A Shared Early Childhood Development Research Agenda: Key research gaps 2010–2015

Associate Professor Linda Harrison, Professor Jennifer Sumision, Dr Frances Press, Dr Sandie Wong, Dr Loraine Fordham, and Dr Joy Goodfellow

Research Institute for Professional Practice, Learning and Education (RIPPLE) Charles Sturt University

4 March 2011
Contents
Acknowledgements.................................................................................................................................................. 5
Disclaimer.............................................................................................................................................................. 5
Glossary................................................................................................................................................................. 6
Introduction.......................................................................................................................................................... 8
1. Gathering, interpreting and analysing policy-relevant evidence ................................................................. 15
   1.1 What programs have been transformed or ceased on the basis of key evaluations? What was learned? .................................................................................................................................................. 17
   1.2 What are the most effective ways of translating research/evaluation findings into: policy? and practice? .................................................................................................................................................. 26
   1.3 Are there evaluation methodologies or approaches that are particularly effective or appropriate for early childhood programs? .................................................................................................................................. 31
   1.4 Summary ..................................................................................................................................................... 36
   1.5 Research gaps............................................................................................................................................. 37
Exemplar............................................................................................................................................................... 37
References.............................................................................................................................................................. 39
2. Effectively communicating with parents and children .................................................................................. 43
   2.1 What is the relationship between socio-economic background and participation in child care and pre-school? ........................................................................................................................................... 44
   2.2 What are the values, attitudes and knowledge of different groups of parents concerning child care, early childhood education services and ‘good parenting’? How does this influence the choices that parents make? ........................................................................................................ 47
   2.3 Where do parents go for advice regarding looking after their children? What are the most effective strategies for providing parents with information concerning services and supports? ......................................................................................... 50
   2.4 What are the most effective ways of engaging parents/carers in terms of understanding early childhood development? ........................................................................................................................................ 53
   2.5 Summary ..................................................................................................................................................... 56
   2.6 Research gaps............................................................................................................................................. 57
Exemplar............................................................................................................................................................... 57
References.............................................................................................................................................................. 58
3. Understanding and responding better to the needs of highly vulnerable Australian families and their children .................................................61

3.1 Characteristics of ‘vulnerable’ children and their families ..................................62

3.2 Approaches to engaging vulnerable families ......................................................68

3.3 Community oriented strategies and programs ....................................................71

3.4 Summary ..............................................................................................................74

3.5 Research gaps ......................................................................................................74

Exemplar ..................................................................................................................75

References .................................................................................................................77

4. Knowing the dynamics of early childhood education and child care markets and key stakeholders ........................................................................82

4.1 What are the interactions between market processes, regulation and funding arrangements? ........................................................................84

4.2 How does the Australian early childhood education and care system compare internationally? ...............................................................88

4.3 What are the different perceptions/expectations of parents concerning child care versus child education? .................................................................89

4.4 Summary ..............................................................................................................90

4.5 Research Gaps ......................................................................................................90

References .................................................................................................................91

5. Identifying best practice to build and support delivery of early childhood services across Australia ......................................................................93

5.1.1 What is meant by best practice? How is best practice defined in EC? ........94

5.1.2 What do practitioners mean or understand by ‘best practice’? .........................99

5.2 How can best practices be applied to different contexts/settings? .........................100

5.3 How is best practice assessed in Australia and internationally? ............................103

5.4 Summary ..............................................................................................................105

5.5 Research Gaps ......................................................................................................105

Exemplar ..................................................................................................................106

References .................................................................................................................106
Acknowledgements

The Australian Government Department of Education, Employment and Workplace Relations (DEEWR) commissioned and funded the Australian Research Alliance for Children and Youth (ARACY) to prepare this report. Work on the report was undertaken by Associate Professor Linda Harrison, Professor Jennifer Sumsion, Dr Frances Press, Dr Sandie Wong, Dr Loraine Fordham, and Dr Joy Goodfellow, with technical advice from Mr Claudio Dionigi from Charles Sturt University (CSU).

The research team would like to thank Geoff Holloway (ARACY) for his advice and support; Claudio Dionigi for his capacity to cheerfully and insightfully answer endless questions concerning the location and filing of data and the efficient use of EndNote; Tania Cowgill for her administrative assistance; Kim Woodland from RIPPLE for her excellent editor’s eye; and Janet Wilks from RIPPLE for her assistance with project management. Particular thanks is extended to all those who attended Reference Group meetings, for their preparedness to read the draft report and provide thoughtful and constructive feedback.

Disclaimer

The opinions, comments and/or analysis expressed in this document are those of the authors and do not necessarily represent the views of the Minister for School Education, Early Childhood and Youth, the Minister for Employment Participation and Child Care or the Department of Education, Employment and Workplace Relations, and cannot be taken in any way as expressions of government policy.
Glossary

**Early Childhood Education and Care (ECEC)** is an internationally used term adopted by the Organisation for Economic Co-operation and Development (OECD) to describe the inseparable nature of ‘care’ and ‘education’ in the provision of programs for children under five. As such, it is inclusive of child care centres, family day care services, pre-school, kindergarten, pre-prep, and other settings that have an early years’ educational focus.


**Pre-school** refers to all ECEC settings that provide an approved pre-school program for children aged 3 to 5 years. Explicit terms, such as United States (US) pre-Kindergarten programs, are used when referring to specific types of pre-school settings.

**Universal ECEC services** refer to ECEC services that are aimed at the general population and where everyone has equal access.

**Targeted ECEC services** refer to ECEC services that are aimed at a specified target group, such as low income families or developmentally at-risk children.

**Targeted-universal ECEC services** refers to the provision of universal ECEC services within a targeted community or regional area.

**Integrated ECEC services** refer to children’s centres that provide a range of services for children and families through or in a single location. Provisions vary from site to site, but can include ECEC, maternal and child health, school and community services.

**Teacher** refers explicitly to ECEC personnel who hold a university level qualification in early childhood education or other fields of education (e.g., primary, special education). Terms such as educator, practitioner, child care worker and staff member are used more generally to refer to ECEC personnel.

**Correlational** refers to the tendency for two variables or measures to vary together or be related, which in quantitative research is proven through statistical analyses.

**Causal** refers to relationships between variables or measures where one is shown to be a consequence of the other, which in quantitative research is estimated by analyses of effect size or the use of controlled experimental or quasi-experimental designs.
**Randomised controlled trial (RCT)** refers to an experimental research or evaluation design that randomly allocates the selected population of participants to a treatment or control group, or to one or more alternate treatment groups. Characteristics of the participants are assessed before allocation and after (or during) the treatment program/intervention. Randomization is used to minimise the effects of other non-treatment factors on the outcomes being assessed.

**Benefit-cost analysis (BCA)**, also referred to as cost-benefit analysis, refers to the ratio of estimated monetised outcomes (benefits) to the total costs incurred in providing the treatment (ECEC program or intervention).
EARLY CHILDHOOD DEVELOPMENT RESEARCH
GAPS ANALYSIS PROJECT

Introduction

This report maps current research on early childhood development with particular reference to early childhood education and care (ECEC) and, in doing so, aims to identify gaps in current evidence on early childhood development needs, especially as these pertain to government policies.

The research mapping addresses the following six priority areas:

1. **Gathering, interpreting and analysing policy-relevant evidence**
   
   1.1. What programs have been transformed or ceased on the basis of key evaluations? What was learned?
   
   1.2. What are the most effective ways of translating research/evaluation findings into (a) policy? and (b) practice?
   
   1.3. Are there evaluation methodologies or approaches that are particularly effective or appropriate for early childhood programs?

2. **Effectively communicating with parents and children**

   2.1. What is the relationship between socio-economic background and participation in child care and pre-school?
   
   2.2. What are the values, attitudes and knowledge of different groups of parents concerning child care, early childhood education services and ‘good parenting’? How does this influence the choices that parents make?
   
   2.3. Where do parents go for advice regarding looking after their children? What are the most effective strategies for providing parents with information concerning services and supports?
   
   2.4. What are the most effective ways of engaging parents/carers in terms of understanding early childhood development? (Note: early childhood development also includes child care and child education).

3. **Understanding and responding better to the needs of highly vulnerable Australian families and children**

   3.1. What are the most effective approaches for engaging ‘vulnerable’ families and their children in quality early childhood education and care? What are the barriers/influences/beliefs preventing such engagement?
3.2. What are the specific characteristics of ‘vulnerable’ children and their families and what is needed to assist them to meet the developmental/education/care needs of their children?

3.3. What makes ‘strong communities’? What are they doing that actually works?

4. Knowing the dynamics of early childhood education and child care markets and key stakeholders

4.1. What are the interactions between market processes, regulation and funding arrangements?

4.2. How does the Australian early childhood education and care system compare internationally?

4.3. What are the different perceptions/expectations of parents concerning child care versus child education?

5. Identifying best practice to build and support delivery of early childhood services across Australia

5.1. What is meant by ‘best practice’? How can it be applied to different contexts/settings? What do practitioners mean or understand as ‘best practice’?

5.2. How is ‘best practice’ defined and assessed in Australia and internationally (e.g., the Organisation for Economic Co-operation and Development [OECD])?

5.3. How do different countries, with sound early childhood systems, differ from Australia?

6. Supporting a skilled and effective workforce

6.1. What characteristics of the early childhood education and care workforces have the greatest benefits for children’s outcomes?

6.2. What are effective workplace models? How do changes, such as altering staff child ratios, affect model performance?

6.3. What is needed to attract and retain an educated/skilled/effective early childhood education and care workforce?

Children’s early development is widely researched, giving rise to a substantial and expanding body of evidence. Although ECEC is not always the primary focus of the preceding set of research questions, this review takes as its starting point research that is linked to ECEC. The research gaps subsequently identified pertain to the ongoing and future development of ECEC programs. A large and informative
research base that concerns children’s early learning and development more broadly is outside the scope of this review.

**Background to the report**

In 2010 the Australian Research Alliance for Children and Youth (ARACY) was commissioned by the Australian Government Department of Education, Employment and Workplace Relations (DEEWR) to assist in the development of a research and evaluation plan to inform early childhood policy development and program implementation.

As part of this plan, the *Early Childhood Development Research Gaps Analysis* project was designed to:

- map current research on early childhood development, especially as it pertains to national policies, including information on significant research evaluations; and
- identify gaps in current evidence on early childhood development needs, especially as they pertain to national policies.

In the lead up to the development of this report, ARACY conducted four two-hour community workshops in October and November 2010 (Brisbane, Sydney, Melbourne, and Perth) at which participants identified what they believed to be key research gaps within the priority areas previously identified by DEEWR (refer to Appendix 1 for the results of these consultations).

The priority areas, established by DEEWR, were:

1. Gathering, interpreting and analysing policy-relevant evidence from within Australia and overseas that is robust and relevant to the early childhood development needs of Australians.
2. Effectively identifying and communicating what parents need to know to meet the needs of their children within their local communities.
3. Understanding and responding better to the early childhood education and child care needs of highly vulnerable Australian families and their children.
4. Knowing more about the dynamics of early childhood education and child care markets, other key stakeholders within the community, and the various systems within which they operate.
5. Identifying best practice to build and support the delivery of early childhood services across Australia, including place based approaches and integrated service provision.
6. Supporting a skilled and effective workforce.

ARACY refined the priorities for the research review and gaps analysis on the basis of feedback from the community consultations and DEEWR. Appendix 2 provides a summary of the feedback from the community workshops conducted by ARACY in October and November 2010.
Methodology

The Research Gaps Analysis Report was developed in three key stages. Firstly, a comprehensive literature search was conducted to uncover existing robust research evidence; secondly, this research was considered in relation to the questions posed within each priority area to identify significant gaps in understanding in relation to each area; lastly, commonalities were identified across priority areas to help build an integrated and comprehensive understanding of gaps in evidence.

Each priority area was allocated to a team member with specialist knowledge related to that area. Before the literature search commenced, a comprehensive team briefing was held to ensure overall consistency in approach. The use of common search terms was trialed and decided upon. A database for each priority area was established using EndNote.

The bulk of the searching utilised subject indexes and citation tracking. Database searches included search terms that provided an overall scope of ECEC. Common terms included “early childhood” or preschool or pre-school or “child care” or childcare or “day care” or daycare or kindergarten or pre-kindergarten or prekindergarten or nursery. These search terms were supplemented by terms specific to each priority area; these are described in Chapters 1 through 6. Searches resulted in a vast array of literature apparently relevant to each area. Initial selections were narrowed by date (primarily 2006–2011). The exclusion of research source material primarily focused on health and/or social services, the robustness of methodology, and how closely the research addressed the focus questions. In addition, international and Australian websites known by the researchers to be potentially relevant were also searched. Such sites included the Australian Institute of Family Studies (AIFS), the Centre for Community Child Health (CCCH), the Social Policy Research Centre (SPRC), and those of professional organisations. Publications already known to the researchers or recommended by ARACY were also sourced. Literature relevant to more than one priority area was shared between members of the team via an interactive CSU-based website.

The research standards pyramid (Figure 1) was used as a guide for the location and utilisation of research material with, as far as practicable, priority given to research which fell within the top range of the pyramid. However, for some of the six priority areas, there was no direct correspondence with the categories defined by the pyramid (this is discussed in more detail in the following section entitled ‘Limitations’). In these cases priority was given to sourcing materials with robust research design. Each team member refined the selection of literature to approximately 50 research entries for each priority area. These are listed as references in Chapters 1 to 6.
The combined list of references totalled 307 entries, which are provided in an EndNote file. The following table (Table 1) summarises the different document types considered in this report. Note that some source documents were utilised in multiple chapters.

Table 1: Overview of research / information consulted (N = 307)

<table>
<thead>
<tr>
<th>Document type</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book</td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td>Book chapter</td>
<td>11</td>
<td>3.0%</td>
</tr>
<tr>
<td>Journal article</td>
<td>196</td>
<td>63.8%</td>
</tr>
<tr>
<td>Research—policy brief/clearinghouse resource</td>
<td>15</td>
<td>4.9%</td>
</tr>
<tr>
<td>Report</td>
<td>57</td>
<td>18.3%</td>
</tr>
<tr>
<td>Government document</td>
<td>9</td>
<td>2.9%</td>
</tr>
<tr>
<td>Conference paper</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>Electronic article</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Unpublished paper</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Other: thesis (1), grant (4), webpage (1)</td>
<td>6</td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>310</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

From their review of the literature, each team member developed a cumulative file of gaps in the evidence base for presentation and discussion at a two-day team workshop. This enabled joint scrutiny of the identified research and potential gaps, and provided the basis for developing recommendations regarding research priorities. From this, a draft report was presented to a meeting of the ARACY Reference Group for feedback (Reference Group members are listed in Appendix 1).
Following the feedback from the Reference Group meeting, another team meeting was held to refine the recommendations, with a particular view to understanding the implications for the development of a research agenda of themes and gaps emerging from reviewing the priority areas in their entirety.

**Limitations**

This literature review takes a broad view of ECEC. Although it encompasses research on parents’ perspectives and parenting programs, it does not encompass all the available research relevant to early childhood development. In particular, it does not canvass the research pertaining to early childhood development where this is examined primarily in the domains of health, family support, social services and so forth. Further, it does not specifically seek out research on children’s perspectives.

Because the area of ECEC is so heavily researched, the literature review does not include publications prior to 2005/6. However, it must be noted that three significant and substantial longitudinal studies—NICHD (US), EPPE (UK), and Competent Children (New Zealand)—have published relevant findings prior to these dates.

The evidence pyramid provided to guide the determination of research validity requires particular discussion. Emanating as it does from a medical model of research (NHMRC), it provides a hierarchy of research that does not have direct applicability to a number of the areas that were the focus of review (Penn & Lloyd, 2007). Systematic reviews and meta-analyses, which rely on comparisons of effect sizes, can give undue weight to single site experimental research. Meta-analyses also do not tend to provide sufficient procedural information for practice (Odom, 2009). In a number of the areas addressed in this research review, the real world complexity of children’s and families’ lives means that it is not possible to conduct reliable and ethical research through the use of methods such as randomised controlled trials (RCT). As Bridges (2009) points out, research in education deploys a wide range of methodological and theoretical approaches. He cites the criteria of originality, significance, and rigour, as being useful to the assessment of the quality of research across diverse approaches. Originality “engages with new or complex problems or debates and/or tackles existing problems in new ways”; significance may be determined by “judging its effects or potential effect on the development of the field, examining contributions to existing debates, and assessing its impact or potential impact on policy and practice”; and rigour may be determined by attention to such qualities as “reliability and validity, and also qualities such as integrity, consistency of argument and consideration of ethical issues” (p. 500).

In addition, many highly utilised databases feature a predominance of US-based research and exclude a significant body of relevant literature such as government reports, local program evaluations and, unfortunately, much Australian research. The research team has endeavoured to address these omissions through additional searches.
**Structure of the report**

Chapters 1 to 6 of the report address the six research priority areas. Each chapter discusses the nature of the published research relevant to its priority area, research findings and research gaps. Chapter 7 draws on the report in its entirety to propose a comprehensive and integrative research agenda that will help build the evidence base for early childhood policy development and program implementation.

Appendices at the back of the report include: the feedback from the ARACY-led community consultations; and membership of the ARACY Reference Groups.

**References**


1. Gathering, Interpreting and Analysing Policy-Relevant Evidence

Questions addressed in this priority area

1. What programs have been transformed or ceased on the basis of key evaluations?
   What was learned?

2. What are the most effective ways of translating research/evaluation findings into:
   a. policy? and
   b. practice?

3. Are there evaluation methodologies or approaches that are particularly effective or appropriate for early childhood programs?

Search approaches

The overarching criteria used to determine inclusion include:

- Relevance to topic: “evaluation of significant programs or research studies”.
- Recency: limited to 2005-11, but including current reports/reviews of earlier longitudinal studies.
- Robustness of evidence: meta-analysis/systematic reviews; breadth, size and representativeness of case control and non-experimental studies; standing of authors or organisations for research to practice and research to policy commentaries.

Search strategies included:

- Consultation: with team members and other colleagues.
- Searches in subject indexes:
  - Databases searched: EbscoHost (Education), EbscoHost (Psychology).
  - Search terms used: “early childhood” or preschool or pre-school or daycare or childcare or “child care” or “day care” or kindergarten or pre-kindergarten; and “evaluat*”; NS “program” “policy” “practice” “intervention”.
  - Limiters: Not “health/nurs*”, “parent”, “teen/adolescen*”.
- No limits were put on the type of source material, to ensure that the searches identified published articles as well as ‘grey’ literature.
- Citation searches, especially noting key articles identified in systematic or policy-related reviews.
- Web-links (National Investment for the Early Years [NIFTeY]) and specific site searching.
- Browsing: using both Google and Google Scholar for specific author or program names and for key government and non-government organizations.
Definitions/limits/scope

Early childhood policy is defined as “a plan or course of action, supported by a publicly-funded institution (e.g., government) that has an impact on the lives of young children, from the prenatal stage to 8 years of age” (Britto, Cerezo, & Ogbunugafor, 2008, p. 104). Policy-relevant evidence is represented in this chapter by the broad scientific knowledge base that encompasses: (1) rigorous evaluations of publicly-funded early childhood programs; and (2) high quality research studies examining the outcomes for children from birth to 8 from attending ECEC services and programs. The scope is primarily directed to programs that are readily transferrable, current and ‘real world’ rather than on demonstration projects, such as the Perry Pre-school Program, that have been thoroughly reviewed elsewhere (Penn & Lloyd, 2006; Wise, da Silva, Webster, & Sanson, 2005).

For the purpose of addressing the research questions, early childhood education and care (ECEC) ‘programs’ have been defined broadly, and include universal and/or targeted national, state/province, and regional area/city programs that focus on: 1) school readiness and school functioning/achievement for 3- to 5-year-old children; 2) child care for <1- to 4-year-olds to support workforce participation and child development; and 3) child and family support programs for disadvantaged families, including community-driven services. The scope of the review is primarily, but not exclusively, concerned with ECEC programs that are located in child care centres, pre-schools and schools, or within integrated (child-family, centre/school-community) services.

Also included are evaluations of ‘overall’ approaches to quality enhancement and improvement in ECEC services/pre-school, such as the implementation of accreditation systems or curriculum framework for ECEC. Evaluations of ‘specific’ approaches to curriculum are not included (see National Center for Education, 2008, for evaluations of 14 pre-school curricula using case-controlled studies). The scope of the review includes key evaluations of some, but not all, of the recently introduced US pre-Kindergarten programs.

Evaluation findings and evaluation methodologies have also been defined broadly, and include evidence based on a wide range of approaches to assessing or documenting children’s progress/achievement, including universal screening, individual testing or teacher-ratings, and community-level ratings, both short-term and longitudinally. Consideration of specific assessment tools or screening instruments, however, is not within the scope of this review. The evaluation methodologies reviewed include other policy-relevant approaches, such as cost-benefit analyses and quality improvement studies, but, in general, study design and analytical features of evaluations and research are not included within the scope.
1.1 What programs have been transformed or ceased on the basis of key evaluations? What was learned?

International research evidence, gathered over a 40-year period and highlighting the benefits of early childhood education for young children’s short- and long-term developmental outcomes, has transformed governments’ child and family policies. The response to this evidence has been an unprecedented growth in publicly-funded pre-school, child care, and child and family programs. In the US, about $12 billion is contributed by federal and state governments for child care fees subsidies for low-income families through the Child Care Development Fund, with a further $7 billion contributed to Head Start. Additionally, most of the states (38 in 2007-08) have implemented public pre-Kindergarten programs for 3- and 4-year-olds at a further cost to government of $5 billion (Pianta, Barnett, Burchinal, & Thornburg, 2009). In the UK, the Sure Start Local Programs initiative for disadvantaged children doubled in size from 2002 to 2004, with a £500 million commitment in 2003-04 (Melhuish, Belsky, & Barnes, 2010). These programs are in addition to the UK funding of free nursery education places for all 3- and 4-year-old children (Roberts, Mathers, Joshi, Sylva, & Jones, 2010). Canada has also invested significant funds in ECEC, most notably in the Province of Quebec, where universal subsidies for full time child care for children aged 1 to 4 years have been in place since 1998. In 2006, Quebec’s allocation to regulated child care costs was $1.49 billion, well over half the total amount ($2.45 billion) spent by all ten provinces that year (Lefebvre, Merrigan, & Roy-Desrosiers, 2010).

The provision by governments of publicly-funded ECEC services has been followed, in most instances, by evaluations to assess the effectiveness of these programs. The literature search identified a vast array of such evaluation reports, which varied by:

- **design** (pre-test/post-test, treatment-control comparison, cohort studies, randomised controlled trial, mixed methods, participatory action research);
- **representativeness** (national, state/province, regional area, or locally-based populations);
- **duration** (short-term 1 to 2 years, medium range 3 to 5 years, long-term 5 to 10 years and over);
- **outcome of interest** (child developmental outcomes, maternal competence/wellbeing, parent-child relationship/interaction); and
- **focus of analysis** (economic benefits to costs estimates, effect size).

and by:

- **program type** (pre-Kindergarten or pre-K or pre-school, child care, infant-toddler programs, integrated child and family services, parenting programs, site-based intervention/prevention, community-developed local programs);
- **specificity** (‘blueprint’ programs, single pedagogical approach, curriculum guidelines, quality improvement program, professional development/training); and
- **eligibility/coverage** (universal, targeted, targeted-universal).
From these, a selection of evaluation reports and research studies was identified to illustrate key findings (what was learned?) and design features of programs that are useful for policy confirmation, revision, or re-consideration (what was transformed?). However, due to the currency of the cited reports (2007-11), little reference is made to program cessation (what was ceased?).

Pre-Kindergarten (pre-K) and pre-school programs for 3- to 5-year-olds to support school readiness

Evaluations of publicly-funded programs for 3- to 5-year-old children have a particular focus on improvements in school readiness for disadvantaged children, who are more likely to enter school less well prepared for the academic and social/behavioural demands of the formal classroom, and, in the later years of primary school, to achieve at a lower level than their more advantaged peers (Claessens, Duncan, & Engel, 2009; Duncan, Dowsett, et al., 2007; Pagani, Fitzpatrick, Archambault, & Janosz, 2010; Romano, Babchishin, Pagani, & Kohen, 2010). Policy differs in the extent to which these programs are provided universally for all children in the age group or targeted only to ‘at risk’ children. Additionally, publicly-funded pre-school programs differ in terms of the weekly hours and length of time that children can attend.

Universal entitlement to pre-school education for 3- and 4-year-olds is in place in the UK (12.5 hours per week), New Zealand (20 hours per week), and for 4-year-olds in the year prior to entering school in some states and territories of Australia (10 to 12 hours per week). In the US, six states have adopted universal pre-K for all 4-year-olds (Ackerman, Barnett, Hawkinson, Brown, & McGonigle, 2009); the others provide publicly-funded pre-K only for eligible low-income or at risk families (Wong, Cook, Barnett, & Kwanghee, 2008). Pre-K operates within state public schools: teachers have a Bachelor level of education (some states also require an Early Childhood certification), and salaries are commensurate with primary school teachers; teacher-to-child ratios are 1-to-10 or better, and group size is restricted to a maximum of 20 children. Wages and conditions (e.g., ratio of 1-to-15 and group size of 30 for 4-year-olds) are considerably higher than in child care centres (Gormley & Phillips, 2005; Wong et al., 2008). The other major US pre-school education program is federally-funded Head Start, which is targeted to low income families, available in every state, and offered in conjunction with a range of additional health, parenting and family support services (US Department of Health and Human Services, Administration for Children and Families [US DHHS ACF], 2010).

Effects of early education programs for 3- to 5-year-olds

Four short-term US evaluations, two large-scale national studies (Australia, the United Kingdom [UK]), and two systematic reviews are summarised:

1) A evaluation of five state pre-K programs, using treatment and comparison groups of similar children not yet receiving pre-K, showed an overall benefit for children’s test
scores in language, mathematics, and pre-reading skills (effect sizes of 0.14, 0.29, 0.70, respectively), but marked differences between and within states (Wong et al., 2008).

2) A more detailed evaluation in one of these states, Oklahoma, found that: full-day rather than half-day attendance produced higher benefits for language/cognitive as well as socio-emotional and motor development; gains were most clearly evident for the least advantaged children (Hispanic and Black) and modest for white and more advantaged children (Gormley & Phillips, 2005). The authors conclude that these findings endorse the value of a universal rather than a targeted approach to pre-K, suggesting that benefits in Oklahoma may be due to the presence of a diverse student population as well as to the teaching program.

3) The 4-year Head Start Impact Study, which is the only national, large-scale evaluation of targeted pre-school education, was conducted in a representative sample of 23 states, 84 agencies, 383 centres, and 5,000 children, who were randomly assigned to the treatment (HS) and control (used other services and/or waitlisted for HS) groups, and compared child and parenting outcomes through HS, Kindergarten and Year 1. Overall results showed that quality was higher in HS versus non-HS centres, and that HS had a positive impact on school readiness tests at the end of the HS year. However, by the end of Kindergarten and Year 1 there was no discernable difference between the groups, suggesting that gains associated with attending HS were not sustained. Benefits were noted, however, for second language learners, Black children, and children with special needs (US DHHS ACF, 2010).

4) A study comparing the effects of HS versus pre-K in a matched sample of 4-year-old children in the state of Georgia showed that school readiness test scores were consistently higher in Kindergarten and Year 1 for the pre-K group (Henry, Gordon, & Rickman, 2006).

5) The Longitudinal Study of Australian Children, which assessed a nationally representative sample of 5,000 4- to 5-year-olds, found that pre-school attendance was associated with higher vocabulary scores. Lower scores were recorded for children who did not attend an early childhood program and children attending long day care centres (Harrison et al., 2009).

6) The UK Effective Pre-school and Primary Education (EPPE) project recruited 3,300 3-year-olds (3,000 attending different types of pre-school provision; 300 with no pre-school experience) and tested social/behavioural and cognitive abilities at pre-school, the start of school, Year 2, and Year 5. Results showed that duration (2-3 years versus 1-2 years or <1 year) but not hours per week (part time versus full time) of pre-school was related to improved achievement in pre-reading and early number concepts at the start of school. In general, all children who attended pre-schools rated as higher in quality had better cognitive and social/behavioural outcomes, but disadvantaged children in particular benefited from higher quality programs. It was noted that “young children from disadvantaged families made more cognitive progress if they attend pre-school settings with a mixture of children from different social backgrounds rather than
in settings catering mostly to children from disadvantaged families” (Sammons, 2009a, p. 105).

7) Burger (2010) undertook a systematic review of 23 large scale and birth cohort studies (6 from Europe, 1 Asia, 11 US, 4 UK, 1 Canada) of pre-school interventions for 3- to 6-year-old children from disadvantaged backgrounds to determine the effects on cognitive abilities (as needed for school readiness) and the degree to which these programs help to overcome inequalities for children from different social backgrounds. Results showed “significant positive short-term and long-term effects on the cognitive outcomes of children” but no evidence of a clear case for compensation—rather “the developmental progress of disadvantaged and more privileged children in preschool programs either proceeds in equal measure in absolute terms or offers larger gains in relative terms to disadvantaged children” (pp. 160-161).

8) Aos, Miller, and Mayfield (2007) reviewed 23 evaluations comparing the effects of full-day versus half-day Kindergarten on children’s learning achievement. While confirming significant positive effects of attending a full-day program during or shortly after the Kindergarten year, Aos et al. found no evidence of any lasting difference between groups one to three years post-Kindergarten.

Policy implications and revisions

In the UK, the early results of the Effective Pre-school and Primary Education project have provided critical evidence for policy revisions in ECEC: the universal provision of free preschool for 3- and 4-year-olds and disadvantaged 2-year-olds; a 10-year strategy for child care, including the roll-out of Children’s Centres in disadvantaged areas; and strategies to ensure quality ECEC programs involving regulations, inspections, training, and professional status for early years staff (Sylva, Taggart, Melhuish, Sammons, & Siraj-Blatchford, 2007).

Similarly in the US, federal policy developments, based on research evidence linking program quality with benefits for school readiness, include legislation (the Early Learning Challenge Fund) that would support state initiatives to improve the quality of pre-school programs through the introduction of standards for program quality and early learning standards. The long-term goal is “that all programs serving preschoolers can enhance children’s kindergarten readiness” regardless of auspice, through the application of standards in all ECEC settings including pre-K in public schools, Head Start programs, child care centres and pre-schools (Ackerman & Sansanelli, 2010, p. 1).

At the same time, the results of the Head Start Impact Study have contributed to a re-thinking of policy regarding the best way to support disadvantaged children’s readiness for school. At issue are whether or not to devolve federal funding to states for Head Start (Henry et al. 2006), and whether other programs should be able to compete with existing Head Start programs for these funds (Wong et al., 2008). There are acknowledged difficulties, however, in the interpretation of results of the HS Impact Study due to inherent design features, including that:

- the comparison group was relatively similar to the HS group in their ECEC attendance;
• the non-HS group could attend pre-K which seems to accrue greater cognitive benefits;
• instruction in language/literacy/mathematics is known to vary across HS programs, but was not specifically assessed;
• duration of exposure to HS—one year or two years—was not able to be assessed; and
• effects disappeared in the early years of school, but schools were generally poor and were not assessed in relation to curriculum or quality.

Child care for <1- to 4-year-olds to enhance workforce participation and child development

Subsidised child care is a component of the early years’ policies of Australia, the US, the UK, Canada, and many European countries, where a sliding scale or income cut-off is applied to subsidies to enable participation by families who are less able to pay the full cost of care. However, there is considerable variation across and within countries in regard to quality assurance processes and levels of family subsidy.

Three areas of the literature are presented:
1) An evaluation of a policy introduced in the Province of Quebec, in Francophone Canada, to provide universal low cost child care ($5 per day);
2) Research into the impact of child care quantity on child developmental outcomes;
3) Research into the effects of quality on child outcomes; and
4) A review of program quality, including an evaluation of a professional development program to improve quality in home-based and centre-based child care.

Universal low-cost child care

An evaluation was undertaken by comparing Quebec with the rest of Canada on three areas, matching the expected enhancements of the policy: a) uptake of child care, particularly equality of access across social gradients; b) workforce participation of mothers; and c) child readiness for school (Lefebvre, Merrigan, & Roy-Desrosiers, 2011). Analysis of data extracted from the National Longitudinal Survey on Children and Youth (NLSCY) showed that this policy dramatically changed the uptake of child care by families in Quebec for children aged 1-4 (from 1998-2006 the use of child care centres grew from <20% to nearly 60% versus 10% to <20% for the rest of Canada). The weekly hours of care received by children aged 1-4 years was up to 11 hours higher than in the rest of Canada, an effect size Lefebvre et al. (2011, p.13) described as “represent(ing) a sea change in the lives of children.” In terms of readiness outcomes, comparisons showed that early literacy and numeracy test scores were lower in Quebec than in the rest of Canada, with little evidence that the policy had reduced social gaps in school readiness. At age 4 negative effects for language outcomes were largest for low educated mothers; and at age 5 were seen for both low and high educated mothers. Lefebvre et al. (2011, p. 21) attribute the poorer outcomes in Quebec to longer hours of care in a system that achieved low levels of quality in the “rush to implement the program, build up new settings and create new spaces to respond to the excess
demand for spaces, which forced the government to accept daycare workers with no specific training in ECEC”.

**Effects of child care quantity**

What was learned from the Quebec evaluation echoes international research that has consistently found links between longer hours of child care and poorer social/behavioural outcomes across the early childhood and primary school years (Belsky et al., 2007: birth to 54 months; Harrison, 2008: age 2-3 years; Jacob, 2009: first year of life), and exacerbated by poor quality and larger numbers of peers (McCartney et al., 2010). Additionally, recent Australian research has reported poorer language development outcomes for 4- to 5-year-old children attending non-parental care for 30 or more hours per week, and poorer health outcomes for infants attending centre-based care for 20 or more hours per week (Harrison et al., 2009). In considering this finding in relation to ECEC in general, it is important to note that most full-day pre-school programs are attended for under 30 hours per week.

**Effects of child care quality**

The concerns raised about the negative effects, on a large scale, of poor quality child care in Quebec align with a significant body of evidence identifying clear links between child outcomes and program quality. Burchinal et al. (2009) conducted a meta-analysis of 20 ECEC research projects and secondary data analysis of four large US studies to examine these associations at school entry for children who entered child care at different ages and differed in their levels of poverty. Effect sizes were stronger for achievement and language outcomes than for socio-behavioural outcomes, and for younger (2- to 3-year-old) than older (4- to 5-year-old) children. Effects were noted for low socio-economic status (SES) pre-schoolers for both achievement/language and socio-behavioural skills. The authors conclude that, in general, children benefit from higher levels of quality, but “larger benefits accrue when quality is in the good to high range” (p. 3). The impact of higher quality child care has also been found to extend into the primary school years, with higher quality care being associated with promoting maths and reading achievement indirectly via early school readiness skills (Dearing, McCartney, & Taylor, 2009). Dimensions of quality directly affecting cognitive and social development include individualised and small group instruction and teacher-directed or explicit instruction (Camilli, Vargas, Ryan, & Barnett, 2010), and the quality of teacher-child interactions and quality of instruction (Burchinal, Vandergrift, Pianta, & Mashburn, 2010).

As was noted for the effects of pre-school for 3- to 5-year-olds, quality “characteristics of child care may matter more for children from more disadvantaged home environments” (Watamura, Phillips, Morrissey, McCartney, & Bub, 2011, p. 60). A recent examination of the cross-context influences of home and child care identified compensatory effects of attending higher quality child care for children whose home care giving was less sensitive and less stimulating of cognitive development. But, lower quality care combined with poorer home care giving increased the risk of poor outcomes—a double jeopardy.
Evaluating quality

Quality is indirectly affected by structural features of ECEC settings, including staff qualifications, staff-to-child ratios, group size (see chapter 5), workplace climate and professional development for staff (see chapter 6). Large scale observational assessments of quality using the Early Childhood Environment Rating Scale (ECERS) or Infant-Toddler Environment Rating Scale (ITERS): see chapter 5) in the US (Burchinal et al., 2010), UK (Roberts et al., 2010; Sylva, 2010), and Canada (Cleveland, Forer, Hyatt, Japel, & Krashinsky, 2007) have shown that a substantial proportion of ECEC services achieve ECERS/ITERS\(^1\) ratings of ‘inadequate’ or ‘minimal’ quality, with most studies reporting an overall average of less than ‘good’ quality. However, in Australia, studies have consistently reported ECERS/ITERS ratings at ‘minimal’ and above, with average scores above ‘good’ quality (Fenech, Sweller, & Harrison, 2010; Ishimine & Wilson, 2007; Janon, 2009).

Improving quality

Seeds to Success is a child care quality rating and improvement system funded by the Gates Foundation and provided in association with the Washington State Department of Early Learning. The 6-month program sought to assess and improve two key features of quality: a) curriculum and learning environment; and b) professional development and training. A randomised controlled trial was applied to the implementation and evaluation of the program in two high-need communities, with the treatment group receiving coaching informed by a centre-designed quality improvement plan, quality improvement grants, and financial support for the costs of professional development, training and associated costs to staff. Results, based on observations, questionnaires and interviews collected at the commencement and completion of the program, showed significantly higher improvement scores for observed quality (based on the ECERS) in the treatment centres (Boller et al., 2010).

Policy implications

The results of the reviewed studies highlight the tensions between policy and parenting decisions, and the difficult challenge of weighing the potential risks of child care hours against the potential benefits of maternal employment and exposure to ECEC programs (McCartney et al., 2010). As recommended by Jacob (2009, p. 569):

\[This\ may\ merit\ the\ development\ of\ strategies\ to\ reduce\ the\ amount\ of\ time\ children\ spend\ in\ non-maternal\ childcare\ throughout\ the\ earliest\ years.\ Such\ strategies\ include\ expanding\ parental\ leave\ and\ changing\ benefit\ packages\ for\ part-time\ employees,\ enabling\ more\ parents\ to\ spend\ more\ time\ with\ their\ infants\ and\ toddlers\ without\ risking\ their\ employment.\ Tax\ policies\ could\ also\ be\ used\ to\ support\ families\ rearing\ infants\ and\ young\ children\ in\ ways\ that\ might\ relieve\ some\ of\ the\ financial\ burden\ requiring\ some\ to\ leave\ their\ children\ to\ the\ care\ of\ others.\]

\(^1\) ECERS ratings are based on a 7-point criterion-referenced scale in which 1 = inadequate, 3 = minimal, 5 = good and 7 = excellent.
The moderating impact of quality on the relationship between quantity and outcomes is also a critical issue for policymakers. Lefebvre et al. (2011) recommend that governments be wary of offering long hours of care to parents at very low prices, advising rather that it is better to offer high quality programs through a slow implementation, with sufficient time to prepare a workforce, and a focus on low income areas. Boller et al.’s (2010) research indicates that quality can be enhanced through an intensive, centre-specific and centre-driven quality improvement plan, when well resourced through financial and training supports.

**Child and family programs for disadvantaged, ‘at risk’ or ‘hard to reach’ families**

Policies directed to supporting the most economically deprived children provide a range of services, including home-based, centre-based, mixed home-centre, and whole-of-community programs designed to enhance children’s development along with improving families’ parenting skills and access to healthcare, social services, and special needs support. The US has a long history of providing targeted support for disadvantaged families through the federally funded Head Start and Early Head Start programs. Canada has a successful record of providing programs universally to all families within targeted areas of need (e.g., Understanding the Early Years). The UK has implemented nationally-supported programs, such as Sure Start. In contrast, similar programs in Australia have tended to be funded at local and pilot level (e.g., Invest to Grow initiatives), rather than through systemic provision.

Five examples of program evaluations in the US, the UK, Canada and Australia are reviewed:

1) The US Early Head Start (EHS) program for infants and toddlers growing up in low-income homes was evaluated in a randomised controlled trial study based in 17 sites and involving 3000 children (DiLauro, 2009; US DHSS ACF, 2006). Assessments collected at 14, 24 and 36 months of age confirm the benefits of the program for cognitive/language and socio-emotional development. Improved parenting practices and uptake of services were also reported. Of note was the high level of effectiveness for the most at risk families, and children who entered the program earlier (US DHSS ACF, 2006).

2) The relatively recent implementation of Sure Start in the UK and the diverse nature of Sure Start Local Programs (SSLP) (Tunstill, Allnock, Akhurst, & Garbers, 2005) provoked difficulties for designing a large-scale evaluation. Unlike in the initial stages, however, more recent findings showed that compared to children in similar non-Sure Start areas, the children attending SSLP had better home learning environments and were more socially and emotionally competent (Melhuish et al., 2010). In contrast, the use of a randomised controlled trial to evaluate SS services in Wales, where the ‘blueprint’ Incredible Years Basic Parent Programme was implemented, showed robust and “significant improvement in parenting and child problem behavior” (Hutchings, Bywater, & Daley, 2007, p. 10). The authors attribute this to the selection of a proven high quality program and strict adherence to procedures to ensure program fidelity.
3) Evaluations of localised community intervention programs are illustrated by a well-established Canadian program—Understanding the Early Years (UEY) (Willms, 2010)—a national initiative housed in Human Resources and Skills Development Canada (http://www.hrsdc.gc.ca) that supported 21 three-year projects from 2006-2008 and a further 15 from 2007-2011. The UEY programs (many of which are reported in pre-2005 literature) draw on regional level data (as opposed to individual child data) afforded by the Early Development Index (Guhn, Janus, & Hertzman, 2007) to collect and use quality local research to help communities make decisions to enhance children’s lives. A unique approach to evaluation is the use of instruments derived from the National Longitudinal Survey of Children and Youth (NLSCY) and population-level data to compare outcomes and assess change over time. A precursor of UEY is the Better Beginnings Better Futures program (BBBF) (Peters et al., 2010) described in the chapter Exemplar.

4) Partnerships in Early Childhood (PiEC) (Valentine, Thomson, & Antcliff, 2009) is a federally-funded Australian program designed to support the development of secure parent-child attachment relationships and family-community connections through child care centre located interventions and support. The PiEC, which was based in four low SES areas in Sydney and surrounding areas, provided training, resources, supervision and support for staff to understand and apply an attachment-based program (Circle of Security) within their centres, and a suite of other activities to support families and increase community connectedness. Evaluation of process identified three critical components: a) to be effective, the intervention “must develop practice change within existing services” (p. 203), which can be limited by the time and staff resources; b) “the success of the intervention depends on the capacity of staff to change their practice” (p. 204), which can be limited by prior training and workforce stability; and c) complex managerial relationships involving three-way partnerships between the program provider, the ECEC organizations, and individual child care centres pose additional challenges.

5) Attachment-based intervention was also the focus of Through the Looking Glass (TtLG), with the target group being mothers of children under 5 years where there was evidence of multiple risk factors (Murphy, Aylward, Colmer, & O'Neill, 2010). The 5-month child care centre-based program required child care attendance for two consecutive days per week, the allocation of a primary caregiver in the room, a site-based clinician, and parent weekly attendance at psychosocial groupwork sessions. The evaluation used mixed-methodologies, including video analysis using standardised observation measures and participatory action research, which established causal attribution “primarily through triangulating methods and data sources and seeking qualitative explanation for changes observed” (Murphy et al., 2010, p.16). Results were consistently positive: for mothers’ wellbeing, parenting practices, child behavior, and parent-child engagement. Follow-up assessments showed that benefits were sustained beyond the 5-month program. See the Exemplar at the end of chapter 2 for more details on the TtLG program.
Policy implications and revisions

In general, the reviewed programs are effective in meeting the goals, with evaluations providing evidence for ongoing provisions. Specific recommendations for policy centre on:

1) Earlier interventions are the most effective. Thus, DiLauro (2009) recommends the expansion of Early Head Start by converting Head Start funds to include EHS provision.

2) When introducing new programs, such as the Sure Start Local programs, program effectiveness is likely to improve over time as guidelines are clarified, quality of services is improved, greater attention is given to the ‘hard to reach’ families, and families have had a longer period of exposure to programs. The need for sufficient time and resources to introduce change gradually also featured in the process evaluation of the PIEC (Valentine et al., 2009).

3) Short-term (Willms, 2010) and longitudinal research (Peters et al., 2010) demonstrate the immediate and sustained effectiveness of the UEY approach to direct funding to not-for-profit local organizations to gather data on children’s development, build local knowledge and raise awareness of child and family issues, and increase community capacity to make policy, program and investment decision to meet those specific needs. The benefit of locating intervention programs within the not-for-profit sector was also noted by Valentine et al. (2009, p. 208), who felt that there was considerable potential for interventions to be applied in generalist services—a “targeted within universal model”—but raised concerns about the capacity of Australia’s ECEC sector to deliver these interventions, particularly in relation to the dilemmas of equity, sustainability and quality. Whilst there is a tradition of not-for-profit ECEC services working in partnership with specialist intervention program providers in Australia, this may not be the case in for-profit services: “The capacity and willingness of the for-profit sector to participate in these challenges is an open, urgent question” (p.210).

1.2 What are the most effective ways of translating research/evaluation findings into: policy? and practice?

The field of ECEC has in recent years “become one of the most vibrant areas of scientific inquiry in terms of the connections among scientific advances and theory, program design, policy, and classroom, practices” (Pianta et al., 2009, p.49). This has been driven, in part, by the generation of high quality scientific evidence that has “helped create a climate in which people across the political spectrum believe that disadvantaged children can benefit from early childhood programs and that such programs are good investment for the larger society” (Huston, 2008, p. 6). The challenge, however, is to align public policy and practice with the
knowledge base; to close the gap between what we know and what we do. This requires effective processes of knowledge transfer and knowledge exchange.

**Translating research/evaluation findings into policy**

**Knowledge transfer**

There are a range of mechanisms by which ECEC research is summarised for the benefit of policy makers and practitioners. The most accessible are web-based, such as the US *What Works Clearinghouse* and *Research-to-Policy Research-to-Practice Brief*, the Canadian *Encyclopedia on Early Child Development*, the UK *Centre for Research on Families and Relationships* and *Every Child Matters Research and Practice Briefings: Children and Families*, and in Australia: the *National Investment for the Early Years (NIFTeY)* network, the *Family Relationships Clearinghouse*, the *Centre for Community Child Health Policy Briefs*, the *NSW Brighter Futures Practice Resources*, and other organisational sites (e.g., Benevolent Society, Family Action Centre, Social Inclusion Board).

These sites are designed to provide accessible summaries of key research and evaluation studies to a wide readership. These venues are also useful for the promulgation of informed recommendations for policy, prepared by leading ECEC scientists and researchers. For example, Duncan, Ludwig, and Magnuson (2007) in reviewing the research literature on predictors of higher benefits for children in ECEC programs recommend the following as a model for policy makers seeking to design effective ECEC interventions:

- national, half-day, two-year program;
- guided by a national curriculum;
- provided by college educated teachers; and
- targeted to children living in poverty but not restricted to this population.

The authors further suggest that:

- teachers use the remaining half-day for parent outreach;
- a system of payment for parents at different levels relative to the ‘poverty line’; and
- a lower priority for funding is the additional wrap-around child care needed to support parents’ work needs.

In her Presidential Address to the Society for Research in Child Development, Huston (2009) makes the following comments on the links between research and policy (and back):

- research is most likely to get attention when it informs realistic policy action;
- science should combine with ‘common sense’; and
- researchers must be aware that other factors also influence policy decisions, including ideology, interests, information, institutional contexts.

These views are expanded in a recent paper by Shonkoff and Bales (2011), who review the challenges faced by researchers seeking to achieve accurate rather than distorted, over-generalised or media-sensationalised reporting of scientific knowledge. They report on the
“use of a variety of innovative methods and strategies in the service of building a rigorous scholarship of knowledge synthesis, translation, and transfer from research to policy and practice” (p. 18). These include collaborative efforts between leading researchers and communications scholars working together to transmit accessible, accurate information presented through a coherent narrative in order to “influence the thinking and actions of a politically diverse policymaking audience” (p.29).

**Knowledge exchange**

The next step up from knowledge transfer is knowledge exchange, where researchers, policy makers and practitioners work in partnership to address key issues in ECEC. Sylva, Taggart, Melhuish, Sammons, and Siraj-Blatchford (2007) refer to effectiveness of the model of knowledge exchange developed in the UK, in which policy makers participated in the design of new forms of research. Knowledge exchange consists of collaborative problem-solving between researchers and decision-makers that happens through linkage and exchange. They illustrate this model by referring to the Effective Pre-school and Primary Education (EPPE) project which was used as part of the ‘evidence base’ for UK policy on universal pre-school provision as well as targeted services in disadvantaged communities. Sure Start as an example of “joined-up government and evidence based policy making, with its origins grounded in a thorough analysis of the research literature of ‘what works’” (Tunstill et al., 2005, p. 260).

In Australia, the development of the national Early Years Learning Framework for Australia provided an example of processes implemented by government for involving researchers, academics and practitioners in the process of policy implementation and the translation of research to practice (Sumsion, Barnes, Cheeseman, Harrison, Kennedy, & Stonehouse, 2009).

Formalised government research partnerships are also illustrated by the Washington State Institute for Public Policy, which is aligned with the State Government Legislature to conduct economic analyses of certain K–12 policies (see Aos et al., 2007).

Government researcher partnerships can make possible the use of administrative and national datasets to address important research questions. Examples of the collection and provision of community-level data that can be used by researchers and communities are: Canada’s Early Development Index (EDI) and NLSCY (Forget-Dubois et al., 2007; Guhn et al., 2007); the Australian EDI (Goldfeld, Sayers, Brinkman, Silburn, & Oberklaid, 2009); and the US Early Childhood Longitudinal Studies—Kindergarten and Birth cohorts, and Early Head Start that provide opportunities for detailed analyses of practice-related data (Bradley et al., 2009).

In Australia, access to nationally representative datasets funded and held by government agencies, such as the Longitudinal Study of Australian Children (LSAC), is also providing many opportunities for research into policy-related concerns.
Translating research/evaluation findings into practice

The few researchers who write about the implementation of ECEC intervention programs and evidence-based practices agree that it is an area that “is woefully understudied” (Griffin, 2010, p. 267). Further, Odom (2009, p. 53) asserts that “the practices identified as having empirical evidence of effectiveness are often not used in early intervention and early childhood special education (EI/ECSE) programs” and that “even with the increase in knowledge about intervention practice, the use of evidence-based practice in EI/ECSE has not increased substantially.” Griffin (2010, p. 268) writes: “the value of such knowledge is limited if it is not accompanied by a thorough examination of the intervention’s implementation and the relationship between implementation and outcomes.” The following section addresses effective mechanisms for knowledge transfer and the evaluation of knowledge transfer.

Knowledge transfer

The challenges of moving research into practice apply to governments as well as ECEC settings and organizations concerned with the provision of ECEC services. A review by Odom (2009) identified traditional, but somewhat ineffective mechanisms of transmission for practitioners and ECEC organisations as:

- narrative reviews (e.g., published articles, texts);
- recommended practices (e.g., professional opinion);
- workshops and presentations (e.g., single or one-off professional development sessions); and
- evidence-based practice briefs (e.g., rigorous reviews with little guidance on how to apply practices in the classroom).

Odom notes that effective implementation requires sufficient attention to the “procedural details for applying practice” to be of use to practitioners (p. 56).

Odom (2010, p. 59) identifies the following as promising practices or “enlightened professional development” approaches for taking research evidence into everyday practice, which apply to “scaling up” as well as other improvement programs:

- models of teaming and team building, to support collaboration in the adoption and implementation process of changing practice;
- coaching and consultation, to demonstrate practices, provide feedback, and support self-evaluation;
- communities of practice, to link practitioners with common interests in instructional practices, and provide mutual support, information and reflection;
- online instruction, teaching program that can include video demonstrations of practices, and self-evaluation processes;
- web-based video and visual access, to offer remote training, coaching, and feedback (e.g., My Teaching Partner—see chapter 6 Exemplar); and
web-based interactive systems, to provide a forum for communication amongst professionals, gather and professional knowledge around ECEC practices.

Writing about the challenges of linking practice with the evidence base, Pianta et al. (2009, p. 20) provide the following summary: “The best approaches to professional development focus on providing teachers with (a) developmentally relevant information on skills targets and progressions and (b) support for learning to skillfully use instructional interactions and to effectively implement curricula.” However, it is likely that in Australia different conclusions would be drawn and different directions recommended. Australian research that examines current, perceived professional development needs of educators is clearly needed (see chapter 6).

**Evaluation of knowledge transfer**

Concerns in the US regarding the translation of knowledge to practice have led to the formation of the Interagency School Readiness Consortium (ISRC) in 2003 and the Preschool Curriculum Evaluation Research Consortium (PCERC) in 2008. The ISRC funds scientific studies of the effectiveness of ECEC interventions and programs. A special section of the *Early Childhood Research Quarterly* (ECRQ) (volume 23, number 3) reported findings for five of the eight ISRC funded programs. The PCERC, funded by the US Department of Education, has supported the use of randomised controlled trials to assess school readiness interventions (National Center for Education, 2008). It is beyond the scope of this report to summarise the findings of specific studies; rather, the focus of this section is on broad approaches to “what works” in translating research/evaluation findings into practice.

Effectiveness research in ECEC seeks to examine the implementation of programs in “real world” conditions of proved practices, also known as “scaling-up” research (Odom, 2010). Durlak (2010, p. 350), in his introduction to a commentary on the ECRQ special section, provides the following summary of “scaling up” or implementation research:

**What is known**

1. Implementation often influences outcomes.
2. Implementation is an essential component of any program evaluation.
3. Implementation is not an all-or-none phenomena but exists along a continuum that ranges from very low to very high, or from 0 to 100%.
4. Implementation is a multi-dimensional construct with at least eight domains (fidelity, quality, participant responsiveness, program differentiation, monitoring of control or comparison conditions, program reach, adaptation).
5. The degree of achieved implementation is almost never 100%.
6. Implementation often varies over time and across providers.
7. Understanding implementation and its effects is highly dependent on identifying and measuring the core elements or active ingredients of an intervention.
8. Adaptation is an inevitable part of implementation in most real world settings and may improve outcomes.
9. An ecological framework provides a useful perspective for understanding the implementation process.

10. At least 23 ecological factors affect the implementation process, including community level factors (funding, politics, current educational theory), program characteristics (complexity, compatibility with the intended practitioners/setting), characteristics of the program provider (perceived need, skills proficiency, self-efficacy), organisational capacity (work climate, leadership, shared vision, decision-making processes), and specific support system (training, consultation, resources).

What is unknown

11. How are different aspects of implementation related?
12. Which aspects of implementation affect which types of outcomes?
13. What is the best way to assess different aspects of implementation?
14. Can implementation thresholds for different interventions be identified?
15. What is the proper unit of analysis in school-based research?
16. What is the relative importance of factors affecting implementation?
17. How does participants’ initial status interact with implementation to affect outcomes?

Durlak (2010, p. 353) summarises the unknown, the “what, who, when and how of implementation,” as follows: “we need more clarity about which aspects of implementation are most important for different outcomes, how to assess each aspect most accurately, who should provide the necessary data, when these assessments should be done, and what ecological factors should be evaluated.”

1.3 Are there evaluation methodologies or approaches that are particularly effective or appropriate for early childhood programs?

Program evaluation and research studies reviewed in section 1.1 revealed methodologies centred primarily on the use, development, testing and application of appropriate assessment measures of children’s developmental outcomes in order to assess the short-term and long-term impacts of ECEC programs. Effectiveness and appropriateness of these methodologies for ECEC are reviewed for two broad areas: 1) research design, including representativeness of the study population, duration of the evaluation/study, and process evaluation; and 2) the outcomes of interest, including short-term and long-term measures of children’s development and progress, assessed at the level of the individual and the group.

Research design

A full review of evaluation and research methodologies is beyond the scope of this report. Summary information will be provided on key themes arising from the reviewed literature.
Quality and instructional effectiveness in ECEC programs

Understanding the processes by which ECEC programs impact children and families requires that evaluation include measures of program quality (e.g., Boller et al., 2010; Dearing et al., 2009; Melhush, Belsky, McPherson, & Cullis, 2010), fidelity in the application of ‘blueprint’ interventions (e.g., Hutchings et al., 2007), and adherence to standards of learning and instruction (e.g., Ackerman & Sansanelli, 2010; Gormley & Phillips, 2005). Appropriate methodologies include process measures, such as observation, self-report surveys, parent ratings, and accreditation status, and structural or regulated features, such as staff-to-child ratios, teacher qualifications, or group size. When evaluations do not assess program fidelity or adherence to standards, effectiveness estimates are compromised (e.g., Head Start Impact Study: US DHSS ACF, 2010).

Randomised controlled trials

Two approaches to randomised controlled trials have been noted in the literature reviewed in section 1.2: a) evaluations that randomise individuals (e.g., children in the Head Start Impact Study: DHSS ACF, 2010; families in the Incredible Years Basic Parenting Programme: Hutchings et al., 2007) and b) evaluations that randomise groups (e.g., child care homes or centres in Seeds to Success: Boller et al., 2010). Concerns have been raised about the limitations of the approach used in the Head Start Impact Study (p. 20), particularly in relation to the inherent difficulties of assessing the effects of a specific program when children’s attendance at programs other than HS could not be controlled. On the other hand, Pierre and Rossi (2006) argue that randomising groups offers a more realistic and useful approach to testing program effectiveness. They note that: a) ECEC programs are delivered to groups, not individuals; and b) rather than assessing “what works?” by comparing individuals receiving the treatment versus no-treatment, comparing groups assesses “what works better?” by comparing one program against another. St Pierre and Rossi (2006) argue that this research question yields more useful information for social policy.

Short-term and long-term designs

Research seeking to assess the impact of ECEC programs on children’s developmental outcomes is invariably challenged by questions centred on when effectiveness can best be demonstrated, and for what purposes. A focus on benefits of ECEC for children’s school readiness, for example, may not be sufficient. Researchers also need to ask “does ECEC have lasting benefits?” In much of the reviewed literature, follow-ups extending throughout children’s years of schooling and beyond have provided convincing evidence of the benefits of ECEC (e.g., Dearing et al., 2009; Peters et al., 2010; Sammons, 2010b). Note, however, that short-term evaluations of Head Start (to three years post-HS) have not demonstrated that early gains are sustained.
Size and nature of the study population

Program evaluations and research reviewed in section 1.1 vary widely in relation to sample size, ranging from 100-150 (e.g., Hutchings et al., 2007; Murphy et al., 2010) through to 2,500-5,000 (e.g., Sammons, 2009a, 2009b; US DHSS ACF, 2010). Equally varied was the nature of the study population, which included nationally representative samples (e.g., Harrison et al., 2009); nationally distributed site-specific samples (e.g., Belsky et al., 2007; Melhuish et al., 2010; US DHSS ACF, 2006, 2010); site-specific whole population samples (e.g., Gormley & Phillips, 2005; Peters et al., 2010), and national whole population samples (e.g., Lefebvre et al., 2011). To some extent, the size and nature of the population is determined by the scope/coverage of the program being evaluated; however, there appears to be no set figure or sample that are particularly appropriate or needed to establish effectiveness. Rather, it is other key features of the design that determine the rigour of the evaluation.

Use of national datasets

A small number of evaluations provided evidence for assessing the effectiveness of programs by comparing outcomes against data available from national datasets, such as Canada’s NLSCY and the UK’s Millenium Cohort Study (Hanson, Joshi, & Dex, 2010). The Canadian approach collects national datasets at regular intervals, which has enabled researchers to make comparisons between site-specific and national profiles (e.g., Peters et al., 2010; Willms, 2010), or between populations (e.g., Quebec versus other provinces and the whole of Canada: Lefebvre et al., 2011). The Millenium Cohort dataset provided an opportunity for comparisons of ECEC quality between Sure Start Local Programmes and matched non-SSLP sites (Melhuish et al., 2010). These examples illustrate the efficiencies that can be achieved through the collection and accessibility of national datasets.

The outcomes of interest

Publicly-funded ECEC programs are expected to improve outcomes for children’s social and cognitive development, their transition to school, and subsequent achievement and adjustment at school and for life. Evaluations of ECEC programs, therefore, must gather evidence to assess child outcomes and demonstrate improvement. The purposes of such evidence are potentially very broad, including: 1) providing feedback to the ECEC service itself; 2) monitoring program outcomes by funding organizations; 3) demonstrating program effectiveness over time or in relation to other programs/no program; and 4) determining cost effectiveness, through the monetisation of child outcomes. Additionally, evidence can be gathered at the level of the individual or the group, and provided by a variety of informants. The following sections summarise key approaches to assessing or documenting children’s progress/achievement. In general, however, it does not address the effectiveness or appropriateness of specific assessment tools.
School readiness measures

The increase in the provision of school readiness programs (e.g., pre-K, Head Start, preschool programs for 3-5-year-olds) has been matched by a growing expectation to provide data on program effectiveness. Brown, Scott-Little, Amwake, and Wynn (2007) reviewed 82 reports published from 1997–2006 of methods used in 26 state-funded and 15 locally-funded school readiness programs located across 28 US states, concluding that “the findings highlight the challenges that evaluators face in ensuring that data are collected in a manner that yields credible, trustworthy, and meaningful information about child outcomes” (p. iv). Brown et al. noted that, in many cases, outcomes did not match the goals of the program and instruments were not sufficiently tested or validated for cultural and linguistic appropriateness. A similar concern was raised by Zaslow, Tout, Halle, Forry, and Child (2006) who reviewed 65 studies (1979–2005) linking ECEC program quality and school readiness outcomes. They noted methodological concerns, primarily to do with validity and reliability of the measures, in the majority of studies, but most noticeably in studies assessing social and emotional outcomes. However, the use of well-established or standardised instruments reduced these concerns in the language and cognition domains.

Zaslow et al. (2006) also raised concerns about imbalances in the reviewed studies’ attention to all five broad domains of school readiness. Of the 65 studies, 80% assessed social and emotional developmental outcomes, 54% cognition and general knowledge, 51% language development and early literacy, 25% approaches to learning, and only 5% included assessments of physical wellbeing and motor development.

Whole-of-community measures

In contrast to Zaslow et al.’s findings, the five domains of school readiness are all represented in the Canadian Early Development Index (EDI) (Guhn et al., 2007) and Australian Early Development Index (AEDI) (Goldfeld et al., 2009). These measures have been used with large populations, including nationally in Australia, to provide broad brush, whole-of-community information on children’s development at the start of school, using aggregated data. Such data are then able to be used to inform the design of community-driven initiatives.

Canadian approaches to whole-of-community measurements include gathering a wide array of data through the Parent Interviews and Direct Assessments of Children Survey (PIDACS) along with the teacher-reported EDI (Willms, 2010). The PIDACS draws on measures used in the NLSCY, allowing comparisons to be made between child and family measures for target sites, similar non-treatment sites, and the nation as a whole.

National reporting/monitoring

Some federally-funded programs, such as Head Start in the US, and state-funded programs have implemented reporting mechanisms to assess standards and child outcomes. While the expectation is that such reporting “should provide timely feedback in order to modify, improve and/or enhance a program”, Kallemeyn and DeStefano (2010, p.22) point out that
these systems are essentially for the purpose of monitoring and accountability, rather than for program improvement. In an in-depth case study of staff perceptions of implementing the Head Start National Reporting System (NRS), they found that the NRS was viewed primarily as providing accountability at the federal level, but limited accountability at the local level. “Most managers did not view the NRS as necessary to validate and support local programming” (p. 32) and felt it gave little guidance for program development.

**Authentic assessment measures**

The tension between educators’ focus on program development and national accountability requirements has the potential to “put recommended (ECEC curriculum) practices at odds with reporting systems” (Grisham-Brown, Hallam, & Brookshire, 2006, p. 46). The challenge is to develop alternate or complementary means of assessing children’s development. Authentic assessment practices are embedded within the curriculum, in the form of naturally-occurring play-based tasks. By applying this approach, Grisham-Brown et al. argue, “accountability can be used as an opportunity to improve practice if teachers and administrators are prepared to address external mandates in ways consistent with high quality practice” (p.51).

**Cost effectiveness measures**

Consideration of the cost effectiveness of programs by monetisation of child outcomes to provide evidence of economic benefits to society is a feature of some of the reviewed ECEC evaluations. Economic impacts include the reduced costs of repeating a grade at school or attending special education programs, as well as children’s future as contributing citizens (Kilburn & Karoly, 2008). Benefit-cost analyses (BCA) also cover broad considerations of the benefits of ECEC programs, including parental participation in the workforce, and the employment and training of educators (e.g., Lefebvre et al., 2011). However, many of the benefits reported for ECEC programs (e.g., achievement scores, socio-emotional skills, parenting practices) are not monetised (Karoly, 2008). In a review of ten effective ECEC intervention programs, only six included a BCA, of which five were based on follow-up data at age 15 years or older (Karoly, 2008). Longitudinal data of a particular nature are required for BCA, but these data are worth including in the design of program evaluations. For example, the Better Beginnings Better Futures follow-up at Grade 9 demonstrated that the program had already paid for itself and furthermore, “the province of Ontario is already reaping dividends from its investment made in the community intervention” (Peters et al. 2010, p. 114).

Aos et al. (2007, p. 1) have argued that BCA are particularly necessary in a climate where governments “will only invest in programs that work”. Rather than relying on monetised measures, however, they estimate that improved school achievement (measured by scores on standardised tests) will be linked to future economic benefits through future labour market participation. By accepting this premise, only the demonstration of higher test scores is required to estimate the future cost effectiveness of the program.
1.4 Summary

This chapter has reviewed a large number of significant ECEC program evaluations and rigorous research investigations conducted in recent years in the US, UK, Canada and Australia. Key findings highlighted by this body of literature are that:

- pre-school programs for 3- to 5-year-old children (regardless of auspice) can have positive effects on children’s cognitive, language and social/behavioural readiness for school and lasting effects into primary school, particularly for children from disadvantaged families, when the program achieves a high level of quality;
- positive outcomes for disadvantaged children are best achieved through universally available high quality ECEC programs that serve a diverse population of families;
- long hours of non-parental child care in the first four years may have negative effects on children’s developmental outcomes, particularly if the program achieves a lower than optimal level of quality; and
- high quality ECEC programs can be achieved through quality improvement and professional development systems that implement locally-driven, well supported processes for translating research into practice.

However, in a similar review conducted for the US context, Pianta et al. (2009, p. 78) make the point that: “It is also abundantly clear that one year of effective pre-school education is not a panacea. Even with an earlier start and longer duration, pre-school education is not an inoculation that guarantees complete and permanent elimination of the achievement gap for disadvantaged children….” Similarly, based on the present review, which has not been able to draw on a significant body of Australian research, a cautious interpretation of the evidence is warranted. Although not the focus of this report, it is well known that factors other than ECEC attendance have a major influence on the developmental achievements that predict children’s school readiness and achievement.

The review of literature also revealed key themes relating to the selection and application of appropriate methodologies for evaluations of ECEC programs. These are:

- the methods of evaluating child outcomes should match the goals of the program, rather than focusing on the measurement of skills or knowledge that are linked to children’s potential future success;
- child assessments prior to school should give equal attention to all five broad domains of school readiness, and resist the risk of giving “overemphasis (to) qualities that can be measured reliably” (Huston, 2009, p. 4);
- where possible, research and evaluation questions should be addressed through the complementary use of large-scale datasets, including matched or nationally reported data, and small-scale locally-relevant qualitative research;
- research/evaluation designs that combine short-term and longitudinal data collection can provide information about the immediate as well as the lasting effects of ECEC;
- research designs that use the ‘group’ rather than the ‘individual’ as the unit of analysis can provide information on ‘what works best?’ in evaluating ECEC programs; and
• to be relevant to policy and practice, research must do more than ‘test’ a program; it must also inform the effective ‘real-world’ application of the program.

1.5 Research gaps

The literature reviewed for this chapter comprises 66 studies and reports, of which only 10 are Australian. In an adaptation of the words of Bradley et al. (2009, p. 886), “this sets the stage for the large canon of studies needed to develop the kind of precise information necessary to make meaningful adjustments in (or extensions to ECEC) programs that promote school success and lifelong adaptive functioning.” Whilst Australia can learn much from the vast body of literature from the US, UK and Canada, research into the mechanisms linking children’s developmental outcomes and ECEC provision, policy and practice in Australia is desperately needed.

The following questions identify areas that warrant specific attention:

• What is the right balance of child assessment tools (e.g., achievement/readiness tests and authentic, competency-based, holistic approaches) to use when evaluating the impact of ECEC programs on developmental outcomes, and that can be applied to different cohorts and contexts?
• What is the relative effectiveness of teachers’ self-evaluations, parent evaluations, and standardised, observer administered instruments for assessing program effectiveness?
• How can ECEC providers and educators best contribute to evaluations of program effects for children and families, including scientifically rigorous evaluations of implementation, processes and practices?
• What are the best methods for identifying the critical ‘ingredients’ of effective practice and ensuring transferability and fidelity across sites?
• What methods and strategies best support knowledge transfer and uptake to practice for ECEC educators?

Exemplar

Better Beginnings Better Futures (BBBF) Canada

Focus

BBBF is an ecological, universal, community-driven, collaborative prevention program, begun in Ontario in 1990 and implemented from 1993/4 to 1996/7 in three economically disadvantaged communities, where there were clear indications that children were at high risk for poor development (low birth weight, low parent education, high proportion of teen parents, high rates of school dropout). Universal access was provided within these targeted areas, in that all children aged 4 to 8 in the area and their families were eligible for the program. The focus of the program was three-fold: child, family, neighbourhood.
Goals
- To promote children’s health, wellbeing and development;
- To reduce children’s emotional and behavioural problems; and
- To strengthen parents, families and neighbourhoods in responding to the needs of their children.

Program initiatives
Programs were community-driven and community-building, described as a ‘meta-program’ approach (Peters et al., 2010, p. 21). Organisation and management structures included neighbourhood parents and residents in all aspects of the project site. A set of high quality programs that were appropriate to the unique needs and character of its community were developed to: some programs were common to all sites. Child-focused programs included Kindergarten readiness, in-class/in-school programs, breakfast programs, child care enhancements, before/after school activities, and recreation. Parent-focused programs included home visiting, support groups, family camps, and toy lending. Neighbourhood programs included community leadership development, safety initiatives, special events/field trips, and adult education. BBBF programs were coordinated with other social and health services, and school programs.

Evidence of outcomes
Short- and long-term outcomes were assessed for all three focus areas, using multiple measures and multiple informants. Benefits for school achievement/functioning were seen at Year 6 (higher mathematics achievement) and Year 9 (better outcomes for preparedness, adaptive functioning, expectations for future school completion, close relationships, conflict resolution, anxiety/inattention). At Years 6 and 9, participants were less likely to repeat a grade or use special education services, and had fewer suspensions. There were some negative findings (more aggression, oppositional behavior, lower self-rated self-esteem, poorer health outcomes). Benefit-cost analyses showed overall gain to the government.

Addressing a research gap
BBBF measured direct effects of programs on participants but also tapped the possibilities of indirect, multiplier effects or ‘social contagion’, that is, “helping one individual may make a difference on a collective level” (Peters et al., 2010, p. 22). Long-term benefits were most evident in the domain of school functioning. The authors suggest that this may be because the program was offered in schools and school-based before/after school care. Reported poorer health outcomes were a concern and the authors suggest that a booster program at age 10-13 years would have been useful. In other words, they conclude that relying on interventions at pre-school/early childhood may not be enough.
References


2. **EFFECTIVELY COMMUNICATING WITH PARENTS AND CHILDREN**

**Questions addressed in this priority area**

1. What is the relationship between socio-economic background and participation in child care and pre-school?

2. What are the values, attitudes and knowledge of different groups of parents concerning child care, early childhood education services and ‘good parenting’? How does this influence the choices that parents make?

3. Where do parents go for advice regarding looking after their children? What are the most effective strategies for providing parents with information concerning services and supports?

4. What are the most effective ways of engaging parents/carers in terms of understanding early childhood development?

**Search approach**

Search strategies included consulting colleagues, database searching, browsing and citation tracking. For database searching the following terms were used:

1st: “early childhood” or preschool or pre-school or daycare or “day care” or “child care” or childcare

and: terms specific to type of research ‘systematic review’ or ‘cohort study’

and: terms specific to sub-questions as appropriate i.e.,:

2.1 “socio-economic background” “participation in child care”

2.2 “parental values” “parental attitudes” “parental knowledge” “child care” “early childhood education” “parenting” “parent choices”

2.3 “strategies” “parent information” “supports”

2.4 “engaging parents” “early childhood development” “education”

Search limiters were as follows:

- Full text; Peer reviewed; English; Refs available; Scholarly; pdf; Journal article; Date: Jan 1 2006 to Jan 1 2011 (although occasionally where relevant, earlier works have been cited); a strong emphasis on Australian research.

Databases searched were:

- Eric, Education Research, Academic Search Complete, Psychology and Behavioural Sciences Collection, Socindex, Cinahl, A+Education, Informaworld, CBCA Complete, Google Scholar and websites such as FaHCSIA, AIFS, SPRC, CCCH.
Articles selected were screened for relevance to four sub-questions. Relevant articles entered into Priority 2 EndNote file. Articles were organised into four topic groups as per each sub-question, then articles in each group categorised as appropriate, read and key points noted.

2.1 What is the relationship between socio-economic background and participation in child care and preschool?

Addressing this question involved looking at:

i) Australian literature concerning the relationship between socio-economic background and participation in child care/pre-school;

ii) the relationship between family income and child care attendance/access; literature examining the relationship between disadvantage and young children’s participation in child care and school settings; and

iii) the interrelationship between socio-economic background, child care access and maternal labour in Australia.

Findings from the Longitudinal Study of Australian Children

Recent data obtained from the Longitudinal Study of Australian Children (LSAC) and presented in the LSAC Annual Statistical Report suggest that, on average, children growing up in different socio-economic circumstances were more similar than different in terms of their experience of child care (Harrison, 2010, p. 62). The influence of families’ economic capacity on children’s experiences of child care was most clearly seen in mothers’ hours of work which strongly reflected weekly hours of care. Differences between groups were attributed to the ages of the children, as well as to the needs of families with a higher socio-economic position for extended and/or more flexible periods of care (for detail see Harrison, pp. 62-63). Broadly, care with relatives was accessed equally, irrespective of a family’s socio-economic position. However some differences are seen in the infant group and for children in the 4- to 5-year-old cohort, and these differences are summarised below.

Children in the infant group

Seventy-five percent of families with infants aged between 0-1 years who earned less than $600 a week were exclusively in parental care compared to 50% of infants in families whose weekly household income exceeded $2,000 (Harrison, Ungerer, Smith, Zubrick, Wise, et al., 2009). Mothers of infants in child care were more likely to be in the workforce, and more likely to be economically advantaged. These mothers appeared to be in families who were more able to afford paid care or who had better access to a range of child care services including family members who could provide care. Conversely, families of infants in exclusive parental care were more likely to have larger numbers of children living in the
home, and to be either less economically advantaged or have cultural values supporting exclusive parental care for their infants (Harrison et al., 2009).

**Children in the 4 to 5 year-old cohort**

Harrison et al. (2009) reported that children from more economically advantaged families were more likely to attend more costly care/education settings such as pre-schools not in school settings. On the other hand, children from less economically advantaged families were more likely to attend care/education settings in the public sector that are provided for lower (or no) cost such as pre-Year 1 and pre-school programs offered in school settings. Additionally, the authors stated “mothers of children not attending a centre or school-based care/education program were less well educated and more likely to be unemployed, have a lower weekly income, have more financial stress, have larger numbers of children living in the household, and reside in less advantaged neighbourhoods” (p. 95). Conversely, as before, mothers of children attending care or school facilities that provided longer hours of care were more likely to be more highly educated, to be working full or part-time, to have higher weekly household incomes, fewer stress indices and fewer children.

**Is cost a factor in child care choice and accessibility?**

Australian Bureau of Statistics (ABS) data from the 2002 Child Care Survey appeared to show no clear link between the cost of child care and families choosing multiple care arrangements (Qu & Wise, 2004/2005). This finding was attributed to the means-tested subsidies that make the cost of child care generally equitable across both low-income and high-income families.

**The impact of the neighbourhood on children’s developmental outcomes**

In 2005, Edwards found that Australian children living in neighbourhoods with greater levels of socio-economic disadvantage were more likely to experience adverse social/emotional and learning outcomes than children living in more affluent areas. Vinson later reported that such “concentrated disadvantage was prevalent in all Australian states” (Vinson, 2007, cited in Edwards & Bromfield, 2010 p. 7).

The Australian Early Development Index (AEDI) National Report (Centre for Community Child Health, 2009, p. 11) confirmed that “children living in the most socio-economically disadvantaged Australian communities are more likely to be developmentally vulnerable on each of the AEDI domains” (physical health and well-being; social competence; emotional maturity; language and cognitive skills; communication skills and general knowledge).

Edwards and Bromfield’s (2010) research into neighbourhood influences on children’s emotional and behavioural difficulties (using LSAC data) produced similar findings in that children living in the most disadvantaged neighbourhoods had significantly worse
hyperactivity, emotional problems and peer problems than children living in the most advantaged neighbourhoods. These differences were largest for peer relationships.

Additionally, Edwards and Bromfield (2010) noted:

- statistically significant and meaningful differences between children living in disadvantaged neighbourhoods compared to those living in the most advantaged;
- neighbourhood belonging has a strong association with children’s outcomes; and
- building social capital is fundamental, but addressing service delivery systems, enhancing parent skills and providing employment in disadvantaged areas are important elements of a comprehensive strategy in addressing area-based disadvantage.

**Links between child care availability, quality and affordability and maternal labour**

An analysis of data from the Household, Income and Labour Dynamics in Australia (HILDA) survey (ABS, 2005) confirmed that married women living in areas with more reports of lack of availability, low quality or costly child care work less than women in areas with fewer reported difficulties with child care (Breunig & Gong, 2010). In regard to affordability however, the authors stated “clearly the availability and quality of child care could affect parental decision-making over child care usage…however parents rarely approach the problem of finding child care as a simple cost-minimalisation exercise…but whether availability, quality and affordability of child care is an empirically significant issue in Australia preventing parents from working is not so obvious and there is a paucity of empirical evidence in Australia which comprehensively investigates these multiple aspects of child care” (p. 2).

Rammohan and Whelan (2006) also used HILDA survey data (ABS, 2005) to examine the implications of child care costs on maternal employment status by distinguishing between full time and part time work. They found:

i) lower child care costs do not have a statistically significant effect on women’s decisions to work (either full time or part time);

ii) Australian mothers respond to an increase in wages by increasing their full time and part time employment; and

iii) an increase in the number of young children (particularly under four years of age) and an increase in non-labour income reduce the likelihood of the mother to be working.

In concluding, Breunig and Gong (2010) stressed the following points:

- future research based on accurate objective measures of quality, availability and affordability is likely to assist our understanding of the relationship between child care and labour supply; and
- data about staff qualifications, length of waiting lists, physical location and number of places would provide more objective measures of quality and availability and would advance the social inclusion agenda of the Australian government.
2.2 What are the values, attitudes and knowledge of different groups of parents concerning child care, early childhood education services and ‘good parenting’? How does this influence the choices that parents make?

A thorough search of the literature to examine the values and attitudes of different groups of parents concerning child care (e.g., parents of children with disabilities, grandparents or foster parents) was beyond the time available for this project. Hence the values, attitudes, knowledge and decision-making processes of diverse groups of parents may diverge from those reported here. Literature searched and selected for this section explores how the majority of parents make decisions about child care. Parenting issues are addressed in question 2.3.

Parental decision-making about child care

It seems there are many factors at play when families choose child care. These factors may be primarily parent-related (Harrison et al., 2009), child-related (Robson, 2006), staff-related (Rose & Elicker, 2008), curriculum-related (Rose & Elicker), centre-related (Weaven & Grace, 2010) or a combination of a number of factors (de Silva & Wise, 2006; Noble, 2007). Centre selection appears to be strongly influenced by informal social networks.

Parent-related factors

In the Australian LSAC study, 40% of parents of 2- to 3-year-olds said that their main reason for using child care was to enable the parent to meet work or study commitments, while 18% reported that it was for the child’s benefit, and another 17% reported it was for their child’s social development (Harrison et al., 2009: Harrison, 2010). Interestingly, Harrison et al. also asked parents of 4- to 5-year-old children to cite their main reason for using multiple child care or educational arrangements, and 70% reported that this was to meet their own work or study needs.

Child-related factors

Other researchers, such as Robson (2006), conducted interviews with a small sample of families in England exploring their perspectives of child care and cited the importance of both child and parent-related factors for these families when choosing child care. Preferred benefits to children were identified as affective, cognitive and physical:

- making friends and social skill development;
- involvement with a wide range of activities and resources;
- oral language and communication;
- confidence;
literacy skills; and
happiness.

Additionally, some preferred child care benefits to the parents in this study were:

- practical support;
- feelings of well-being/happiness/peace of mind;
- safety for my child, security of the environment;
- time and personal space for self; and
- knowledge that my child is happy (Robson, 2006, pp. 451-453).

**Staff-related factors**

In a much larger American study, Rose and Elicker (2008) surveyed 355 mothers, “exploring the importance of child care characteristics to their choice of arrangement, through ratings, rankings and conjoint analysis” (p. 1161). Regardless of which method of data collection they used, the authors found that mothers attributed highest importance to the warmth of the caregiver. Two other child care characteristics that mothers consistently rated important were the caregivers’ education levels and a play-based curriculum (Rose & Elicker 2008).

**Centre-related factors**

Another recent Australian study conducted by Weaven and Grace (2010) examined parental perceptions of child care service quality across alternative long day care business structures. They interviewed 20 parents whose children attended diverse types of centres (community based, independent-private and corporate chain centres) and found that parents consistently regarded independent-private and community based centres as providers of the highest levels of care. Parents in this study also tended to associate service quality with “observable child care experiences, such as child interactions with staff and peers” (p. 59) rather than child-staff ratios, class size or caregivers’ qualifications. The authors conclude that further research is needed from diverse geographic locations within Australia that examines the role of cultural influences on parental perceptions.

**Combined factors**

Noble’s (2007) synthesis of data from a phenomenographic investigation with 23 Queensland families identified eight categories grouped into three dimensions that describe how parents view early childhood education and care services:

*Physical dimension*

- demographically convenient; and
- safe, secure and hygienic.
Personnel dimension

- providing a routine;
- caring and nurturing;
- having trained and qualified staff; and
- valuing parents and keeping them informed.

Personal dimension

- providing socialization; and
- preparing for further learning.

(see Noble pp. 25-26 for detail)

In a second stage of analysis, Noble employed a grounded theory approach to better understand how parents chose a service, and she concluded, “parents make complex and pragmatic choices within social contexts” (2007, p. 27).

A number of categories similar to Noble’s were also found to be important for a group of 238 Australian parents from culturally diverse backgrounds whose children were using formal child care services in Melbourne (da Silva & Wise, 2006). Three groups of parents (Anglo, Somali and Vietnamese) were surveyed and asked to indicate how important an item from a list of 20 was to them. Of the 20 items, the top seven for all parents were:

- nurturing;
- safety and health;
- flexibility in hours;
- carer training and education;
- stimulating toys and materials;
- nutrition; and
- learning activities.

When ‘very important’ responses for child care characteristics were examined, the top three ranked items (by percentage) for each cultural group were as follows:

- Anglo: nurturing; safety and health; carer training and education
- Vietnamese: nurturing; safety and health; learning activities
- Somali: flexibility in hours; carer training and education; stimulating toys and materials

da Silva and Wise concurred with other researchers in that in addition to child care characteristics parents also place importance on accessibility, relationships with carers and cultural responsiveness (2006). In conclusion they suggested that research into the developmental consequences of carer relationships and cultural responsiveness was needed.
Centre selection

Finally, despite what is reported here about the child care characteristics that parents deem beneficial to their children and representative of quality, research in Australia and the UK appears to suggest that the centre selection process is very much influenced by parents’ informal social networks (Robson, 2006; Noble, 2007). Noble stated that “marketing did not appear to inform choice of early childhood education centre” (p. 27). Robson’s work also reflected this finding as the majority of families in her study (52%) relied on informal social contacts (such as neighbours, word of mouth or local hearsay) to guide their decisions about which child care setting to choose.

2.3 Where do parents go for advice regarding looking after their children? What are the most effective strategies for providing parents with information concerning services and supports?

The first section describes Australian research that explored how parents accessed information and resources as well as parents’ beliefs about their parenting knowledge. Subsequent sections report on international perspectives into the types of texts that parents typically refer to and why, as well as report on strategies for providing parents with information.

How parents access advice regarding their children

The Australian Parenting Information Project conducted a telephone survey of 1,931 parents exploring awareness of and access to information about children’s development. The researchers found that the methods parents preferred were “face to face advice, brochures on specific issues, television programs and a handbook or kit” (Commonwealth of Australia DFCS, 2005, p. 7, cited in Nichols, Nixon, Pudney, & Jurvansuu, 2009). Additionally, the project highlighted parental use of informal and formal information sources as well as their preference to access information via multiple modes. This project gave rise to $4 million being made available for the creation of two new national resources for parents and families: the Raising Children Website (http://www.raisingchildren.net.au); and the National Indigenous Family and Children’s Resource Service (http://www.snaicc.asn.au).

Subsequently, another Australian project titled Mothers and Fathers seeking and sharing information about children’s learning and development was designed to “generate knowledge regarding parents’ practices and purposes in accessing and circulating resources to support young children’s learning” (Nichols et al., 2009, p. 149). Of the 129 parents surveyed, most indicated they used a mix of human, text-based, media-based and Internet-based resources.
Specifically, the information sources most commonly used were:

- friends;
- family members;
- pamphlets;
- parenting magazines;
- parenting advice books;
- television programs;
- health professionals;
- Google searches; and
- teachers.

Additionally, parents indicated other information sources that were used moderately. These were: specific web addresses; videos or DVDs; wall posters; radio programs; and parenting courses.

It can be surmised from this list that parents access information via many different networks. For example, informally they appear to access information through friends and family networks, and formally they appear to access information at libraries, shops, early childhood health centres, hospitals, and clinics. What is therefore apparent from both of these projects is that parents access information at multiple locations and in multiple formats in order to best meet their needs.

**How parents learn about parenting**

Parental views about whether parenting skills come naturally to most people were explored in an Australian General Population of Parents Survey (GPPS) undertaken in mid-2006. The GPPS was a telephone survey of a national random sample of around 5,000 parents who had at least one child under the age of 18 years (Qu & Weston, 2006). Amongst other statements, participants were asked their views about the following statement “The skills needed to be a good parent come naturally to most people.”

The survey found that mothers aged under 25 years were more likely to agree with this statement (i.e., 53% agreed that parenting skills come naturally), while a higher proportion of all other groups of mothers disagreed with the statement. The difference was particularly striking in the oldest group of mothers (45 to 54 years), of whom 64% rejected the statement and 27% agreed with it. The authors asserted that not only do these results suggest that people are likely to modify their views about parenting skills through experience (as shown by the different responses according to parental age) but they also appear to indicate that a sizeable proportion of these parents appeared “unaware of the importance of experience, and most probably of relationship and parenting education programs, for the development of relationship and parenting skills (Qu & Weston, 2006, p. 57).

American researcher Connell-Carrick (2006) wrote that if parents were equipped with critical thinking skills to analyse the large amount of parenting information they receive, they would be more able to make better, more informed decisions about their children. She asserted that
practitioners have a unique role to play in not only teaching parents appropriate strategies for child rearing, but also teaching them developmental theory and critical thinking skills.

In her analysis of the types of texts parents access to enhance their parenting skills (texts included *On becoming babywise*, Ezzo & Bucknam, 1998; *Secrets of the Baby Whisperer*, Hogg & Blau, 2001; *The baby book*, Sears & Sears, 2003; *How to solve your child's sleep problems*, Ferber, 1985; *The no-cry sleep solution*, Pantley, 2002; *The happiest baby on the block*, Karp, 2002; and *Toilet training in less than a day*, Arzin & Foxx, 1974), Connell-Carrick (2006) noted that while the trend in the academic literature is toward more child-focused parenting, most parenting recommendations in popular books or on television shows such as *Supernanny*, are not. Connell-Carrick concluded that most parents do not avail themselves of scientific literature on parenting, but rather find themselves at a local bookshop seeking advice on common developmental issues such as sleeping patterns, breastfeeding, eating, and toilet training.

**Effective strategies for providing parents with information about services and supports**

Dunst and colleagues have long argued that the most effective strategies for providing parents with information and support are those that utilise informal as well as formal networks. An extensive review of the research into the influences of social support for families with children with disabilities (Dunst, Trivette & Jodry, 1997) revealed several related findings:

- support provided by informal networks has the greatest positive effect on child and family functioning;
- social support functions as early intervention;
- support is most effective when it is given in response to an indicated need;
- support from personal networks has a more positive effect when it is characterised by closeness, caring and capacity building; and
- when professional help-giving practices mirror the features of informal support networks there is greater impact on parental self-efficacy and empowerment.

The value of building relationships with parents and forming partnerships with families has been extensively reported in the Australian literature (see for example Elliot, 2005; Moore, 2007; 2009). Building relationships underpins all strategies for effectively communicating with families about information, services and supports. Research undertaken by Duncan, Bowden and Smith in New Zealand (2006) described how two successful ways to build meaningful relationships with parents and the Whānau (a Maori word meaning family that includes a wide range of relations and kinsfolk) were the informal strategies of “gossiping and yacking.”

Over the past decade, there has been a growth in the number of parenting websites available for practitioners and parents alike, such as:

- [http://raisingchildren.net.au/](http://raisingchildren.net.au/)
The Australian website Raising Children currently has 38 discussion forums, the most popular of which are (according to the number of replies) ‘parents of children with autism spectrum disorder’ (23,451), ‘babies 3-6 months’ (4,613), ‘toddlers 1-3 years’ (3,842), ‘mums’ (2,741), ‘newborns 0-3 months’ (1,314). Most of these have daily activity.

Utilising social media networks such as Facebook, YouTube and Twitter would seem a logical approach to reaching young as well as tech-savvy parents. Indeed, visitors to the Raising Children website are encouraged to “Become a fan of the Raising Children Network on Facebook today. You'll get news, snippets, parenting info and lots more sent straight to your news feed” (http://raisingchildren.net.au/).

Social media is defined as user-generated content shared over the Internet via technologies that promote engagement, sharing and collaboration (Tommasi, 2011). A Nielsen poll conducted in mid-2010 revealed Australians led the world in terms of time spent using social media spending on average seven hours per month on social networks or blogs. The potential for social media to quickly and easily provide parents with information on services and supports perhaps has a lateral connection to the learning experiences of Sure Start, which showed how important it was for centre-based services to be within pushchair-walking distance to all families.

As a final point, Barlow, Kirkpatrick, Wood, Ball and Stewart-Brown (2007) reviewed the parenting literature, and commented that there is ample evidence from the UK and elsewhere to show that parenting interventions which start early during the antenatal period and continue through infancy and early childhood can produce good outcomes for children.

2.4 What are the most effective ways of engaging parents/carers in terms of understanding early childhood development?

The first two sections address definitions of parent engagement and the literature on partnerships and relationships. Barriers to engagement are then explored, and the final section presents strategies for effective engagement with parents.

Definition of engagement

Canadian educational researchers Pushor and Ruitenberge (2005), together with their co-researchers, presented a definition of parent engagement that implied a bi-directional process, one that enables parents to participate on a more equal footing and “take their place alongside educators in the schooling of their children, fitting together their knowledge of children, of
teaching and learning, with teachers’ knowledge” (p. 13). Additionally the authors suggested that this definition of parent engagement means flattening out traditional power structures and working together to achieve mutually determined and mutually beneficial goals. Key to this process is development of trust and building of relationships.

American authors Kemp, Marcenko, Hoagwood and Vesneski (2009) reviewed the literature on engaging parents in children’s welfare and outlined six core (and more traditional) dimensions to parent engagement:

- early/structured outreach;
- practical help;
- knowledge, skill building, empowerment;
- supportive relationships;
- consultation and inclusion; and
- family-centred culturally responsive practice.

**Role of relationships**

Relationships between professionals and parents are fundamental to parent engagement and relationships play a critical part in the development of young children. As previously mentioned, Australian researcher Tim Moore (2007; 2009) has written extensively on the nature and role of relationships in early childhood services. Subsequent to his synthesis of the evidence of the impact of relationships (2007) Moore asserted:

- relationships matter;
- relationships affect other relationships;
- relationships form a cascade of parallel processes;
- effective relationships at all levels share common characteristics; and
- relationships change brains.

Other educational researchers such as Hoover-Dempsey, Walker, Sandler, Whetsel, Green et al. (2005) also stressed that parenting programs that lacked strong partnerships were likely to result in less parent engagement. How partnerships between practitioners and parents really develop was explored by Tayler (2006), who studied three diverse early childhood programs in Queensland, Western Australia and New South Wales, and concluded:

> The challenge to early education partnerships is demonstrating an ability to realise and value diversity while simultaneously forging common directions that foster a just and humane society ... When it comes to developing partnerships in the interest of children’s learning all adults are important players irrespective of family background, gender, religion, race, level of education and geography.

Finally, on the role of relationships in future Australian early childhood services, Moore (2010) suggested that the following actions and interventions are central:

- provide staff with training in family engagement and relationship-building skills;
employ community links workers to build relationships with marginalised and vulnerable families; and
create opportunities for parents to be actively involved in the planning, delivery and evaluation of the services and facilities they use.

Barriers to engaging parents— who drops out and why

Some researchers have also explored the other side of the coin, i.e., why is it that some families are hard to reach in the first place (Winkworth, McArthur, Layton, Thomson, & Wilson, 2010), and why other families drop out of home-visiting programs (Barnes, MacPherson, & Senior, 2006; Roggman, Cook, Peterson, & Raikes, 2008). Reporting on their in-depth interviews with 20 financially disadvantaged sole parents living in Canberra, Winkworth et al. identified four reasons why these parents were not well-connected to the services that were meant to help them:

1) they had no informal networks;
2) they felt judged or under surveillance;
3) they were isolated and had no ‘gateway’ to helpful information and support; and
4) they used services but did not feel connected to them.

In their review of randomised trails of programs for parents of young children, Olds, Sadler and Kitzman (2007, p. 384) noted, “almost every review of parenting interventions and home visiting programs has lamented the challenges of engaging and retaining parents.” As an example, they cited the work of Barnes et al. (2006) who interviewed 128 vulnerable families with new babies to ascertain why they had not accepted home-visiting programs from community volunteers. The top three reasons families gave (by percentage) were:

- they just did not need support: 47%
- they had simply changed their minds: 19%
- their circumstances had changed: 9%

Lastly, Roggman et al. (2008) concluded that the characteristics of the home visits themselves predicted whether families would stay connected or drop out. They argued that if home visits were less focused on child development and were frequently interrupted with distractions, families were more likely to drop out. They stated that when parents are engaged in home visits, they stay in closer proximity to the child and the home visitor, show an interest in and participate in the activities with the child, and initiate activities and discussions that relate to the child.

Which programs and strategies are better for parents?

Recently, a number of European and American researchers have conducted meta-analyses (Nowak & Heinrichs, 2008), reviews (Hallam, Rogers, Shaw, & Rhamie, 2007), systematic reviews (Kane, Wood, & Barlow, 2007) and reviews of reviews (Bunting, 2004; Law, Plunkett, Taylor, & Gunning, 2009) into parenting programs. As a consequence, these
reviews have determined a number of specific components of the most widely-employed programs that appear most beneficial to parents:

- parents are provided with knowledge, skills and understanding, and feel accepted and supported;
- parents have a sense of regaining control and feeling able to cope;
- programs that provide crèche facilities;
- programs that are sensitive to the needs of individual parents and families;
- programs that are tailored to meet the social context of the families targeted; and
- practitioners who are appropriately trained.

Finally, Barlow et al. (2007) reviewed the available evidence on what works in family and parenting support programs and identified five characteristics of evidence-based parenting programs:

- they are provided by early years practitioners (or volunteers) who receive additional training and get ongoing support while delivering the programs;
- they encourage new ways of parenting or help change established ways of parenting;
- they use specific methods of intervention with parents and may use specific techniques to enable parents to parent differently;
- they are goal-driven with specified objectives achieved and specific tasks performed; and
- they are based in theory and often guided by a manual.

To conclude, and echoing what has been already stated (see Tayler, 2006; Barlow et al. 2007), Randolph, Fincham and Radey (2009) noted that strategies that effectively engage parents are those that account for variations in families’ needs as well as their capacities, while taking into consideration the amount of resources available. Without doubt, successful relationships between professionals and parents underpin effective engagement.

2.5 Summary

Accurate objective measures of quality, availability and affordability are likely to assist our understanding of parents’ participation in ECEC e.g., staff qualifications, length of waiting lists, physical location, and number of places.

Secondly, the most effective strategies for providing parents with information and support start early and utilise informal as well as formal networks. In addition, strategies that effectively engage parents are those that account for variations in families’ needs as well as their capacities while taking into consideration the amount of resources available.

Finally, successful relationships between professionals and parents underpin effective engagement.
2.6 Research gaps

- What do different groups of parents in the population know about early childhood development and how does that translate into their understandings of early childhood education and care?

- How can broad cultural change be implemented so that society puts greater value on early childhood education and care? What processes and mechanisms are most helpful or useful to achieve such a cultural change?

- When, where, and what sorts of communications with parents are most helpful for parents?

- What research approaches are best to build a profile of parents who do not access early childhood education and care? What changes are needed to support access?

Exemplar

*Through the Looking Glass (Australia)*

**Focus**

Funded over three years by the Commonwealth Government’s Stronger Families and Communities Invest to Grow strategy, the Through the Looking Glass (TtLG) Project (Aylward & O’Neil, 2009) is a health, education and welfare collaborative early intervention strategy that utilises the existing infrastructure and universality of five child care settings (sites) across Australia to intervene with families where there is an identified compromised attachment relationship between the parent and child/children.

**Goals**

The project’s goal was to “develop and pilot a model of collaborative early intervention and prevention for targeted parents to improve secure attachment outcomes for young children”. The project was designed to achieve specific outcomes for parents (targeting mothers), children and child care staff and to develop and promote a ‘best practice’ service model to address issues of attachment.

**Program initiatives**

The TtLG Project provides intensive psychosocial support, therapeutic intervention and child care as a package for high-risk families in order to develop and support secure attachment relationships between mother and child. The primary target group is mothers of children aged 0 to 5 years. Participating families come from diverse backgrounds but all exhibit multiple risk factors including anxiety, depression and social isolation and many of the parents have reported early trauma in their own lives. A clinician and co-facilitator provide the program
and work with child care staff. The provision of child care for project clients is crucially important to the functioning of the project.

TtLG Project is based on Attachment Theory. The intervention draws from the Circle of Security (COS) Project Model (Marvin et al., 2002) which assists parents and child care staff to understand and integrate Attachment Theory into practice. The program works with small numbers of families (up to 7) in each group and focuses on their particular struggles that directly impact on their parenting, as well as on developing strong attachment relationships with their children.

**Evidence of outcomes**

The TtLG project was extensively evaluated using a mixed methods paradigmatically pragmatic stance (Greene & Caracelli, 1977) involving the selection of diverse appropriate evaluation methods in order for data collection to address the range of identified indicators and meet the needs of stakeholders. The TtLG Project provided a range of capacity building activities to staff across the five centres which in turn supported the TtLG families and improved attachment outcomes. This allowed the organisation to deliver better services for targeted families and their children (a national Invest to Grow priority). The authors argue there is an overwhelming case to perpetuate the project in order to build on the investment and continue to provide an intervention which has clear multiple positive impacts and sustainable benefits for Australian families.

**Addressing a research gap**

The project exemplifies a successful translation of research to practice. It has demonstrated its flexibility to adapt to, and be adopted by different child care centre practices and contexts and generate a range of successful and profound outcomes for service providers and their clients.

**References**


on February 21st 2011


3. UNDERSTANDING AND RESPONDING BETTER TO THE NEEDS OF HIGHLY VULNERABLE AUSTRALIAN FAMILIES AND THEIR CHILDREN

Questions addressed in this priority area

1. What are the specific characteristics of ‘vulnerable’ children and their families and what is needed to assist them to meet developmental/education/care needs of their children?

2. What are the most effective approaches for engaging ‘vulnerable’ families and their children in quality early childhood education and care? What are the barriers/influences/beliefs preventing such engagement?

3. What makes ‘strong communities’? What are they doing that actually works?

Search strategies and scope/limits

The focus of these questions is one of indicators and contexts for prevention and early intervention relating to vulnerable families and children. The overarching criteria used include:

- Relevance to the topic: “highly vulnerable Australian families and their children”.
- Recency: limited to January 2006–January 2011, and including any recent evaluations of high profile longitudinal studies particularly those relevant to interventions undertaken in Australia.
- Robustness of evidence: meta-analysis/systematic reviews; relevant to standing of authors or organizations.

Search strategies included:

- Consultations with colleagues
- Searches in subject indexes
- Databases: EbscoHost (education); EbscoHost (psychology); Informaworld; A+Education/Informit; Springer Link; Ingenta; wiley Science; Sage

Search terms included:

- “early childhood” or preschool or pre-school or daycare or childcare or “child care” or “day care” or kindergarten
- “vulnerable” and “protective factors”
- “vulnerable families” and “vulnerable children”
- “disadvantaged”
- “early intervention” and “disability”
Limiters:

- Literature that may appear to be relevant but not included in this priority area includes:
  - literature on vulnerability beyond the focus on families and children’s development
  - children and families within the child protection system
  - indicators of quality in early childhood services
  - ‘readiness for school’ literature

### 3.1 Characteristics of ‘vulnerable’ children and their families

The literature abounds with descriptions of those who can conceivably be called ‘vulnerable’. Before addressing issues surrounding vulnerability, it is important to define the term and consider the synonyms that are used to describe these populations.

**Definitions**

Definitions of vulnerable are necessarily broad because authors may apply different criteria depending on the particular sociological, psychological, health or medical perspectives being taken (Liampittong, 2007; Lyttinen et al., 2006). The Policy Brief issued by the Centre for Community Health (2010) states that “marginalised and vulnerable families refer to those who are receiving little support in their family and parenting roles either from personal support networks or from community based support services” (p.1). More broadly, definitions include those who are open to environmental, social, psychological or medical ‘risk’ and thus lack the capacity to become self-regulating or achieve independence without external and often social and emotional support.

Other terms used to describe vulnerable populations are ‘disadvantaged’, ‘at risk’ or ‘invisible’, and ‘hard-to-reach’. Disadvantage occurs where the environmental and social circumstances within which families live their daily lives are unfavourable and potentially deleterious to their well being. The concept of disadvantage encompasses different subgroups in terms of health, educational attainment, child welfare and ethnicity (Barnes et al., 2005). This raises issues around who should be included and how best to group those considered to be vulnerable in order to provide relevant services.

There are also those families who are ‘marginalised’ and not linked into support services because they do not fit neatly into a group and, therefore, service eligibility criteria. Often, it is the degree of risk or multiplicity of problems that leaves families falling through the cracks of intervention services. These may well be the families in greatest need of support as the multiplicity of risk factors experienced by children contributes to their delayed cognitive and social development and to deviant behaviour and overall low school readiness (Smart, Sanson, Baxter, Edwards, & Hayes, 2008).
The cumulative effect of successive levels of disadvantage on cognitive development supports the need for early and ongoing intervention (Ayoub et al., 2009; Nicholson, Lucas, Berthelsen, & Wake, 2010; Shonkoff, Boyce, & McEwen, 2009). However, while a cumulative factor exists, protective factors such as the quality of parenting can mediate the negative effect of economic disadvantage on young children’s development (Kiernan & Huerta, 2008; Whittaker, Harden, See, Meisch, & Westbrook, 2011). For example, maternal sensitivity has been found to be a mediator between parenting stress and children’s social-emotional development (Craigie, Brooks-Gunn, & Waldfogel, 2010; Whittaker et al., 2011).

‘At risk’ usually refers to circumstances where there is exposure to or a likelihood of being susceptible to adverse circumstances and particularly if intervention does not occur. For example, younger children may be more vulnerable and susceptible to risk because of their developmental immaturity; a child’s medical condition or disability may impact on their growth and development; and/or their capacity to function may be impaired by parental and community factors—i.e., their exposure to risk and lack of social support (Sheppard, 2008). Studies have identified a relationship between ‘risk’ environments (including parental mental health and substance misuse) and children’s behaviour (Raver et al., 2009); even with children as young as three years of age (Whitaker, Orzol, & Kahn, 2006). Impaired relationships may also lead to poor parent-child communication. Parents’ lack of attention to the child’s material needs may result in a negative impact on a child’s social and cognitive development (Forrester & Harwin, 2006; Pirasaroe, 2007).

For organisational efficiency, ‘at risk’ factors that may contribute either singularly or collectively to children’s wellbeing as well as subsequent health, social and cognitive outcomes can be grouped according to:

- community circumstances (e.g.; housing, economic and socio-cultural factors);
- family factors (including health and capacity to parent); and
- child factors (including health and temperament) (Geary, 2007).

Table 3.1 displays references to literature that addresses community, family and child risk factors relevant to vulnerable populations. References are grouped as follows:

- **Primary research**: direct report on research undertaken;
- **Secondary research**: analysis of data collected from another (often large scale) piece of research;
- **Research review**: comment on findings from groups of studies or topical literature; and
- **Evaluation report**: overview and findings from systematic evaluation.
<table>
<thead>
<tr>
<th>Risk indices</th>
<th>Reference</th>
<th>Primary research</th>
<th>Secondary data analysis</th>
<th>Review</th>
<th>Evaluation report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMMUNITY FACTORS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic – housing and homelessness including poverty and unemployment</td>
<td>Slee, 2006*</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of social cohesion: inadequate social support</td>
<td>Harries, 2008</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and social circumstances associated with aboriginality, refugee, other</td>
<td>Libesman, 2004*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>marginalised groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Policing’ of marginalised/vulnerable families</td>
<td>Booth &amp; Booth, 2006</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child trafficking</td>
<td>Bokhari, 2008</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PARENTAL/FAMILY FACTORS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family structure</td>
<td>Craigie et al., 2010</td>
<td>√R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate parenting capacity (e.g., children born to teen/single parents)</td>
<td>Watson &amp; Tully, 2008*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incarceration</td>
<td>Lederman, Osofsky, &amp; Katz, 2007</td>
<td>√√</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Victorian Association for the Care and Resettlement of Offenders (VACRO), 2006*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ziv, Alva, &amp; Zill, 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absence of social support</td>
<td>Sheppard, 2008</td>
<td>√√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winkworth, McArthur, Layton, &amp; Thomson, 2010*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health including maternal depression</td>
<td>National Scientific Council on the Developing Child, 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boursnell, 2007*</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Turney, 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability</td>
<td>Guralnick, 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3.2 provides examples of the risks to children from the community and family risk factors identified in Table 3.1. While children may experience these either singularly or in combination, their own personalities, temperament, capabilities and protective factors will impact on the degree to which their development and wellbeing is compromised.
Table 3.2: Child risk factors as an outcome of deleterious community/family factors

<table>
<thead>
<tr>
<th>Child ‘risk’ factors (singularly or in combination)</th>
<th>Reference</th>
<th>Primary research</th>
<th>Secondary data analysis</th>
<th>Review of research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired neurological development and architecture of the brain—e.g., evident in exposure to severe deprivation</td>
<td>National Scientific Council on the Developing Child, 2010a, 2010b</td>
<td></td>
<td></td>
<td>√√</td>
</tr>
<tr>
<td></td>
<td>Lupien, McEwen, Gunnar, &amp; Heim, 2009</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Impaired social/emotional development relative to the age of the child</td>
<td>Geary, 2007*</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Whittaker et al., 2011</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Delayed cognitive ability (including children 0-3 years); language development and subsequent reading difficulty; late detection of delay</td>
<td>Lyytinen et al., 2006</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Ayoub et al., 2009</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Disruptive behavioral (often increasing with number of risk factors)</td>
<td>Raver et al., 2009</td>
<td>√R</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Whitaker et al., 2006</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequalities in physical and developmental health</td>
<td>Nicholson et al., 2010*</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Abandonment including sense of rejection, isolation and/or exclusion</td>
<td>Cameron &amp; Maginn, 2008</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Stevens, 2006; Stevens, Seid, Mistry, &amp; Halfon, 2006</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Insecurity—failure of continuity of care and relationship issues around emotional development, attachment and neglect</td>
<td>Cameron &amp; Maginn, 2008</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>‘Internalising’ mental health problems and depression</td>
<td>Bayer, Hiscock, Ukoumunne, Scalzo, &amp; Wake, 2010</td>
<td>√R</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VACRO, 2006</td>
<td>√</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Toxic stress including cumulative risk resulting from combination of biological and environmental risk over time from birth

Ayoub et al., 2009
Duncan, Ziol-Guest, & Kalil, 2010
Feldman & Eidelman, 2009
Lupien et al., 2009
Shonkoff et al., 2009

Key:  * Australian research/reports  R = randomised controlled trial

Families who are under-represented in services, or even ‘service-resistant’, are the group commonly labeled as being ‘hard-to-reach’ and frequently described as being ‘invisible’, ‘silent’, ‘hidden’ and/or ‘deviant’ (Cortis et al., 2009, p. 3). Examples of hard-to-reach families are those identified as:

- Indigenous Australians;
- young single mothers;
- immigrant families;
- isolated parents;
- families with low socio-economic status (joblessness and poverty);
- families with transport difficulties;
- families unstable due to domestic violence;
- families who do not use mainstream services and/or are wary of professionals; or
- mobile or itinerant families (Cortis, Katz, & Patulny, 2009, pp.16 & 39).

Within these groups, individual characteristics may contribute to vulnerability or even act as protective factors. Individual characteristics of hard-to-reach families include those who:

- are lacking in self-esteem, confidence or awareness of their need;
- are problematised by their life trajectories such as participating in criminal activity, drug and alcohol abusers or families where there is domestic violence;
- might be described as detached from the system, such as asylum seekers and refugees;
- may be service resistant, service weary, service fearful, or simply disinterested in the services on offer;
- do not perceive that they have a problem;
- do not wish to be identified;
- have communication difficulties including poor literacy; or
- have health issues (Cortis et al., 2009; Forrester & Harwin, 2006; Winkworth, McArthur, Layton, Thomson, & Wilson, 2010).

While hard-to-reach families may fall within identifiable groups and have particular characteristics, there is a danger that they may not access services because those services are too busy or do not have the extra resources to make contact with these families (Early
Although not necessarily hard-to-reach, a group that is often ‘hidden’ but highly vulnerable are infants and toddlers who enter the child welfare system (Lederman et al., 2007). Infancy is a known period of significant cognitive growth and development, however, there are only a limited number of intervention programs that specifically target this age group. Infants and toddlers in foster care or other out-of-home arrangements who may have experienced trauma within their family environment and/or maltreatment can continue to experience a lack of stability of care if they are moved from placement to placement (Bromfield & Horsfall, 2010; Nupponen, 2007). Opportunities to develop attachments to significant adults in their lives may also be limited (Cameron & Maginn, 2008).

Interventions that assist families in meeting the developmental/education/care needs of their children

A systems perspective to intervention/prevention is appropriate for it takes account of children’s development, environmental influences and each family’s unique characteristics. Guralnick’s (2011) systems perspective (developed from other systems models such Bronfenbrenner’s ecological model) takes account of a number of factors that must be considered when establishing policies, initiating programs and determining professional expertise required at a community and an individual level in order to reach and support the families involved. Some of these issues will be addressed within the response to question 3 in this priority area.

It is well established that environments that are conducive to children’s development and functional capacity are those that support children’s language, psychosocial, emotional and cognitive development. Safe and secure environments enable children to gain a sense of belonging; are stimulating and enriching; and respect children’s rights. Some families, however, have difficulty in meeting the challenges of parenting their children, and yet improved parenting is often seen as the key to effective intervention (Evangelou, Sylva, Edwards, & Smith, 2008; Whittaker et al., 2011). Following an examination of parenting practices and family contextual risks indicative of ‘high-risk’ families in a Head Start infant and toddler program, Whittaker et al. (2011) found that the quality of parenting (including constructs such as parental warmth, responsivity and emotional availability) had a more direct effect on children’s social-emotional outcomes than other interventions. That is, the quality of parenting had a major role in protecting young children against adverse family ecologies.

3.2 Approaches to engaging vulnerable families

Families require non-stigmatising, accessible and affordable services for their children’s care and education, the availability of parenting support programs, and continuity of professional support if and when it is required (Taggart et al., 2006; Winkworth, McArthur, Layton, &
Thomson, 2010; Winkworth, McArthur, Layton, Thomson, & Wilson, 2010). However, the higher the level of disadvantage and the mother’s psychological condition, the less likely the family is to use formal care/early education services (Harrison, Ungerer, Smith, Zubrick, & Wise, 2009). Individual approaches may be an initial step towards accessing services and these include informal services such as playgroups as well as parenting programs (see Exemplar at the end of this chapter). However, community oriented programs, while universally available, may need to be proactive in engaging these families. Further to this, an Australian study involving interviews with 20 parents who were in receipt of income support, noted the “underleveraged potential of large institutions such as housing and Centrelink to link families to services” (Winkworth, McArthur, Layton, Thomson, & Wilson, 2010, p.442).

**Community based programs**

There is now a significant history in the US, Canada and the UK of large scale intervention programs that target vulnerable families and support young children’s engagement in early education and care services. Three longer term programs where evaluations have recently been conducted are the well established Head Start program in the US (US Department of Health and Human Services, 2010), the Better Beginnings, Better Futures Project (BBBF) in Canada (Peters et al., 2010) and the Early Years Transition and Special Educational Needs (EYTSEN) Project, which was a follow-on from Sure Start in the UK (Melhuish, Belsky, MacPherson, & Cullis, 2010; Sammons et al., 2003) An example of a recent Australian evaluation is the Australian Stronger Families and Communities Strategy (SFCS) (Hilferty et al., 2010). The focus of Head Start was the provision of health, education and financial support services for low income families and Sure Start provided programs in areas of ‘high deprivation’. Both the Canadian program and the Australian Communities for Children service delivery model are universal and community driven. However, as previously noted with respect to ‘hard-to-reach’ families, the availability of programs does not necessarily ensure family participation.

**Barriers to service engagement**

Generally, barriers to service engagement by families can be grouped within three main types:

- structural barriers, e.g., access and affordability;
- family barriers, e.g., characteristics associated with ‘vulnerability’ such as homelessness, poverty and mental health; and
- interpersonal or relational barriers, e.g. those surrounding lack of social skill and confidence to negotiate with professionals, lack of trust, fear of child protection services and misconceptions of what services are for (Centre for Community Child Health, 2010).

A relatively recent telephone interview undertaken in Canberra surveying 55 parents in a Communities for Children program “who do not normally engage with services”, found similar barriers including ‘shame and fear of being judged’ (Winkworth, McArthur, Layton, & Thomson, 2010, p.212).
Largely, these barriers relate to both families’ capacity to access services and the extent to which services meet family needs.

**Family and access issues**

Findings from the SFCS evaluation (Cortis et al., 2009) indicate that the things that made a difference to engaging hard-to-reach families in intervention services included:

- having an outreach worker;
- adequate, stable and long-term funding;
- employing community members (especially those from the hard-to-reach groups), as liaison or outreach workers;
- staff who have the skills to make contact with families, develop relationships and design intervention strategies relevant both to individuals and communities;
- soft entry points; and
- establishment of networks across the community (p. 43).

However, investigation of issues surrounding engagement are often limited by both the kinds of information sought from parents when surveys are designed by practitioners and parents’ capacity to complete the requirements of a survey. Some parents may be unwilling to be involved for fear of retribution from disclosure of personal information.

On the other hand, extra resources may be required such as those needed to support Indigenous Australian families accessing early childhood services. Services may also require more culturally appropriate resources to support these families. A small qualitative and quantitative study undertaken by SDN Children’s Services (2011) provides some insights into the barriers Indigenous Australian families saw to accessing universally available pre-schools for their children. The Longitudinal Study of Indigenous children, when completed in 2011, may provide further insights (Department of Families Housing Community Services and Indigenous Affairs, 2009).

**Service provision and quality issues**

While there may be barriers to accessing intervention services, access to quality education and care linked to such services remains open for debate. With respect to intervention programs for vulnerable families, direct links between particular aspects of quality and children’s developmental profiles are not entirely clear. However, in the Sure Start program, higher child care quality was found to be particularly related to improvements in children’s language (Melhuish et al., 2010). Longitudinal studies also suggest that service quality is an important measure if services are going to have an impact on families and children. Service quality is addressed in chapter 5.
3.3 Community oriented strategies and programs

The Australian Government’s Stronger Families and Communities Strategy provided community oriented approaches to working within disadvantaged communities to enhance children’s early learning and development (Edwards et al., 2009). The SFCS evaluation (Hilferty et al., 2010; Muir et al., 2009) did not assess the quality of the early childhood services accessed within projects, nor did the Brighter Futures evaluation (Hilferty et al., 2010). Of the three service delivery models (Communities for Children, Invest to Grow and Local Answers), Communities for Children had a greater community and integrated service model focus requiring community consultation and the extensive involvement of local agencies both in decision making and service delivery.

Characteristics of strong communities

Verity (2007) defines community as “a heterogenous groups of individuals who share something and combine to act collectively” (p.17), and considers that it has three elements:

- a place that is bounded geographically, socially and individually yet has identified characteristics that can be readily targeted by service providers;
- a social service system of relationships and networks that is:
  - accessible and co-located (wherever possible) (Wood, 2008);
  - collaborative (Evangelou et al., 2008; Fisher, Thomson, & Valentine, 2006; Muir et al., 2009);
  - embedded (Melhuish et al., 2007; Melhuish et al., 2010);
  - integrated (Evangelou et al., 2008; Melhuish et al., 2007);
  - supportive;
  - targeted towards individuals and particular service types known to enhance family functioning such as structured parenting programs and home visiting (Barnes, Senior, & MacPherson, 2009; Hutchings et al., 2007; Reading, 2007); and
  - provides continuity of support (Barlow et al., 2007; Bayer et al., 2010; Ward, Brown, Westlake, & Munro, 2010); and
- interest-based, consultative and attentive to the strengths, interests and needs of community members (Edgley & Avis, 2007; Guralnick, 1998).

However, one of the challenges in more disadvantaged communities is that communities can be fragmented with individuals feeling isolated by their personal differences, their financial situation and/or their individual circumstances. There may be low levels of trust, few shared values and limited connectedness.

What works?

A number of national and more localised state and community based programs in Australia have developed in response to government policy and funding initiatives. Most often these have been for a limited funding term and while local organizations have had opportunities to address local community circumstances there is a lack of evidence that these programs have
stated sound theoretical underpinnings and strategies in place for evidence gathering in relation to projected outcomes.

The evaluation of the SFCS (Muir et al., 2009), while critical of “the paucity of the quality of the local area data” (p.74), noted some positive community oriented outcomes of the intervention, notably:

- involvement of community members in project/program design, implementation and management;
- the use of well established (and trusted) local agencies to recruiting families;
- being goal directed and having clear outcomes that enabled review of strategies and objectives;
- having knowledgeable and effective leaders who were supported by staff development opportunities; and
- willingness of staff to work collaboratively across sectors.

Strategies to guide the development of community based programs may be delivered by a top-down or bottom-up approach. For example, Head Start and Sure Start targeted identified local populations whereas the Canadian BBBF and the Australian Communities for Children (within the SFCS) were universal community driven so enabling local membership to tailor programs to meet local needs.

Further to what was reported in the SFCS evaluation, individual Promising Practice Profiles submitted by local level ‘practitioner-focused research’ (Soriano, Clark, & Wise, 2008, p. 2) provide insights into developments and successes of strategies adopted in individual programs at the local level (see for example, Wong & Cumming, 2008). They included:

At the service delivery level

- the importance of safe, welcoming and non-stigmatising venues such as local schools and early childhood health centres and child care centres;
- attaching targeted services to universally available services;
- providing integrated early education and care centres as identified through examination of the Early Years Transition and Special Educational Needs (EYTSEN) project in the UK (Taggart et al., 2006);
- having multiple ‘soft entry points’ such as playgroups through which initial contact may be made with families;
- providing innovative approaches to parent support such as cooking classes;
- fostering parent-child interaction through play based learning activities; and
- the implementation of evidence based intervention programs and delivery of these with ‘fidelity’ (see for example, the randomised controlled trial of a Sure Start parenting program reported by Hutchings et al., 2007).

At the organizational level

- co-location of services wherever possible;
- providing outreach services within rural communities;
- encouraging access and retention through assistance with transport and financial assistance with child care; and
- addressing levels of quality indicative of effective early childhood intervention programs.

At a professional level
- cooperation, collaboration and networking between different service providers at the local level;
- building the capacity of adult-focused services to be child-sensitive; and
- the provision of professional development programs.

In meeting the needs of culturally and linguistically diverse groups and Indigenous families
- providing interpreter services;
- engaging service provider staff who are of and respected by the local community;
- ensuring that curricula are appropriate; and
- being flexible, making connections within the community and developing trust.

The literature (see for example, Raver et al., 2009) has also identified a number of innovations that contribute to effective program implementation:
- having a consultative service available to child care centres that accept vulnerable families;
- providing sufficient professional planning and review time for teachers who have case loads of vulnerable families and children;
- professional support for child care centre staff including supervision and counseling;
- child care centre staff time and support to engage in practitioner inquiry; and
- effective centre-based programs that have the following characteristics:
  - highly skilled teachers
  - appropriate adult-to-child ratios
  - age-appropriate curricula
  - language-rich environments
  - warm, responsive interactions between children and staff
  - high and consistent levels of child participation
  - work in partnership with other professionals and community leaders.

With respect to consultative/support services within a local area innovative intervention program, an (unpublished) internal evaluation of SDN Children’s Services Brighter Futures undertaken by their ‘embedded researcher’ illustrates the value of such a support role (Wong, 2009).
3.4 Summary

Vulnerable families are a heterogeneous population with varying strengths, needs, expectations, and support systems. The implementation of programs to both reach this diverse population and provide appropriate services for them, requires those involved to work with particular knowledge and skills and in community collaborative ways, if effective intervention to enhance young children’s health and development is to occur. That is, “the success of interventions is determined as much by the way in which they are delivered as by what is delivered” (Centre for Community Child Health, 2010, p.3).

The following principles serve as a guide to policy, practice, and advocacy in supporting very young and vulnerable children and their families:

- begin early with management of ‘risk’ factors;
- use multiple entry points for both the identification and meeting the ongoing support needs of families;
- provide intensive support provided by home visitors with intervention strategies that begin during the prenatal period and follow through until at least the third year of life;
- where families/children are experiencing significant adversity then programs need to provide simultaneously for support to parents and high-quality child care;
- where young children are experiencing ‘toxic stress’ due to parenting factors then intensive services are required in order to alleviate the potential disruption to brain architecture;
- link up with families and support them across as many settings as possible;
- provide professional development and support for staff who work directly with these families;
- evaluate the extent to which continuous support on an individual family needs/strengths basis is preferable to community targeted/oriented strategies; and
- consider return on investment rather than ‘up-front’ costs. (Centre on the Developing Child at Harvard University, 2007; Knitzer & Lefkowitz, 2006).

3.5 Research gaps

This literature review has highlighted the diversity within vulnerable populations and therefore, the need for programs to address this diversity through localised and even individual approaches. Longitudinal studies of program implementation and individual family circumstances point to the value of longer term monitoring of intervention outcomes and the processes involved in achieving these outcomes. The nature and extent of that monitoring requires a commitment and involvement of professional practitioners who in turn, need opportunities for professional support to enable them to actively engage in reflective practices and program monitoring. Therefore, in addition to requiring further Australian research that reflects the unique nature of Australian social contexts the following areas for further investigation through addressing the following questions:
• What are the perspectives of participants in early intervention programs including parents, children and staff with respect to program processes and outcomes?

• What are the support needs of staff in community based integrated services where challenging families, who have high support needs, are accessing these services?

• What is the nature of relationships between service staff and families perceived to be vulnerable with respect to the establishment of trust, capacity to bring about changed parenting behaviour and information seeking/resourcing?

• What are the unique support needs of ‘at risk’ infants who are entering formal early childhood services?

• What strengths-based family oriented approaches best engage those families who are ‘marginalised or ‘hard-to-reach’ particularly refugee families, families in isolated communities and indigenous families?

Exemplar

SDN Children’s Services’ Child and Family Resource Centre (Australia)

Focus

A non-targeted, non-stigmatising ‘soft-entry point’ for families of children aged birth to 8 years. The Child and Family Resource Centre (CFRC) facility enables parents to access professional advice through a toy library, play spaces where parents and children can spend time together and advice/support provided by appropriately qualified trans-disciplinary staff lead by a key worker who is an early childhood educator.

Aims

To promote children’s growth and development; enhance positive relationships between children and their parents; support families in developing their parenting skills; and overall, to provide open access to an integrated strengths-based approach to service delivery. The CFRC enables seamless entry into a range of service agencies relevant to family identified needs.

Program context

The CFRC, located at Granville (a Sydney suburb), has developed from a toy library location to offering a suite of services including stay and play sessions, family support groups and individual family support. The toy resources are carefully chosen by the CFRC staff for their potential to support children’s learning; be inclusive of diverse ethnicities and cultural groups; and provide appropriate activities for children with disabilities. Further, stay and play sessions not only provide opportunities for qualified staff to model appropriate play behaviours for parents but provide a context for parents to raise issues of concern to them. A Family Resource Worker is available (at no extra cost), to support families in addressing a range of issues such as access to relevant early intervention services and appropriate housing.
**Key initiatives**

Centre funding ‘adds value’ to the existing toy library through the employment of a qualified early childhood educator thus enabling families to have access to consistent, high-quality child development and early learning information as well as information and support to access local early education and early intervention services. Initiatives introduced at the CFRC are outcomes focused as well as being soundly grounded in theory, core values with respect to the importance of play and evidence of ‘what works’. The CFRC itself, benefits from the educator’s childhood expertise in the selection, purchase and advice on the appropriateness of learning resources and creating positive learning environments for both children and parents.

**Evidence of outcomes**

SDN’s ‘embedded researcher’ undertook an evaluation in 2007. Using a program logic approach, the researcher gathered evidence from a number of sources relating to the achievement of outcomes stated as: the success of the CFRC's employment of an integrated, trans-disciplinary model of service delivery is demonstrated through its achievement of outcomes. These include: access and utilisation of the CFRC by traditionally hard-to-reach families; transition of families across the programs and into local services; and child and family outcomes (including positive changes in children’s development; improvement in families' parenting skills; and an increase in families' social networking. Examination of records including staff reflective journals, staff and parent surveys, and researcher field observations showed that the CFRC was successful in three key dimensions—attracting traditionally hard-to-reach families; supporting families’ transitioning across programs; and positive changes in children’s behaviour and parenting efficacy.

**Addressing a gap in program implementation**

The program addresses multiple gaps relating to early entry; reaching hard-to-reach families; a family oriented strengths-based approach; opportunities to model and support parents’ parenting skills; and, the existence of professional mentoring support for staff. This is one of only a few programs that has systematically evaluated its effectiveness through the involvement of staff in planning the evaluation; making transparent the evaluation processes through a program logic model; and, gathering the perspectives of program staff and users. Further, the evaluation is publicly available for external scrutiny through accessing the organisation’s website:  [http://www.sdn.org.au](http://www.sdn.org.au).
References


Page 77
Canberra Retrieved from  


Verity, F. (2007). Community capacity building - a review of the literature: School of social administration and social work, Flinders University of South Australia.


4. **Knowing the Dynamics of Early Childhood Education and Child Care Markets and Key Stakeholders**

Questions addressed in this priority area

1. What are the interactions between market processes, regulation and funding arrangements?
2. How does the Australian early childhood education and care system compare internationally?
3. What are the different perceptions/expectations of parents concerning child care versus child education?

Search approach

The overarching criteria used to determine inclusion include:

- Relevance to topic: each sub-question required different search criteria. The first question focused on issues relevant to supply and utilisation, especially in relation to the impact of funding and regulatory arrangements. The second question looked to literature concerning comparative policy in ECEC. The third question focused on parent preference and choice in relation to the care of their children.
- Recency: searches included publications from January 2006.
- Robustness of evidence: breadth, for example national studies; the range of datasets used to model funding impacts; the depth of case study data; and the standing of authors were all considerations in determining robustness.

Search strategies included:

- Consultation with colleagues
- Review of Australian publications known by the researcher
- Review of websites known by the researcher (HILDA, AIFS, ICMEC)
- Database searches:
  - EBSCO Host all with the following selections: Academic Search Complete, Education Research Complete, ERIC and SocINDEX; Informit and Google Scholar.
  - Search terms: overarching terms were “early childhood” or preschool or pre-school or daycare or childcare or “child care” or “day care” or “kindergarten” in ‘all text’
    - For question 1: “markets” and “funding”
    - For question 2: “policy” and “Australia”
    - For question 3: “parent preference”, “parent perception”, “parent choice”

Initially, evidence limiters relating to the NHRMC evidence pyramid were used as additional search terms (for instance, “systematic review”) but these yielded very few relevant results.
The same search was conducted with no evidence limiter in search terms. Titles and abstracts were reviewed, and those that seemed possibly relevant were saved onto a database. These were reviewed more closely, reading abstracts and introductory sections. Articles prior to 2006, or those primarily concerned with health services or social services, were deleted. Additional articles were deleted because they were insufficiently relevant, or methodologically rigorous.

The NHMRC evidence pyramid provided was used as a guide to determine research reliability but was limited in its usefulness because its categories did not readily relate to the type of research undertaken in this area. This is not a reflection on the rigour of the research reviewed, rather it reflects disciplinary differences, and ‘real world’ constraints (for a fuller discussion refer to the introduction). Hence, in determining rigour, the size and nature of datasets was a key consideration as well as methodology. From time to time, case studies have been cited to provide indicative insights into the qualitative issues, particularly as they face families.

**Definitions/limits/scope**

For the purposes of this discussion, the ‘market’ is regarded as comprising all provider types (sources of supply) as well as ‘consumers’ (families). With regard to forms of supply, the terms ‘public’ and ‘private’ are used inconsistently across the literature, this inconsistency reflecting the national context from which the research emanates. To avoid confusion, this literature review uses *public* provision to refer to systemic provision through government provided services, for instance through departments of education; *non-profit* provision to refer to not-for-profit providers including charitable institutions, religious institutions, municipal (local) government, and local associations; *for-profit* providers to refer to commercial businesses. These are broad categories and no one type of provision is homogenous. The non-profit and for-profit sectors both contain a variety of governance structures, including stand-alone single services, and small and large ‘chains’. Even within public provision there exists diversity in governance and operational matters such as hours of opening and the age range catered for.

The national policy context in which the research is located affects research foci and findings. Two dominant policy concerns related to the dynamics of markets have been: the relationship between the provision of ECEC and women’s participation in the paid labour force; and how best to facilitate access to ECEC by low-income and /or families with additional needs. Not surprisingly, therefore, these concerns are reflected in much of the research. Other related research has focused upon issues such as: the impact of funding approaches in generating supply and increasing utilisation whereECECservices have been inaccessible (in short supply or not affordable); the impact on the quality of service provision of different funding approaches; differences in quality according to service provider; and parental perspectives on quality, and parental satisfaction.
A body of literature relevant to the issue of markets in child care more generally, is that concerning the marketisation of human services (for instance, Meagher & King, 2009). This has not been reviewed for this report.

4.1 What are the interactions between market processes, regulation and funding arrangements?

Funding approaches

The reviewed literature establishes that the funding decisions that governments make profoundly shape the composition of the market and the way in which early childhood education and care options are used. In some countries, early childhood education is only provided by public institutions; in others, funding is directed to public and non-profit providers; and other countries rely on the for-profit sector to respond to demand, partially if not fully. Haas and Hartel (2010) refer to policies promoting either public care through the direct public funding of child care, home care through parental leave and workplace protections for parents taking leave; or private external care through direct financial support to families. Their cross-national study of child care and leave policies in Austria, the Netherlands and Sweden, illustrates that these policy possibilities are sometimes ‘bundled’ and can vary across the child’s life course.

The way in which the purpose of ECEC is conceived affects how it is funded. For instance, if its purpose is primarily regarded as a means of enabling women to work, or as part of welfare to work strategies, then funding is likely to be targeted to labour force participation. If it is regarded as a poverty alleviation measure, funding is likely to be directed to particular communities or families. If, however, it is perceived as an educational entitlement, then funding is more likely to be systemic and linked to particular age groups (for example, 3- to 5-year-olds). In a number of countries there is a pattern of publicly provided pre-school in the one or two years before school with a range of non-government and for-profit child care provision for infants and younger children and children requiring longer hours of care and education. White’s (2009) investigation of the historical development of child care policies in France and the US illustrates the impact of context, norms and the framing of policy problems in the development of policy responses.

Purcal and Fisher (2006) reviewed funding approaches across 14 countries in relation to affordability for low income families and identified three basic types of affordability funding: operational funding; fee subsidies; and tax relief. Operational funds go directly to services and are geared to either targeted or universal access. Fee subsidies are aimed at making services more affordable and are either comprehensive (that is, all eligible families receive the subsidy) or allocated within a set budget. Fee subsidy systems limit parents’ payments by providing a government funded contribution against a nominal or actual fee ceiling. A nominal ceiling is used only for the purpose of calculating the subsidy, an actual ceiling establishes a fee maximum that services cannot exceed. Almost all fee subsidies are paid
directly to the service. *Tax relief* is also designed to improve affordability and includes deductions, exemptions, benefits, rebates and credits. Tax relief goes directly to families and can be universally applied or means-tested. Although the funding designs and mix of each country varied considerably most tried ‘to direct some subsidies to low-income or otherwise socially disadvantaged families’ (p.52). (See Rigby, Tarrant & Neuman, 2007, for a conceptual discussion of the socio-political effects of child care policy designs).

Funding can be directed to demand or supply. Demand side funding regimes are usually geared to stimulating investment from the for-profit sector and are based on the assumption that funding consumers directly enables consumer (parent) choice and thus positively affects both supply and quality. There is considerable variation in the extent to which services are funded through direct funding and reliance upon a commercially driven market.

**Findings related to supply**

Research relating to supply tends to be generated in cases where there are difficulties with supply. Hence it addresses questions such as the effectiveness of particular measures to stimulate supply, or how to improve the financial accessibility of services to a greater number of families. It appears that where universal provision is already achieved (usually through direct funding) there is much less research in the area.

In examining supply, Haas and Hartel (2010) make a useful conceptual distinction between express demand and potential demand for early childhood services. *Express demand* is “the demand for care by families under existing conditions” and *potential demand* is the demand for care that could exist “under different scenarios of availability or using varying criteria for need” (pp.76-77). This distinction is useful in considering the adequacy of supply in relation to existing and potential policy objectives.

It is clear that funding increases access to services, either by directly increasing supply, or by improving affordability. In their modeling of funding approaches, Purcal and Fisher (2006) assert that: governments incur the most cost through full operational subsidies or unscaled tax relief; universal access is most likely to be achieved through operational subsidies; and fee subsidies and tax relief may impose cost burdens on families. Cleveland and Krashinsky (2009) assert that operational funds to the non-profit sector are one of the most efficient ways to improve quality.

In Spain, reforms to early childhood education were introduced in 1990, establishing non-compulsory full time pre-school for children from aged three through the education system (both state and religious schools), with the result that by 2002, schooling rates for children from 3 to 5 years were almost 100%, with children usually attending on a full time basis. It must be noted however, this achievement was built on an already high utilisation of pre-school education by 4-year-olds (León, 2007). Ficano (2006) draws on a range of country level datasets including child care subsidies, the rate of employment of child care workers, female employment rates, regulatory requirements and child care start-up costs, to model the impact of welfare related increases to child care subsidies from 1990-2000. Her study shows
that, in general, child care expansion is stimulated by increased maternal employment and increased child care subsidies, with policy interventions in rural and low-income communities having more pronounced impacts than in more urbanised and more affluent communities. Greenberg’s (2010) study of the effect of public subsidies on enrolment in early childhood education in the US suggests that subsidies increase the likelihood of children from low-income families attending formal early childhood programs. West’s (2006) review of the impact of UK policy initiatives from 1997 to 2003 on the availability of early childhood programs reinforces the nexus between funding and usage. She found that funding increases had improved the overall participation in pre-school programs by 3- and 4-year-olds. However, this increase was less for younger children (3-year-olds), and for children from lower income households, and from ethnic minorities. In addition, increased participation rates were not necessarily in service types that were regarded as generally providing higher quality ECEC (namely nursery schools and nursery classes). It must be noted that West’s review preceded the Sure Start initiatives.

Much of the reviewed research highlights the fact that ECEC markets are local markets affected by local conditions. Fischer, Nelson, Mikelbank, and Coulton (2008) examined the availability of child care in light of demographic trends and geographic dispersion in a large US urban county and found variation concerning the adequacy of supply at the neighbourhood level. They argue that aggregate data does not accurately reflect families’ lived experience in the search for ECEC. Ficano’s (2006) US study reinforces the regional differences that can be discerned regarding the adequacy of, and the differential impact of policy variables with less urbanised and rural counties and those with incomes below the sample median responding more dramatically. Cleveland and Krashinsky’s (2009) examination of ‘thick’ and ‘thin’ markets in Canadian ECEC (discussed further on) also emphasises the localised nature of child care markets.

Demand side funding is successful in stimulating investment in early childhood education, but only in some sections of the market. Noailly and Visser (2009) studied the impact on child care provision in the Netherlands of moving from a mix of supply side and demand side funding to demand side only. Their examination of data on the geographical location of child care facilities revealed that demand side funding favoured for-profit providers; that provision increased in communities that were more urbanised and more affluent (and thus more attractive to for-profit providers); and that reliance on demand side funding only, caused supply to drop in less affluent, more rural communities as not for profit providers found it difficult to meet the costs of provision in the absence of direct subsidies. Penn’s (2007) analysis of trends in the UK shows that supply increased with demand side funding but also created instability in supply as services with relatively low utilisation rates began to experience difficulties with financial viability.

A number of researchers trace the way in which demand side subsidies have given rise to corporate child care provision (particularly in relation to the Australian born corporation, ABC Learning) and provide empirical and conceptual discussions of the impact of corporate provision on local and international markets (Brennan, 2007; Harris, 2008; Penn, 2007; Woodrow & Press, 2008; Sumsion, 2006).
Regulation, supply and quality

Demand-side subsidies are hypothesised to improve the quality of ECEC by enabling consumers (i.e., parents) to exert an upward influence on quality through their desire for it. A number of studies point to the difficulties in sustaining this rationale.

Mocan’s (2007) comprehensive review of parent and expert ratings of quality indicates that parents significantly overestimate quality when compared to expert ratings of quality. Mocan (2007) argues that this is evidence of adverse selection because centres do not have an incentive to produce high quality care in the absence of the demand for it. Cleveland and Krashinsky (2009) examined data from 325 early childhood classrooms across Canada to examine differences in quality according to for-profit and non-profit status and in thick and thin markets. They concluded that for-profit centres were disproportionately represented in lower quality classrooms and non-profit centres disproportionately represented in good quality classrooms. However, they argue that since child care markets are local markets, it is important to differentiate between ‘thick’ and ‘thin’ markets. Thick markets produce a nonprofit advantage by enabling the support of quality differentiation. In thick markets, non-profit services tend to hire more highly trained staff, support professional development, employed qualified directors and so forth. In thin markets, the push for higher quality is not supported because there are insufficient resources to raise quality and no competitive incentive to do so. Nevertheless, they conclude that “improvements to quality can be achieved most reliably through non-profit organizations” (p.459). Lloyd and Penn’s (2010) comparative review of the funding of child care in the Netherlands and the UK cites research by de Kruijf et al. (2009), which indicates that the quality of child care in the Netherlands is deteriorating under its switch to demand side funding. Secondary analysis of the NICHD data by Sosinsky, Lord and Zigler (2007) reveal that, in general, non-profit centres provided higher quality care. However, quality was also affected by religious affiliation (perhaps because the religiously based centres in the study were exempt from regulation) and whether services were ‘stand-alone’ or part of larger chains. In general, for-profit chains were lower in quality, but the sample size for these types of centres was small. However, broad trends mask quality variability within types of provider with a number of studies alluding to unevenness in the quality of service provision (Sosinsky et al., 2007; Cleveland & Krashinsky 2009). In the UK, Vincent, Braun and Ball (2010) noted that many of the working class families they investigated in relation to child care choices, were unable to change child care provider, despite being unhappy with the care their children received.

In relation to the interplay of regulation with markets, Ficano (2006) postulates that, all things being equal, the effect of regulation is ambiguous because it can affect supply in two contradictory ways. Firstly, it may raise the cost of provision and thus decrease supply, and/or it may increase demand by enhancing quality and therefore “the utility obtained from its purchase”. In her study, regulation did not appear to predict expansion or reduction of services except in the case of teacher education requirements which had a positive impact. She suggests this may be because the presence of a teacher has a larger effect on parental demand than increased centre cost.
4.2 How does the Australian early childhood education and care system compare internationally?

The answer to the question of how Australia compares internationally, is of course, dependent upon the measures that are nominated for comparison. Areas commonly used to compare performance in relation to ECEC are measurable aspects such as expenditure and participation. In recent years attention has been paid to the way in which comparisons of qualitative aspects, such as values or constructions of children underpinning policy development and implementation, are also useful in order to understand national responses to ECEC.

Information regarding Australia’s performance is drawn from the 2006 *OECD Thematic Review of ECEC* (OECD, 2006); the *Innocenti Report Card 8* (UNICEF, 2009); a comparative literature review produced for the Social Policy Research Centre workshop: *Building an International Collaboration in ECEC* (Press, 2008). However, there are significant limitations to this discussion. Since these reports were produced Australia has embarked upon a series of significant reforms, the impacts of which are yet to be measured. In addition, at the time these reports were produced, difficulties in obtaining accurate and consistent data from each jurisdiction concerned with the delivery of ECEC have made robust comparisons difficult.

For the purposes of this discussion, Australia’s comparison internationally will focus on issues closely related to the ECEC supply and demand: expenditure; accessibility and utilisation; and responsiveness. Since the funding and regulation of ECEC is shaped by overall policy purposes sought from ECEC it is important to briefly touch upon where Australia sits in relation to the values that underpin its policies. Brennan (2007) cites Daly’s observation that in many countries in Europe policy for ECEC services is increasingly being framed as a part of ‘children’s social policy’ and is being regarded as a child’s right rather than primarily a conduit for adult related concerns (i.e., labour force participation), or related primarily to welfare policy. In Australia, the reform of ECEC sits within the Federal Government’s productivity agenda (Press, 2008).

It is worth noting that the general direction of Australian reform is by and large in keeping with many of the policy recommendations that have arisen out of international studies of ECEC policy. For instance, the United Nations (UN) *General Comment* urges “coordinated, multisectoral strategies in order to ensure that children’s best interests are always the starting point for service planning and provision” (2005, p.11). To achieve coordination, the OECD (2006) suggests the establishment of a “lead ministry that works in cooperation with other departments and sectors” (p.47). The bringing together of care and education under the one federal department (DEEWR) is in keeping with the spirit of these directions. On the other hand, the split between the portfolios of child care and pre-school is counter to trends in a number of other countries (for example, Sweden and New Zealand). In a similar vein, the cooperative work of COAG in taking a joint approach to early childhood reform is in keeping with the UN *General Comment* call for “coordinated, multisectoral strategies in order to
ensure that children's best interests are always the starting point for service planning and provision” (2005 p.11).

In relation to expenditure and participation, published comparisons rate Australia very poorly. In the 2006 *OECD Comparative Report: Starting Strong II*, Australia rated second last in investment for ECEC for children birth to six out of a comparison of 14 OECD countries. When expenditure for 3- to 6-year-olds only was compared, Australia dropped to last place (OECD, 2006). The *Innocenti Report Card Number 8* rated Australia as well below the OECD average, only spending 0.4% of GDP on ECEC. In relation to supply and accessibility, the *Report Card Number 8* reported that Australia failed to reach the 80% benchmark for pre-school participation for children aged four. Tayler (2007) notes that the enrolment of 4- to 5-year-olds in teacher-led ECEC (excluding pre-Year 1 of school) is just 68%.

The question remains whether these comparisons are still applicable. The time lag between the release of these reports and the impact of current reforms needs to be taken into account as does the paucity of reliable and comparable data across different jurisdictions.

### 4.3 What are the different perceptions/expectations of parents concerning child care versus child education?

None of the literature uncovered directly answers this question. The reviewed research addresses questions such as the impact of funding on parents’ child care choices, or how parents decide upon the child care they use, including the characteristics that they value. Much of the research in this area involves case studies. Findings suggested by the research include the following:

*Child care preferences may be affected by class and culture.* Vincent, Braun and Ball (2008, 2010) examine class differences in child care selection between middle class and working class families in two areas of inner London. They found that working class families were by and large more likely to use publicly-funded facilities, and more likely to trust formal, public child care settings for their children. Middle class families, on the other hand, were more likely to choose and trust private child minders for infants and actively select nursery education for their pre-school age children. Middle class mothers tended to emphasise the need for small intimate spaces for babies, while working class mothers’ thought that the group care environment was good for the babies’ development. In the US, Ficano (2006) found that Hispanic families were more likely to choose informal care by relatives and friends and that in Hispanic communities, the expansion of formal child care places was likely to be dampened by the availability of formal care options.

*Choices are affected by availability and cost.* Vincent et al. (2010) noted that cost restricted choice for many of the working class families in their study. Even though a number of the families they spoke to were unhappy with their child care provider, they did not have the option to change providers. West (2006) reports on research indicating that the choices of
working class families were restricted by availability and cost. Cost was not found to be the most important factor in selecting providers but had an impact on the type of early childhood programs parents elected to use and had an impact upon patterns of attendance, tending to limit the total hours used. Those on the lowest income were more likely to report restricted choice and hours of usage. In a case study of child care choice and satisfaction involving twenty women in the Townsville area, Harris (2008) found that many of the women had difficulties in locating and obtaining the child care centre they wanted for their children and were dissatisfied with the predominance of corporate care provision.

Research related to parents’ choices can also be found in chapter 2, section 2.2.

4.4 Summary

The research indicates that funding shapes usage. Supply-side funding results in an increase in service provision, but there are, in broad brush terms, differences in quality between for-profit and non-profit services with non-profit services being, in general, better quality than for-profit services. The research also indicates a relationship between governance structures and quality with non-religious, non-profit services and services that are not part of chains, generally being of better quality. However, quality is uneven within types of provision as well as across types of provision. In addition, ECEC markets need to be understood as local markets. Responses to policy interventions can vary according to community characteristics such as geographic location and SES.

Nations’ approaches to ECEC vary considerably, which means that it is difficult to extrapolate with certainty the lessons from research outside the Australian context. The Australian policy landscape has a number of unique features which distinguish it from the countries in which the research cited here has been undertaken. Though it has in common with the UK, US and Canada, a mix of public, non-government and for-profit provision, it has long had income-related fee support for families using formal child care and regulatory and standard setting frameworks for most non-government early childhood services, and a commitment to ECEC that has involved all levels of government. It also contends with a large geographic spread of population. Hence, the trends that are indicated by the research cited here may or may not be played out in the Australian context. Nevertheless, findings do provide an indication of areas that could be usefully researched to inform policy formation and evaluation.

4.5 Research Gaps

Central to the ECEC reform agenda is the goal of providing children and their families with access to good quality programs. Thus the issue of supply needs to be examined in conjunction with quality. Australia’s ECEC sector relies on a mixed economy and encompasses a range of management structures. To ensure that the twin goals of adequate supply and good quality are being met, it would be useful to gather and make available
national data that differentiates types of ECEC provision in conjunction with data that measures quality. Once broad trends are identified, it is possible to drill down to examine more closely the factors that support higher quality supply across such factors as geographic location, SES, governance type and so forth.

In addition, it is important to consider the local nature of the ECEC market and the impact of policy interventions. Ficano’s (2006) research highlights that policy interventions in more rural, less urbanised communities and low income communities have a greater impact than in more urbanised and higher income areas. Hence, it is advisable to monitor the local impact of the introduction of new initiatives such as the ‘roll-out’ of pre-school places for all 4-year-olds. Key questions could include whether such initiatives have an impact on total enrolments or simply change patterns of usage (that is children transfer from one service to another). If patterns of usage change, what is the impact on the total provision of ECEC places in a locality?

Hence, the following gaps are identified:

- What is the relationship (if any) between type of provider, governance structures and quality?
- What is the relationship (if any) between type of provider, governance structure and access—i.e., who is using what type of service?
- What is the impact of existing funding regimes and new initiatives on local markets, particularly in regional, rural and low income communities?

References


OECD. (2006). Starting Strong II: Early Childhood Education and Care, OECD,


5. IDENTIFYING BEST PRACTICE TO BUILD AND SUPPORT DELIVERY OF EARLY CHILDHOOD SERVICES ACROSS AUSTRALIA

Questions addressed:

1. What is meant by best practice? How is best practice defined in Australia and Internationally? What do practitioners mean or understand by best practice?
2. How can best practices be applied to different contexts/settings?
3. How is best practice assessed in Australia and internationally?
4. How do different countries, with sound early childhood systems, differ from Australia?

In order to avoid repetition, rather than address the final question in a standalone manner, illustrations of research from international examples are incorporated throughout and differences with Australia highlighted.

Search approach

Data bases searched included (those marked * yielded the greatest number of relevant articles):

- EbscoHost*
- Informaworld*
- A+Education/Informit*
- PsychINFO/OVID
- Wiley Science
- Springer Link
- Humanities & Social Science
- Ingenta
- Sage

Search terms included:

- “early childhood” or preschool or pre-school or daycare or childcare or “child care” or “day care”
- “best practice”
- “research based”
- “evidence based”
- “recommended practices”
- “indicators of quality”
- “quality early childhood”
Limiters included:

- English language
- 2005-2010

The search yielded 488 articles in total from nine databases. The titles of these articles were skim read, and 95 relevant articles were saved to EndNote. In addition, a number of websites were examined and several ‘grey’ literatures were added to EndNote; as were a number of papers forwarded by colleagues. More careful reading of the abstracts and introductory sections of these documents resulted in the deletion of several articles/documents. The remaining 71 were read more thoroughly and drawn on to address the research questions—49 references are cited.

There is a large body of work on best practice in early childhood special education. This literature is not included here.

5.1.1 What is meant by best practice? How is best practice defined in EC?

The term ‘best practice’ is used broadly and frequently in a range of professional fields, but most especially health and medicine; business and industry; and (to a lesser extent) education. The term, however, lacks conceptual clarity: It is used ambigously, has multiple meanings and is often used interchangeably with other terms such as ‘evidence-based practice’; ‘research based practice’; and ‘recommended practice’. The term which seems to be most favoured in ECEC as synonymous with ‘best practice’ is ‘high quality’. From here on, for ease of reading, ‘best practice’ will be mainly used.

In ECEC, the concept of best practice is hugely contested (Myers, 2006; Ray & Smith, 2010), particularly because the outcomes at which practice is aimed can differ markedly depending on, for example, diverse cultural understandings about children (e.g., as active citizens or vulnerable) and childhood (e.g., as a ‘special time’ or ‘preparation’ for the future), and concepts such as play (e.g., free or structured); or on the differing perspectives of stakeholders (e.g., children, parents, professionals, providers, researchers and policy makers) (Layzer & Goodson, 2006; Myers, 2006). To illustrate this diversity, Table 5.1 provides some examples of different desired outcomes evident in the literature; these are neither mutually exclusive nor exhaustive.
Table 5.1: Diverse desired outcomes evident in ECEC

<table>
<thead>
<tr>
<th>Focus</th>
<th>Examples of potential best practice outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child</td>
<td>Positive developmental outcomes</td>
</tr>
<tr>
<td></td>
<td>Enjoyment</td>
</tr>
<tr>
<td></td>
<td>Positive well-being</td>
</tr>
<tr>
<td>Family</td>
<td>Affordable</td>
</tr>
<tr>
<td></td>
<td>Accessible</td>
</tr>
<tr>
<td></td>
<td>Available</td>
</tr>
<tr>
<td></td>
<td>Positive parenting</td>
</tr>
<tr>
<td>Society/policy makers</td>
<td>Dominant values upheld (e.g., democratic principles)</td>
</tr>
<tr>
<td></td>
<td>Economic (e.g., positive cost benefit ratio)</td>
</tr>
<tr>
<td></td>
<td>Workforce (e.g., skilled workforce/increased participation)</td>
</tr>
<tr>
<td></td>
<td>Poverty reduction</td>
</tr>
<tr>
<td></td>
<td>Social Inclusion</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td>Service provider</td>
<td>Mission accomplishment (e.g., philanthropic organisations)</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
</tr>
<tr>
<td>Staff</td>
<td>Income</td>
</tr>
<tr>
<td></td>
<td>Professional fulfillment</td>
</tr>
<tr>
<td></td>
<td>Safe and enjoyable working conditions</td>
</tr>
</tbody>
</table>

**Developmental outcomes**

Despite the existence of multiple desired outcomes for ECEC, much of the literature—both internationally and in Australia—defines best practice narrowly in terms of those factors that lead to positive developmental outcomes for children, evidenced primarily through empirical evaluations (Elliott, 2006; Myers, 2006; Pianta, Barnett, Burchinal, & Thornburg, 2009). This research informs ECEC in two ways. First, findings from science, most particularly developmental psychology, health, and neuroscience, are drawn on and directly applied to the ECEC context (see for example: Ray & Smith, 2010). A problem with adopting research from science into ECEC, however, is that findings are not always ‘tested’ in the ECEC environment. So whether or not the findings are transferable from the laboratory/experimental setting to diverse classroom settings is not always known. Caution and careful evaluation of their appropriateness is needed, therefore, when findings from such research are advocated as best practice in EC.

Second, research examining the effects of attendance in ECEC services on children’s development are used to advocate for (or against) universal provision of ECEC, inform and improve practice, and determine how it should be assessed (Elliott, 2006; Pianta et al., 2009; Ray & Smith, 2010). Much of the early research in this area aimed to determine whether ECEC was ‘good’ or ‘bad’ for children (Elliott, 2006). It was often simplistic and failed to
control for the great diversity children experienced in ECEC, dosage effect, or long term outcomes (Belsky et al., 2007). Only recently has work examining the effects of ECEC begun to take into account variables such as quality (usually defined through child-staff ratios; groups size; teacher qualifications; and responsiveness of the environment), quantity (hours spent in child care), and type of care children experience (e.g., pre-school, centre-based day care, or family day care), or to examine its long term effects (Belsky et al., 2007). Collectively, however, this work, including large scale evaluations (most notable those conducted on the Head Start, Abecedarian and High/Scope Perry Pre-school programs in the US and the NICHD study also in the US, and the Effective Provision of Pre-School Education [EPPE] in Europe), provides compelling evidence that attendance at high quality ECEC services can have positive effects on children’s academic, language, cognitive and social skills, particularly for children living in poverty. Findings from this research are summarised in Table 5.2.

Table 5.2: Characteristics of best practice in ECEC services

<table>
<thead>
<tr>
<th>Model</th>
<th>Integrated/Comprehensive/Holistic/Cross-disciplinary Not-for profit/Independent private</th>
<th>Moore, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Government subsidised</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family/ community</td>
<td>Family-centred and empowering</td>
<td>Moore, 2010</td>
</tr>
<tr>
<td></td>
<td>Supportive of families</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Culturally appropriate</td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td>Small group-size</td>
<td>Gerber, Whitebook, &amp; Weinstein, 2007</td>
</tr>
<tr>
<td></td>
<td>Low child-staff ratios</td>
<td>Goelman et al., 2006</td>
</tr>
<tr>
<td></td>
<td>Safe and healthy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organisational health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Qualified staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Staff satisfaction and wages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parental fees</td>
<td></td>
</tr>
<tr>
<td>Pedagogy</td>
<td>Clearly articulated, developmentally appropriate, play based (child directed and initiated as well as teacher directed) curriculum, grounded in active learning. Including:</td>
<td>Ray &amp; Smith, 2010</td>
</tr>
<tr>
<td></td>
<td>• Opportunities for: repeated and extended practice of challenging tasks; organisational tasks; persistence; and goal-directed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Language and literacy rich environment: reading materials; frequent storytelling; active storybook sharing; rhyming games; meta-</td>
<td>Iaquinta, 2006; McCartney et al., 2007</td>
</tr>
</tbody>
</table>
linguistic games; writing materials; drawing and mark making.

- Opportunities for: counting, sorting, and problem solving.

Responsive, warm, supportive and sensitive caregiving that scaffolds children’s learning. Including:

- Opportunities for children to: voice their identity; express their feelings and individuality; take risks and experiment; and exert agency over their environment

**Transitions managed**

<table>
<thead>
<tr>
<th>Ray &amp; Smith, 2010)</th>
<th>Gerber et al., 2007; Howes et al., 2008; Locasale-crouch et al., 2007; Ray &amp; Smith, 2010</th>
<th>Ray &amp; Smith, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dockett, Perry, &amp; Kearney, 2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This empirical work provides robust evidence (Britto, Cerezo, & Ogbunugafor, 2008) of ECEC practices that enhance children’s development which can be drawn on by practitioners and policy makers alike, and readily lends itself to the development of regulations, accountability requirements and comparative assessments.

One criticism of much of this work, however, is that in attempting to find universally applicable best practices, it often relies on rather simplistic linear input-to-outcome models, that fail to consider the impact of context, including processes, and overlooks individual idiosyncrasy. Consequently, little has been learnt about the day to day practices/processes in ECEC that contribute to children’s growth and development (Jensen, 2009; Penn & Lloyd, 2007). More nuanced research that drills down to the ‘specific mechanisms’ (Belsky et al., 2007, p. 697) in child care that are related to positive or negative outcomes is needed to inform practice. Some factors that are often referred to in the literature as best practices, but for which there is little empirical evidence, or evidence is equivocal, include:

- collaborative and integrated practices;
- strong parental engagement;
- community involvement;
- leadership;
- teacher preparation and professional development;
- welcoming, inviting, naturalistic environments; and
- play-based curriculum.

Further, despite this wealth of evidence of the positive effects of ECEC on children’s development, gaps remain in the knowledge base, particularly in relation to Australian research which Ishimine, Taylor, and Thorpe (2009) argue “has led to an over-dependence on international studies to inform policy and practice” (p. 728). For instance, little research has been conducted in Australia on the effects of ECEC on child outcomes (Elliott, 2006; Ishimine et al., 2009); on services catering for children under three years of age (OECD, 2006; Pianta et al., 2009); for Indigenous children (Dockett et al., 2010); children from culturally and linguistically diverse (CALD) and refugee backgrounds; or in non-centre-based care such as family day care (Pianta et al., 2009; Raikes, Raikes, & Wilcox, 2005). A number of projects funded by the Australian Research Council are currently underway that may
address some of these omissions. Projects include investigations of the effectiveness of teacher education (Mayer et al., 2011-13); the effectiveness of early childhood programs (Tayler et al., 2009-14); infants’ experiences of family day care and long day care settings (Sumsion et al., 2008-11); and play-based learning (Edwards & Cutter-Mackenzie, 2010-13).

Social benefit outcomes

A second major way that best practice in ECEC is defined in the literature is in terms of those factors that lead to the accrual of ‘social benefits’, particularly economic benefits (see for example: Heckman & Masterov, 2007; Heckman & Tremblay, 2006). Abbott and Langston (2005), for example, say that in the UK, increased interest in the well-being of young children shown by New Labour was largely based on economic imperatives. Much of the literature supporting an economic perspective, however, draws on evaluations of a relatively small number of early intervention programs in the US, provided mainly for low-SES, African American children, namely: Head Start; High/Scope Perry Pre-school; Abecedarian; and Chicago Parent/child centres (Pianta et al., 2009). These evaluations are often cited as providing evidence of the cost-benefits of investing in ECEC (Pianta et al., 2009).

Penn and Lloyd (2007), however, make some important critiques of these evaluations. In their systematic review of the literature, they found that, whilst all three programs showed cost-benefits, how these benefits were calculated varied between sites thus making comparisons across programs impossible. Further, as Penn and Lloyd point out, these programs are site and population specific; they do not elucidate what specific practices produced changes in children’s outcomes; and in any case, because of the longitudinal nature of the evaluations, many of these practices would today be considered outmoded: thus making it difficult to draw on these findings, and those from similar longitudinal evaluations, to inform best practice. Moreover, the applicability of these findings to the Australian context is unknown. As Hayes notes, “Australia lacks a framework for economic evaluation of the comparative costs and benefits of early education...In the absence of Australian economic data, we have had to rely on small-scale international examples that cannot adequately reflect our social, economic and policy contexts” (in Forward to Elliott, 2006, p. v). If best practice in ECEC in Australia is to be defined in terms of those practices which lead to the accrual of social benefits, then local research is required.

An alternative way to think of social benefits may be to look at social indicators or quality of life measures (Land, Lamb, Meadows, & Taylor, 2009; Sirgy et al., 2006; Williams, Shanks, Kim, Loke, & Destin, 2010). But there seems to be little work that has made links between ECEC provision and a society’s collective well-being over time.

Ethical and/or moral/philosophical perspectives

Finally, best practice in ECEC is also defined in terms of those practices which most readily reflect particular ethical and/or philosophical positions. Uppermost in ethical arguments is the issue of equity of access to ECEC services (Myers, 2006). The definition of best practice in terms of access stems from a child’s rights perspective and is most notably reflected in the
United Nations Convention of the Rights of the Child, which commits signatories to ensuring children’s basic right to health, education and participation and protection from abuse and neglect. However, those who advocate educational quality from a child’s rights perspective also recognise that equity of access on its own is insufficient and it must also take into account the quality of services (Myers, 2006). Thus, best practice in this sense is equitable access to ECEC services of equivalent quality.

Best practice can also be defined in terms of philosophical perspectives about “what gets taught”. A focus on best practice in terms of philosophical perspectives is highly evident in Nordic countries (Finland, Sweden, Norway, and Denmark) where there is “social pedagogical tradition” (OECD, 2006, p.138). Jensen (2009) states, for example, that Nordic countries tend to have in common, to a greater or lesser extent, an holistic approach to child learning that focuses on the child’s rights; and development of democratic principles and values (e.g., responsibility, egalitarianism, freedom of mind and tolerance) rather than a focus on individual child development outcomes. The Australian national ECEC reform agenda seems to have a balanced position between a focus on child development and well-being, preparation for school, and citizenry. There is some evidence, however, that current understandings about best practice in ECEC in Australia are incongruent with Australian Indigenous peoples’ perspectives (Hutchins, Frances, & Saggers, 2009).

5.1.2 What do practitioners mean or understand by ‘best practice’?

Only relatively recently has there been a focus in the research on what practitioners mean or understand by best practice. Research in the US and Australia (mostly small scale studies) suggests that there is high congruity between ECEC practitioners’ beliefs about best practice and those factors identified through research (Fenech & Sumsion, 2007; Rohacek, Adams, Kisker, & Urban, 2010; Weaven & Grace, 2010). Review of the scholarly and ‘grey’ literature also reveals that many practitioners, either alone or in tandem with researchers, are engaged in professional and systematic investigation on their practice (see for example: What Works Clearinghouse in the US and the Australian Stronger Families and Communities Promising Practices Profiles). This work includes knowledge derived from both empirical research and from professional reflection—typically referred to as ‘wise practice’ (Goodfellow, 2006) or ‘professional wisdom’ (Buysse, Wesley, Snyder, & Winton, 2006). Best practice understanding derived at a practice level is often exchanged both formally (e.g., through professional bodies, conferences or literature) and informally (e.g., through professional networks). It can be particularly empowering for practitioners and is potentially conducive to experimentation and thus expansion of the professional knowledge base. But the reliability of this research and the accessibility of findings are variable; little of it makes its way into peer reviewed publications, and therefore it tends to be unrecognised and undervalued, resulting not only in the loss of valuable lessons, but potentially resulting in costly (both in terms of monetary expense and time) duplication. It would be wise to investigate ways to capitalise on this practice-based work, perhaps by: (i) developing systems
that support a strategic and cohesive approach to practitioner investigations; (ii) providing mechanisms for supporting and building practitioners’ capacity to undertake robust research; and (iii) facilitating dissemination of findings.

This section has highlighted that the concept of best practice is widely evident in ECEC but is variously termed and ill-defined. It is unlikely that any one conceptualisation of best practice, whether based on empirical research on child development outcomes, accrual of social-benefits, philosophical perspectives, or practice wisdom alone will be sufficient for ensuring effective, ethical and/or innovative practices in EC. Rather, to be holistic, concepts of best practice need to take each of these perspectives into account. Buysse et al. (2006) propose the following definition of best practice: “a decision-making process that integrates the best available research evidence with family and professional wisdom and values” (p. 3). Similarly, in the Australian context, Ishimine et al. (2009) argue that “Linking a definition of ECEC quality to child outcomes, which are both curriculum based (i.e., literacy and numeracy) and sensitive to cultural differences (i.e., the social beliefs of the family and community), provides a basis for defining the concept” (Ishimine, 2009, p. 719). To some extent, the Australian Early Years Learning Framework (EYLF), which was developed through a consultative process, has gone some way towards defining what best practice means in the Australian context—but how broadly the Framework is accepted is as yet unknown—apart from anecdotal evidence suggesting a positive reception to the document from the early childhood field.

5.2 How can best practices be applied to different contexts/settings?

The application of best practice in various contexts/settings is fraught with difficulties and depends to a large extent on:

- the availability, accessibility, and relevance to practice, of research knowledge (e.g., can practitioners’ readily access the information? how user friendly is it? how applicable is it to different contexts?);
- practitioners’ skills at judiciously applying this knowledge at the practice level (effected, for example, by their professional preparation and ongoing development as well as opportunities for reflection); and
- the degree of compulsion and/or incentives to implement best practices.

The literature is replete with statements attesting that despite the ever increasing evidence-base, the translation of evidence/research into ECEC practice remains problematic. According to Buysse et al. (2006: citing Hood, 2002), for example, the research practice gap problem “can be summed up as one in which practitioners do not turn routinely to research knowledge to solve practice dilemmas, nor do researchers routinely pose questions or produce findings that are relevant and useful to consumers” (p. 4). Surprisingly, however, there seems to be little evidence to substantiate these claims. Whilst research has been conducted to identify barriers to implementing best practices in other fields (e.g., in health
see: Grol & Grimshaw, 2003), there appears to be no recent work of this nature conducted in Australian ECEC. It will be difficult to address the research/practice gap (if indeed one exists) without a sound understanding of the inhibitors and facilitators of conducting practice relevant research, and its translation and implementation in practice.

To support the application of best practice in ECEC, research findings are typically translated into policies and regulations governing ECEC and practice guidelines or frameworks. These mechanisms can vary in several ways, for example in terms of:

- what gets included/excluded (e.g., scientific evidence; practice wisdom);
- how prescriptive they are (e.g., regulations; formalised curricula; practice frameworks);
- how they are developed and introduced (e.g., degree of input from stakeholders; professional development available at their introduction to support uptake); and
- how best practice is governed (e.g., voluntary; mandatory).

In terms of what gets included in regulations, curricula, and frameworks, by and large, these draw on the findings from empirical research; while practice wisdom tends to be marginalised. Nevertheless, there appears to be broad agreement that regulations are an appropriate mechanism for ensuring compliance with structural factors known to affect the quality of services (e.g., ratios/group size) especially in market-driven contexts (Deynoot-Schaub, & Riksen-Walraven, 2005; Fenech & Sumsion, 2007; OECD, 2006; Sosinsky et al., 2007). Indeed, in jurisdictions where regulations are absent or weak, quality in ECEC tends to be low (Deynoot-Schaub & Riksen-Walraven, 2005; Pianta et al., 2009). The threshold for regulations, however, is a contested and contentious issue. Currently in Australia, there are significant variations between state and territory regulations for ECEC. Although the implementation of the National Quality Framework, over time, will address these disparities, there is little Australian research on which to draw to inform what these thresholds should be in different contexts.

Curricula are another mechanism for implementing best practice. They vary in their level of prescription from broad principles to detailed lesson instructions. Formalised curricula are argued to be particularly beneficial for developing certain aspects of children’s development (such as numeracy and literacy: Pianta et al., 2009). According to Pianta et al. (2009), in the US there is a movement to improve quality in ECEC services (which tends to be low compared to other OECD countries: OECD, 2006) through introducing structured curricula. Pianta et al. (2009) state, “extensive attention has been given to the importance of using proven-effective manualised curricula or instructional approaches as a means of improving program impacts on children’s skills” (p. 75). Further, Jensen (2009) argues that in Nordic countries, a move to competency based curricula may more adequately meet the needs of “endangered children” (p. 7), whom he argues do less well than their peers in services with a traditional (in Nordic countries) social pedagogy focus.

There is a body of literature, however, that problematises the impact of prescriptive approaches on ECEC. In particular, it is argued that such approaches fail to draw on the expertise of practitioners, resulting in technicist approaches to practice which are non-
responsive to local contexts, and potentially lead to disempowered, disengaged, and non-reflective practitioners (Bown & Sumson, 2007; Dahlberg, Moss, & Pence, 2007; Fenech & Sumson, 2007). Little research seems to have been conducted that takes into account the complexity of this dynamic process and its possible implications for other aspects of ECEC service delivery (e.g., staff morale, satisfaction, and engagement). In one robust, large scale evaluation of a number of prescriptive curricula implemented in the US (e.g., Bright Beginnings in Tennessee and Curiosity Corner in Florida, Kansas and New Jersey), mixed results were found in terms of a range of child development outcomes (e.g., phonological awareness) and classroom factors (e.g., phonological awareness instruction), highlighting the need to thoroughly evaluate curricula to assess their efficacy (Preschool Curriculum Evaluation Research Consortium, 2008).

Pedagogical frameworks are a further way to support the application of best practice in ECEC. Pedagogical frameworks tend to be less prescriptive than curricula, relying instead on professional engagement and judgement, and potentially facilitating experimentation and innovation, which in turn contributes to the development of the field (OECD, 2006). The OECD (2006) refers to frameworks as key instruments for “democratic consultation and government guidance” (p. 125). Indeed, many authors agree that for best practice to occur it is not enough to just have structural standards or guidelines, but rather what is needed are reflective practitioners with the skills to implement and evaluate strategies that support individual children’s needs in a variety of contexts (Alvestad, Duncan, & Berge, 2009; Howes et al., 2008).

An increasing number of countries have developed pedagogical frameworks over the last decade (e.g., England’s Birth to Three Matters Framework; New Zealand’s Te Whariki; and Australia’s Early Years Learning Framework) (OECD, 2006). They can be focused on child development or on social pedagogy traditions and differ in terms of how prescriptive they are, but they tend to have in common statements about: the values, theories and beliefs on which they are based; importance of relationships with families; intended outcomes or learning goals; and ways learning should be assessed (Langford, 2010; Abbott & Langston, 2005). The relative recency of the development of frameworks, however, means that little research has been conducted to assess their effectiveness (for whom?, in what ways?, and in what context?).

Further, little is known about the processes of developing and implementing regulations, curricula frameworks (Burgess, Robertson, & Patterson, 2010). Whilst such guides to practice, if developed by those ‘external’ to practice (such as policy makers), may be relatively quick and easy to produce, there is some evidence that a ‘top-down’ approach will be met with resistance from professionals (Burgess et al., 2010). Conversely, more collaborative approaches to the development of regulations, curricula, frameworks, that draw on the expertise of a range of stakeholders (including families), are likely to be more readily accepted and implemented (Smith, Hemmeter, & Sandall, 2006; OECD, 2006).

Given the huge role that regulations, curricula and frameworks play in facilitating the implementation of best practices, it would be expedient to conduct both outcomes and
processes evaluations of these mechanisms. The introduction of the National Quality Framework, including the EYLF and National Quality Standard (NQS), in Australia, provides a unique and valuable opportunity for understanding this process.

5.3 How is best practice assessed in Australia and internationally?

There is growing interest, both in Australia and internationally, in assessing best practice in ECEC (Myers, 2006; OECD, 2006). However, because best practice in ECEC is an “elusive concept” (Ishimine et al., 2009, p. 718) which is “nebulous and difficult to assess” (Elliott, 2006, p. 3), assessment of best practice in ECEC is complex. It varies, for example, in terms of: (i) the focus of the assessment (e.g., Government, service, family, child); (ii) what is assessed (i.e., the indices measured); (iii) the mechanisms used to assess (e.g., the tools and processes); and (iv) who conducts the assessment (internal/external).

The two major processes for assessing best practice in ECEC are empirical research and compliance checking. Much of the empirical research assessing best practice in ECEC has focused on child related factors. There appears to have been little research, however, focused on examining best practice from a child’s perspective, that incorporates Aboriginal and Torres Strait Islander peoples’ perspectives, or on its broader implications, for example, for the population, local communities, families, or staff working in services. Neither has there been analysis of what types of services are most appropriate for which populations (Ishimine & Wilson, 2009). Given the great diversity of service types in Australia (e.g., urban/remote; for-profit/not-for-profit; centre-based/home-based; long hours/sessional), this is a large gap in our knowledge that could potentially lead to inappropriate practices being advocated. Further, as previously noted, much of the research both in Australia and elsewhere has focused on structural components (e.g., ratios) with little attention to the process factors (e.g., relationships). Moreover, whilst a great deal of research is being conducted within Australian ECEC that could inform best practice, much of it is small scale, one-off, time-limited, and fails to build into a substantial body of work, reflecting a rather ‘ad-hoc’ approach. A more systematic approach to research in ECEC, that addresses both conceptual and practice related issues, may result in more cohesive, effective, practice relevant knowledge.

Further, there appears little consistency in the ways best practices are measured in ECEC (see Halle, 2010, for a useful compendium), although global quality measures seem the most widely used. Of these, the most commonly used measure appears to be the Early Childhood Environment Rating Scale (ECERS), and its subsequent revised versions ECERS-R and ECERS-E. The ECERS have high levels of validity and reliability. They have been criticised, however, as providing only a snap-shot of the setting; inadequately capturing those aspects of practice most linked to children’s development outcomes; and failing to measure the service from the child’s perspective (Forry, Vick, Halle, & Child, 2009; Layzer & Goodson, 2006). Further, whilst Sylva et al. (2006) argue that the revised version the ECERS-E is sensitive to pedagogical practices that lead to cognitive development, Forry et al. (2010) argue for the use
of domain specific measures (e.g., language and literacy; mathematics, science and cognition; social and emotional, health safety and nutrition; families and cultural competence). Although it is unlikely that any one measure will cover all aspects of best practice in ECEC, greater consistency would make it easier to both consolidate data from various studies and facilitate comparisons both across research in Australia and internationally.

The second major mechanism for assessing best practice in ECEC is through measuring compliance, or program fidelity, with steering documents, such as regulations, curricula and frameworks, and through especially developed rating systems (OECD, 2006). Quality improvement rating systems are based on the idea that best practice is not a static milestone but rather a continual process. Pianta et al. (2009, p.74) state, for instance:

_Quality rating and improvement systems are fundamentally mechanisms for defining the optimal conditions for caring for and preparing children for school and for encouraging and rewarding improvement to higher levels. They provide a way to open the system of early childhood programs to market-based forces (e.g., consumers of child care have information on quality), and they offer a variety of mechanisms for states to define levels of quality and desirable outcomes for the programs in which they invest, which in turn become markers for monitoring and resource allocation._

However, quality improvement systems, including Australia’s Quality Improvement and Accreditation Scheme (QIAS), have been criticised by several writers as having a number of limitations in terms of their: (i) content (e.g., lack of child development monitoring); (ii) validation processes (e.g. poorly established inter-rater reliability); (iii) their effects on the profession (e.g., potential to diminish professional autonomy); and (iv) cultural appropriateness (e.g., lack of congruence with Aboriginal and Torres Strait Islander peoples’ perspectives) (Dahlberg et al., 2007; Elliott, 2006; Fenech & Sumsion, 2007; Hutchins et al., 2009; Ishimine et al., 2009; Zan, 2005). Moreover, Australia, with its current two-tier system of QIAS and diverse state/territory regulations, lacks a nationally consistent approach to quality improvement. The development of the new NQS and National Quality Rating Scale is an attempt by COAG to improve the existing system and will expedite uniformity. In particular, the seven quality areas established in the document (educational program and practice; children’s health and safety; physical environment; staffing arrangements; relationships with children; collaborative partnerships with families and communities; leadership and service management) are highly congruent with those known from the research to be influential for best practice. The implementation of this system is a major milestone in the history of the development of ECEC in Australia and warrants a carefully designed research plan to assess its: uptake and acceptance; usefulness for families in understanding what quality means; and effectiveness in terms of its ability to support services to provide quality—as defined from a range of stakeholder perspectives.
5.4 Summary

This chapter has sought to address a number of questions related to best practice in ECEC. What we know is:

- The concept of best practice in ECEC is highly contested. It is primarily defined in terms of those factors (processes and practices) that lead to positive developmental outcomes for children or accrual of social benefits; but there are also ethical and philosophical considerations.
- Best practice in ECEC is a highly researched area, and multiple factors have been shown to support children’s positive developmental outcomes and provide social cost benefits. Yet, whilst this large body of research can inform practice in ECEC, its relevance to the diversity of Australian contexts is questionable. Particular gaps exist in relation to:
  - children aged birth to three years;
  - Indigenous children, CALD, and refugee children;
  - non-centre-based care such as family day care;
  - collaborative and integrated practices;
  - parental engagement and community involvement;
  - leadership, teacher preparation and professional development; and
  - environments.
- Translation of research into practice is problematic:
  - mechanisms to support best practices range from highly prescriptive regulations to ‘looser’ pedagogical frameworks—little is known about which approach is most effective, in what ways and for whom; or the most effective ways to support best practice through the development and implementation of regulations, curricula or frameworks; and
  - best practice guidelines draw primarily on empirical research—potentially missing valuable lessons from practice oriented research.
- Ways best practice in ECEC is measured both in research and practice is contentious. Research tends to lack consistency and coherence in terms of what is measured and the tools used, for example. It also fails to take in multiple perspectives—most notably those of children.

5.5 Research Gaps

- What does best practice mean in the diverse Australian ECEC context? Particularly from the perspectives of those who have erstwhile been neglected, namely Aboriginal and Torres Strait Islander peoples, families and children (especially very young children)?
- How can we support the implementation and effective evaluation of, and dissemination of findings about, best practices in ECEC in Australia?
- How effective is the EYLF in supporting best practices—broadly defined?
Exemplar

No exemplar exists (or perhaps ever can) that incorporates best practice from all perspectives, as discussed in this chapter. In Australia, however, we have our own statement of best practice in EC—the Early Years Learning Framework (EYLF) for Australia. The EYLF was developed in consultation with a range of stakeholders. It reflects a number of perspectives on what best practice means in the Australian context. It is founded both in evidence-based understandings of best practice and philosophical perspectives largely reflective of the ECEC professional community. Its implementation has been supported nationally (e.g., through professional development workshops). Complemented and supported by more prescriptive regulations and quality assurance mechanisms, it represents a loose framework that invites professional engagement with, and critical reflection on, pedagogical practices. How well received the framework is, how useful and broadly utilised it is, and how effective it is from a range of perspectives, however, remains to be seen.

References


Locasale-Crouch, J., Konold, T., Pianta, R., Howes, C., Burchinal, M., Bryant, D., & Barbarin, O. (2007). Observed classroom quality profiles in state-funded pre-kindergarten programs and...


Pianta, R. C., Barnett, W. S., Burchinal, M., & Thornburg, K. R. (2009). The effects of preschool education: what we know, how public policy is or is not aligned with the evidence base, and what we need to know. *Psychological Science in the Public Interest*, 10(2), 49-88.


6. SUPPORTING A SKILLED AND EFFECTIVE WORKFORCE

Questions addressed in this priority area

1. What characteristics of the early childhood education and care workforces have the greatest benefits for children’s outcomes?

2. What are effective workplace models? How do changes, such as altering adult-child ratios, affect model performance?

3. What is needed to attract and retain an educated/skilled/effective early childhood education and care workforce?

Focus/limits/scope

The discussion in this chapter is framed around structural and process dimensions of quality, as applied to the ECEC workforce, ECEC settings as adult workplaces, and ECEC systems. Structural dimensions can be measured readily and reliably, and therefore regulated. They include practitioner qualifications, staff-child ratios, group size, and any mandatory requirements for professional development. Process dimensions concern the experiences that take place within these structures in “dynamic exchanges” amongst people and contexts (Brownlee, Berthelsen, & Segaran, 2009, p. 454). Although not easily measured or regulated, they are integral to practitioners’ workplace experiences and contributions. They include practitioners’ personal and professional resources, such as beliefs, motivation, self efficacy, knowledge and skills, and the less tangible dimensions of ECEC settings, such as organisational climate and leadership. The dimensions discussed in this chapter have been selected because of their prominence—or in some cases, lack of visibility—in the research literature in the period under review (2006-11) and because of their relevance to the current Australian ECEC policy agenda. Literature focusing only on the primary/elementary years of school was excluded.

Search approach

The overarching criteria used to determine inclusion include:

- Relevance to topic: “evaluation of significant programs or research studies”.
- Recency: limited to 2006-11, but including current reports/reviews of earlier longitudinal studies; in addition, a small number of key pre-2006 papers/reports of known relevance.
- Robustness of evidence: meta-analysis/systematic reviews; breadth, size and representativeness of case control and non-experimental studies; standing of authors or organisations for research to practice and research to policy commentaries.

Search strategies included:

- Consultation: with team members and other colleagues.
• Searches in subject indexes:
  - Data bases searched: EbscoHost (Education Research Complete selection), Informaworld, A+Education and PsychINFO.
  - Search terms used: “early childhood” or preschool or pre-school or daycare or childcare or “child care” or “day care” or kindergarten or prekindergarten or “pre-kindergarten” (all text); and (all text):
    o workforce and outcomes
    o “adult-child ratios” or “staff-child ratios”
    o “organisational practice*” or “organizational practice*”
    o leadership
    o attrition
    o retention
• Citation searches, especially noting key articles identified in systematic or policy-related reviews.
• Web-links/site searching including: National Investment for the Early Years–NIFTeY; the Centre for the Study of Child Care Employment; the National Institute for Early Education Research; the Brookings Institute and the Social Policy Research Centre and specific site searching.
• Browsing: using both Google and Google Scholar for specific author or program names and for key government and non-government organizations.
• Manual search of all issues [2006-2011] of the following journals: Early Education and Development; Early Childhood Research Quarterly; Early Child Development and Care.

6.1. What characteristics of the early childhood education and care workforces have the greatest benefits for children’s outcomes?

For the most part, ECEC workforce characteristics beneficial to children’s outcomes have been examined by focusing on the ‘quality’ and ‘effectiveness’ of ECEC practitioners. Kagan et al. (2006, p. 5) define practitioner quality as the “demonstrated competence” of practitioners in working with children, and practitioner effectiveness as their impact on children’s development. Measuring effectiveness requires information about practices and children’s outcomes, as well as evidence that practices and outcomes are related (Kagan et al., 2006). Because of the difficulties of establishing causal links between practitioners’ actions and children’s outcomes, most research examining characteristics of ECEC workforces beneficial to children’s outcomes has focused on practitioner quality, rather than effectiveness (Kagan et al., 2006). Moreover, most studies that have endeavoured to examine effectiveness have provided correlational, rather than causal, evidence.
Structural dimensions of skilled and effective ECEC workforces: Practitioner qualifications

Determining the impact of practitioner qualifications on ECEC quality and children’s outcomes will always be contentious and far from clear-cut because of the:

- complex interrelationships between the many variables involved, hence the potential for influences on children’s outcomes to be confounded;
- almost insurmountable difficulties of providing causal, rather than correlational, evidence;
- lack of clarity and consistency concerning the use of terms such teacher, teacher education, ECEC specialisation, training and professional development, particularly in US research; and
- differences in national and local contexts that make generalisations difficult.

For these reasons, caution is needed when interpreting findings.

Large robust, representative studies in several countries have shown positive correlations between practitioner qualifications and quality. For example:

- reporting on the You Bet I Care (YBIC) study in Canada, Goelman et al. (2006, p. 291) found that the ‘ECEC education level’ of observed staff was a “strong and consistent” direct predictor of quality in infant-toddler and pre-school rooms—although information about qualification levels was not provided;
- in the Effective Provision of Pre-school Education (EPPE) study in England, Sylva, Melhuish, Sammons, Siraj-Blatchford and Taggart (2004, p. ii) reported that “settings that have staff with higher qualifications have higher quality scores and their children make more progress”, with a significant positive association between the presence of university qualified ECEC teachers and children’s pre-reading progress; and
- in the Longitudinal Study of Australian Children (LSAC), multivariable analysis showed, for children aged 4 to 5 years in ‘pre-Year 1’, “the benefits for children’s language development of having an early childhood [university] qualified teacher” (Harrison, Ungerer, Smith, Zubrick, & Wise, 2009, p. 159).

In the US, until the mid-2000s, there was substantial, if qualified, agreement that Bachelor degree level qualifications (with and without an ECEC specialisation) tended to result in higher quality ECEC provision and, by implication, better children’s outcomes, than did lower level qualifications (Tout, Zaslow, & Berry, 2006; Whitebook, Gomby, Bellm, Sakai, & Kipnis, 2009). More recently, however, there has been growing equivocation about links between practitioner qualifications, the quality of program provision and/or children’s outcomes—notwithstanding Saracho and Spodek’s (2007) conclusion, based on their descriptive summary of 40 studies, that there is a clear and positive association between qualifications and quality. The equivocation stems in part from the findings of other meta-analyses (Early et al., 2007; Kelley & Camilli, 2007) and reviews (Tout et al., 2006) of US studies.
Meta-analyses

Early et al. (2007) undertook a meta-analysis of the findings of seven major US studies to predict ECEC quality and 4-year-old children’s outcomes in literacy and mathematics from practitioners’ qualifications. After conducting numerous statistical analyses, they found that:

- of 28 analyses for quality, only 8 provided evidence of an association with practitioner qualifications, and only 2 of those 8 analyses found evidence that quality was higher when practitioners had a Bachelor degree;
- there was “very limited evidence” (p. 370) of any association between practitioner qualifications and children’s academic scores after controlling for children’s previous skills and demographic characteristics; and
- of the 23 analyses undertaken for practitioners with a Bachelor degree with an ECEC specialisation, only 1 provided a significant association between specialist qualification and children’s academic achievement (vocabulary scores).

Overall, Early et al. (2007) report many null and contradictory findings for their hypothesised links between qualifications, quality and outcomes and a lack of clear patterns in the evidence. They suggest that a possible explanation for the discrepancy between their findings and those of many of the previous studies could be that a relationship between qualifications and ECEC quality might be evident only when simple analysis techniques are used, and may weaken with the use of more complex techniques.

Acknowledging limitations of their meta-analysis (e.g., that it involved only 4-year-olds, and centre-based care) and its inconclusive findings, Early et al. (2007) emphasise that their findings should not be interpreted to mean that Bachelor degree qualifications are unnecessary for ECEC practitioners. In supporting that conclusion, many US researchers have drawn attention to other limitations of the Early et al. (2007) meta-analysis, including:

- its narrow focus on ‘pre-academic’ skills’, lack of attention to other domains such as social and emotional development, and dubious time frame for endeavoring to measure practitioner influence (Bogard, Traylor, & Takanishi, 2008); lack of explanation of the statistical models used in the meta-analysis (Kelley & Camilli, 2007); and inadequacies in the studies reviewed that may have led Early et al. to underestimate the benefits of a Bachelor degree (Kelley & Camilli, 2007).

The findings of the Kelley and Camilli (2007) meta-analysis and the Tout et al. (2006) review were more positive than the Early et al. (2007) findings, but still qualified. After analysing the findings of 32 studies undertaken in the US, Kelley and Camilli (2007) found that completion of a Bachelor degree had a relatively small but significant positive effect on children’s outcomes. They also found a small but not significant difference in children’s outcomes for practitioners with a Bachelor degree with an ECEC specialisation, compared to practitioners with a Bachelor degree without an ECEC specialisation. Tout et al. (2006) reviewed 16 US studies that examined links between qualifications and ECEC quality and concluded that evidence concerning an association between qualifications and quality was mixed.
**Calls for new directions**

The exclusive focus of these meta-analyses on US studies limits their relevance and generalisability to Australia given the major contextual differences in ECEC provision. Importantly, however, they highlight the need for future studies to:

- clearly conceptualise practitioner qualifications and related concepts (e.g., education level, specialised training, inservice professional development) and associated terminology to enable meaningful comparisons; and provide adequate detail about the nature of the qualification, substantive content, and required professional learning (Kelley & Camilli, 2007; Maxwell, 2007; Tout et al., 2006);
- develop hypotheses that enable specific questions, particularly those salient to policy makers, to be addressed, rather than “casting the net” too widely (Maxwell, 2007);
- ensure closeness of fit between measurement instruments and investigation foci (Fukkink & Lont, 2007; Maxwell, 2007); and
- report sufficient detail (e.g., about context, methods, data) to enable meaningful meta-analyses and, as far as possible, generalisations (Kelley & Camilli, 2007).

Yet ultimately, correlational evidence does not enable causal claims about the effects of qualifications on quality. Neither does it provide an estimation of the size of any effect of qualifications, or information about specific aspects of the requirements undertaken for the qualification that might be associated with quality (Fukkink & Lont, 2007). Hence, Early et al. (2007, p. 576) call for “a new era of research” that more fully addresses complexities of practitioner quality and effectiveness by going beyond supposedly easy-to-measure constructs.

In the US, calls are escalating for an in-depth mapping of teacher education and other professional preparation programs (see for example: Bogard et al., 2008; Early et al., 2006; Early et al., 2007; Whitebook et al., 2009). Proponents contend that identifying the characteristics of different programs (e.g., in duration, course work, practicum, overall quality) would provide a more robust base for ascertaining the effect of qualifications than is currently possible. Yet, a previous mapping of K-12 teacher education programs in the US (Cochran-Smith & Zeichner, 2005), presented enormous conceptual and methodological difficulties.

The evidence chain for any equivalent mapping of ECEC preparation programs in Australia would also require many critical links, for example: empirical evidence that demonstrates the link between the ECEC pre-service program and the learning of pre-service students enrolled in the program; between their learning and their practices in the ECEC setting; and between their practices and children’s outcomes. The cumulative complex challenges presented by often lengthy time lags between pre-service preparation and measurement of children’s outcomes; numerous, difficult-to-measure confounding and intervening variables; and substantial contextual differences in the pre-service programs and ECEC settings (Sylva et al., 2004) would make it difficult to justify the cost of such an endeavour in Australia —
although there are likely to be some benefits in mapping quality ratings under the National Quality Standards against practitioner qualifications and ECEC specialisation.

In light of the difficulties in unraveling complex inter-relations and the compounding effects of different variables, there is broad agreement that it is time to move beyond the undue and not particularly productive focus on qualifications that has been especially prominent in the US literature. Rather than continuing to try to isolate the impact of particular features, such as qualifications, a cumulative approach (Tout et al., 2006, p. 100) to identifying a ‘package’ (Sylva et al., 2004) or ‘breadbasket’ (Raikes et al., 2006) of characteristics and assets of a skilled and effective ECEC workforce would appear more useful.

Attention to a broad range of personal and professional practitioner resources would enable a more nuanced and ecological approach to understanding processes that are effective in enhancing children’s outcomes (Gerber, Whitebook, & Weinstein, 2007). A broader focus would also provide better guidance to policy makers concerning the appropriate ‘threshold’ levels of qualifications (e.g., acceptable minimum/optimal level), and mix of qualifications for the ECEC workforce. Moreover, it would highlight that while qualifications are important, they are not in themselves sufficient to ensure high quality ECEC provision.

**Process dimensions of skilled and effective ECEC workforces: Practitioners’ professional and personal resources**

*Professional resources*

In this report, the term ‘professional resources’ refers to ECEC practitioners’ specialist knowledge and skills, for example, in interacting with children and families, their pedagogical knowledge and skills, and their ability to work effectively with professionals from other disciplines.

*Pedagogical knowledge and skills*

In their study of Californian pre-schools, Karoly, Ghosh-Dastidar, Zellman, Perlman, and Fernyhough (2008) concluded that practitioners, in general, were moderately successful in providing well-managed, engaging, socially and emotionally supportive learning environments. They were much less successful in fostering children’s language and higher order cognitive skills, or in providing high quality feedback.

In England, in the Researching Effective Pedagogy in the Early Years (REPEY) study, a supplementary study to EPPE, Sylva et al. (2007) identified specific pedagogical skills used by practitioners in effective centres (i.e., with positive child outcomes). In the higher quality effective centres, educators engaged children in ‘sustained shared thinking’ (scaffolding children’s thinking, e.g., through modeling and questioning, to solve problems, clarify concepts, extend narratives) for a significantly greater proportion of time, than in the effective centres judged to be of adequate quality. In comparison to practitioners in adequate-quality centres, they also engaged in more (pedagogically appropriate) direct teaching and
spent less time simply monitoring children. In Queensland’s Preparing for School Trial, Thorpe et al. (2004) similarly highlighted the importance of a rich repertoire of advanced pedagogical knowledge and specific instructional skills. Content knowledge of specific curriculum areas is also important (Elliott, 2006). The implementation of Belonging, Being and Becoming: The Early Years Learning Framework for Australia (Australian Government Department of Education Employment and Workplace Relations, 2009), with its explicit focus on pedagogical decision-making, highlights the imperative to understand more about educators’ pedagogical knowledge and skills and how these can be fostered.

Collaborative skills

The growing focus on the cross-agency support of families and early identification of children with additional needs increasingly requires ECEC educators to develop skills in effective collaboration across disciplines, often referred to as inter-professional work. Literature reviews focusing specifically on the implications for ECEC workforce development (e.g., Press, Sumsion, & Wong, 2010) highlight the complexities involved, including the need to respect different knowledge bases, change traditional and often well-sedimented practices, and take on new roles and responsibilities. More research is needed to extend and add depth to the emerging Australian empirical literature (e.g., Aylward & O’Neil, 2009; Press et al., 2010) about inter-professional work in the early years.

Personal resources

How people experience their work is integral to the dynamics of a workforce (Martin & Healy, 2010). Motivation, workforce relationships and self efficacy, for example, can have considerable effects on who enters and remains in an occupation, performance in the role, and inclination to engage in professional development (Martin & Healy, 2010). Despite a growing literature about effects of ECEC psycho-social characteristics or ‘personal resources’ (Domitrovich, Gest, Gill, Jones, & DeRousie, 2009) and their interrelations with characteristics and perceptions of ECEC settings as adult workplaces, relatively few studies have investigated associations among educators’ personal resources, quality and children’s outcomes. In the overview that follows, unless otherwise stated, the studies cited were undertaken in the US, and the associations referred to are statistically significant.

Motivation and intentionality

Evidence about whether intrinsic motivation for working with children and intentional choice of ECEC as a career, rather than a temporary occupation, is associated with ECEC quality and children’s outcomes is mixed (Doherty, Forer, Lero, Goelman, & LaGrange, 2006). In their Canadian study of family day care providers, (Doherty et al., 2006, p. 302), found a positive association between intentionality and quality, with the exception of one variable—“working with children and/or contributing to their development” as an intrinsic motivator—which was associated with lower quality. Torquati, Raikes, and Huddleston-Casas (2007) found that practitioner motivation was associated with intention to remain in the profession, but not with quality.
Psychological wellbeing

Practitioner wellbeing has been conceptualised broadly, from absence of depressive symptoms and economic stresses to social support networks and high self-esteem (Gerber et al., 2007). Given the well-documented stresses of working in ECEC, is practitioner psychological wellbeing associated with ECEC quality and children’s outcomes (Gerber et al., 2007)? Findings were not consistent across the studies reviewed. Gerber et al. (2007) found no direct link between practitioner wellbeing and sensitivity to children, possibly because of the social supports afforded by a team. Neither de Schipper, Riksen-Walraven, and Geurts (2007) in The Netherlands, nor Pianta et al. (2005), identified associations between practitioners’ depressive symptoms and their interactions with children. de Schipper et al. (2007), however, found that educators working with infants had lower mood scores than those working with older children. Interestingly, Domitrovich, Gest, Gill, Jones et al. (2009) found that educators who rated themselves more emotionally exhausted at the end of the previous year were rated more highly on their interactions with children by their professional development coaches than were less exhausted practitioners—perhaps because exhaustion may have been a reflection of commitment and effort. Conversely, Manlove, Vazquez and Vernon-Feagans (2008) found that practitioners with a larger number of personal stressors were rated lower on behavior management strategies, although there was not a significant relation between stress and ability to maintain a positive emotional climate.

Sensitivity

Despite clear evidence that practitioner sensitivity (recognising and responding to children’s needs, strengths, circumstances, interests) is a key component of ECEC quality and important for children’s developmental outcomes, little is known about factors that influence educators’ ability to engage in positive and effective interactions with children (Gerber et al., 2007). For example, what characteristics contribute to sensitivity, what are the risks to sensitivity, and what moderates those risks? Do practitioners whose thinking is more complex provide more sensitive and responsive care to infants and toddlers than those who are more categorical in their thinking (Manlove et al., 2008)? Manlove et al. (2008) found no relation between practitioners’ sensitivity to children and the complexity of their thinking about children’s behaviour, while Gerber et al. (2007) reported that educators’ perceptions of their work environment was a significant predictor of sensitivity.

Beliefs

Although considerable research has focused on ECEC practitioners’ beliefs about their work (Berthelsen & Brownlee, 2007), there has been little in-depth investigation of links between beliefs and children’s outcomes. The available evidence appears partial and inconclusive. Pianta et al. (2005) identified that practitioners with ‘adult-centred’ beliefs about interactions with children were rated significantly lower in their quality of interactions with children than those with ‘child-centred’ beliefs. On the other hand, Brown, Molfe, and Molfese (2008) report very weak relations between beliefs about literacy and mathematics and changes in children’s literacy and mathematics scores—although as they point out, the practitioners’
work contexts may have precluded enactment of their beliefs. Berthelsen and Brownlee (2007) categorised the belief structures of practitioners working with toddlers in Australia. They did not attempt to identify associations between belief structures and children’s outcomes but tentatively suggested a possible association between qualification level and sophistication of belief structure.

**Self-efficacy**

Evidence of relationships between ECEC practitioners’ self-efficacy (i.e., a belief that one’s practices can bring about desired outcomes) and/or quality of pedagogical practices and children’s outcomes is limited and mixed (Guo, Piasta, Justice, & Kaderavek, 2010). For example, Guo et al. (2010) found that practitioners’ self-efficacy was a positive and significant predictor of pre-school children's print awareness, whereas Domitrovich, Gest, Gill, Jones, et al. (2009) report no association between self-efficacy and curriculum implementation. Guo et al. (2010) call for broader conceptualisations and measures of efficacy, including collective efficacy (perceptions of the effectiveness of the team) in future studies.

**Responsiveness to professional development interventions**

There is emerging evidence, including from randomised controlled trials (Domitrovich, Gest, Gill, Bierman, et al., 2009; Neuman & Cunningham, 2009; Raver et al., 2008) about professional development interventions that are effective in improving pedagogical practices—although, for the most part, studies are still to examine whether these interventions lead to improved child outcomes. Also unclear is why some practitioners who participate in professional development interventions adopt more effective instructional practices, while others who receive the same amount and type of support appear to change very little (Lieber et al., 2009). Lieber et al. (2009, p. 474) found that personal characteristics, including being “motivated, responsible and organised, and open to new learning opportunities”, and professional skills in expanding and integrating the curriculum were most consistently associated with practitioners who were ‘high implementers’ of a new curriculum.

Methodological and ethical difficulties can preclude studies that enable causal associations between practitioners’ psycho-social characteristics and children’s outcomes. In future studies, however, efforts should be made to:

- use representative samples;
- generate longitudinal data, rather than relying mainly on concurrent (and frequently, self-reported) data;
- ensure that centre and practitioner data are not confounded; and
- use micro-analytic measures (e.g., practitioner’s interactions with target children) and reduce reliance on global measures of overall quality (e.g., of practitioners’ interactions with children as a group).
6.2 What are effective workplace models? How do changes, such as altering adult-child ratios, affect model performance?

There is growing recognition that practitioner quality and effectiveness can be influenced by the characteristics of their work environment and how they experience their workplace (Manlove et al., 2008). Moreover, interactions between practitioner and workplaces characteristics are key to identifying implications for professional development and organisational change (Wagner & French, 2010). Yet, there remains relatively little attention to how well ECEC settings function as adult work environments (de Schipper et al., 2007). Indeed, according to Lower and Cassidy (2007), ECERS-R subscales pertaining to program administration and organisational climate are often excluded from analyses. In the Netherlands, de Schipper et al. (2007) found that differences at the centre level accounted for more variance in quality than did differences between individual practitioners, thus highlighting the need for more focus on centre-level variables, including from practitioners’ perspectives.

In this section, adult-child ratios and group sizes—structural dimensions typically used in evaluating the quality of ECEC settings for children and families—are considered in terms of their contribution to the quality of settings as adult workplaces. Process dimensions of the adult work environment (sometimes referred to as ‘global’ measures of quality) include, but are not limited to, organisational climate, leadership and supervision, decision-making processes, and professional development (Manlove et al., 2008).

Structural dimensions of effective work place models: Adult-child ratios and group sizes

Evidence indicates, on balance, that there is a statistically significant association between lower adult-child ratios (i.e., fewer children per adult) and higher global quality scores, higher process quality, and better child outcomes. Conversely, with notable exceptions (e.g., Doherty et al., 2006; Gerber et al., 2007) higher adult-child ratios (more children per adult) have been shown to reduce process quality (Huntsman, 2008). The evidence for an association between group size and quality is not as strong (Huntsman, 2008) and therefore discussed here only in passing.

The vast majority of studies investigating relationships between adult-child ratios have been correlational in design. A rare exception is de Schipper, Riksen-Walraven, and Geurts’ (2006) experimental study that compared practitioners’ and children’s interactional behaviours and responses in play contexts in which the adult-child ratio was initially 1-to-3, and subsequently increased to 1-to-5. de Schipper et al. (2006, p. 871) found that differences in the quality of practitioner interactions when the ratio was 1-to-3 versus 1-to-5 were “consistently significant but relatively small”—but possibly marking the difference “between adequate versus inadequate care” for large number of children, especially infants and
toddlers. When the ratio was 1-to-3, practitioners were significantly more supportive of children and more respectful of their autonomy, while children were more cooperative. de Schipper et al. concluded that children’s wellbeing was significantly higher, particularly for younger children. Practitioner well-being was not of focus of this study.

Drawing on the same sample in a later study, de Schipper et al. (2007) found, to their surprise, that higher adult-child ratios or larger group sizes did not have a significant negative association with how practitioners perceived their work environment or, in contrast to the findings of their 2006 study, on the quality of their practice. Self-reported higher physical workloads, however, were associated with more health problems, and with lower quality caregiving.

The implication is not that ratios or group sizes are unimportant but, rather, that there is a need for a sustained focus on the dynamics among work environments, practitioner characteristics and ECEC quality in order to more fully understand their effects (de Schipper et al., 2007; Gerber et al., 2007). High levels of professionalism and commitment to quality, for example, may drive ‘superhuman’ but ultimately unsustainable efforts to avoid compromising quality, despite structural obstacles. To understand complex dynamics, longitudinal research and detailed case studies are needed.

Ackerman’s (2008) case study examined the effect of the ‘continuity of care’ policy in US military centres. To enable stability, practitioners remain with the same infant-toddler group for up to three years. An unexpected bonus was the growth of professional learning communities and the development of practitioners’ knowledge and skills, grounded in deep familiarity with children and families and supported through regular ‘debriefings’ (reflective dialogue) with a training and curriculum specialist. Both have contributed to practitioners’ positive perceptions of the organisational climate.

Process dimensions of effective work place models:
Organisational climate and leadership

It is widely accepted that positive organisational climates (Lower & Cassidy, 2007) and effective leadership (Siraj-Blatchford & Manni, 2006) contribute to the quality and effectiveness of the ECEC settings. Notably, however, some studies reviewed for the present report (e.g., de Schipper et al., 2007; Gerber et al., 2007) found no evidence of statistically significant associations between a supportive workplace environment and quality. In the Effective Leadership in the Early Years Sector (ELEYS) study, an extension of EPPE, from case studies of good to high quality centres, Siraj-Blatchford and Manni (2006) identified eight characteristics of effective ECEC leadership. These characteristics are consistent with a consultative, collaborative and critically reflexive approach to leadership and are in keeping with Guo et al.’s (2010) call for a focus on collective efficacy.

In their review of the burgeoning literature about professional practice in effective integrated service provision, Press et al. (2010) identified leadership as a prominent theme. Case studies providing thick descriptions of organisational development and change through effective
leadership of integrated services include Broadhead, Meleady, and Delgada’s (2008) account of the development of the Sheffield Children’s Centre in England, and Aylward and O’Neil’s (2009) report on cultural change at Gowrie, South Australia. The often rich and complex conceptualisations of (inter)professional practice, including leadership, in much of the UK literature (e.g., Robinson, Atkinson, & Downing, 2008), especially in relation to integrated services, contrast with the generally more measurement driven, survey-based examinations of leadership and change in more ‘traditional’ ECEC settings predominant in the US. Future Australian research should aim for conceptual depth and empirical scale with careful and attention to the nuances arising from the diversity of Australian ECEC contexts, including the growth of integrated services.

Common themes across the literature reviewed include the importance of an organisational ethos of commitment to and support for ongoing professional growth. Wagner and French’s (2010) study of relations between practitioners’ perceptions of their workplace (e.g., in terms of supervisor support, collegiality, degree of choice/control) and their motivation for professional growth highlights the importance of satisfaction with one’s perceived degree of influence/control in decision-making (e.g., regarding workplace policies, processes and curriculum) and perceived freedom to “be creative and challenge oneself professionally” (p. 167) within a supportive context. Overall, Wagner and French (2010) found a strong positive association between work satisfaction and intrinsic motivation for professional development, while Kagan et al. (2006) note interrelations between the workplace environment, professional development, and pay and conditions.

6.3 What is needed to attract and retain an educated/skilled/effective early childhood education and care workforce?

From 2006-11, the question of what is needed to attract and retain a high quality workforce has been the focus of investigation of at least two major Australian studies (Bretherton, 2010; Community Services Ministers' Advisory Council [CSMAC], 2006). At the time of writing, it is the subject of a Productivity Commission study (Productivity Commission, 2010). It has also been the focus of numerous previous studies commissioned by governments around Australia and internationally. In relation to staff recruitment and retention, virtually all Australian studies and expert commentaries (e.g., Elliott, 2006), along with most international studies, have reached essentially the same conclusions: the need for improved pay and working conditions, including pay parity with teachers with equivalent qualifications and experience in the school sector, and enhanced profile and status commensurate with responsibilities. The building of an adequately paid, sustainable high quality ECEC workforce has not been constrained by lack of knowledge about what is required, so much as an apparent lack of political will to address the obstacles involved, particularly pay inequities. Also essential is an adequate central data collection and management process to ascertain and track staff profiles and staffing patterns (Elliott, 2006).
This section does not reiterate ground covered by the Productivity Commission study or earlier reports, but highlights potentially promising new directions for workforce development reported in recent literature. Unless new directions are taken, underpinned by the necessary political commitment to improving pay and conditions, the Australian ECEC sector will continue to be seen by many as “a low skill–low pay trap” (Bretherton, 2010, p. 7). Consequently, despite considerable government investment in ECEC in recent years and contrary to government intent, Australia risks a downwards trajectory towards de-professionalisation of the ECEC workforce, unless the “multiple pre-conditions for atrophy” identified by Bretherton (2010, p. 20) are addressed. These conditions include inadequate wages and high rates of casualisation that have contributed to the de-professionalisation of the ECEC workforce in many parts of the US (Bellm & Whitebook, 2006).

**Structural dimensions aiding recruitment and retention: Pay and conditions**

Awards for university qualified ECEC teachers working in the prior to school sector continue to languish approximately 20% behind those of teachers in the school sector with equivalent qualifications and experience. Moreover, ECEC teachers, particularly in long day care, generally also have substantially poorer conditions than their school-based counterparts (Bretherton, 2010). Relative to other occupations, there are also major disparities in pay for equivalent qualifications, experience and responsibility for diploma and certificate qualified staff (Community Services Ministers’ Advisory Council [CSMAC], 2006). These disparities are widely cited as a major reason for high rates of staff turnover of reportedly up to 40% (Bretherton, 2010).

Bretherton (2010) undertook case studies of four ECEC services across three Australian states that were using innovative and successful strategies to sustain high quality, stable workforces. The four services were of diverse auspice type. All paid substantially above award wages, offered permanency of employment for core staff, and offered generous and flexible conditions, for example, family and study leave, to assist in avoiding burnout (Bretherton, 2010). All four employers also demonstrated a strong commitment to, and support for, staff professional development. At a service level, these initiatives enabled the recruitment and retention of staff with higher level skills, as well as less skilled staff, “based on profiling characteristics rather than qualifications followed by training” (Bretherton, 2010).

However, as these employers noted, their initiatives did not address the entrenched and systemic problems of inadequate pay for the sector as a whole, further highlighting the need for government intervention to achieve pay parity, as in New Zealand (May, 2007) and, partially, in New Jersey (Whitebook, Ryan, Kipnis, & Sakai, 2008). While Bretherton’s (2010) case studies of exemplary practice are illuminating, detailed reports documenting successful scaling up of organisational initiatives to system levels changes appear largely

---

2 Some casual staff were still employed to manage ratios, but on much better conditions than is typical for the sector.
missing from the Australian and international literature. So too, are reports of predictors of the effectiveness of system level efforts aimed at addressing recruitment and retention. Given the limited effectiveness of stand-alone measures such as cash incentives reported by Gable, Rothrauff, Thornburg, and Mauzy (2007), these gaps warrant addressing.

**Process dimensions aiding recruitment and retention: Professional development**

Professional development features prominently in reports of what is needed to address recruitment and retention (e.g., Bretherton, 2010; CSMAC, 2006). Professional development, as used in this section, encompasses enrolment in formal study for higher qualifications and targeted inservice ‘training’, with a focus on system-level provision. Collectively, meta-analyses (Fukkink & Lont, 2007), syntheses (Klein & Gomby, 2008) and reviews (Zaslow & Martinez-Beck, 2006) of the many reports of ECEC professional development initiatives emerging from the US in recent years highlight the:

- great variation in effectiveness of different professional development programs in changing practices;
- importance of specialised, targeted training and the negligible benefits of ‘one-off’ training;
- benefits of ‘coaching’ (sustained specific support from a mentor over time);
- need for broader conceptualisations of professional development to include, for example, active participation in professional bodies;
- need for more incisive research questions, effective measurement instruments; and more detailed, precise reports of programs to enable meaningful comparisons of different programs/approaches; and
- continuing research gaps, including investigations of: interrelations between practitioner and workplace characteristics and program effectiveness (measured through changing practices); the effects of professional development on children’s outcomes; and effects of professional development on recruitment and retention.

Whitebook et al.’s (2008) case study of the Abbott Preschool Program in New Jersey (catering for approximately 40,000 children in 405 centres) exemplifies the benefits of tackling recruitment and retention by addressing concurrently structural and process dimensions of workforce quality. The Abbott initiative is highly relevant to the Australian context because it took place in a mixed delivery system (with mainly private services) that provided full day, care and education programs, in many cases for low income, minority group families. The intent was to establish a high quality system that gave pay parity to ECEC teachers with equivalent qualifications to K-12 teachers in an endeavour to assist recruitment, stem attrition, and improve program stability. To this end, New Jersey mandated a requirement for Abbot Program practitioners (with very few exemptions) to have a Bachelor degree level qualification, with an early childhood (P-3) specialisation. Where feasible, practitioners who opted not to upgrade their qualification were relocated to other programs. Those who choose to upgrade received considerable support (e.g., fee scholarships,
flexible study leave) to enable them to combine full time work and part time study. Close collaboration between the New Jersey Department of Education, universities and Abbott Program leadership, and the establishment of a system of master teachers to provide pedagogical leadership to colleagues were important contributors to successful structural change.

In Australia, a national study of the views of long day care centre directors, owner-operators and practitioners concerning professional development (Waniganayake, Harrison, Cheeseman, de Gioia, Burgess, & Press, 2008) highlighted similar themes to the US research cited above, concerning the importance of systemic, high quality, relevant, targeted, financially supported, professional development that incorporated ongoing leadership and mentoring/coaching. Waniganayake et al.s’ (2008) findings reinforce that a high quality professional development system should be an essential component of Australia’s National Quality Framework.

6.4 Summary

Most of the literature reviewed for this chapter originated in the US, where systematic reviews, randomised control trials, cohort studies, and other research designs cited in the upper layers of the evidence pyramid referred to in the introduction to this report are far more common than in Australia. Overall, US findings concerning associations between ECEC qualifications, the quality of ECEC services and/or child outcomes are mixed and contested. These findings mostly come from correlational research, despite its inherent limitations, because of the prohibitive methodological complexities of endeavouring to establish causal relations. Given the contextual differences between the US and Australia, the relevance of US findings to the Australian context is questionable. Three large representative studies undertaken respectively in Australia, Canada and England show generally positive associations between qualifications, quality and/or child outcomes, but again these findings are correlational, subject to many confounding variables, and hence do not show causal relationships. There is considerable consensus, however, that qualifications alone are not sufficient to achieve high quality services, and that attention needs to given to how qualifications and other practitioner characteristics interact with the characteristics of ECEC settings as adult workplaces. Again, because of confounding variables, it is difficult to identify causal associations. The positive impact of effective professional development programs on quality is more clear-cut and has been the focus of considerable research in the US but much less so in Australia.

The literature is unequivocal that lack of pay parity for university qualified ECEC teachers (compared to equivalently qualified teachers in the school sector) and diploma and certificate qualified educators (compared to other occupations with similar qualifications levels) is a major cause of the entrenched difficulties in recruiting and retaining an educated and effective ECEC workforce. As Australian case studies have shown, these challenges can be addressed through creative endeavours at local levels. With notable exceptions from New
Zealand and New Jersey, the literature provides little guidance about how localised initiatives can be brought to scale and implemented at a system level.

6.5 Research Gaps

Research gaps identified by this review as high priorities to pursue include:

- Across the diversity of Australian ECEC settings, what constitutes an appropriate mix of practitioner qualifications and other characteristics and assets (‘professional and personal resources’) for high quality provision? Does this vary according to different contexts (for example, in integrated services) and if so, in what ways?

- How can pre-service/professional development programs, and work environments foster the development of these characteristics and assets? What specific features of pre-service/professional development most effectively support practitioner growth? What approaches do Aboriginal and Torres Strait Islander educators and those from other minority groups tend to find particularly supportive?

- What factors predict the effectiveness, or otherwise, of approaches to improve recruitment and retention?

- How can local initiatives that have been effective in improving pay, conditions and status be taken to scale to enable system-wide implementation?

Exemplar

My Teaching Partner (MTP) United States

Focus

My Teaching Partner (MTP) is an online and video-based inservice professional development program for pre-K educators in the US.

Goals

MTP aims to provide effective and sustained professional development support for ECEC educators to assist them to improve their interactions with children.

Program initiatives

MTP comprises video resources accessed online and web-mediated consultation with a highly qualified (generally at Masters level) consultant with substantial ECEC experience. Every fortnight, educators participating in MTP videotape an example of their professional practice, typically focusing on their interactions with children. They then send/upload the tape to their consultant who then edits it to highlight positive examples of the educator’s practice before posting it on the educator’s private MTB web page. The consultant also provides written comments for the educator to review. The educator and consultant then
‘meet’ for a video-based and online, one-to-one, collaborative discussion about the consultants’ feedback, to problem solve and to jointly identify a focus for further development. This process is known as the MTP consultancy cycle and is repeated fortnightly for up to two years. In addition, all educators participating in MTP can access the MPT website, which contains video exemplars of specific high quality practices, selected using the Classroom Assessment Scoring System (CLASS). For more detail, see Downer, Locasale-Crouch, Hamre, and Pianta, 2009; Pianta, 2006; and http://www.myteachingpartner.net.

Evidence of outcomes

Studies undertaken by Pianta, who developed MTP, and his colleagues indicate that the processes embedded in MTP enabled effective coaching of ECEC educators, when educators were responsive to and engaged in the process, and when the educator and consultant developed a positive relationship. MTP appeared more effective in settings where 50% or more of children attending the setting were classified as poor and when educators participated for a full year (Downer, Kraft-Sayre, & Pianta, 2009; Downer, Locasale-Crouch, et al., 2009). Under these conditions, there was evidence of improvements in the quality of educator-child interactions and correlational evidence in improvements in children’s language and literacy progress (Hamre et al., 2010). Findings indicated that it can be difficult to sustain educator involvement for a second year (Downer, Locasale-Crouch, et al., 2009).

Addressing a research gap

On balance, evidence from the series of studies cited above suggests that online coaching of ECEC educators could be an effective way of moving beyond the ‘one-off’ approach to professional development now widely recognised in the research literature as ineffective.

Relevance to Australia

The content of the MTP video resources appears to reflect the US focus on children’s achievement of specific and arguably narrow measurable targets as a measure of pedagogical quality. The actual content, therefore, appears unlikely to be particularly useful to Australian ECEC educators, given the focus on broader outcomes in Belonging Being and Becoming: the Early Years Learning Framework for Australia (the EYLF). The processes embedded in MTP (i.e., the combination of sustained online and video-based coaching), however, appear to hold considerable promise for the Australian context with its widely geographically dispersed ECEC workforce, and emphasis in the EYLF on locally relevant curriculum and warrant further investigation.
References


7. GAPS AND FUTURE DIRECTIONS

In addressing the questions from each of the six priority areas, the preceding chapters synthesised key research findings from the hundreds of articles, reports, and books located through the search approaches described previously. Given the large and diverse corpus of literature associated with each of the priority areas and, indeed, with each of the questions within each area, it has not been possible to encapsulate in this report all the details, nuances and implications of those research studies and their findings. Nevertheless, the chapters highlight prominent trends and points of discussion, agreement and contention in the literature for the period reviewed (2005/6—2010/11), as well as strengths and limitations of that literature. They also considered the relevance, or otherwise, of the research reviewed to Australian contexts. This chapter builds on the issues raised in the summary and the research gaps sections in the previous chapters to identify research foci and priorities that will support and extend the national ECEC reform agenda.

The reform agenda is a timely, comprehensive, significant, and in many respects, visionary development. For its potential to be realised, it needs to be accompanied by an equally comprehensive agenda for Australian ECEC research and evaluation. To this end, this report strongly recommends that a national ECEC research framework or strategy, underpinned by clearly articulated principles, be developed to guide and support a programmatic approach to future ECEC research activity.

7.1 An ECEC research framework, principles and programmatic approach

In Australia, the fragmentation and small scale of much educational research limits its capacity to contribute to the development of cumulative national evidence (Cumming, 2010). The same critique could be leveled at much of the ECEC research undertaken to date. Indeed, Australia has been described as “a relative under-contributor to the global body of research” on ECEC (The Boston Consulting Group, 2008, p. 19). In comparison to countries such as Canada, New Zealand, the UK, and the US, ECEC research in Australia has been characterised by a paucity of landmark studies; an emphasis on small scale, ad hoc evaluations; and relatively little investment in research capacity building and infrastructure. It is not surprising, therefore, that only a small proportion of studies cited in this report are Australian, given that the project brief for this review specified that the selection of studies for inclusion be guided by the NHMRC evidence pyramid. As noted throughout this report, major contextual differences between Australia and the US, where the majority of studies cited were conducted, limit the generalisability and relevance of their findings to Australian ECEC. For example, as noted in Chapter 6, much of the US research focuses on children’s achievement of specific and arguably narrow measurable targets, for instance, in language, literacy, and mathematics, as measures of child outcomes and program quality, in ways that
have limited relevance to the focus on broader outcomes emphasised in *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (the EYLF).

While there are encouraging signs of change and growing commitment to the development of large datasets, notably through the Longitudinal Study of Australian Children (LSAC), the Australian Early Development Index (AEDI), and more recently, the E4Kids Study (Taylor et al., 2009-14), there remains a pressing need for increased investment in ECEC research.

Limited resources reinforce the ethical imperative to optimise the value of research investment, a process that in part, involves learning from the strengths and limitations of research investment initiatives elsewhere. In the US, for example, the No Child Left Behind (NCLB) Act passed by Congress in 2001 has led to a heavy emphasis on standardised test-based accountability (Hollingsworth et al., 2007) and funding regimes that favour particular types of ‘scientific’ research (e.g., experimental and quasi-experimental research, randomised controlled trials, benefit-cost analyses), widely perceived by US policy makers to provide robust, causal evidence. An unfortunate impact, according to many US researchers, has been an unduly narrow research focus, consequent constraints on the kinds of questions and problems that it has been feasible to investigate, and often impoverished understandings of implications for policy and professional practice (see for example, Huston, 2008; Teale, Hoffman, & Paciga, 2010; Wise, no date; *American Educational Research Journal, 27*(4), 2007, Special Issue on NCLB). Lessons for Australia from the US experience, therefore, include the need for a well-balanced research agenda, and an ECEC research framework that explicitly values and encompasses a continuum of research designs and methodologies that collectively enable broad brush and in-depth examination of complex, real world problems. A well-balanced approach would recognise, for instance, the value of randomised controlled trials built on rich accounts of promising practices generated through practitioner research and other localised studies.

Accordingly, the following principles are proposed as the basis for an Australian ECEC research framework.

**Principles**

Taking into account the funding available for ECEC research within government, universities, research institutions and the community sector, the framework would assist in:

- identifying priorities for and facilitate programmatic research to build a cumulative knowledge base, avoid duplication and maximise leverage of research effort;
- facilitating the evaluation of major initiatives (e.g., their implementation and effectiveness) to inform policy and program development, modifications and transformations (including expansion and taking to scale);
- providing a balance between research that has immediate policy relevance (e.g., the evaluation of ECEC reforms as they are rolled out, to identify their effects, both concurrent and overtime, and their unintended, as well as intended, consequences) and research that has the potential to identify and shape new policy agendas;
ensuring a mix of national, state/territory and local (including site-based) studies that identify, track and drill down to discover, through indepth investigations, the impacts of ECEC reforms;

- adopting a broad definition of evidence that promotes the use of a diverse range of robust, innovative and culturally appropriate methodologies that, developed in tandem, build comprehensive insights into how best to support an improved ECEC system;

- outlining mechanisms for the dissemination of research reports, including research commissioned, or otherwise funded, by government, to a wide readership through a central and accessible collation point (for example, Research to Practice briefs);

- encouraging maximum use of existing datasets, as well as the targeted and strategic generation of new data;

- fostering research collaborations and partnerships across disciplines, institutions and sectors (policy, academic, practice, community) to make effective use of diverse expertise;

- building research capacity in all sectors (e.g., by supporting ECEC educators and organisations to develop the skills to undertake methodologically robust program evaluations, as well as practitioner driven, practice-oriented research that can provide a rapid response to issues of concern to the ECEC field);

- maximising the impact of practitioner and other locally generated research by investigating the conditions and processes that enable local reforms/program improvements to successfully be brought to scale; and

- focusing on children’s experiences, as well as outcomes.

A programmatic approach

The principles outlined above are consistent with a programmatic approach to building a national evidence base. In contrast to project-based research in which each project essentially stands alone as a discrete entity, identified by a tightly, pre-defined focus and funded for a pre-determined time, a programmatic approach reflects a longer term commitment to addressing particularly complex problems through a series of interconnected and complementary projects that collectively, cumulatively and explicitly, add to the evidence base.

In the proposed ECEC research framework, a programmatic approach would seek to:

- use comprehensive, nationally compatible, and publicly available minimum datasets;

- balance longitudinal research, cross sectional research, and ‘nested studies’ addressing specific issues in depth;

- employ methodologies for drilling down to enable in-depth and multi-perspective understandings of localised trends, developments and contexts;

- develop research foci guided by, but not limited to, policy priorities; and

- sequence research to build on exploratory, local or practitioner-initiated, practitioner-generated studies through to formalised testing of program effectiveness.
A programmatic approach of this nature would enable major gaps in Australian ECEC research to be addressed.

7.2 Gaps in Australian ECEC research

The gaps discussed in this section are of three kinds: specific (i.e., linked to each priority area), structural, and process. These gaps have been identified through the literature reviewed in Chapters 1 to 6, and from in-depth knowledge of the Australian ECEC research context.

Specific gaps

The gaps listed here are a collation of the research gaps identified at the conclusion of each of the preceding chapters. They resonate with many of the gaps identified at the ARACY-conducted consultations for this project (see Appendix 1) and with those identified almost a decade ago by Fleer (2002).

Chapter 1: Gathering, interpreting and analysing policy-relevant evidence

- What is the right balance of child assessment tools (e.g., achievement/readiness tests and authentic, competency-based, holistic approaches) to use when evaluating the impact of ECEC programs on developmental outcomes, and that can be applied to different cohorts and contexts?

- What is the relative effectiveness of teachers’ self-evaluations, parent evaluations, and standardised, observer administered instruments for assessing program effectiveness?

- How can ECEC providers and educators best contribute to evaluations of program effects for children and families, including scientifically rigorous evaluations of implementation, processes and practices?

- What are the best methods for identifying the critical ‘ingredients’ of effective practice and ensuring transferability and fidelity across sites?

- What methods and strategies best support knowledge transfer and uptake to practice for ECEC educators?

Chapter 2: Effectively communicating with parents and children

- What do different groups of parents in the population know about early childhood development and how does that translate into their understandings of early childhood education and care?

- How can broad cultural change be implemented so that society puts greater value on early childhood education and care? What processes and mechanisms are most helpful or useful to achieve such a cultural change?

- When, where and what sorts of communications with parents are most helpful for parents?
What research approaches are best to build a profile of parents who do not access early childhood education and care? What changes are needed to support access?

*Chapter 3: Understanding and responding better to the needs of highly vulnerable Australian families and their children*

- What are the perspectives of participants in early intervention programs including parents, children and staff with respect to program processes and outcomes?
- What are the support needs of staff in community based integrated services where challenging families, who have high support needs, are accessing these services?
- What is the nature of relationships between service staff and families perceived to be vulnerable with respect to the establishment of trust, capacity to bring about changed parenting behavior and information seeking/resourcing?
- What are the unique support needs of ‘at risk’ infants who are entering formal early childhood services?
- What strengths-based family oriented approaches best engage those families who are ‘marginalised’ or ‘hard-to-reach’, particularly refugee families, families in isolated communities, and Indigenous families?

*Chapter 4: Knowing the dynamics of early childhood education and child care markets and key stakeholders*

- What is the relationship (if any) between type of provider, governance structures and quality?
- What is the relationship (if any) between type of provider, governance structure and access—i.e., who is using what type of service?
- What is the impact of existing funding regimes and new initiatives on local markets, particularly in regional, rural and low income communities?

*Chapter 5: Identifying best practice to build and support delivery of early childhood services across Australia*

- What does best practice mean in the diverse Australian ECEC context, particularly from the perspectives of those who erstwhile have been neglected, namely Aboriginal and Torres Strait Islander peoples, families and children (especially very young children)?
- How can we support the implementation and effective evaluation of, and dissemination of findings about, best practices in ECEC in Australia?
- How effective is the EYLF in supporting best practices—broadly defined?
Chapter 6: Supporting a skilled and effective workforce

- Across the diversity of Australian ECEC settings, what constitutes an appropriate mix of practitioner qualifications and other characteristics and assets (‘professional and personal resources’) for high quality provision? Does this vary according to different contexts (for example, in integrated services) and if so, in what ways?

- How can pre-service /professional development programs, and work environments foster the development of these characteristics and assets? What specific features of pre-service /professional development most effectively support practitioner growth? What approaches do Aboriginal and Torres Strait Islander educators and those from other minority groups tend to find particularly supportive?

- What factors predict the effectiveness, or otherwise, of approaches to improve recruitment and retention?

- How can local initiatives that have been effective in improving pay, conditions and status be taken to scale to enable system-wide implementation?

Structural gaps

As highlighted by the Boston Consulting Group (2008), Australia lacks a range of vital research structures. To enable the implementation of a comprehensive ECEC research agenda within the recommended ECEC research framework, at least four kinds of structural gaps need to be addressed. These include:

- the development of comprehensive national minimum datasets that can be regularly and efficiently updated and disaggregated in ways that enable the specific gaps outlined above to be addressed;

- efficient data linkage mechanisms, for example, between administrative and research datasets, and across data collected by different jurisdictions;

- ready access to existing large scale datasets and to the findings of government commissioned research, to enable the capacity to address specific and complementary questions; to provide comprehensive base line data; and to avoid unnecessary and wasteful duplication of effort; and

- systematic mechanisms for the effective and accurate dissemination and transmission of research findings, including mechanisms that heighten the national and international visibility of existing Australian ‘research to practice’ briefs; address the problem of lack of visibility of much Australian research in search engines and data bases; and transcend barriers that separate sectors.

Process gaps

Process gaps relate primarily to the need to build research capacity and to generate expertise in a broad range of methodologies in order to build a rich and robust evidence base. Process gaps can be addressed through:
• the embedding of evaluation methodologies in the planning and roll out of programs and initiatives, in conjunction with capacity building processes to improve the quality of data collected in local sites;
• systematic processes for facilitating effective four-way dialogue across sectors (policy, research, practice, communities);
• comprehensive and systematic approaches to building research capacity, including particular attention to higher degree research programs and to strengthening the skills base of ECEC researchers and academics;
• mechanisms to enable systemic information exchange concerning research and capacity building opportunities, including up-to-date, centralised lists of research expertise within Australia and abroad;
• a suite of complementary methodological approaches to address complex problems, build a wide range of evidence, and encourage innovative use of existing datasets; and
• the commitment of resources necessary for longitudinal, case-control research and evaluations.

The full range of gaps identified in this section requires carefully targeted and sustained action to effectively address Australian ECEC research priorities.

7.3 Research priorities

The priorities identified below have been synthesised from across the specific gaps identified at the end of each of the previous chapters and restated in 7.2. In identifying these priorities, the following criteria adapted from (Wise, no date) have been considered:

Table 7.1 Criteria for establishing social policy research priorities

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsive</td>
<td>The priority addresses or anticipates significant issues affecting Australian ECEC.</td>
</tr>
<tr>
<td>Relevant</td>
<td>The issue or question aligns with or has potential to extend the ECEC Reform Agenda.</td>
</tr>
<tr>
<td>Relationships</td>
<td>Other stakeholders recognise that there is a problem and support the research (e.g., government Ministers, government departments, practitioners, services providers, peak organisations; academia, community groups, media).</td>
</tr>
<tr>
<td>Implementation ready</td>
<td>There is scope for implementing findings at some level or scale, even if there not unanimous support from or commitment of other stakeholders (including government).</td>
</tr>
<tr>
<td>Recognition</td>
<td>It contributes to the development and reputation of Australian ECEC research, and creates new networks and spheres of influence.</td>
</tr>
<tr>
<td>Original</td>
<td>It doesn’t duplicate work conducted elsewhere, unless replication is intended.</td>
</tr>
<tr>
<td>Reliable</td>
<td>It produces the right evidence to support the initiation of a new policy or the alteration of an existing policy or program.</td>
</tr>
<tr>
<td>Resourceful</td>
<td>It makes effective use available non-monetary resources, expertise and goodwill.</td>
</tr>
<tr>
<td>Inputs</td>
<td>It can be appropriately resourced.</td>
</tr>
</tbody>
</table>
The priorities identified through these processes are:

- Given Australia’s goal of providing affordable, accessible, quality ECEC services, what creates an effective universal system that has the capacity to respond to the diverse circumstances of children and their families? At what point is additional resourcing required (and how much more) to effectively respond to children with additional challenges?
- What is the impact of the National ECEC reform agenda on the experiences of and outcomes for children, families, educators and communities at local and national levels? Are anticipated outcomes being achieved? What are the specific outcomes for program quality?
- What are the dynamics that contribute to the provision of high quality ECEC environments for children from birth to three?
- What are the dynamics, including motivations, expectations, entry pathways and career trajectories, of the ECEC workforce?
- What models of knowledge transfer and professional development best support ECEC educators in dealing with the complexities of a changing and demanding work environment, including within integrated services and cross-disciplinary contexts?

This report recommends that these priorities be addressed through a programmatic approach. The following section illustrates how a programmatic approach can support an integrative research focus.

### 7.4 An illustration of an integrative focus in programmatic research

As emphasised throughout this report, the complexities of ECEC and the systems in which it is embedded limit the capacity of narrow project-based research foci to generate useable findings for policy and practice. The following example draws from the six priority areas identified in the project brief to illustrate the value of an integrative focus within a programmatic research approach. The example has direct relevance to the National reform agenda policy goals.

**Policy goal: Universal pre-school**

Central to the ECEC reform agenda is the goal of providing children and their families with access to good quality programs. A key initiative within current policy directions is the provision of “universal access to quality preschool education for all children in the year before school” (Investing in the Early Years: A National Early Childhood Development Strategy, COAG, 2009).

A key element is the quality of children’s pre-school experience, which is a critical contributing component to the achievement of better educational outcomes. Thus it is important to consider the issue of supply and availability of pre-school, in conjunction with
consideration of quality. Further, since the reviewed research indicates that early childhood markets are local, it is also important to be cognisant on the impact of the pre-school policy initiative on the composition of ECEC markets more generally.

Hence evaluating the effectiveness of the ‘roll-out’ of pre-school places could incorporate a number of key questions. For instance:

- **Supply**: Are there sufficient places?
- **Impact on local markets**: Is the introduction of the policy changing patterns of supply? Is the financial viability of services being affected?
- **Marginalised groups**: Is there effective engagement of all children and families? What makes a difference?
- **Funding**: What types of funding, funding regimes and levels of funding/subsidy are most effective in supporting access to good quality ECEC, especially for ‘hard to reach’ families?
- **Providers**: Are there patterns across types of providers and governance structures (e.g., quality differentials, location differences, levels of inclusion)?
- **Quality**: Are places achieving a good to high level of quality? What accounts for variations in quality?
- **Children’s experiences**: How has universal pre-school affected children’s experiences in early childhood programs? What is the level of consistency or disruption children are experiencing in relation to programs, peer groups, and educators?
- **Children’s developmental outcomes**: What is the impact on children’s language, cognitive, social and behavioural development, concurrently and in the long-term?
- **Educators**: What insights can teachers and educators provide about effective models of program provision?

### 7.5 Conclusion

This report is framed by a policy and practice context of exciting possibilities and new directions for Australia’s ECEC services. Building a knowledge base that supports and informs policy and practice by documenting processes and experiences, evaluating program effectiveness, reporting outcomes, and translating research, is an essential expectation of the National reform agenda. The requisition of this report by government is a first step towards this goal. The report has identified specific gaps (content and process knowledge in six priority areas), structural gaps (access to and dissemination of information), process gaps (research capacity), and research priorities for ECEC. We recommend that closing these gaps and addressing priorities can be achieved through an ECEC research framework founded on principles and a programmatic approach. The recommendations are in keeping with national and international trends to move ‘evidence-based practice’ towards knowledge exchange (Sylva, Taggart, Melhuish, Sammons, & Siraj-Blatchford, 2007), knowledge brokering (Head, 2010), and knowledge translation (Guerra, Graham, & Tolan, 2011) through collaborative, research-policy-practice alliances.
References


Head, B. (2010). From knowledge transfer to knowledge sharing. Towards better links between research, policy and practice. In G. Bammer, A. Michaux & A. Sanson (Eds.), Bridging the ‘know-do’ Gap: Knowledge brokering to improve child wellbeing (pp. 109-123). Canberra: Australian National University


Wise, S. (no date). What priorities for social policy research at Anglicare Victoria in 2011-2014?
Appendices

Appendix 1

Early Childhood Development Research Reference Group

ARACY held two face-to-face reference group meetings (August 2010, February 2011). The following is a combined list of meeting attendance.

Dr John Ainley Australian Council for Educational Research
Prof Donna Berthelsen Queensland University of Technology
Dr Mindy Blaise Monash University
Prof Jennifer Bowes Macquarie University
Prof Deborah Brennan Social Policy Research Centre
Associate Professor Ngaire Brown Poche Centre for Indigenous Health
Ms Pam Cahir Early Childhood Australia
Dr Gordon Cleveland University of Toronto
Mr Dan Cloney University of Melbourne
Prof Marilyn Fleer Monash University
Dr Sharon Goldfeld Centre for Community Child Health
Prof Anne Graham Southern Cross University
Dr Matthew Gray Australian Institute of Family Studies
Ms Marie Hammer Monash University
Prof Pauline Harris University of South Australia
A/Prof Linda Harrison* Charles Sturt University
Dr Susan Irvine Queensland University of Technology
Ms Jatinder Kaur University of Queensland
Prof Michael Keane University of Technology Sydney
Ms June McLoughlin Victorian Department of Education & Early Childhood
Ms Karen Merange Playgroups Australia
Ms Jayne Meyer-Tucker Good Beginnings
Dr Tim Moore Centre for Community Child Health
Dr Sue Packer Child at Risk Assessment Unit, Canberra Hospital
Mr Dawson Ruhl Child Inclusive Learning and Development Australia
Prof Sven Silburn Menzies School of Health Research
Dr Sarah Wise Anglicare
Dr Kylie Smith University of Melbourne
Prof Collette Tayler University of Melbourne
Dr Affrica Taylor University of Canberra
Ms Ginie Udy SDN Children’s Services
Ms Suzie Vassallo Australian Institute of Family Studies
Prof Graham Vimpani University of Newcastle
Prof Jennifer Sumision*  Charles Sturt University

Ex Officio
Dr Russell Ayres  DEEWR
Joanna Stanion  DEEWR
Ms Kathryn Edmondson  DEEWR
Dr Lance Emerson  ARACY
Dr Geoff Holloway  ARACY
Ms Ngaire Hosking  DEEWR
Ms Sue Ludwig  ARACY
Mr Scott Matheson  DEEWR
Ms Catherine Moore  DEEWR
Ms Jaya Negi  ARACY
Ms Gabrielle Phillips  DEEWR
Ms Robyn Shannon  DEEWR
Dr Mary Welsh  DEEWR
Mr Glen Watson  DEEWR
Ms Joan ten Brummelaar  DEEWR

*prior to taking up the project
Appendix 2

Transcription of ARACY-led discussion group summaries—GAPS

1. GATHERING, INTERPRETING AND ANALYSING POLICY-RELEVANT EVIDENCE

List 3 - first group

2. Research stocktake - Catalogue of what research has been done.
3. Policy research - We also need some research evidence on what sort of research influences policy and of course going with that how do you get research to influence policy. We need more partners in utilising research so that, e.g., economists could work alongside health and education researchers.
4. Parents’ needs, attitudes (frame analysis), values, preferences - There is a need for research about different groups of parents and what they want and need from services; not everybody wants or needs the same thing. Parents’ attitudes, preferences and values regarding services, so that when the policy is made it has some sense about who that policy is being made for. What contributes to parents being more competent in their own situation? What makes research and policy to the people to whom it would be helpful—so that when research is being done and policy is being made, going and asking people how this is helpful for them and what did they like about it?
5. Policy transparency - Transparency in the process of policy making along with the ideas of who are the advocates for research that actually gets on to the desk of the policymakers and also what is the role of advocacy and advocates to ensure research gets on to the desk or into the policymaking forum?
6. Policy evaluation - Is policy evaluated systematically, rigorously and locally?
7. What questions do people in the field have about policy?

List and prioritise – second group

1. Communication and parents - We actually need to look at how different groups of parents not only access the information but also how they act on it. In the previous discussion we talked about the fact that a lot of information on parenting goes from parent to parent.
2. Communities - Also wanted to look at communities and look at not just focusing on communities that are disadvantaged or have been identified as disadvantaged but with the AEDI looking at communities that are well functioning, that have really good early childhood outcomes for their children and they may be in the areas of low socio-economic factors, they may in all sorts of communities, but actually do some research on what the strong communities are doing that actually works, what’s happening in those communities that’s long term, that’s sustainable that might not involve lots of funding that needs to go across every community. Around strength perspective, building stronger communities.
3. Child versus parent needs - How parents interpret their child’s needs so not only looking at what parents think their child needs but also looking at what a child identifies as his need and comparing the two and looking at how effective parents are in identifying their child’s needs at a particular point in time.
4. Communication and parents - What are effective and cost effective methods for parents to access information universally—e.g., parents now don’t tend to go down to the library now, they tend to use the Internet but some parents don’t have access to the Internet. How do we provide information that is used but is also cost effective and is provided universally rather than just provided to the disadvantaged community but to all families because we know that for families which are struggling the bulk of the community around them can actually influence how those families react, how those families survive

3 Following discussion of the key issues, some groups managed to prioritise them, whereas others found such a task too difficult given the inter-relationship of many issues. Where the issues have been prioritised it has been noted as such in the sub-heading.
and prosper within their community, if that info is spread among all those parents within those communities.

5. ‘Children’s voice’ - Keen on seeing the child’s voice in all research, we understand and we were challenged to think about how you can do that for 0-3 if not 0-5. But there are lots of interesting ways that are happening in early childhood settings where people are starting to access that feedback from children and we think that all of the research, particularly between parents and children, is important to get perspectives from both parents and children.

2. EFFECTIVELY IDENTIFYING AND COMMUNICATING WITH PARENTS AND CHILDREN

List – first group

1. Evaluation of programs against parenting knowledge - There is an absolute plethora of programs out there and parents are accessing them and they are costing them from very little to huge amounts of money. Those programs are evaluated but often they are evaluated against their own terms. What is needed is an evaluation framework that is set against the developmental and parenting knowledge priorities that we will have as an entire sector which can then be applied down into all of these different types of programs out there. This would then provide a means for these parents to take informed decisions in their selection of programs. The need to establish an evaluation framework for the independent evaluation of parenting programs and that shapes the evaluation framework against identified parent education priorities rather than those of the program itself. That would then allow us to evaluate a whole part of programs to identify the ways in which they address parenting and developmental priorities (we can see that we are getting value for money).

2. Communication modes - Gap in the changing area of the ways in which we access information, the modes in which the information is distributed and some need to investigate what’s most effective for parents in terms of face-to-face online social networking and other means that they might begin to access and use information.

3. Competing programs - Parents encounter many professionals and practitioners, teachers, doctors, healthcare workers, nurses etc who make recommendations about certain programs and we don’t know what programs these professionals are recommending, why they are recommending, what points in a parent’s and child’s life these programs are recommended.

4. Parents’ knowledge - We really don’t know parents’ knowledge practices and values in terms of parenting and child-care nor do we know children’s. Children are quite expert in family interaction and parenting engagement and they are often completely ignored - but could provide us with very valuable information.

Second group

1. Pathways research - Key gaps with respect to researching the trajectories to enable forward planning and that’s trying to be proactive not reactive so perhaps taking a life course approach looking at special needs, mental health, premature babies and following them through a longer term. Not enough research on very low birth weight or premature babies and their course at different transitions. We need to have longitudinal research, that’s quite a challenge when we are dealing with promotion of prevention and early intervention. Longitudinal research is very scarce.

2. Parents’ and children’s experiences - Researching for multiple perspectives, we often do lots of research on observed experience but we need to do more from lived experience both from a child’s perspective and parental/family perspective.

3. We also need more info on physiological, bio-medical data as well as social science data, which complements some multiple perspectives there.

4. ‘Children’s voice’ - Although it’s a challenge researching with children, but they have a right to use their consent and also have a voice using strength-based approaches. We also need to employ different strategies for different groups and to cater for those special needs of children. There was some discussion about children who have autism or have limits in their communication skills, what’s the best
way so that they can have a voice. Looking at getting expertise from different fields from a whole range of practitioners.

5. Various types of communication strategies for getting the child to understand that they are having a say in how they are going to communicate as well as express that.

6. **Multiple perspectives** - There are lot of clinicians and practitioners out there from health, educational, different perspectives, but we need to bring them together with researchers to better help identify research gaps.

### Third Group

1. **Program evaluation** - Evaluating programs that are currently operating and how hard it is sometimes for the organisations to get funding to realistically evaluate what they are doing.

2. **Knowledge and communication with parents** - Knowledge base of individuals and organisations to be researchers themselves. Knowledge skills and training, the professional development that the professionals and practitioners require to be researchers but also to effectively communicate with parents.

3. **Communication with parents** - Being effectively able to build on what parents already know and having some knowledge about that. How best to communicate with parents through social networking etc because of the changes in media/technology and that also links to how parents actually gather their information about parenting.

4. Collecting realistic data and getting non-defensive responses when people filling in surveys etc and how do we make sure that we are getting responses (that will enable us) to create more realistic pictures and gathering information from invisible families.

### List and prioritise – fourth group

1. **Communication with parents** - We actually need to look at how groups of parents not only access the information but also how they act on it. In the previous discussion we talked about the fact that lot of information on parenting goes from parent to parent.

2. **Communities** - Also wanted to look at communities and look at not just focusing on communities that are disadvantaged or have been identified as disadvantaged but we have this opportunity now with the AEDI around looking at communities that are well functioning, that have really good early childhood outcomes for their children and they may be in the areas of low socio-economic factors, they may in all sorts of communities, but actually do some research on what the strong communities are doing that actually works, what’s happening in those communities that’s long term, that’s sustainable that might not involve lots of funding that needs to go across every community. Around strength perspective, building stronger communities.

3. **Parents’ and children’s perspectives** - How parents interpret their child’s needs so not only looking at what parents think their child needs are but also looking at what a child identifies as his/her need and comparing the two and looking at how effective parents are in identifying their child’s needs at a particular point in time.

4. **Communication modes** - What are effective and cost effective methods for parents to access information universally – for example, parents don’t tend to go down to the library now, they tend to use the Internet but some parents don’t have access to the Internet. How do we provide information that is used but is also cost effective and is provided universally and is not just provided to the disadvantaged community but to all families because we know that for families which are struggling the bulk of the community around them can actually influence how those families react, how those families survive and prosper within their community if that info is spread among all those parents within that communities.

5. **‘Children’s voice’** - Keen on seeing the child’s voice in all research, we understand and we were challenged to think about how you can do that for 0-3 if not 0-5. But there are lots of interesting ways that are happening in early childhood settings where people are starting to access that feedback from children and we think that with all of the research, particularly between parents and children, it is important to get perspective from both parents and children.
List and prioritise – fifth group

1. Overall there is some, but limited, research on formal parenting programs – e.g., Triple P, but there is less research on other programs – e.g., looking at whether or not the knowledge gains that parent have received during those programs actually translate to real changes for children and that children are better off as a result of parents having access to these programs and longitudinally does it work. We do have some longitudinal data in Australia particularly around the Longitudinal Study of Australian Children, the Longitudinal Study of Indigenous Children, and the youth longitudinal study. So we can use these to benchmark and try to see programs in particular areas working, so we can use this perhaps as a comparison group or if there are any policy changes or things happening at a local level, do some analysis of those participants, (and) from those large studies form some (analyses for) local areas.

2. Funding research - Lack of funding is also another issue, which may or may not include RCTs which are not the only way of demonstrating robust research. There is lot of priority being placed on diagnostic-based, disability-based categories like autism, so the problem of that being deficit-based rather than strength-based. So what we don’t know is whether having diagnostic-driven funding model actually works, do we know that it is actually the best?

3. Parents’ concepts of ‘good parenting’ (frame analysis) - How do diverse parents’ best learn and take on board and reflect on information about good parenting? So the research question or the research gap there is really around what are the mechanisms for disseminating engagement and communicating with families. Is it the brochure and we accept the point that one brochure for everybody is not going to work, tailored brochure for different families is that useful at all, is having a mechanism for getting the information to families just in time, if you are given a brochure do you put it in a filing cabinet, or a drawer, fridges, when you find out that your kid is having trouble with speech is it then that you want to know about what the speech therapy services might be in your local area. Or is it having a community hub and certainly there is information that we have learned from evaluations of the former government’s ‘Stronger Families and Communities’ strategy and SPRC and AIFS were working on the national evaluation so there is lots we have learned about that, including the usefulness of the community hub. So how can we apply some of those lessons beyond because that was of course just around the communities for children’s site. So that was a special model, there was funding and resources put into that coordination, so how can that be actually taken up and applied elsewhere. So we need to evaluate whether in fact it works outside those very narrow sites where it was specifically set up under this program.

4. Scaling up the existing programs and practice again. Programs like the ‘Stronger Families and Communities’ strategy identifies lots of promising practices, they weren’t necessarily RCT’s, they weren’t necessary externally evaluated, but programs were keeping data, they might be getting data from schools, might be getting data from workers within their own service and reflecting on what’s working, what’s changed for parents, for families, for children etc, writing that up and incorporating that within a conceptual framework to say it fits in with what the literature says, so it’s a level of evidence. Now those that are being identified as part of the ‘Stronger Families and Communities’ strategy evaluation we publish them on our Communities and Families Clearing House website. The research gap that exists is how we scale those up? One of the issues is distilling what are some of the key principles and particularly how you might be able to localise some of those integrated approaches. So what are some of the fundamental principles that underpin those and then evaluating them as they translate into another context to see whether they work when you take from what’s being learnt here and applying over there.

List and prioritise – sixth group

1. Knowledge transfer4 - Making practitioners aware of the research, otherwise how do teaching administrators managers of child care, how do you make those people aware of the research, and how do they take that research and present it to staff members or colleagues or whatever and then make

4 There are various terms, all meaning essentially the same—knowledge brokering, knowledge translation, knowledge transfer.
something of it in terms of practice. That is the gap in research that the research is not being taken up or being used or evaluated and that links with providing info to staff who are working with children - that is one sort of priority. The AEDI provides info about kids of a particular age group (5 years), there is a gap in terms of covering kids who are younger. The AEDI is actually providing us with information about our schools, about our kids, that we use, that pre-primary and kindi teachers are using it but there is nothing pre that. To some extent the AEDI project is an example of a practice that has actually come in and being taken and being used.

2. **Knowledge transfer** - There is a lack of dissemination of research about mental health and learning difficulty issues of mental health in the early years. Research not being distributed to parents and/or organisations, there’s some evidence of that being there but we don’t know how much it is about those kids and those early years and we need to know about it.

3. **Knowledge transfer** - Failure to transition information from one agency to another early child care-kindly. The essential questions and the research about it was what the parents want/need for their children? Is that a research gap? Because the program that is evaluated, the person who is evaluated, the school that is evaluated infact what do parents want and if the premise is what do parents want and if the premise is that parents know best and to a large extent that is true either they know what they want, or of there is something wrong with the child then where is the best research on what parents want?

3. **UNDERSTANDING AND RESPONDING BETTER TO THE NEEDS OF HIGHLY VULNERABLE AUSTRALIAN FAMILIES AND CHILDREN**

**List – first group**

1. Research that looks at trans-disciplinary knowledge and understanding of leadership in terms of integrated practice and service really looking at how we undertake that.

2. **Research on 0-3's** - Current research that came up was 1-3s being particularly needed area. For example, in terms of research in Australia on the impact of non-familial carers on first brain development and child outcomes. There is some British research in that area but we have to look at it more strongly. Wellbeing should be a priority in terms of informing practice in Australia.

3. **Policy research** - Research to really drive policy and funding in a very clear way and research that looks at high quality practice. Really trying to look at services that do have strong outcomes for children and really including those very strongly in terms of policy and funding.

4. **Knowledge transfer** - Research that helps those working in the field to interpret the research that makes that open and accessible. There is this big gap between what’s being done in an academic sense of research for other researchers and how that impacts on the field.

5. **Relationship-based/strength based-research** - We are doing research with the Save the Children mobile play scheme and have really come to a strong view that relationship-based/strength based-research particularly for vulnerable families has got to be there, it has to be on the ground researchers going out and actually being a part of the research rather than distanced from it and making recommendations in a distanced way. We see it as a critical element and perhaps it is a gap that has been around with research with vulnerable families.

**Second group**

1. Emphasise partnership and collaboration. We want research to not only look at just us and them but how we could work with people not talk over them - that is a principle which could be researched.

2. ‘**Filtered**’ communication - Research gap regarding agency as the intent of Indigenous workers and how it is filtered through middle management. An Indigenous worker in an agency could communicate something to middle management of a concern or something, but it goes through a filter of middle management to a modification and that probably means that the right message doesn’t get there.

3. **Environment and children** - We would like to see research on ways in which the environment effects early childhood development that includes outdoor-based places, curriculum access, wild spaces, playgrounds etc.
4. There is very little Australian research on the best ways to intervene - preferably in naturalistic ways to ensure better futures better outcomes for children with mild difficulty as well as children with major disability. We have about 20% of kids with mild difficulties in the 0-6 bracket, not hard to overcome with a little bit of push, very easy to overcome, but often doesn’t happen and we would like to see that from a strength side not deficit basis and done naturalistically.

List and prioritise – third group

1. **Families’ aspirations and expectations** - We want to know more about the aspirations of families, what do they actually want for their kids? Indigenous community, what do they want for their kids, parents in the detention camp, what do they want for their kids? We don’t know enough about that, there will be commonalities obviously but there will be particular needs and particular values and that is one way of what communities do value, what’s important for their children. Also connected to that is what are their preferred ways of learning, like do different communities’ groups have preferences for the way their children are taught, the way the learning takes place.

2. **Family-based learning** - Not sure whether this is as much a research gap but it is important - valuing learning that goes on at home, enabling parents/families to know about the things they do on a daily basis. That is, encouraging their kids to learn. We don’t know enough about the kind of learning that takes place at home, parent and families valuing and recognising that they are engaged in the learning process and are not just sent to the expert groups.

3. **Community** - Want to know examples of innovative models particularly around building community models. So what is working in the community particularly around partnerships – one example with the Australian Catholic University, Smith Family et al, they have been involved in this project since 2002 and the number of children involved in the homework club that they have been running has really taken off and they have just been awarded a Schools First Award which is around $100,000 that they have received to built that program. That can show that it is working but it is not just working with the kids, it is working with parents and families and the wider communities. They are the sort of models we would like to know more about. What is working, what are the critical success factors? What aspects of the models could be used, replicated, or modified.

Fourth group

1. **Evidence models** - The vast majority of research and this is an issue for the way evidence is built around the programs. So you run a program with staff and then you can research it because you’ve got professional workers there to collect the data. The amount of research is actually there on what families do is far different from what we think they do. So, we don’t have good research, even though it is a significant factor that we need to know, we don’t do that. Have an issue with the pyramid model (of standards of evidence), because the only things that ever get into the Campbell collaboration type stuff is program-driven professional work across Australia, there is not a single piece of good quality research on community playgroups in this country. Because there are no workers involved to control it and test the intervention.

2. **Program evaluation versus parental and community knowledge** - A lot of the evaluation research is mainly around individual programs, small scale evaluation research. We need find out more about how families actually learn to be parents, what supports they access, why they want to access? What we can do to help them access it, particularly for vulnerable families but for all families as well. Brofenbrenner’s ecological model gives us a perfect (model) - not that would ever get into the top level of research as a paradigm particularly the ecological model stuff but in terms of how the world operates, we don’t understand the paradigm shift in parenting that’s happened in the last 50 years, all the consequences of it. So think back to a time when we did not have child care, where we didn’t send children to school at age 4. That’s happened in a relatively short span of time but we’ve done no quality research on the consequences of what all of that means. We don’t know how our children are being raised now and how do we properly intervene. So in terms of the research gaps, it is a pretty fundamental gap. We also need to look at research on how that happens in the context of a community.
because that’s where people live, they don’t live in services. As much as we spend our money on services, they live in communities and they live in families.

Fifth group

1. Families who don’t access the services are missing from all research and involving children in research.
2. Data collection there is huge gap there – we don’t have consistent data for comparability.
3. Program evaluation - Outcome studies of our current services – we felt quite strongly that WA has a different model than other places. So we can go to the UK wearing a practitioner hat as a child development service model, we can go to the UK and see how intervention is evaluated over there, but they have a completely different cohort of children attending child development services. They have disability and developmental all rolled into one service delivery, so it’s a different population. Even looking at Queensland where a lot of the therapy provision for children who are at the spiky end and need intervention and in Queensland that is very much delivered within an education model. The therapies are embedded within the education model whereas here we have health and education quite divided. So we need those WA specific models of research (put) into current services.
4. Lack of longitudinal studies and the gap of providing continuous internal evaluation. We talk specifically about some programs we knew of that had really substantive evaluation done at the beginning of their life and of course that was the end of that research of that project. And as the program has evolved over the years it has actually changed and so if somebody were to come back and re-evaluate they are actually evaluating a different program because the practice has changed. So we need to build these in internally (enhancing) continual ability to evaluate services.

5. Very early years research - Important to emphasise the starting early research. We know that (poor) attachment in infancy is the biggest indicator for poor developmental and learning difficulties so we really need to think about getting down to that end—getting down to 12-months-old children.

4. KNOWING THE DYNAMICS OF EARLY CHILDHOOD EDUCATION AND CHILD CARE MARKETS AND KEY STAKEHOLDERS

First group

1. Family knowledge, norms, attitudes and values - There needs to be more research on family knowledge, experiences and negotiations and series of entitlements that affect early childhood education and care including taxes, rebates, parental leave, and knowledge and accessibility of the early childhood systems and its options. There needs to be research on how families understand from early childhood education and care into other educational workplace settings and included in the family is a very essential part of family which are the children—under this category we are including children’s experiences of different service types, what’s it like being a child in a playgroup, what’s it like being a child with whom different professionals work during the day and what’s his experience like.
2. Workforce development - Essential part of this is workforce development—what workforce development is like in different sectors, what’s it like in large corporate, what’s it like in non-for-profit sector, what’s it like in the integrated service system, what’s happening, what works and who is able to access different buckets of funding and how do they do it and where do they get knowledge from and how much time is it taking them.
3. International comparisons - Look at the international comparisons like how the nations have garnered collective visions and then flow on affect on state architecture that produced a very solid and pervasive early childhood system – so how has that happened, what strategy is being used and what kind of resources does the early childhood community need to do that
4. Mixed markets - Comparison of national international research around mixed markets provision, what are the outcomes for children and families in the countries that have state funded demand side funded provision for early childhood education and care – what are the outcomes for children in countries like Australia that has mixed markets demand side provision.
5. Jurisdictional comparisons - Need lot more territory and state comparisons, so what’s going on in different states like Victoria – Victorian government is much more active in developing particular types of service systems then other states.

List and prioritise – second group

1. Parents’ perceptions of various delivery models, what are the various expectations of child care of parents vs. education and also within that looking at the impact of the priorities of the schooling sector that’s having on the child care services and preschool services.

2. Parent’s knowledge - Parents understand and know about schooling but the perception of child care appears to be different, so we need some research around why is that? What’s going on there? Valuing parents’ knowledge, they have lot of knowledge about their children? Are we utilising that and what’s the research saying about that.

3. Knowledge transfer - Translation of research into practice, there is lot of research around that generally, but more specifically looking at early childhood. We do all this research, how do we make sure that gets into practice? Where is the translation of that research into practice? There are a lot of early childhood areas that we need to look across that translation because practitioners are not always picking up on that research and they don’t always know what’s the latest research, so how do we translate that into practice.

4. Conceptions of childhood (frame analysis) and social marketing - The match between early childhood philosophy and the marketing approach. From an early childhood perspective we want to be capable and competent but the marketing approach is quite a deficit model. So looking at that and doing some research around that.

5. Accessibility of services - How do we make services accessible to all and engaging and removing barriers for all families? How do we remove those barriers for children and families? How do we make sure that all children have access to the services they require? And how do we make sure that that information is shared across services.
5. **Identifying Best Practice to Build and Support Delivery of Early Childhood Services Across Australia**

List – first group

1. **Worst practice** - We often don’t get worst practice identified, that information is neither released nor captured and there are lots of reasons for this. If we don’t know what isn’t working it is hard to know what is working.

2. **Data availability** - Another gap is in the availability of data some of the big national data bases exist in Australia--Centrelink, Child Support Agencies, Medicare, agencies collecting population level data but it is not easy or possible to get access to that data so it cannot be used to provide very reliable pieces of information that policy makers require.

3. **ATSI information** - There are issues about collecting good information on ATSI people, those in isolated communities.

4. **Children’s transitions** - There are gaps in the research that’s available when children are transitioning between different stages in their lives, particularly when kids have been to Family Court situations, and when their living arrangements suddenly change or kids living in poor accommodation. In terms of this notion of best practice, like what this is anyway, there are many ideas of what best practice is. Difference in the best practice in ATSI communities, different cultures and there are different ideas about what is desirable and positive parenting.

5. **Collaboration across disciplines** - Gap in collaborating across disciplines because people using different frames of reference, kinds of language, and so on. Again difficult to get good research on best practice when people are not collaborating as they would like to be.

List – second group

1. Had lots of discussion around teacher research and practitioners’ research with the view to say that if teachers are researching their own staff with children/families then that could inform what best practice could possibly become for building and supporting service delivery.

2. **Children’s voices in research** - but also relationship between practitioners that are working with children in a range of different capacities and (different) children’s services, there is not enough of that and that could perhaps inform what happens.

3. **Research on less accessible populations** - Research is done with less accessible populations and of course there are issues involved such as who wants to be in the research and doesn’t and why, but there are questions which we need to ask (concerning) what are those research processes?

4. **Place-based research** - Place-based approaches to ensure closer links between researchers, i.e., local contextually specific and figuring out how that sits (and gets) attention within the broader national visions of what we want. There is that tension about the whole nationalization going on and how we keep things contextually specific and local and who those researchers are and who gets valued as a researcher.

5. **Defining the practitioner** - Discussed the concept of who a practitioner is. There seems to be a kind of divide between teachers who meet face-to-face with children (and) are one form of practitioner but also academics are practitioners, educators are practitioners, so having some kind of nuance about the different kinds of practitioners that we all are but also having a broader view on what practitioner research could potentially be. Research could be more effective and empowering and collaborative in a new way, I think the processes are an important part (of) our discussion.

6. **Place-based approaches** - Where we would go to find the Australian database on place-based approaches, so where is all that information?

7. Rest of the discussion was around qualifications, Indigenous communities—it is easy for us to be urban but we should think about the rest of the country as well. [Note: most Indigenous people live in urban settings.]
List and prioritise – third group

1. Gaps in terms of looking at the impact of regulations and funding on the ability to (en)vision best practice as well.
2. Engagement of vulnerable - How to engage the most vulnerable via our services, i.e., the hard-to-reach, what changes need to be implemented.
3. ‘Universal’ does not mean ‘uniform’ – need to diversify at universal services level - Sometimes the aim of creating universal services can preclude social inclusion. It is kind of a complex issue. We were talking about targeted and universal services, but that kind of area, there is a need to understand that a bit more deeply. We should have diversity within universal services rather than uniformity. [One of the issues here was the misconception that ‘universal’ = ‘uniform’].
4. Looking at research principles and ethics in early childhood services and raising children’s voices, carers’, parents’, kinship, cultural diversity and ownership of the evidence like when we are doing research and creating evidence.
5. ‘Best practice’ - Specifically unpacking what does work and why? What are the mechanisms in a particular context of where services have shown to demonstrate best practice? How do we transport/implement that to other communities or other settings? We can’t necessarily think it from one context, so unpacking it a bit more deeply.
6. Historical analysis - Perhaps some of the services from the models we have got were working historically. So is there much information or historical analysis of the current services—what did work about them, when was it working and how was it working. Somebody raised a point that at one stage each kindergarten had to have at least two disability placements available. Did that work? Why did that change? In looking at that historical analysis we were suggesting we might understand political and economic dramas as well.

List and prioritise – fourth group

1. Accessibility of research (knowledge transfer) - Research being accessible, research doesn’t need to be so difficult that you find it hard to comprehend it and implement it into practice. If you can’t say it simply and if it can’t be used by people in the workplace then what the use of it. So that’s very important that practitioners are actually able to put into practice.
2. Practitioners’ concepts of ‘best practice’ - Mismatch between practitioners working in services and how they understand their practice as best practice or how it matches with what they understand as best practice. This is an issue which causes staff burnout because they have an expectation of a practice they can’t reach. And all other interesting best practice also impacts on it - the training, in the context of the workplace.
3. Change management process and that if you are looking at barriers and things that you need to change and how do we want to do that, We need to actually think in terms of a change management process which means that we are looking at all the different areas of change management—the systems, the structure, the people, the processes, the IT, the infrastructure across the whole architecture, not just keeping everything in silo. Looking as a whole change process. Within that the leadership and expertise to deliver change management process to actually deliver change and make it happen. Obviously there are political constraints there and cost constraints there, feasibility studies all that could go there. (Research gap in the best practice in the change management process).
4. Components are potentially not synchronised. There is a lot of duplication of efforts, that is difficult but that is something we need to look at.
5. Program evaluation - Having some sort of post-implementation review. There is lot of great programs, but then going back, normal project principles you have PMRs, what that actually means? How are those KPI’s met? KPI’s are difficult as lot of them would be intangible but you still can measure it, you still can make that change to see the difference.
6. IMS system - What does it look like? Was that a big gap? How do the core people access that? How does it disseminate information everywhere?
6. **Supporting a Skilled and Effective Workforce**

**First group**

1. **Workforce research** - We want a national early childhood workforce study on a continuous basis. Australia is one of the few countries which has never undertaken a large scale thorough comprehensive workforce study. Some critical questions that arise are who is working in the sector, what services are they involved in, what role they perform, etc.
   Personal ambition: having a centre dedicated to addressing workforce issues. They would perform a multitude of functions like conducting research would be one of the tasks that this centre would be focusing upon. There would also be a clearinghouse something like AIFS, Victoria. They would also be able to provide research-based data to the government on workforce reform that’s needed. It would also have capacity to consider issues about regulating and registering early childhood personnel. Again something we don’t have, we are marginalised in terms of the education sector registration. We do need to consider a dedicated early childhood sector workforce collaboration of some sort and that’s why proposing this model.

2. **Workforce support** - We talk about the need to provide support for early childhood staff in a variety of ways and if we don’t do that then we lose on the qualified staff who are joining the workforce. We also know that recruitment and retention are major issues for us therefore providing support in a more focused way becomes essential.

3. **Racism** - The early childhood workforce doesn’t reflect the Australian community; lack of leadership to address these issues.

**List and prioritise – second group**

1. **Effective workforce models** - We need compelling evidence of effective workplace models in different contexts to make sure that the working conditions are right for people for people wanting to stay in the workforce, and it’s around what’s the evidence of the number of children in the group, what is the child staff ratio. What evidence do we have for particular staff child ratio for being better than or less than effective, hours of attendance—there are huge issues around the changes that are coming in around 15 hours, children being in care for 15 hours a week but with reduced child staff ratio, the need for more staff, the numbers of children in a group of funding models, and all these types of issues, it looks though that it is not going to be a very attractive profession, because you won’t be able to work full time in a sessional setting, in a long day setting, yes you will.

2. **Workplace environment** - There has to be evidence around the workplace environment about staff roles, how many staff should we be having not just in relation to child-staff ratio but also in management and support of staff, looking at parents, looking at roles in terms of children in the wider community.

3. **Professional development** is another big issue. What requirements are there for professional development, what is there for the staff to be having professional development and it then also comes down to teacher registration issues in the primary sector where there is requirement for professional development and the support for professional development that isn’t existing in the early childhood arena.