Assessing the quality of early childhood education and care

In December 2009 the Council of Australian Governments (COAG) agreed to a unified National Quality Framework (NQF) for Early Childhood Education and Care (ECEC). The quality reforms — which include clear standards, streamlined regulatory approaches, an assessment and rating system and a national learning framework — are being implemented over the period 2012 to 2020 as an initiative of the National Early Childhood Development Strategy. The vision of the strategy is that “by 2020 all children have the best start in life to create a better future for themselves, and for the nation” (COAG, 2009).

The purpose of this Policy Brief is to consider the implications of current research and the role of quality assessment in delivering the National Early Childhood Development Strategy vision. Specifically, the Brief discusses the ECEC policy environment in Australia and outlines international evidence regarding the impact of ECEC quality components related to adult-child interactions and relationships.

Why is this issue important?

The care of young children is increasingly a shared responsibility of families, communities, governments and private enterprise. In 2008, UNICEF reported that in industrialised countries, approximately 80% of three-to-six year-olds and 25% of children under the age of three participate in formal early childhood education and care (ECEC). What happens in this care matters: neuroscience research is providing evidence about the vital importance of early environments on children’s learning and development trajectories (National Scientific Council on the Developing Child; 2010). Participation in ECEC impacts directly upon children’s educational and social development, and this impact has a lasting effect (Vandell et al, 2010; Ramey, Sparling and Landesman, 2012). It is participation in high quality programs, however, that delivers the greatest benefit for children (Tayler, Cleveland, Ishimine, Cloney & Thorpe, 2013).

On the basis of international research, the UNICEF report (2008) emphasised that “improving the quality of early childhood education and care remains the most potent of all available opportunities for resisting the entrenchment of disadvantage.” The report concluded by stressing the importance of measuring progress toward the goal of improved quality in ECEC and the need for monitoring to inform evidence-based policy, effective advocacy and public accountability.

Australian governments have increased investment in ECEC significantly over the last decade (DEEWR, 2010). Most children in Australia participate in one or more ECEC programs (long day care, family day care, limited hours or occasional care, kindergarten/preschool) before they start school (Centre for Community Child Health and Telethon Institute for Child Health Research, 2009). However, increasing access is not sufficient to deliver the intended gains for children. A commitment to program quality improvement is essential to tackling the disparities in outcomes associated with disadvantage (Britto, Yoshikawa and Boller, 2011).

Empirical evidence about the essential components of quality within ECEC services for young children in an Australian context is scarce. In order to develop a clear picture of the role of ECEC quality in delivering the desired outcomes, we need measures to understand the components of quality and research to understand how they contribute to the advancement of human capabilities and social inclusion objectives, and the costs associated with achieving positive effects (Harrison et al., 2011).
The National Quality Framework

Australia has been engaged in rapid reform that brings together for the first time, federal, state and territory jurisdictions and the variety of ECEC service types under a single umbrella. The National Quality Framework (NQF) includes:

• a legal and governance system comprising the National Law and National Regulations; providing a collectively governed uniform national approach to the regulation, monitoring and quality assessment of ECEC services
• an early years learning framework, Belonging, Being and Becoming, outlining practices to support and promote children’s learning and opportunities
• a National Quality Standard that sets out national benchmarks for ECEC and school-aged care
• a transparent ratings system providing families with access to information about aspects of quality known to influence child outcomes.

The unified framework for assessing, monitoring and reporting on quality standards is expected to deliver a range of benefits. Consistent national data will provide services and families with a deeper understanding of key elements of a quality service, equipping them to make informed choices and decisions. Researchers will gain access to consistent ECEC data and data linkage opportunities that can facilitate large-scale impact studies. Policymakers will be able to identify service characteristics, trends, strengths and opportunities for improvement and use the data to target future public investment.

What does the research tell us about ECEC and quality?

The impact of quality

International research demonstrates that it is high-quality ECEC programs that have a positive impact on the health, learning, development and wellbeing of children who participate (e.g. Vandell et al., 2010; Mashburn et al., 2008; Melhuish et al., 2008; EPPE, 2007). The value of investment in ECEC is confirmed by economic analyses, which show sustained benefits beyond childhood (Reynolds et al, 2011; Reynolds & Temple, 2008; Karoly & Bigelaw, 2005; OECD, 2006).

The evidence shows that high quality programs can increase the abilities of all children and help address achievement differences that emerge by school entry for children from disadvantaged backgrounds (Sammons et al., 2012; Tayler et al., 2007; Heckman, Grunewald, & Reynolds, 2006; Heckman & Masterov, 2006; Shonkoff & Phillips, 2000). The benefits of high quality programs are maximised for disadvantaged or marginalised families when parent support and involvement is incorporated (Brooks-Gunn & Markman, 2005; Press, 2006).

Aspects of quality for early childhood education and care

Quality in ECEC can be separated into structural and process aspects. Structural aspects include the number of children in the room (group size), the corresponding number of adults (adult-to-child ratios) and the qualifications of the adults. The process aspects of quality are concerned with the nature of adult-child interactions and the activities and learning opportunities available to children (Britto, Yoshikawa and Boller, 2011; Burchinal et al., 2000; Phillipson, Burchinal, Cryer, & Howes, 1997).

Research has demonstrated that structural features are associated with child outcomes in expected ways; improved staff-to-child ratios, higher staff qualifications and smaller group size are generally associated with better child outcomes (Snow & Van Hemel, 2008). However, cause-effect relationships are complex and improving structural quality does not automatically improve outcomes for children. For example, there is mixed evidence about what kinds of qualifications best promote positive classroom interactions and about the benefit of professional development training relative to pre-service training (Early et al., 2007, Kelley & Camilli, 2007, Blau, 2007).

The quality of children’s services is best considered as a product of the interaction between structural and process aspects and other factors that are not easily categorised, including the conduct of leadership and management and alignment with the values and principles of the community (Britto, Yoshikawa and Boller, 2011). Most importantly, it is the way adults engage with children within the child’s family and community context that generates much of the quality (Britto, Yoshikawa and Boller, 2011; Meunnig, et al., 2011; Mervis 2011).

Quality in Australian early childhood education and care

E4Kids is an Australian research project that considers children’s abilities and family backgrounds alongside the quality of ECEC programs, including staff training and resources, and the experiences of children in ECEC settings (Tayler et al, 2013). These experiences include the impact of sustained and attuned interactions between children and early childhood professionals (see Hamre et al, 2013). Measurement challenges have long been a key issue for
research into process aspects of ECEC quality (Sylva et al., 2006; Burchinal et al., 2011) that capture learning interactions.

This study used quality measurement tools that align with core elements of the National Quality Standard, particularly the quality areas of educational program and practice and relationships with children. The CLASS measures aspects of quality based on the interactions between children and adults, the kinds of activities and experiences available for children, and the observed learning environments and reports across three domains: emotional support (the positive or negative climate; teachers’ sensitivity and regard for children’s perspectives); organisational support (managing children’s behaviour, productivity, teaching routines); and instructional support (concept development, quality of feedback, language modelling).

The results for the domain of emotional support were generally positive, reflecting the good emotional connection between adults and children as well as amongst children. Very few instances of expressed negativity were observed. In the domain of organisational support, results were reasonable, with a tendency for good ratings on ‘behaviour management’ (the adult’s ability to provide clear behavioural expectations and prevent and redirect misbehaviour) and ‘productivity’ (the adult’s management of instructional time and routines and provision of activities to engage children in learning).

However, for the domain instructional support, results were generally poor, with less than two per cent of observations showing a high level of instructional support. Ratings were lowest in ‘concept development’ (activities that promote and extend children’s thinking skills and understanding) and ‘quality of feedback’ (the extent to which teachers provide feedback to children to expand their understanding and encourage their continued participation). Notably, the majority of scores observed are lower than the (hypothesis) threshold for improvements in children’s learning and development (Burchinal, Vandergrift, Pianta, & Mashburn, 2010). However, the scores are typical of ECEC settings in Australia, US and UK settings (Taylor et al, 2013).

The results also show a weak but statistically significant association between the socio-economic characteristics of the neighbourhood of the service and the quality of observed adult-child interactions: higher quality classroom interaction is more commonly found in more advantaged areas.

What are the implications of the evidence?

Findings of this research provide evidence of moderate to high quality emotional support and classroom organisation. However, in all settings, the instructional quality is low. In relation to the new National Quality Standard, this implies that ECEC services are succeeding in fostering relationships with children, but may be underperforming in terms of educational program and practice. The data point to the importance of investing in the education and training of the ECEC workforce to promote improved levels of instructional support for all children, and build on the strong foundation in emotional support and classroom organisation.

The policy context provided by the National Early Childhood Development Strategy (COAG, 2009) delivers a clear objective in respect of providing ‘better early education services to all children, particularly those from disadvantaged backgrounds’. The evidence from this study of a social gradient in all three domains of staff-child interactions is concerning. The data imply that families who attend services in more affluent areas are receiving higher quality adult-child interactions. This finding is mirrored by evidence of inequitable child development outcomes on school entry, as documented by Australian Early Development Index (AEDI) data (Centre for Community Child Health and Telethon Institute for Child Health Research, 2009); for further information see www.aedi.org.au. This evidence raises concerns regarding children’s ECEC program experiences. Access to early childhood education alone is insufficient; high-quality interactions for all children are fundamental to ensuring the best start in life.

Considerations for policy and programs

- ECEC policy should support programs offering high-quality interactions and instructional support. Evidence shows that educational programs can be improved by focusing on children’s concept development, extending the quality of feedback and language modelling in learning environments. This focus on the quality of the instructional support is particularly needed in neighbourhoods where there is a known trajectory of relatively poor social and academic achievements.

- Significant investment is required to attract, train and retain a highly qualified, knowledgeable ECEC workforce. Improvements in educational programs can be made by improvements in the capacity of early childhood professionals to respond to the learning needs of each child. Findings from E4Kids show a need for early childhood educators to be able to engage in attuned and extended discussions with children — providing high quality instructional support. This is an area where there is an opportunity for higher quality teaching inputs.

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1 Socio-economic characteristics are measured using the Australian Bureau of Statistics (ABS) Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD) to measure ‘a continuum of advantage (high values) to disadvantage (low values)’ derived from Census variables related to both advantage and disadvantage. 2
• Child outcomes are likely to be enhanced by improvements in the way that children are supported to develop key concepts about the world around them; and in the ways that educators ensure that children develop their thinking and understanding. New requirements for staff qualifications and experience in the NQF set a context for further research on how such improvements may bolster learning and cognitive outcomes. The role of Lead Educator is now in place in every Australian Children’s Education and Care Quality Authority-approved ECEC service and presents an opportunity to explore the quality of the everyday programs children experience within ECEC services. The extent to which new standards support child outcomes must be monitored closely.

• Further research is required to identify economic and social barriers to the implementation of quality programs that are targeted to advance children’s learning and development. Focus on both demand-side barriers — such as cost — and supply-side barriers — such as training of educators — will provide new evidence to aid in addressing social gradients and inequality and ensure all children have the best start in life.

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About the Centre for Community Child Health
The Centre for Community Child Health (CCCH) has been at the forefront of Australian research into early childhood development and behaviour since 1994. The CCCH conducts research into the many conditions and common problems faced by children that are either preventable or can be improved if recognised and managed early.

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References
A full list of references and further reading used in the development of this Policy Brief is available from: www.rch.org.au/ccch/policybriefs.cfm

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