whatever the approach, the aim in theory is to gain deeper understanding about practice through reflection carried out by individuals and groups of teachers. As Goodnough notes (2008, p.449), PAR can be messy and uncertain:

“Because teacher research is contextual research and begins with teachers’ beliefs, knowledge, and understandings, the problem or issue they research cannot be held in place...their problem and research plans are continually shifting, developing, and being revised as ideas are translated into [centre] practice”.

Time to work through the PAR processes and support for novice action researchers are critical factors. The role of the RA is to help teachers to deal with the messiness of their research and to make sense of the processes. They make decisions about how best to
manage the challenges and facilitate the process of making sense of the data. As they carry out their roles they should “engage in second order inquiry” (Goodnough, 2008, p.452) in which they reflect on their own effectiveness in the PAR process. There are processes in the COI model, such as hui and milestone reports, for RAs to engage in this second order inquiry.

**Dissemination**

All COI are required to disseminate to others information about their innovation and their research. This involves sharing with other COI and non COI services examples of practice, the resources they have developed, and the findings of their research. The media for this dissemination has been print-based, web-based or face to face through workshops, presentations or visitor programmes. In view of the ripple effect that sharing within educational communities is likely to produce, it is quite difficult to establish the extent to which findings are dispersed and adopted by other services. Many current and past COI have disseminated their programmes through international conferences and papers and this has stimulated much interest in early childhood education throughout the world.

A later section reports on dissemination within the New Zealand education context.

**Hui**

Each COI service had the opportunity to attend two annual hui held for their cohort and RAs. The hui, held over two days, provided COI with the chance to share the progress they had made on their innovations and to discuss their emerging research findings and issues. COI are prompted to report to the cohort on how their innovation research is impacting on outcomes for children and their families. In addition, the hui programme supported COI as they entered different phases of their project. For instance, at one of the last hui attended by COI in Round Three, centres had an opportunity to consider how they would sustain their interest in research post COI tenure.
The evaluation questions

This project is about evaluating the impact on (a) teachers, children and their families within centres involved in a COI initiative, and (b) other centres (Second Wave) who engage with the findings from the COI research, usually through the dissemination phases. The overall questions the evaluators were charged with answering were:

- How, and to what extent, are teacher researchers and their teaching practices changed as a result of their participation in the programme? How are children’s learning outcomes changed? (within COI service effects).
- What difference is the COI programme – as a whole and elements within it – making to improving quality within the ECE sector and to outcomes for children? (wider sector effects).

Questions addressed to each level are:

**Within COI services (micro level)**

1. What factors/conditions are key in facilitating any significant change (growth amongst teachers/outcomes for children and their parents) in teaching and learning at the service level?
2. How is this significant?
3. To what extent is this significant?
4. What, if any, differences are discernible ‘during COI tenure’ compared with ‘post COI tenure’?
5. How, and to what extent, does COI work contribute to improved outcomes for teacher researchers?
6. What are the outcomes for young children, toddlers and infants?
7. What are the outcomes for parents and whānau?
8. What differences, if any, are discernible between COI rounds?
Wider Sector (*macro level*)

1. What aspects of the COI work (innovative practice, action research and dissemination) have an effect?
2. For whom do these effects apply?
3. How do these effects apply?
4. What has been/is the level of dissemination of COI research findings?
5. How well, and in what form are audiences responding to it?
6. What is the impact on the body of knowledge about effective teaching and learning practices?
7. Is the movement of COI teacher researchers to other employment within the sector of any significance when considering the impact of the programme within the sector? What are the impacts, if any, of COI teacher researcher mobility on the sustainability and/or sharing of the programme benefits?

Two additional questions have been posed by the evaluation team as a means of summing up this evaluation:

8. What factors are particularly effective in the COI model?
9. What could be done differently?

From these questions the evaluation team developed a set of sub questions that were addressed to a range of participants. An example of the sub questions is included in the appendices section of this report (Appendix 1). Where appropriate, questions were adapted so they were more relevant to particular participants.

**Theoretical background for the evaluation**

One of the stated purposes of COI is to build the teaching capacity of those working in the early childhood sector. The evaluation team has focused on evaluating COI in terms

---

10 The Ministry is particularly interested in finding out about the impact that the COI programme has on others outside of the COI itself through the processes of dissemination employed. The individuals and groups to whom COI findings have been disseminated have been referred to in this methodology as the Second Wave.
of the quality of the professional learning that has been achieved by the teachers who have participated in the initiative and the impact on the Second Wave. There is also interested in identifying the impact on children and their parents/whānau. In terms of identifying what quality professional learning is, the evaluators' focus is to anchor judgments in well respected theory on what counts as effective/worthy or commendable professional learning.

One way evaluators can arrive at valid judgments about this is to look to current theory on professional learning in early childhood settings. The publication Characteristics of professional development linked to enhanced pedagogy and children’s learning in early childhood settings: Best Evidence Synthesis (BES), co-authored by Mitchell and Cubey (2003b) provides a highly relevant set of principles (expressed as characteristics or criteria of effective performance or outcomes for participants) about professional learning. PAR, as a culture of operating, is implicitly stated within these criteria.

According to Mitchell and Cubey (2003), effective professional development/learning:

- incorporates participants’ own aspirations, skills, knowledge and understandings into the learning context
- provides theoretical and content knowledge and information about alternative practices
- involves participants investigating pedagogy within their own early childhood settings
- involves participants analysing data from their own settings.
- has as its core critical reflection which enables participants to investigate and challenge assumptions and extend their thinking
- supports educational practice that is inclusive of diverse children and their families and whānau
- helps participants to change educational practice, beliefs, understandings and/or attitudes
- helps participants to gain an awareness of their own thinking, actions, and influence.
The evaluation team saw these criteria as providing a useful framework for analysing data gathered in this evaluation. Rather than specifically address the criteria in the report, the evaluation team have used the criteria as principles to judge the merit or worth of COI in action.

**Outcomes**

Consistent with the principles of the *Teacher Professional Learning and Development BES*, the evaluation takes learning as its fundamental focus, and looks at the processes at multiple stakeholder levels in terms of how these processes contribute to good outcomes for all stakeholders. In this context this is about outcomes for teachers (in COI and Second Wave organisations), young children, toddlers and infants and their families. Questions around outcomes are therefore a strong focus of the evaluation.

At the beginning of this evaluation it was an expectation that COI would have evidence of the impact of their initiatives as an essential aspect of their PAR process. As the evaluation progressed, it became apparent that most COI gathered data about the impact of initiatives at the level of individual children (usually through Learning Stories\(^{11}\)). They did not, however, have robust data that would allow them to know about the impact of their COI initiatives at a whole centre level.

Information about impact, therefore, has been gathered in the field by the evaluation team. This was achieved by seeking the perceptions of impact from multiple stakeholder groups associated with the COI programme and close reading of milestone reports for any details about the impact that innovations have had on children and teachers. While there is confidence that teachers’ self reported assertions about their professional growth have some validity (because the claims are able to be triangulated by RA, and through centre milestone and final reports), there is less confidence about the claims teachers have made about the benefits to children. The concern with respect to this is that while teachers have

---

\(^{11}\) A learning story is “a documented account of a child’s learning event… [they] accumulate over time and are used by practitioners for individual planning” (Carr, May, & Podmore, 2000, p.7).
gathered substantial records of learning for *individual children* there has been no analysis of children’s learning at a whole cohort level or across time. Later in this report there are some recommendations with respect to how the COI model could be strengthened to support a more robust process of gathering evidence about impact.

**Methodology**

It was clear to the project team that in order to comprehensively answer the evaluation questions data would need to be gathered about how well COI was operating from a broad range of stakeholder groups that had a direct or indirect involvement in COI. These stakeholder groups were identified as “within service personnel” (teachers, supervisors/head teachers/managers, parents, RAs) and “wider sector groups” (Second Wave stakeholders, personnel within the Ministry of Education, regional associations, umbrella organisations\(^\text{12}\), and the COI Research Leader).

**Sampling processes**

Participation in the evaluation was voluntary. Nineteen COI were funded in the first four rounds. Sixteen COI were included in the evaluation as they were sufficiently far enough through their projects, or had completed their projects. One of the sixteen COI in Rounds One to Three did not take part. This non participation was due to an inability to negotiate an acceptable methodological approach for gathering the data within the time period set for organising the evaluation. For confidentiality reasons the non-participating COI is not identified.

**Data collection approach**

The majority of the data was collected on-site at each centre during late September and throughout October. RAs were interviewed in person, participated in a focus group discussion at the Auckland Hui held in mid November 2008, or responded to questions via email or telephone. The evaluators considered it important to have as much face to

---

\(^{12}\) Umbrella organisations are the parent organisations of particular types of services. For instance the Kindergarten Association is the Umbrella organisation for Kindergartens. Many umbrella organisations have regional sub associations.
face contact with teacher and RA participants as possible. Face to face methods of data gathering, such as interviews and focus group discussions, produce rich detail that can not be readily captured when data are gathered from a distance. Notwithstanding, it was not possible to talk with everyone, particularly the Second Wave who are widely dispersed throughout the ECE and tertiary sectors. For this reason data were also collected using an electronic or hard copy survey. The following table shows the methods (and the rationale behind these methods) for collecting data from stakeholder groups.

### Methods of data collection

<table>
<thead>
<tr>
<th>Tool</th>
<th>Participant/source</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. COI teacher researchers</td>
<td>Gather data about impact of COI on centres</td>
</tr>
<tr>
<td></td>
<td>2. Parents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. RAs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Research Leader</td>
<td>Gather data about COI processes</td>
</tr>
<tr>
<td></td>
<td>2. Representatives from some umbrella organisations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second Wave</td>
<td>Gather data about impact at another level</td>
</tr>
<tr>
<td>Surveys</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Second Wave</td>
<td>Gather data about impact at another level</td>
</tr>
<tr>
<td>Focus group discussions/interviews/emails</td>
<td>RAs</td>
<td>To validate information</td>
</tr>
<tr>
<td>Document analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Milestone and final reports</td>
<td>Scoping Validation</td>
</tr>
<tr>
<td></td>
<td>2. Other papers/articles(^{13})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Catching the Waves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Riding the Waves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cresting the Waves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Ministry of Education website</td>
<td></td>
</tr>
</tbody>
</table>

\(^{13}\) These publications have been produced by Dr Anne Meade as an adjunct to the COI programme.
Data were collected from:
Teachers 60
Research Associates 18
Parents 50
Second Wave participants\textsuperscript{14} 14 15 other ECE centres
1 professional development service
2 tertiary training services
1 tertiary student in training
Region associations and umbrella organisations 3
Others 1

**Ethics**

The involvement of human participants in research requires a core set of confidentiality and ethical principles that Evaluation Associates staff are committed to implementing. These are, that participants:

- are fully informed about the research aims and objectives, their expected role and requirements, and how the research information will be used
- are fully informed of their rights as research participants, including that their participation is anonymous, confidential, voluntary and that they have the right of withdrawal at any time
- come to no harm as a result of their participation
- have appropriate access to further information about the research as required.

All processes for contacting and involving participants in the research adhered to the above.

**Informed consent**

At the beginning of the project, each COI was contacted by telephone. The telephone call was to head teachers/supervisors and involved explaining the project so participants were able to make an informed decision about their participation. Most RAs were contacted by email.

\textsuperscript{14} Responses were typically from one individual on behalf of others within the service/institution
Where teachers and RAs agreed to participate in the project, the evaluators followed up immediately with emailed details including:

- a letter explaining the objectives and processes of the project and the processes by which participants could make contact with evaluators
- a consent form.

These letters are appended to this report (Appendix 2).

During the data gathering process, evaluators were careful to ensure that all participants were willing to take part, and knew what was expected of them. They also took great care to preserve the privacy of the participants who contributed to the evaluation and the information they received from these participants. The information gathered during the evaluation is currently held in a secure manner at Evaluation Associates Ltd.

**Research instruments and processes**

The two evaluators, under the supervision of the Director of Evaluation Associates Ltd, planned the project and designed the evaluation instruments. The instruments comprise sets of interview questions (interview schedules) and surveys that probe the key evaluation questions (Appendices 1 and 3).

Some of the questions are more appropriately addressed to some groups than others. Nevertheless, evaluators were mindful of the danger of assuming that participants would have no experience of issues or would have no views on how things were and could be. The interview questions were intended to be a prompt to evaluators as they talked with participants rather than being used in a rigid manner.

Evaluation Associates Ltd researchers used the approach of conversational interviewing. This semi-structured approach is frequently used by respected international researchers such as Lincoln and Guba (1985) and Patton (1990). In this approach participants explore topics/themes so an understanding of *how things are understood or experienced by them* can be developed. An interview guide is developed and the key evaluation
questions are covered in an emerging way. The questions are phrased in an open ended way that invite the participant into the conversation (Maykut & Morehouse, 1994, p.81). Thus,

‘the researcher tactfully asks and actively listens in order to understand what is important to know about the setting and the experiences of people in that setting…. [T]he researcher asks questions pertinent to the study as opportunities arise, then listens closely to people’s responses for clues as to what questions to ask next, or whether it is important to probe for additional information.’

A written survey of ten items was developed for Second Wave participants (Appendix 3). The support of COI was enlisted to select Second Wave participants. Each COI was asked to nominate approximately seven Second Wave centres or organisations with whom they had engaged during the process of dissemination. Evaluators made contact with most of these centres and sought permission from them to take part in the survey. As was the case with all other groups, participation was voluntary and care was taken to provide potential respondents with information to ensure their informed consent. The survey was also distributed electronically via umbrella groups and through email contact directly with the participants.

**The evaluation process**

The majority of the evaluation fieldwork took place in September and October 2008. Two days per site were allocated for data gathering including visiting each COI and making contact with the RAs.

**Analysis and synthesis**

Evaluators made regular contact with each other for the purposes of discussing the project and to share themes that were emerging from the field work. They continued to refine the questions they asked of participants and further explore the themes that surfaced.
Following the visits to all COI, interviews or email contact with RAs, and attendance at two hui (one in late September and another in mid November 2008) the evaluators met to synthesize the overall findings. The purpose was to analyse the data for understandings about the outcomes of COI on teachers, parents, children and other stakeholder groups. The evaluators identified recurring spoken or written repertoires\(^{15}\) or themes in the data. From these data evaluators used inductive processes to draw generalisations, concepts, or hypotheses (Merriam, 1988).

Evaluators spent some time deciding whether aspects of the findings, such as issues around transition to school, fell within the parameters of the evaluation. As the COI programme was seen as more comprehensive than what happened within individual COI work recommendations relate to a broad range of issues that could be addressed at many stakeholder levels within the system.

In order to arrive at well founded claims about the findings, evaluators grappled with the complex notions of *representativeness* (the extent to which the phenomenon were reported amongst a range of stakeholders), *depth* (the scale of importance of phenomenon reported), *causality* (the link made between a phenomenon and its probable cause), and *benchmarking* (the comparison between the phenomenon and the norms for good practice as articulated in the BES indicators). Evaluators arrived at some theories, expressed as recommendations, about what should happen to improve the COI model.

In terms of representativeness and depth, conclusions were able to be reached because there were sufficient data to indicate that the phenomenon was both widespread and of sufficient interest to participants to be a persistent theme within and across stakeholder groups. Collecting data across multiple participants allowed evaluators to triangulate the legitimacy of the claims made by groups and individuals. In the findings section the patterns of the findings including the multiple and complex viewpoints of participants are reported.

\(^{15}\) Repertoires are frequently occurring phrases, patterns, explanations or sets of arguments made up of clusters of terms, descriptions and figures of speech (Wetherell & Potter, 1992, p. 90)
Causality is a more complex issue because it is a presumed relationship and as such can only be probabilistic. There is seldom a clear causal chain between an outcome or effect and a single identifiable variable that causes this effect. It is also more complicated by the explicit or implicit articulations of participants who clearly have their own value-laden theories about the impact that the COI work has had on their practice and outcomes for parents and children. From the evaluators’ perspective, and sometimes articulated by teachers themselves, it is highly problematic to attribute COI work as the sole cause of the positive changes that occurred during the COI tenure. As many teachers said “we were a good service before COI came along. Maybe we would have done these things anyway.” In all likelihood, COI provided teachers with the time and resources (monetary and personnel) to achieve objectives that would not be possible in ‘normal’ circumstances.

Evaluators are aware that, in reporting generalisations, some of the detail about specific instances of good, or less than desirable practice, can be lost. Where evaluators came across instances of particularly effective strategies, practices and approaches that had a positive impact on teachers, parents and their children, these were noted. The rationale for doing this is that others might also like to learn about these practices. Similarly, practices that were not effective have been described and the factors that are likely to have caused these outcomes.

**The structure for reporting the findings**

The next section of the report contains the findings from those who participated in the evaluation. A small number of extracts from interviews with teachers, parents, RA, the Research Leader, Second Wave participants and umbrella organisations are reported along with interpretive analysis. In some cases the evaluation questions have been clustered to avoid repetition and provide a more cohesive response to the evaluation questions.
Evaluation findings

Within COI services: Evaluation Questions One, Two and Three:

What factors/conditions are key in facilitating any significant change (growth amongst teachers/outcomes for children and their parents) in teaching and learning at the service level?
How is this significant?
To what extent is this significant?

Factors that enabled successful COI involvement

All teachers stated that being a COI involved very hard work and prolonged commitment. Without exception, teachers also stated there were times when they struggled to achieve their planned objectives for a variety of personal and professional reasons. Nevertheless, at the time of the evaluation all but one COI had completed their projects, or were in the closing stages of doing so, and teachers expressed feelings of pride in the fact that they had accomplished what they set out to do.

Where COI were working well in terms of self reported positive benefits\(^{16}\) for teachers, parents and children, participants and/or evaluators were able to identify a number of factors that enabled these outcomes. Conversely, where teachers were less sure about the outcomes of their COI work, a significant number of corresponding disabling factors were present. In terms of evaluator judgment, the most significant enablers to successful participation in a COI programme are the knowledge, capability and dispositions teachers bring to their COI work. Many COI claimed that prior to tenure as a COI their service was performing well in terms of pedagogy, centre programming, relationships with parents and other aspects of early childhood education.

---

\(^{16}\) In a later section, the evaluators comment on the evidence that was available to them in terms of outcomes for teachers, parents and children.
‘The COI came on top of existing good practice, what it allowed us to do was to take our time to explore practice, to reflect on it, take out what was good and embed it over time.

We were operating at a high level before. We were reflective and open to learning. We were possibility thinkers’.

Most services reported that they worked in a positive professional climate in which teachers were motivated by their work and interested in professional matters. In these contexts, COI offered teachers an opportunity to pursue further their interest in teaching and the processes by which children learn. These teachers were familiar with, and applied to their early childhood programmes, the principles of the early childhood curriculum, Te Whāriki. Their backgrounds included professional development (for example in Kei Tua o te Pae, the Educational Leadership Project and post-graduate study) that built on their knowledge of pedagogy, assessment and learning. They operated within a culture of curiosity and frequent professional dialogue. For most services, the opportunity to be a COI was taken up with enthusiasm as a further chance for professional growth.

In most centres staffing was stable. This meant staff had the chance to develop practices and routines that were consistent across the centre and to become a cohesive research team. When new teachers were recruited during a COI’s tenure, head teachers/supervisors strategically appointed teachers with the disposition and skills to continue the work that had been started with COI. Where there were good processes in place to induct these teachers into COI, there were noticeable benefits in terms of maintaining the momentum of the project. Several teachers that were appointed in mid COI tenure expressed delight at being part of a COI, and at their own ability to quickly adapt to centre regimes and initiatives such as being involved at an early stage in dissemination.
Factors that hindered COI involvement

Where COI reported problems such as the project stalling, there were invariably a complex range of issues staff were dealing with. These issues included: multiple changes in staff without the support of centre infrastructure and/or stable leadership, insufficient understanding of the foundational theory of early childhood education (such as Te Whariki and assessment practices), a poor understanding of the direction of their COI programme, issues with relationships amongst staff, difficulty working with the RA, and minimal experience with matters of an academic nature, which made carrying out their research challenging. While many of these factors emerged throughout the tenure, some COI entered with known risks to their involvement.

Threats to successful involvement in a COI

Most teachers, by their own assessment, considered that their involvement in a COI had been valuable professionally and had positive outcomes for themselves, parents/whānau and children. In the view of the evaluators, approximately one centre per round was at risk. This conclusion was reached on the basis that these centres did not have a sufficient mix of the enabling factors already mentioned and encountered a significant number of the barriers also mentioned in the previous section. It was difficult for them to maintain their COI projects let alone bring about good outcomes for teachers, parents and children.

Specific issues mentioned by the small number of staff who gave voice to their concerns include:

- variable commitment from staff
- issues about whether the staff felt worthy/capable enough to be in the project
- issues with the management style of the head teacher/supervisor
- feeling that there was competition between COI
- the lack of rigor around the research process
- the lack of a coordinated approach to the project management
- too much going on to absorb new understandings and embed them
- loss of faith in the integrity of management
- RAs not meeting some teachers’ expectations
- lack of transparency about how financial resources were used
- lack of clarity about the focus of the project
- poor induction processes
• staff working in isolation
• too exclusive (only some children benefited).

The evaluators understand that some centres that did not have a history of sustained good practice entered the COI programme by virtue of their potential to contribute to a scant body of research in their chosen field. While the evaluators accept that it is worthy to promote New Zealand research in early childhood education, the decision to include such centres should be balanced by a prudent assessment of the experience, ability and commitment of the teachers to sustain their work over a three year period.

Other centres were highly complimentary about the initial and ongoing support they received from their parent organisations.

These findings have instructive messages for teachers, leaders, and RAs contemplating entering the COI programme in terms of their readiness to take up the challenge of COI. In our view, it is critical that all potential COI have a strong foundation of existing pedagogical knowledge so they can meet the COI objectives they have set for themselves, and carry on their core business of serving children and their families/whānau well. It is also critical that all COI team members are committed to the project and know what is expected of them.

**Distributed leadership**

Within COI centres, learning communities are characterised by: shared values, philosophy and priorities, a common focus on children and their families, collaboration about programmes and pedagogy, the sharing of practice (often referred to as deprivatisation), and reflective practice. The presence of people who take responsibility for, at times, leading this community is pivotal in establishing and maintaining its vitality. RAs and designated leaders (head teachers/supervisors) play an important role in this respect. However, shared/distributed leadership is also an important feature of early childhood education settings. Shared leadership is characterised by inclusive and collaborative relationships and participants take on leadership roles and responsibilities in
different contexts. At times “leadership” is assigned where individuals have strengths and interests that are perceived to be of value in meeting the priorities of the group.

Consistent with the notion of communities of learners, most COI operated within a culture of distributed leadership, apportioning leadership responsibilities across team members according to the curriculum and personality strengths of the team. The opportunity for teachers to work like this was highly valued and they felt it had contributed to their personal and professional growth.

There were times when it was necessary for the designated leader (head teacher/supervisor) to guide the COI process, such as inducting new staff into the project. Where leaders were most effective, they facilitated the processes around managing resources, especially time allocation and staffing arrangements. A particularly good example of this was the creative ways that designated leaders made provision for staff to engage in quality professional inquiry in which they examined their practices and the assumptions on which they were founded.

Several head teachers/supervisors had post graduate qualifications and thus had been exposed to academic literature and new ways of thinking and researching. This placed them in a good position to know how to support staff as they embarked on their own research. These leaders frequently liaised with RAs, the Ministry and the wider educational community, and generally ensured that the COI programme moved ahead.

**Involvement of parents**

The extent to which parents/whānau and other community members were involved in COI programmes varied considerably. A very strong theme across all centres was the high priority teachers placed on including parents/whānau in wellbeing-focused relationships. Accordingly, part of their research focus was to include parents/whānau more actively in the programme. Several COI were particularly focused on making use of the talents and interests of parents/whānau. From parents’ perspectives, the stimulus
for their involvement in service programmes was seeing the enthusiasm shown by their children who were involved in COI-related initiatives.

Where parents/whānau were most complimentary about COI, it was apparent that teachers had successfully conveyed to them the objectives of the project and had kept them informed about any changes that were likely to occur in the programme or centre routines. The continued engagement of parents/whānau was managed by making information available to them about aspects of COI work either through displays within the service, web pages, email or newsletters.

There were some centres where parents perceived that their children were missing out as a result of COI work. The issues for parents/whānau were related to teachers being away from the centre as they carried out their dissemination work, teachers changing practices without talking through the rationale with parents, and generally spending too much time on bureaucratic functions that were perceived to be far removed from the core business of the centre. Where teachers anticipated and managed these risks, such as always employing the same relievers when teachers were away, parents/whānau were not as concerned.

**Broader community of learners**

Consistent with the notion of learning communities, several COI developed collaborative and productive relationships with other COI in their cohort. Initially the relationships were established at the cohort Hui, but through email communication and visits to each other’s centre, these relationships were sustained and grew. In one particularly effective case, three services met periodically to share their research experiences and resources, and to build on their knowledge about PAR approaches. Where such learning communities existed, teachers were highly appreciative of the chance they had to learn from others involved in a COI and to hone their skills in presenting their work to a broader audience.
**Umbrella group support**

Overall, COI experienced mixed support from their umbrella organisations. One COI enjoyed high levels of practical and emotional support in the form of financial and property management, promotion of COI activities in the broader community and in the educational arena and active support in the dissemination activities. According to the teachers in this COI, association endorsement not only provided them with the feeling that they were doing something worthwhile, but allowed them to concentrate on the core business of their COI work. This was not the case for some other COI.

Several COI stated that the actions and apparent lack of support, particularly in relation to dissemination within their region, from their regional associations/umbrella organisations were counterproductive to their COI work. They cited significant and worrying issues over property and financial management that had a detrimental effect on the wellbeing of staff and the resources provided to the service. It was felt by some COI that their association/umbrella organisation could have done more to promote COI within the region. It was also felt that the intense interest in their work and subsequent high demands on their time for dissemination could have been partially managed by the association arranging some local events in which COI findings were shared en masse.

The evaluators recommend that the Ministry of Education develop a memorandum of understanding with umbrella organisations in which there are protocols around how resources are managed and clearly stated expectations about professional support for COI within their region.

**Within COI services: Evaluation Question Four:**

*What, if any, differences are discernible ‘during COI tenure’ compared with ‘post COI tenure’?*

**Further research**

Our discussion with teachers who had finished or were about to finish their tenure with COI indicated that approximately 60% of them were likely to continue their involvement
in educational research in early childhood settings. There is a strong correlation between
the numbers of centres that were likely to continue their research work and those centres
that were most positive about the processes and outcomes of their COI involvement. As
mentioned above, teachers were predisposed to being curious about teaching and learning
matters. Involvement in a COI had provided them with the confidence to pursue inquiry
armed with new research tools and processes. Their interest was aroused with respect to
future areas for research. Conversations with evaluators included many possibilities for
future inquiry.

Teachers expressed regret and frustration that they would no longer be funded through
COI to carry out future projects. In most cases, teachers were not sure what the options
were with respect to alternative funding sources. The evaluators recommend that the
Ministry consider ways of supporting successful COI to sustain their research work
beyond COI tenure, thereby continuing to build the body of early childhood research.
This may be by increasing teachers’ awareness of other funding streams (such as TLRI)
or by providing support and avenues for COI to publish their research work or engage in
post-graduate study opportunities.

**More time for dissemination**

In terms of their COI work, most teachers were of the opinion that a funded post-tenure
(fourth) year would allow them to do justice to dissemination. Their views were also
supported by a number of RAs. While most centres successfully managed simultaneous
research and dissemination, some found that they would prefer at least some of the
dissemination phase to be separate from their research work. Their concern with
combining research and dissemination was that (a) they could not always do justice to
both activities, and (b) it was not until their COI work was over that they really felt
confident reporting on their work. These COI felt that by the time they reached the end
of their project they could more effectively report the salient points of their research.

It is interesting to note that (a) the self-reported higher performing COI had very active
programmes of dissemination that continued throughout their COI tenure, and (b) a few
centres were actively engaged in dissemination long after their COI tenure had finished. Conversations with teachers suggested that most COI were highly motivated to share their findings locally, nationally and internationally for the benefit of the early childhood teaching sector. Additional findings about dissemination are reported in a later section.

**Within COI services: Evaluation Question Five:**

*How, and to what extent, does COI work contribute to improved outcomes for teacher researchers?*

**Better understanding of children**

Teachers consistently stated that they knew much more about children as individuals, and through this knowledge they felt that they were better able to respond to them. Invariably teachers' responses to questions about what had changed included statements about viewing children as more capable of self-directing their learning:

>'There has been a significant impact on the philosophy of the centre. It was always strong but now there is clarity around how we see ourselves and children as learners. Teachers view children as highly capable learners who have the right to shape their own world. Teachers have become even more skilled at being responsive to children by reading their play and supporting the learning in discrete ways.'

**Critical thinking**

Teachers talked about many positive outcomes for themselves professionally. A frequently occurring repertoire related to their increased tendency to reflect individually and in teams on their initiatives and findings. Many of the changes that grew from their collaborative reflections focused on changing aspects of the programme and enhancing their interactions with children and their parents/whānau:

>'In addition there has been much more reflection around how things are done at the centre so there are minimum interruptions in a child’s day. For instance we looked at routines and reviewed whether these were actually impacting on opportunities to learn.'
It is not possible to determine whether this, and other benefits asserted by teachers, would have happened without COI although as teachers pointed out, COI afforded them the time to think about their practices and the impact it was having on children and their families/whānau.

The processes of professional learning

Teachers articulated that whereas their work in the past had often been taken up as unexamined habitual practice, they were now more aware of using educational practice that had a sound theoretical and research basis. Teachers reported three interrelated complementary processes that contributed to this awareness: frequent shared professional discussions (either informally within the teaching team, or in more formal contexts supported by the RA), engaging with a range of new theories, philosophies and perspectives (often through a range of literature sourced by RAs or Head Teachers/supervisors), and processes by which colleagues or RAs deliberately challenged or provoked teachers to critique or justify their practices, beliefs and assumptions. As this quote exemplifies, teachers made some significant philosophical shifts that have had major implications for teachers and children:

'Children have been given permission to be creative and to express themselves because we have taken a different view of them as learners. We have higher expectations of them. We think of them as competent and capable learners.'

Complementing these opportunities for growth was the dissemination process by which teachers talked about their practice and the important theories that guided their work. Through this talk, teachers added depth to their thinking in relation to their practices and the underpinning theories.

Increased awareness of meaningful planning and assessment

Teachers in most centres stated that their COI work, and particularly the cyclical process around PAR, enhanced their foundational knowledge of assessment and planning. They claimed that COI work helped to sharpen their focus on what individual children were doing within the particular focus of the project and in other aspects of centre life. Teachers assert that they became more perceptive at writing meaningful narratives in
which children’s learning was noticed, recognised and responded to. As one RA commented, “COI has provided the ideal context for applying the principles of Kei Tua o te Pae”.

**Increased use of information and communication technology (ICT)**

Most centres had a minor focus on ICT as part of their COI project. ICT was seen to be a vehicle for achieving some of the objectives of their project as well as an area that fostered engagement with children and their parents/whānau. Centres used part of their COI funding to purchase new ICT equipment including laptops, digital cameras, smart boards and software packages. The arrival of new technology in the centre often prompted teachers to consider ways of integrating ICT into the programme to enhance learning for children and to communicate with their families. In addition, most teachers stated that their ICT skills had increased noticeably as a result of their involvement in dissemination, where it was expected that they would present their work to a high standard and be competent in using a range of applications and software.

**Within COI services: Evaluation Question Six:**

*What are the outcomes for young children, toddlers and infants?*

**Programme evaluation**

It was clear that teachers felt that they had honed their formative evaluation capabilities with respect to observing children’s growth and responding through planning and the programme in action to the emerging interests of individual children.

If teachers carried out an evaluation of the aspects of their COI programme, it was not documented in an explicit manner in their milestone and final reports, nor captured in their conversations with evaluators. Missing from the PAR processes was a clearly documented process by which teachers evaluated the impact that the initiatives they were undertaking were having on a range of stakeholders. This teacher responded to the question on processes for knowing about impact on teachers, children and their parents as follows:
'There have been no formal ways. It has been done through the natural process of producing learning stories.'

When teachers were asked about the impact on children as a whole within their centre, they responded in two ways. One response was to provide anecdotal evidence about the growth made by individual children whose particular progress, in their view, was notable. Evaluators heard numerous individual stories that indicated that some children had benefitted from the changed philosophical perspectives of the teachers, and subsequent modifications to centre practices.

Where comments were made about children as a whole cohort, teachers talked in generalities about growth and development with no reference to the extent to which COI is likely to have contributed to it:

'Children have gained confidence in using language and they have developed social skills such as hospitality, patience and empathy. They show relentless curiosity but are happy with not knowing too. They are making connections to their previous learning.'

When asked in what other ways teachers knew that children, as a whole, were benefiting from their COI projects/initiatives, teachers responded in the second way by claiming that because their (teachers’) practices had changed/got better, then ipso facto, this meant that children would learn/progress. Neither of these approaches, however, answers the question of knowing about impact.

COI teachers talked often about writing learning stories for individual children. In these stories they noted children’s interests and strengths. They seldom referred to writing teaching stories: accounts of what they (teachers) had done and why (the rationale based on evidence) they had done it. A teaching story is about “evaluating practice. It could emerge from an action research sequence in which staff decided that they did not know enough about [aspects of the programme]”(Carr et al., 2000, p.8). Teaching stories, according to Carr et al (2000) are highly efficacious in guiding teaching practice because
they sharpen the focus on what really needs to happen to bring about change. Learning stories are the foundation for teaching stories. In the hands of perceptive teacher-evaluators, learning stories contain the data that can be mined to see what practices teachers are using and how effective these practices are in meeting the learning needs of children. Questions that explore the interests and strengths of children as well as outcomes for them in terms of social, emotional and cognitive growth, guide teachers in this evaluation process.

The evaluators do not wish to undermine the value of formative assessment such as writing learning stories. However, in terms of COI, there is also a place for some good quality formative and summative evaluation of each COI initiative. All early childhood centres (as is the case with other educational institutions) should know about the effectiveness of the services they provide. Centres need to know about the impact of their programmes on children at a broader, whole centre/cohort level. They need to know about this impact over time. Further, the processes around evaluating impact needs to be rigorous and yield trustworthy and useful data. The PAR framework, when applied in a disciplined manner, is a highly effective tool for this programme evaluation process and should be applied to COI programmes.

Rationale for these assertions, with respect to programme evaluation are as follows. Firstly, evidence of outcomes (at various levels) is a clearly stated principle of all robust PAR. From valid and reliable evidence\footnote{We provide the criteria for validity on page 48} about impact, centres are able to know which aspects of the programme are working well (because, for example, groups of children are learning) and which aspects of the programme need further development.

Secondly, in operating from an evidence basis, COI add validity to the claims they make about the benefits of their COI programmes. If COI are able to identify, on the basis of valid data, that aspects of their practice are effective, then other centres will feel more confident about adapting or replicating them in their own settings. It is critical that this
rigor is applied if COI are to meet the standards of good quality research and make their findings accessible and useful to other services.

Thirdly, in an era where there are so many competing demands for Ministry funding, continued support for the programme is more likely if centres are able to provide valid evidence about the impact their COI work is having on children, teachers, parents/whānau and their sector colleagues.

**Making explicit expectations about evaluation**

The evaluators recommend that some structure to ensure better processes for evaluation be applied to the COI model at Ministry level. The priority of operating in an evidence-based environment should be (a) articulated in the expectations for COI as they consider entering the programme, (b) supported by the Research Leader through her work with COI, (c) actively promoted through the PAR process by the RAs, and (d) reflected in the milestone and final reporting expectations of COI.

**Managing evaluation in the complex world of early childhood learning**

In practical terms, measuring outcomes in an early childhood setting is problematic. As Kei Tua o te Pae (2004, p. 13) states, “worthwhile educational outcomes are often complex, especially if they are about relationships and participation”. Nevertheless, the early childhood curriculum, *Te Whariki* explicitly states that it is possible to know that children’s’ knowledge, skills and attitudes are being enhanced, and the evidence for this is the increasingly more complex ‘working theories’ children acquire and the increasing depth and breadth of the learning dispositions\(^\text{18}\) children bring to their play and learning.

As indicated above, the changes teachers make in their practices and theory development and the increasing engagement of parents/whānau in centre programmes are also of interest and could similarly be noted over time for evidence that the COI programme is impacting on these groups.

---

\(^\text{18}\) Learning dispositions are, “learners’ inclinations, skills and understandings” (Kei Tua o te Pae, 2004, p.18). Reknowned early childhood academic, Dr Margaret Carr (2001, p.21) states that learning dispositions are “situated learning strategies plus motivation – participation repertoires from which a learner recognises, selects, edits, responds to, resists, searches for and constructs learning opportunities”
The process of evaluation is deliberate. Teachers decide what will be reviewed and plan how this will happen; the data is gathered and interpreted. Judgments are made about the data and decisions about future action are made from the results. Information is what is gathered and analysed, evidence is what is used to inform the judgments made (Ministry of Education, 2006). Implicit in measuring progress is establishing, at the beginning of the COI tenure, baseline information about how effectively the service is meeting the needs of each of the relevant stakeholder groups. In essence, this step is about doing a stock take of centre effectiveness.

This does not necessarily require collecting large amounts of quantitative data, but could consist of gathering good quality information about the knowledge, skills and attitudes of the relevant cohorts. For instance, if a COI is focused on increasing the engagement of parents/whānau in the centre programme, at the beginning of the COI work, baseline data of a particular type (perhaps observation or parent surveys) would be collected about the ways parents are currently involved in the programme. Data collected at subsequent points in time would be compared to this baseline data for evidence of change. One centre actually did do this, but this was the only instance of gathering baseline and follow up data that we were able to find.

Carr et al's (2000, p.16) work on assessment and evaluation strategies and tools to use within an action research framework have considerable potential for application in the COI model. Of particular worth are the criteria they articulate for what constitutes useful and valid data. Thus, data of merit is that which:

- can be collected quickly and easily
- is capable of starting an analysis and planning process
- is capable of energizing staff to reflect on their practice
- is capable of surprise, challenging assumptions
- is linked to the child’s [teachers] questions in a transparent way
- is precise
- is capable of showing that action had made a difference
is capable of being analysed.

In terms of the validity of the data, the theories expounded by Gagnato, Gee and Green and Anderson and Herr (cited in Carr et al, 2000, p.17) and Carr, May and Podmore themselves are particularly pertinent to a discussion about data and validity in a COI evaluation context. The following table summarises the key theories and theorists with respect to validity:

<table>
<thead>
<tr>
<th>Theorist</th>
<th>Notion of validity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bagnato (1997)</strong></td>
<td></td>
</tr>
<tr>
<td><em>Sensitivity</em></td>
<td>Data provides a clear direction for curriculum development or intervention</td>
</tr>
<tr>
<td><em>Authenticity</em></td>
<td>Data is collected in natural authentic settings and everyday contexts</td>
</tr>
<tr>
<td><em>Equity</em></td>
<td>It incorporates multiple ways of knowing and thinking and communicating and includes cultural and philosophical differences</td>
</tr>
<tr>
<td><em>Collaboration</em></td>
<td>Involves all interested participants</td>
</tr>
<tr>
<td><em>Convergence</em></td>
<td>It relies on more than one source of data</td>
</tr>
<tr>
<td><strong>Gee and Green (1998)</strong></td>
<td></td>
</tr>
<tr>
<td><em>Coverage</em></td>
<td>The capacity for continuity and comparison. The criteria are consistently interpreted</td>
</tr>
<tr>
<td><em>Convergence</em></td>
<td>It relies on more than one source of data, or different analysis of the same data</td>
</tr>
<tr>
<td><strong>Anderson and Herr (1999)</strong></td>
<td></td>
</tr>
<tr>
<td><em>Catalysing</em></td>
<td>Leads to change</td>
</tr>
<tr>
<td><em>Challenge</em></td>
<td>The data are capable of challenging assumptions, not just affirming what we know already</td>
</tr>
<tr>
<td><em>Accessibility</em></td>
<td>The data are not difficult to collect</td>
</tr>
<tr>
<td><em>Leverage</em></td>
<td></td>
</tr>
</tbody>
</table>
The data are capable of leading to action and change, and provide a way of showing that action made a difference.

The benefits of operating within a culture of evidence-based inquiry, where data is sourced that meets the criteria articulated above, are significant for teachers and children. The professional discussions about what learning looks like, what counts as evidence of growth/progress (including the criteria by which it can be measured), and the subsequent evaluation of progress made, have the potential to promote highly valuable learning. In terms of benefits to children, where teachers use evaluation data (rather than tacit feeling and assumptions) to change programmes, the adjustments are likely to more precisely meet the needs of children.

In conclusion to this section on programme evaluation, it is cautioned that, whatever form evaluation takes, it should be undertaken as a genuine enterprise in gathering evidence about what is working and what needs to be improved. It should not be viewed as an exercise in meeting Ministry demands for accountability. To this effect it is important that the Research Leader and RAs promote evaluation as a highly desirable and ‘do-able’ professional activity that will make the centre a better place for children and their parents/whānau. The evaluators suggest drawing on the expertise of Carr, May and Podmore, and others in the ECE sector who are currently working in the field of assessment and evaluation in early childhood, to further develop this focus on evaluation within the COI model. Sections one to three of the document, Self-review guidelines for early childhood education. Nga arohaehae whai hua (Ministry of Education, 2006) also provide highly relevant information on how evaluation processes might be carried out.

**Within COI services: Evaluation Question Seven:**

*What are the outcomes for parents and whānau?*

Teachers claimed that COI provided them with the time to consider ways they could foster meaningful engagement with families. From their perspective: (a) there were stronger learning–focused relationships with parents/whānau in which information was
exchanged about their children’s learning, and (b) parents/whānau felt valued, demonstrated by contributing resources and participating in programmes:

*We see enhanced relationships, partnerships which have a real learning and wellbeing focus. One of the most significant outcomes is that we have rebuilt a sense of community. Parents now stay, they join in activities and in some cases parents’ relationships with their children has changed because they have seen that there are better ways to relate to others.*’ (Head Teacher)

Centres, however, had limited evidence of the impact of the COI programme on parents/whānau. Some services had made a good start by carrying out surveys or observations of parents within the centre. The usefulness of the information was limited however, because these data were not followed up to find out what changes had occurred over time. This meant that centres did not comprehensively understand the impact of the COI work on parents as a group. What is clear is the feeling that practices implemented at the centre had been highly effective in building partnerships that were valued by teachers and parents/whānau:

*‘There is a much greater sense of belonging. Parents come in and start talking to us and it is clear they feel at home here and want to engage in conversations with us about their children. Some of the practices we use are building partnerships with parents. For example sending the cameras’ home has stimulated parents to write learning stories.’* (Head Teacher).

Discussions with parents/whānau showed that, in many cases, they were positive about the COI programme. As indicated in Evaluation Question One, the aspect that most pleased them was the enthusiasm of their children, which parents/whānau often stimulated even further in their lives outside of the centre. The synergy created when the COI shared the children’s interests with families and the families in turn shared what had been happening at home was a distinct feature of many COI. Many parents/whānau talked about their feelings of being connected to the centre, of being valued, welcomed and in partnership with teachers. Where these feelings were not shared, as mentioned
earlier, there were issues of poor communication that were seen to disempower parents/whānau.

**Within COI services: Evaluation Question Eight:**

What differences, if any, are discernible between COI rounds?

**Changes**

The following changes appear to have occurred between COI rounds:

- Selection processes appear to have strengthened over successive rounds (although, as mentioned previously, at least one COI per round encountered difficulties that jeopardized its involvement).
- Milestone reporting became more realistic and manageable for COI after Rounds One and Two.
- Rounds Two and Three suffered from changes in Ministry personnel. This impacted on their ability to manage the administrative side of their work.
- By Round Three there was greater clarity around the role of the RA.\(^{19}\);
- By Round Three there was a stronger sense of a learning community as COI worked with other participating COI.
- There is an increasing trend of dissemination in the pre-service early childhood teaching sector.

---

\(^{19}\) Evaluators endorse recent steps to create guidelines that support RA in their work.
Wider Sector: Evaluation Questions One, Two and Three

What aspects of the COI work (innovation practice, action research and dissemination) have an effect? For whom do these apply? How do these effects apply?

Innovation

Many of the benefits of being involved in a COI programme have been discussed in the previous sections. To summarise, teachers claimed the following outcomes:

- a deeper understanding of content and/or pedagogical knowledge related to the specific topic being researched (e.g. inclusion, second language acquisition, the integration of ICT into centre programmes)
- an increased capacity to notice, recognise and respond to children’s learning
- an increased desire and capacity to engage with parents/whānau and the community
- a deeper understanding of the theory that underpins their practices in their focus areas
- better understanding of how ICT can enhance learning for children and facilitate communication with parents/whānau.

PAR

According to teachers and RAs, COI involvement has provided teachers with the following benefits:

- a better understanding of PAR. (Models of PAR ranged from case study level to complex multi-strand research)
- an understanding of the value of using data formatively (at an individual child level)
- a greater tendency to engage in collaborative, professional discussion in informal and formal ways;
- learning from, and being supported by, colleagues within and beyond the COI
- being supported in their research by skilled RAs.
‘It was exciting and the collaboration was great. There were lots of options for reflection and good opportunities to learn about ourselves as teachers.’
(Teacher)

Some centres talked about PAR becoming embedded within the cultural practices of their service.

‘We now understand that practice is not static but is evolving and organic and must stand scrutiny. We have grown in our ability to write for others.’

‘We have been inspired by making connections with researchers across the world and within our own local community.’

‘We are excited by what could be done in further research or professional learning. We could run workshops around the pragmatics of teacher researching...’ (Head Teacher).

This is highly desirable and it is recommended that RAs discuss with the COI how a culture of research can be sustained beyond the tenure of the COI.

**Dissemination**

In terms of dissemination, teachers reported:

- a significant growth in their confidence with regard to disseminating locally, nationally and internationally
- increased skill in using ICT to convey their research findings
- satisfaction and mana from sharing their work with others in the early childhood sector
- a reciprocity to their professional learning through exposing themselves to a range of audiences who consumed and commented on their research, and thereby extended COI teachers’ thinking.

Further information about dissemination is reported in the following section.
Wider Sector: Evaluation Question Four and Five:

What has been the level of dissemination of COI research findings?
How well, and in what form are audiences responding to it?

At the time of the evaluation, only one centre had a list detailing to whom they had disseminated their findings. This list was appended in their final report. It is possible that other centres also generated such lists, and have sought to gather information about the impact of the dissemination on practice from the Second Wave, but this information was not made available to the evaluators when they asked about Second Wave groups that could be contacted. Information about dissemination has therefore been based on what was gathered through surveys and discussions with COI during the evaluation.

Evaluators were not able to accurately assess the impact of COI findings on Second Wave individuals, groups and institutions because of the highly dispersed way dissemination occurs. It is suggested, therefore, that any claims made about dissemination, are likely to be underestimated rather than inflated, given the ripple effect that operates in terms of sharing information amongst teaching communities. With respect to gathering information about impact, a random sample of the Second Wave population was taken to seek specific information about how, why, and with what effect, dissemination occurred. This information is presented in this section.

As previously stated, the data was collected from the Second Wave participants by survey. Each COI was asked to provide a list of organisations/individuals to whom they had disseminated. For two COI the list was fewer than the seven the evaluators wanted because the COI had not yet engaged in large scale dissemination. Evaluators contacted 49 Second Wave organisations or individuals. They sent follow up emails in an effort to gain responses from Second Wave participants. As an extra measure, associations and umbrella organisations were also asked to distribute the survey amongst their membership.

It should be noted that a significant number (15/20 responses) were furnished on behalf of others within the Second Wave service. In many cases the responses represented a full
teaching team from a kindergarten (two or three people) or all the staff in an early childhood centre (five or more people), or a large proportion of the parents from a playcentre. In effect the 20 responses therefore represent the views of many more people. It is likely that the views expressed are generalisable within the groups from whom respondents represented.

During the data gathering process it became apparent that it was not just other ECE centres that were showing an interest in COI work. The lists of Second Wave organisations provided by COI included a range of other than early childhood education services such as tertiary institutions involved in pre service teacher education training, and ECE professional development providers. Dissemination also occurred across different types of ECE services, for example playcentre parents visited kindergartens and visa versa.

The following table shows who responded to the survey:

**Second Wave Respondents**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE services (kindergarten, home based ECE service, kohanga reo, playcentre or education and care centre)</td>
<td>15</td>
</tr>
<tr>
<td>ECE pre service teacher education training institution</td>
<td>2</td>
</tr>
<tr>
<td>ECE professional development provider</td>
<td>1</td>
</tr>
<tr>
<td>Pre Service trainee</td>
<td>1</td>
</tr>
<tr>
<td>Not identified</td>
<td>1</td>
</tr>
</tbody>
</table>

During conversations with teachers, and through the surveys, evaluators developed an understanding of how Second Wave groups heard about COI work. In addition to the predicted methods of face to face contact, a considerable amount of dissemination occurred via less expected methods such as print media (through papers produced by COI and RAs), and email. The evaluators were also surprised at the amount of interest shown in COI work by ECE pre-service teacher training organisations and professional development providers.
It was clear that those who designed professional development (PD) programmes and ECE preservice teacher training curricula, were making use of COI findings and resources within their programmes. Their comments indicated that they valued the locally-produced research that grew out of COI because teachers could relate to the philosophy expounded by the teachers and the distinctly New Zealand way of carrying out ECE in New Zealand. Research papers were built into the reading lists for teacher trainees, and included in professional development and post-graduate programmes.

Sometimes PD providers took course participants to COI to see how the programme worked. One provider made it standard practice to include a visit to a highly regarded COI with a unique cultural setting as part of their PD programme. This provider claimed that visiting the centre allowed course participants to see for themselves high quality ECE practice in action. Similarly, COI team members were sometimes invited to present aspects of their work in training programmes and PD courses.

Dissemination activities did much to raise teachers’ awareness of COI and the research COI teachers produced. Teachers felt considerable pride in being able to talk about their COI work and their growing ability to convey their research ideas to a range of audiences. The awareness of COI work was also raised when COI members presented their research and findings at local and regional workshops, and national and international conferences.

The following table indicates the ways that Second Wave respondents indicated that they came to hear about COI activity. Data about international conferences has not been included as the impact of COI on overseas audiences was not a focus of this evaluation. It is acknowledged, however that these conferences have been a significant avenue for overseas audiences to hear about COI programmes. COI dissemination overseas has contributed to the high regard with which New Zealand ECE is held, and the mana that has been afforded the Ministry for funding practitioner-based research.
Ways Second Wave respondents came to hear about COI activity:

Through professional development courses 6
Knew the COI involved and approached them 4
COI material included in tertiary course content 4
Heard about COI at conference 3
Read COI publications 3
Word of mouth recommendations 2
Heard about via the umbrella group 1
Not identified 1

There was often a purpose for Second Wave respondents to attend COI dissemination events that related to a specific intent to build teacher capability and/or improve their service. Some Second Wave attendees travelled long distances to hear COI teachers talk about topics that were particularly important to them. While most Second Wave groups made one or two visits to a COI, a number of them made multiple visits to gain a better understanding of the philosophical and practical aspects of the COI’s approach. In between visits they often communicated with the COI via email. A few Second Wave participants made the visit to a centre out of curiosity about what COI do, or simply wished to take part in the experience of being in a community of learners. The following table shows the reasons that respondents gave for attending:

Reasons for attendance at COI dissemination

To build teacher capability 6
Compulsory requirement (course) 5
Curiosity 4
Had heard about the reputation of the COI 3
To find out more about a specific field 1
To engage in mutual exchange of ideas 1
Most local (within New Zealand) dissemination happened through programmes where visitors came to the COI at arranged times. In these programmes COI had clearly understood protocols with respect to welcoming visitors and explaining the innovation and research. Often responsibilities for aspects of the dissemination programme were shared amongst the team with the rationale of building everyone’s capability and confidence in dissemination. It was a source of great delight and pride to teachers that it no longer fazed them to speak to large audiences (in New Zealand and internationally) about their work.

All teachers spoken to understood that the privilege of being a COI entailed reciprocity. They understood that COI gave them an opportunity to learn from others as well as a responsibility to share with others. The means by which findings were disseminated reflect the growing trend towards building learning communities. For instance, COI teams not only hosted other centres, but also visited non-COI teams in their centres taking with them some of the resources they had developed and their research findings. COI teams mentored other teachers informally. Some of the new technology and ways of applying it became the means by which information was shared with other teachers. PowerPoint presentations were common place and teachers were keen to keep contact with their wider learning communities via blogs and email. The following table shows the range of dissemination activities mentioned by respondents:

**Dissemination activities**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshops or presentation</td>
<td>9</td>
</tr>
<tr>
<td>Reading about COI findings and research in course material</td>
<td>4</td>
</tr>
<tr>
<td>Observation and questioning on site at a COI</td>
<td>3</td>
</tr>
<tr>
<td>Mentoring by COI team member(s)</td>
<td>2</td>
</tr>
<tr>
<td>Lecture (at tertiary institution)</td>
<td>2</td>
</tr>
<tr>
<td>COI members came to service to share</td>
<td>2</td>
</tr>
<tr>
<td>Visiting COI blog sites</td>
<td>1</td>
</tr>
<tr>
<td>Skyping</td>
<td>1</td>
</tr>
</tbody>
</table>
In terms of how audiences responded to COI dissemination, there were clear indications that Second Wave educators valued what they heard and read from their peers. They enjoyed being challenged to think about new ways of operating and appreciated ideas that they could apply in their own settings. The following two tables outline the many aspects that interested audiences, and the reasons they were interested:

<table>
<thead>
<tr>
<th>COI focus or concept/teaching theory/philosophical approach</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance/applicability to own setting</td>
<td>5</td>
</tr>
<tr>
<td>Observing practice within a COI setting</td>
<td>4</td>
</tr>
<tr>
<td>Hearing about the research processes and the research ‘journey’</td>
<td>3</td>
</tr>
<tr>
<td>Seeing the displays and resources</td>
<td>2</td>
</tr>
<tr>
<td>Learning new ICT skills and how they could be applied</td>
<td>1</td>
</tr>
<tr>
<td>Seeing the COI presentation unfold</td>
<td>1</td>
</tr>
<tr>
<td>Valuing the COI team as role models</td>
<td>1</td>
</tr>
<tr>
<td>Finding out about aspects of teaching practice</td>
<td>1</td>
</tr>
<tr>
<td>Discussion with colleagues</td>
<td>1</td>
</tr>
</tbody>
</table>

The reasons for their interest were as follows:

<table>
<thead>
<tr>
<th>Relevance (Findings could be readily applied to own setting)</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>The research area matches Second Wave service’s current priorities</td>
<td>12</td>
</tr>
<tr>
<td>Ideas are practical</td>
<td>6</td>
</tr>
<tr>
<td>Could see how others present their work (presentation &amp; facilitation skills)</td>
<td>2</td>
</tr>
<tr>
<td>Mana/personality of the presenters</td>
<td>2</td>
</tr>
<tr>
<td>Clarified audience understanding</td>
<td>2</td>
</tr>
<tr>
<td>Stimulated thinking/reflection about practice</td>
<td>1</td>
</tr>
<tr>
<td>Helped to make links between theory and practice</td>
<td>1</td>
</tr>
</tbody>
</table>

All Second Wave groups indicated that they responded in their own programmes to what they saw, read and heard through COI dissemination. In some cases what they learned from COI resonated so strongly with them that they made quite substantial changes to their own centres including the review of philosophical positions (how teachers viewed children as learners, how they related to parents/whānau, and how they organised their
centre programme and environment) as well as centre practices such as planning and assessment. The following is an analysis of the changes Second Wave teachers reported:

<table>
<thead>
<tr>
<th>Change</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>General teaching approach</td>
<td>10</td>
</tr>
<tr>
<td>Assessment</td>
<td>6</td>
</tr>
<tr>
<td>Planning</td>
<td>3</td>
</tr>
<tr>
<td>Practices around access to profile books</td>
<td>3</td>
</tr>
<tr>
<td>Relationships with primary schools</td>
<td>3</td>
</tr>
<tr>
<td>Reviewed concept of child as a learner</td>
<td>2</td>
</tr>
<tr>
<td>Improved leadership practices</td>
<td>2</td>
</tr>
<tr>
<td>Purchased new resources</td>
<td>2</td>
</tr>
<tr>
<td>Improved the learning environment</td>
<td>1</td>
</tr>
<tr>
<td>Improved support for parents</td>
<td>1</td>
</tr>
<tr>
<td>Increased staff competency in ICT</td>
<td>1</td>
</tr>
<tr>
<td>Began running own workshops</td>
<td>1</td>
</tr>
<tr>
<td>Adopted PAR as a centre practice</td>
<td>1</td>
</tr>
</tbody>
</table>

As indicated above, Second Wave groups made changes in a broad range of areas. They believed there were many positive outcomes from these changes for a range of stakeholders. These impacts were most noticeable from teacher’s point of view in the areas of relationships and learning. The following list shows the impact of the changes in Second Wave contexts:

<table>
<thead>
<tr>
<th>Impact</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better relationships with children and their families/whānau</td>
<td>7</td>
</tr>
<tr>
<td>Know more about children’s learning</td>
<td>7</td>
</tr>
<tr>
<td>Increased parental understanding (of their children’s learning &amp; the programme)</td>
<td>7</td>
</tr>
<tr>
<td>Increased interest in doing research</td>
<td>5</td>
</tr>
<tr>
<td>Increased teacher understanding of pedagogy</td>
<td>4</td>
</tr>
<tr>
<td>Improved physical learning environments</td>
<td>4</td>
</tr>
<tr>
<td>Improved planning, assessment and evaluation</td>
<td>3</td>
</tr>
<tr>
<td>Improved transition to primary school programmes</td>
<td>3</td>
</tr>
<tr>
<td>Improved collaboration amongst teachers</td>
<td>2</td>
</tr>
<tr>
<td>Raised teacher expectations about children as learners</td>
<td>2</td>
</tr>
</tbody>
</table>
Increased awareness of the theory base behind practice  
Stimulated enthusiasm in teachers  
Enhanced children’s skills and dispositional learning

In conclusion, it is likely that there has been a significant impact on the thinking and the actions of the Second Wave groups who have come into contact with COI. Their responses have been far reaching in many cases and significantly focused on teaching and learning.

**Wider Sector: Evaluation Question Six:**

*What is the impact on the body of knowledge about effective teaching and learning practices?*

RAs and the Research Leader stated that the research produced by COI is highly valued because it has (a) produced research that New Zealand ECE teachers can relate to (is authentic and grounded in the reality of actual ECE settings), and (b) filled a gap in the research about aspects of ECE (particularly in the fields of research on cultural settings). The following participant response indicates that access to COI research, and especially material that the sector can relate to, has been highly valued:

‘The impact of the (named service) COI is quite significant because [the findings/research] can be used as examples in the education programme (in workshops etc) as examples of good practice. Because [the research] come[s] from (named service), our trainees know that the example is applicable to them. The journal articles and book arising from (named) COI... are particularly useful because they have given us good resources to explain a concept that was already part of the education programme... ’(Management within an umbrella organisation).

Many COI teachers stated that the reports they wrote on their research were created to capture the reality of life in ECE settings. They wanted their findings to be relevant to others and at the same time reflect the commitment they had made to undertaking their
COI research. Above all they believed their reports should “speak” to other teachers and encourage them to undertake their own research projects:

‘We wanted to let other centres know that this COI project was carried out by a team of three teachers each of who have thirty children. It is important that in sharing of our work others see us as credible and our work as realistic so they can have the confidence to try too.’ (Head Teacher).

Thus their reports contained accounts of the frustrations and the joys of everyday life as ECE teachers and their processes around understanding and doing PAR. They frequently stated that the initiatives they put in place through COI and the research should be accessible to any centre that was motivated sufficiently to carry out sustained research.

**Making COI findings more visible**

While there is evidence that COI findings are being disseminated quite widely within certain groups of people, there is still room to make COI more readily available to a range of audiences. The evaluators have some recommendations about how this might be achieved. These recommendations relate to extending the opportunities for dissemination beyond the sector, and enlisting more active support from umbrella organisations. At present, information about COI can be accessed through a small number of publications, via conference journals and papers, Ministry web pages and through dissemination events. Access is contingent on people knowing what the COI programme is, where to find COI, and how to find publications through various sources.

The evaluators recommend the Ministry consider other ways of getting more, and regular information about COI and research findings out to the early childhood and compulsory education sectors (particularly primary schools). This could be achieved by periodically publishing COI articles in the Education Gazette or producing a DVD (such as summaries of centre findings or case studies) that go out to ECE services and primary schools.

In the case of the latter, COI teachers made two important observations in the course of talking about children and their learning and what happens as they progress into school. They noted that small but growing numbers of teachers in early years classes (Years 0-1),
are showing interest in ECE research. They believe this is because (a) they wish to facilitate the process of children transitioning to school, and, (b) those teachers appear want to know more competencies children bring to school.

Deliberately extending the dissemination into primary schools might well address issues ECE teachers identified in the course of this project, specifically that schools could do much more to facilitate a seamless transition to school for children and their families/whānau.

Umbrella organisations could be encouraged to more actively disseminate their COI’s findings amongst the early childhood community. Once again, COI teachers had expectations about what associations/umbrella organisations should do to spread the word about COI findings (such as organising dissemination events and regularly publishing COI findings in newsletters and web pages). In some cases COI felt that they were an untapped resource that umbrella organisations were failing to put to good use. Some teachers tentatively raised the explanation that perhaps umbrella organisations were cutting off the tall poppies to reduce the likelihood of professional jealousy within that service sector. Regardless of the explanation, there are some fundamental issues that need to be addressed in terms of clarifying expectations and practices around how the umbrella organisations promote the work of the COI.

**Wider Sector: Evaluation Question Seven:**

*Is the movement of COI teachers to other employment within the sector of any significance when considering the impact of the programme within the sector? What are the impacts, if any, of COI teacher researcher mobility on the sustainability and/or sharing of the programme benefits?*

There has been some movement of teachers during and after tenure in COI. Interestingly, few head teachers/supervisors moved from their centres while they were involved in COI. When asked about why this might be, head teachers/supervisors stated that they felt a strong commitment to see COI through. In the two cases where head teachers/supervisors did move, sustainability of the COI project was jeopardized and the
remaining teachers reported feeling less positive about the processes and outcomes of their COI work.

Where COI teachers moved on to new positions within the ECE sector they have attempted to apply the ideas they have learned to their new settings. In some cases this application has been successful, particularly where the changes are consistent with the centre’s prevailing education philosophy. A few teachers stated that the new centres they moved to were not particularly interested in COI findings, mainly because they were engaged in their own professional development focus.

Many teachers believed that their involvement in COI enhanced their employment prospects in the ECE sector. They believed that involvement in COI equipped them with highly desirable skills, such as competency in research and project management, and deeper content and pedagogical knowledge, that made them attractive to other centres.

In terms of comparing the effects of teacher movement versus dissemination on building teacher knowledge, evaluators are of the firm view that dissemination is far more influential in bringing about changes in ECE. This perspective is informed by the data provided by Second Wave participants. For further information about this please refer to the earlier section on dissemination.

**Wider Sector: Evaluation Question Eight:**

*What factors are particularly effective in the COI model?*

**Access to resources**

Two factors were repeatedly mentioned when evaluators asked this question. The most highly valued aspect of the COI model for teachers was access to funding that meant teachers could (a) be released to do their COI work, (b) travel to other COI, Hui, and national and international conferences, (c) purchase extra resources such as ICT, and (d) have additional buildings for the centre.
**RAs and the Research Leader**

The second most valued aspect was access to expertise that supported them during their research work. Most often cited as helpful in this respect was the RA who made regular visits to the centre. Teachers also valued the input made by the Research Leader, who met with each centre to support them throughout their tenure. As is the case with the RA, the Research Leader challenged teachers to view their practices in alternative ways. The Research Leader also provided much needed moral support to centres when they encountered difficulties, acted as a liaison person in discussions with the Ministry and RA, and provided considerable support to COI as they crafted their reports.

RAs were perceived to be particularly effective in supporting teachers’ professional growth. RA previous experience with facilitating academic learning was adapted to work in a new research environment where teachers felt challenged and stimulated:

> ‘The RAs have been highly instrumental in supporting professional learning. They have stimulated teachers and provoked them to critically reflect on what they are doing. Some of their most useful work has been to ‘throw things into the pot that is already boiling’ to support further professional growth. They have presented teachers with literature from different sectors that have allowed them to realise that there are common elements to learning regardless of the sector. Their ability to support learning by co-constructing the next steps has been hugely beneficial’ (Supervisor).

Overall teachers had a highly complementary perspective of RAs. What they most valued was the way RAs:

- were accessible (distance was not seen as an issue but some COI suggested that proximity is an advantage)
- were aware of the capabilities/prior knowledge of the COI team and skillfully tailored professional learning accordingly
- were able to facilitate change and growth in ways that empowered the team
- allowed COI teams to be self-determining but kept an overview of how things were going
• provided opportunities for teachers to learn the skills of researching
• encouraged COI to work collaboratively with other COI
• provided access to dissemination in the tertiary sector
• challenged the assumptions held by teachers and fostered critical thinking as a way of being
• exposed teachers to new and relevant theory that stimulates their thinking and practice
• liaised well with the head teacher/supervisor.

In many instances there were two RA working with the team simultaneously. In some cases RAs changed during the course of a centre’s tenure, so having two RA enabled some continuity. Generally teachers reported that having two RA was successful because they enjoyed the dynamic they brought to the project. Also of value was the mixture of academic and professional expertise the RA provided. From the perspective of RAs, access to a colleague, with whom one could consult over problems of practice, was seen as a huge benefit.

In one case teachers were critical of the dynamic of their two RAs. The conflicting views of the two RAs on aspects of the project confused teachers and this confusion impacted on their ability to grow and undertake research. While the notion of two RAs is supported, there are some important factors necessary in selecting the RA team. It is important that the RAs:

• are socially, philosophically and methodologically compatible
• bring complementary skills and experience in conducting and supervising research
• communicate well with each other and the COI team.

Wider Sector: Evaluation Question Nine:

What could be done differently?
Many aspects of the COI model are working well. The model, however, could be enhanced by making changes in the following areas:

- Doing research
- RAs
- COI processes at Ministry level

**Doing research**

As previously mentioned, there is a need to strengthen the processes around doing research, particularly the need to undertake programme evaluation based on gathering evidence about the impact of the research initiatives on whole cohorts of children and parents/whānau. The evaluators recommend that:

- At the beginning of the project, teacher researchers describe the status quo (baseline position) in terms of children’s’ learning and/or dispositions in relation to the topic under research. They should also do this for parents/whānau and for themselves as teacher researchers.
- At agreed points throughout the research, but especially at the end of the project, teachers should take stock of the progress the relevant groups have made (relative to the baseline data) paying particular attention to gathering and analysing data that allows them to know to what extent they have been successful.

In terms of actual research, there are improvements that can be made to streamline the process around gaining ethics approval for the work centres carry out. At present many centres experience delays in gaining approval that impact on the timeline of their project. The evaluators recommend that the Ministry takes over the process of managing ethics approval so these delays are eliminated.

It would also be beneficial if COI had rapid access to libraries and their databases so that delays in accessing academic literature can be minimised. These issues are not widespread, but are important.
As noted previously, many teachers expressed a desire for an additional funded post (fourth) year in which COI could concentrate on disseminating the final findings of their research. While acknowledging that the Ministry is not likely to have any further resources for this as part of COI, the evaluators recommend that the Ministry consider ways of supporting successful COI to sustain their research work beyond COI, thereby continuing to build the body of early childhood research. Suggestions include encouraging COI to hold back some of their funding for the fourth year and for the Ministry to provide a small amount of support for the dissemination to continue in a fourth year.

**Research Associates**

RAs are subject to the requirements of their contract in terms of their outputs for COI. Given the complexity of their role, it would be beneficial for RAs to have guidelines that provide clarity as to their function in a COI and that are regularly reviewed to ensure they comprehensively cover the range of activities undertaken by RAs. It is understood that such guidelines are under development.

Some teachers believed it would be desirable for there to be more flexibility about who could be an RA. For example an RA could be someone who has a doctorate, but who was not currently attached to a tertiary institution. Given that there are a few issues about funding with respect to RA attached to universities, and some RA might thus be unavailable in the future, it would be advantageous to have a broader pool of RA from which to draw.

**COI processes at Ministry level**

The following recommendations are proposed in light of comments from teachers about making COI applications and receiving ongoing Ministry support:

- a dedicated COI administrator in Ministry with whom COI can liaise
- mentoring/guidance about applying to be a COI

---

20 The issues relate to the university expectation that staff will be funded at a cost effective rate. COI remuneration rates have not necessarily kept pace with this rate.
• speedier resourcing
• guidelines for umbrella organisation about resourcing
• funding guidance and support
• flexibility with the timeframe for COI including:
  - provision of a shorter tenure for those wishing to engage in smaller projects (this might be attractive to some potential COI who do not feel they can commit to a three year period)
  - provision of a longer tenure for those wishing to continue
• opportunity to reapply or pursue new research.
Conclusions

COI is about self-directed professional learning within a culture of inquiry. The following principles of effective professional learning, articulated in Characteristics of professional development linked to enhanced pedagogy and children’s learning in early childhood settings: Best Evidence Synthesis (BES) (Mitchell & Cubey, 2003a), have served as the touchstone for the evaluative judgments about the effectiveness of COI as a model and in practice:

1. Incorporates participants’ own aspirations, skills, knowledge and understandings into the learning context.
2. Provides theoretical and content knowledge and information about alternative practices.
3. Involves participants investigating pedagogy within their own early childhood settings.
4. Involves participants analysing data\(^{21}\) from their own settings.
5. Has as its core critical reflection which enables participants to investigate and challenge assumptions and extend their thinking.
6. Supports educational practice that is inclusive of diverse children and their families and whānau.
7. Helps participants to change educational practice, beliefs, understandings and/or attitudes.
8. Helps participants to gain an awareness of their own thinking, actions, and influence.

COI, as a model, and many of the COI centres in practice, achieve these principles. There is however one principle, that needs to receive further attention at COI (within centre) and Ministry levels. While COI appear to be carrying out assessment quite effectively, their practices around the process of evaluation are currently undeveloped. Principle four is about assessment and evaluation. Without this principle, all other principles are meaningless, because assessment and evaluation is the foundation of knowing about teaching, reflection and changing practice. Assessment data allow us to know what children are doing as individuals. Evaluation data allows us to know what is

\(^{21}\) The evaluators thinking, with respect to data, is informed by the theories articulated by Carr, May and Podmore (2000), specifically that action research should be guided by a set of action research tools that allow centres to collect a variety of data. The findings from the analysed data allow teachers to take appropriate responses. The data should be relatively easy to collect, precise, stimulate reflection, challenge assumptions, be capable of analysis and lead to action and change.
happening for cohorts of children and to respond to this data accordingly in our programmes. As Carr et al (2000, p.16) state: “Data will discriminate between the appropriate [response by teachers] and the inappropriate [response by teachers]…[they] are capable of showing that action made a difference”. In all other respects COI as it stands is an effective process for building teacher research capability and for developing amongst teachers the skills to talk about and reflect on teaching practices (although this process would be significantly enhanced by more robust data about outcomes for stakeholders).

The evaluators were not charged with reaching a judgment about whether COI is cost effective. Whether it is a cost effective process for building teacher capability depends on how COI compares to other modes of professional development and the extent to which COI flows on to benefit Second Wave services. It is not possible to quantify the learning teachers make during their involvement in COI. Nor is it possible to know the extent to which COI findings ripple out and impact on the sector at a local, national and international level. COI research is highly valued because audiences can relate to the research contexts and understand the backgrounds in which COI operate. Data suggest that there has been an impact on the thinking and practices of Second Wave services and that there have been positive changes for teachers, children and parents/whānau.

There is evidence that where there are enabling factors such as competent and willing teachers, good leadership by head teachers/supervisors and RA, and sufficient support from associations, COI are in a good position to meet the COI objectives they set for themselves. This has implications for those COI who are chosen to take part in the programme. Advice for those who select centres for inclusion in COI is that potential centres should have a strong and evident history of good performance that situates them well to sustain their work and succeed.

The personnel and financial resources that COI provides have a positive impact on the professional growth of teachers, including those who are directly involved and those who hear about COI work through dissemination. It is less clear what benefits are derived for
the children who attend these COI services. Centres themselves had little aggregated information that allowed them, or the evaluators, to know about impact at a service level. In the interest of knowing about their work, and of sustaining COI overall, it is highly recommended that all services involved know how and why evaluation should be carried out. The Ministry should build into the model processes by which evidence-based evaluation occurs.

Apart from what happens within the centres themselves, there are some amendments to Ministry systems that have the potential to facilitate teachers’ involvement in their COI research projects. These include more streamlined processes around accessing academic literature and ethics approval and clearer guidelines to RA and associations/umbrella organisations about expectations.
Suggestions for enhancing COI

The following suggestions will further improve the COI programme:

**Suggestion 1: Programme evaluation**

1.1 That the Ministry strengthens the processes around evidence-based programme evaluation, specifically by stating expectations about how COI should report the impact of innovations on outcomes for children, their families and teachers themselves;

1.2 That RAs and the Research Leader support COI to understand the rationale for carrying out programme evaluation and assist COI to develop the skills for carrying out this evaluation as a part of PAR.

**Suggestion 2: Refining research and dissemination processes**

2.1 That the Ministry implements processes whereby COI, through RAs, can more efficiently manage the processes of obtaining ethics approval and access to libraries and library databases.

2.2 That the Ministry extends the pool of potential RA to include those who are not currently employed within a tertiary institution but who have the necessary prerequisite skills to undertake the RA role effectively.

2.3 That the Ministry supports teachers to undertake a funded 4th year in which COI can carry out dissemination activity without the constraints of simultaneous COI research.

2.4 That the findings about COI innovations and research are made accessible to a broader sector audience and are available in formats that support teachers to make use of them.

**Suggestion 3: Clarity about support for COI**

3.1 That memoranda of understanding are developed between Ministry, COI teachers and regional associations/umbrella groups whereby each party has a clear understanding of its roles and responsibility with respect to COI processes and outcomes.
References


Appendices

Appendix 1: Teacher interview schedule

<table>
<thead>
<tr>
<th>Centre/Service:</th>
<th>Interview details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Names of participants and roles:</td>
<td>Date:</td>
</tr>
<tr>
<td>Nature of the Innovation:</td>
<td>Time:</td>
</tr>
<tr>
<td>COI involvement dates:</td>
<td>Venue:</td>
</tr>
</tbody>
</table>

List of “Second Wave” centers and services Evaluator: Robyn Gibbs requested?

**Interview questions**

Q1 How have you been involved in the process of learning and research in the COI?
What do/did you do?

Q2 What support have you received from others/ other stakeholder groups?
What has been the impact of receiving this support?
Sources of evidence:

Q3 What impact has there been on teachers as researchers?

Sources of evidence:

Q4 What impact has there been on teachers as practitioners?

Sources of evidence:

Q5 In what ways has the COI project fostered the inclusion and engagement of parents/whānau and contributed to their knowledge of their children’s learning?

Sources of evidence:

Q5 In what ways has the COI project fostered the learning and wellbeing of infants, toddlers and young children?

Sources of evidence

Q6 In what ways have you sought information about the impact of the project on
   (a) teachers?
   (b) children?
   (c) parents/whānau?
   (d) people working in other services/centres?
sources of evidence

Q 8 With whom and how have the research findings been shared?

Q 9 What has been the response of those people?

sources of evidence:

Q 10 What are/were the successes of the COI initiative?

sources of evidence

Q11 What difficulties have you encountered?

Q 12 What factors are particularly effective in the COI model?

Why are they effective?

Q 13 What could be done differently?

Why?

Q 14 What has happened at your service after the COI project finished?
Q 15 How has the COI model evolved over time? (Research Assistants)

Additional questions asked
Analysis with respect to the sub questions developed from the Key Evaluation Questions
(see analysis written for teachers)
What aspects of the COI work (innovative practice, action research and dissemination) have an effect?

For whom do these effects apply?

How do these effects apply?

What has been/is the level of dissemination of COI research findings?

How well, and in what form, are audiences responding to it?

What is the impact on the body of knowledge about effective teaching and learning practices?

Is the movement of COI teacher researchers to other employment within the sector of any significance when considering the impact of the programme within the sector? What are the impacts, if any, of COI teacher researcher mobility on the sustainability and/or sharing of the programme benefits?

What factors/conditions are key in facilitating any significant change (growth amongst teachers/outcomes for children and their parents) in teaching and learning at the service level?

How is this significant?
To what extent is this significant?

What, if any, differences are discernible ‘during COI tenure’ compared with ‘post COI tenure’?

How, and to what extent, does COI work contribute to improved outcomes for teacher researchers?

What are the outcomes for young children, toddlers and infants?

What are the outcomes for parents and whānau?

What differences, if any, are discernible between COI rounds?
Appendix 2: Information letter and consent forms for participants

Dear X and the staff at Y centre

RE: Programme Evaluation Services in Relation to Early Childhood Education Centres of Innovation

We are writing to invite you to contribute to the programme evaluation of the Early Childhood Education Centres of Innovation which will be undertaken soon. Our organisation has been contracted by the Ministry of Education to carry out this evaluation of the Rounds One to Three Early Childhood Centres of Innovation across New Zealand. Your service is one of the 16 which will be evaluated nationally. The date for the programme evaluation of your Early Childhood Centre of Innovation is X Month, 2008

Why is this evaluation happening?

The Ministry of Education is interested in finding out about the key success factors of the Early Childhood Centre of Innovation (COI) programme overall and the impact that initiatives have on individual services. They are also interested in finding out the extent of the impact that COI have on other groups, services and organisations. Information from this evaluation will be used to make improvements to the COI model. We appreciate your help in carrying out this important project by contributing your perspectives.
What is the evaluation about?

The objective of the evaluation is to answer the following evaluation questions:

Within COI services (micro level)

1. What factors/conditions are key in facilitating any significant change (growth amongst teachers/outcomes for children and their parents) in teaching and learning at the service level?
2. How is this significant?
3. To what extent is this significant?
4. What, if any, differences are discernible ‘during COI tenure’ compared with ‘post COI tenure’?
5. How, and to what extent does COI work contribute to improved outcomes for teacher researchers?
6. What are the outcomes for young children, toddlers and infants?
7. What are the outcomes for parents and whānau?
8. What differences, if any, are discernible between COI rounds?

Wider Sector/macro level

1. What aspects of the COI work (innovative practice, action research and dissemination) have an effect?
2. For whom do these effects apply?
3. How do these effects apply?
4. What has been/is the level of dissemination of COI research findings?
5. How well and in what form are audiences responding to it?
6. What is the impact on the body of knowledge about effective teaching and learning practices?
7. Is the movement of COI teacher researchers to other employment within the sector of any significance when considering the impact of the programme within
Who will be involved?
Staff in COI are key participants in this evaluation. It is important that the evaluators talk with Head Teachers/Supervisors, teachers and other staff who were/are involved in the COI initiative. Clearly staff who arrived at various stages in the COI initiative will also have views as will those who arrived after the COI project was completed. Evaluators will talk to Research Assistants and other people who supported the project. Information will also be sought from parents who are/were involved in the COI. If possible evaluators will talk informally to children in centres where a COI is currently being undertaken.

The evaluation will take place in the centre/service/kindergarten/Kohanga reo/A’oga and will involve collecting information over a two day period. It would be useful if the evaluator had access to documents such as records of how the innovation findings and processes were shared with others.

We are asking the Head Teacher/ Supervisor to arrange:
(a) a suitable time for the staff to meet as a focus group with the evaluator;
(b) for teachers to meet individually with the evaluator to talk about the COI initiative
(c) for parents to meet with the evaluator, either individually or as a group.

When will this evaluation take place?
The evaluation will take place in September and October 2008. Head Teachers and Supervisors have already been contacted by phone to tell them about the evaluation. The evaluators will endeavor to minimize the impact that the research has on services by negotiating a suitable timetable for the on site work.
Who will carry out the evaluation?
The two people who will carry out these evaluations have considerable experience as educators and/or as evaluators within the early childhood, primary and secondary sectors. Robyn Gibbs is employed by Evaluation Associates Ltd in Auckland and Dr Jenny Poskitt works out of Palmerston North. They can be contacted through Evaluation Associates Ltd (phone (09) 3600827) during business hours. The Director of Evaluation Associates, Michael Absolum, is also available on this number.

Participant information and informed consent
Participation in the evaluation is voluntary. All potential participants will receive a letter outlining the ethical considerations that apply to an evaluation such as this. The letter outlines who potential participants, and those who agree to take part in the evaluation, can contact should they wish to find out more about the project.

The Head Teacher/Supervisor has been asked to make the information letter and consent form available to all staff and to the parents/whanau approached to participate in the project. Evaluators will collect the signed consent forms at the start of the evaluation.

We look forward to working with you on this interesting project and thank you in anticipation for your time and your generous contribution.

Yours faithfully

Robyn Gibbs
Project Director
Appendix 3: Survey for the Second Wave

Programme Evaluation of the Early Childhood Education
Centres of Innovation

Survey for attendees of Centres of Innovation dissemination events

Number of people responding to this survey:

Type of Centre/Service in which you work:

This survey is designed to gather information about the impact on others of the Centres of Innovation programme. The answer to your questions will help us to know:
1. How COI findings are being shared (information evening, university lecture, article, seminar at the COI)

2. How widely COI research findings are being shared

3. How audiences are responding to it

4. What effect COI work has on others

Please answer as fully as you can the following questions and return the survey by the Friday 31st October.

Your responses remain confidential to the evaluation team. Only trend data will be reported to the Ministry of Education.

Question One:
What is the name of the COI you visited? (if you visited more than one COI, please record the names of all COI)

Question Two:
When did you attend? (If you visited or had contact with the COI more than once please, record these occasions)
**Question Three:**
If you did not visit the COI but found out about their work in another way, please state how.

**Question Four:**
How did you find out that this COI was going to share its work?

**Question Five:**
Who else from your service/centre attended?

**Question Six:**
Why did you attend?
Question Seven:
What form did this sharing take?

Question Eight:
What part of the COI’s presentation most interested you?

Why did this interest you?

Question Nine:
What disappointed you about the presentation or content shared?
Why?

How could the presentation be improved?

**Question Ten:**
Did you change any elements of your practice? Yes No

If you did not change, why not?

If you did change your practice, what were the elements you changed?

In what ways did the change(s) enhance outcomes for teachers?
(For example: teaching and/or assessment practices improved, staff know more about how children learn, programme planning improved, the programme structure or organisation improved, relationships between staff and parents/whanau improved, staff are more focussed on being learners, research is happening in our service/centre)

In what ways did the change(s) enhance outcomes for children?

In what ways did change(s) enhance outcomes for parents?

Thank you for filling out this survey. Please return it by the 31st October