Evidence Brief on Staff to Child Ratios and Educator Qualification Requirements of the National Quality Framework
January 2013

About us
Early Childhood Australia (ECA) is the national peak early childhood advocacy organisation, acting in the interests of young children, their families and those in the early childhood field. ECA advocates for quality in education and care as well as social justice and equity for children from birth to eight years. We have a federated structure with Branches in each State and Territory. There are more than 2,350 members of ECA encompassing individuals, early childhood services and organisations (including not-for-profit, public and private entities). This year, ECA marks 75 years of continuous service to the Australian community from 1938 to 2013.

Background
This summary has been prepared to support the staff to child ratios and educator qualification requirements contained in the Early Childhood Education and Care National Quality Framework (NQF) currently being implemented in Australia. ECA believes there is a solid research base that suggests that these two components are critical to achieving quality education outcomes for young children. This summary is a brief review of the evidence rather than a comprehensive review because its purpose is to provide a timely response to questions being raised by a minority of service providers who have not yet embraced the NQF.

Determinants of quality
For more than a decade there has been consensus on the structural components or features of early childhood education and care services that have a significant bearing on quality:

- the qualifications required of staff
- numbers of qualified staff
- staff to child ratios, and
- requirements regarding group size, health, safety and physical space.

The literature makes the distinction between structural quality, which looks at ‘quantitative’ aspects of early childhood education and care settings such as facilities, staff levels and qualifications; and process quality — what actually happens in an early childhood education and care setting, especially child–adult and child–child interactions and children’s education programs.
Galinsky (2006) summarises much of the research related to quality in early childhood programs in a comprehensive report for the Center for Economic Development in the USA. Galinsky’s report examines the research on three programs (The Perry Preschool/Highscope project, The Abecedarian project and the Chicago Child—Parent Centres) which provide strong evidence of the economic benefits of early childhood education as an economic investment with a view to answering the question: ‘What can and should early childhood programs do to make a lasting difference in the lives of children, families and society and how can standards in early childhood education reflect these findings?’

The drivers for this approach were a concern to counter the belief that any early childhood program regardless of its quality would make a difference and to more precisely examine the meaning of high-quality in early childhood programs. The evidence from these three programs and other international research studies indicate that staff to child ratios and the qualifications of the staff are critical structural matters underpinning high-quality early childhood programs with consequent improved learning, developmental and health outcomes for children. The following sections of this Policy Brief will present an overview of the research evidence that underpins the staff to child ratios and staff qualification requirements of the NQF.

**Staff: child ratios**

There is sound evidence from research that the ratio of staff to children makes a positive difference in early childhood programs and particularly for children from birth to three years of age. Infants and toddlers do not thrive in environments where their need for individualised, responsive attention and attachment with caring, consistent educators is compromised because there are insufficient skilled adults to meet these critical needs. Research also indicates that the level of sensitive, responsive care for infants and toddlers decreases when the ratio of staff to children is decreased (NICHD, 2000).

The American Academy of Paediatrics’ Policy Statement on Quality Early Education and Child Care from Birth to Kindergarten (2005, p. 187), states that:

‘Early brain and child development research unequivocally demonstrates that human development is powerfully affected by contextual surroundings and experiences. A child’s day-to-day experiences affect the structural and functional development of his or her brain, including intelligence and personality’ (our emphasis).

The American Academy of Paediatrics identifies staff to child ratios as a significant contextual matter which can affect young children’s brain development and overall development and learning. Consequently their Policy Statement recommends staff to child ratios which are lower than Australia’s National Quality Framework as the following table indicates.

<table>
<thead>
<tr>
<th>Age group</th>
<th>American Academy of Paediatrics recommended staff-to-child ratios</th>
<th>Australian NQF min. staff-to-child ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth to 12 months</td>
<td>1:3</td>
<td>1:4</td>
</tr>
<tr>
<td>13 to 24 months</td>
<td>1:4</td>
<td></td>
</tr>
<tr>
<td>24 to 30 months</td>
<td>1:4</td>
<td>1:5</td>
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<tr>
<td>31 to 35 months</td>
<td>1:5</td>
<td></td>
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<tr>
<td>3 years and 5 years</td>
<td>1:7</td>
<td>1:11</td>
</tr>
</tbody>
</table>
Research shows that higher numbers of staff to children aged three to five years is associated with important learning outcomes including:

- more extensive language skills through increased opportunities for conversations with adults
- increased literacy skills
- improved general knowledge
- more cooperative and positive behaviour with peers and adults
- better concentration and attention skills.


Research also indicates that the meaningful inclusion of children with special or additional needs into universal early childhood education and care settings is supported when there is a higher level of staff to child ratios (Forster, 2007; Phillips, 1988; McQuail et al; 2003). Statistics indicate that 15 to 20 per cent of children have special needs which suggest that a significant number of early childhood education and care services would be or could be working with special needs children and their families. Current NQF staff ratios to children requirements are designed to support inclusive practice for children with special needs and their families. The new ratio requirements assist educators in providing individualised assistance and differentiated learning experiences for children with special needs. In addition to children with special needs, research has identified that vulnerable children from disadvantaged family backgrounds generally require more intense support because many of them have developmental and learning difficulties or delays. Educators can provide more effective interventions and support for children and families when there are higher rather than lower levels of staff to child ratios (Munton et al., 2002).

In addition to improved outcomes for children, higher staff to child ratios encourage educators to want to work with young children because there is less stress for them and they appreciate the increased opportunities for more sensitive, responsive care and education for every child (Munton et al., 2002).

The Australia Institute Discussion Paper No. 84 (2006), based on a survey of 578 responses from early childhood education and care staff working in a diverse range of centres, found that one of the reasons why many early childhood educators would not send their own child to early childhood education and care was because of inadequate staff to child ratios operating at that time. Educators working with very young children often complain that poor ratios create a stressful environment in which to work (OECD, 2000). This finding is particularly relevant for Australia, given the ongoing difficulty of staff retention and recruitment in early childhood education and care centres.

The vocal but limited opposition to the NQF staff to child ratio requirements ignores the fact that the changes to the ratios under the NQF are not that different from some previous state or territory regulations as well as the actual practice of many early childhood education and care centres who operated above the legal minimum requirements for staff to child ratios (Rush, 2006). ECA evidence brief on NQF ratios and qualifications 4 January 2013
**Staff qualifications**

Research is unequivocal on the link between staff qualifications and training and improved outcomes for children in early childhood education and care programs. A comprehensive review of the literature on *Determinants of quality in child care* (Huntsman, 2008 p. iii) concluded that across age groups and service settings ‘the most significant factor affecting quality appears to be caregiver education, qualifications, and training’.

The UK *Effective Provision of Pre-School Education* project (EPPE), one of the most comprehensive and widely regarded longitudinal studies, found that settings which have staff with higher qualifications have higher quality scores on quality rating systems and children make more progress as learners. The EPPE findings show that having trained teachers working with preschool children (aged 3–5 years) for a substantial amount of time had the greatest impact on quality and was linked specifically with improved outcomes for children’s literacy and social learning at age five (Sylva et al, 2004). The NQF requirement for an early childhood teacher to be employed for 25 preschool children or more is in direct response to the EPPE findings.

Research in the United States also confirms that children in early childhood education and care settings led by an educator with a bachelor’s degree in early childhood show greater progress and achievement in language, literacy and numeracy learning and are better prepared for school compared with children in programs led by less qualified educators. In addition, there are less reportable child accidents or serious incidents when educators with higher qualifications are employed (Vandell & Wolfe, 2000). While experience as an educator is helpful for ongoing professional development, research shows that experience is no substitute for formal qualifications and early childhood education training (Kontos & Feine, 1987).

Why do higher and relevant early childhood qualifications and ongoing training make such a significant positive difference to child outcomes? As the *Strategies for Children Coalition Research* report (2000) states, ‘better prepared teachers teach better’ because they:

- have deeper knowledge of child development and how children learn
- are more responsive to children’s interests, strengths and needs
- have more advanced skills in guiding children’s behaviour and planning for individual differences and learning including using effective early intervention strategies
- understand the significance of relationships for learning and have the skills to develop the type of relationships which foster learning dispositions in children which in turn promotes children’s thinking skills, attentiveness, language skills and sociability
- have the knowledge and skills to form partnerships with families in supporting every child’s learning and development
- are paid more and therefore are more likely to be retained and stay in the sector which helps programs to maintain quality overtime and reduces disparities in outcomes between services.

The Australian Institute of Family Studies (AIFS) has identified ongoing challenges for early childhood educators working with complex families and children who need multi-faceted support. Research undertaken by AIFS and the Centre for Community Child Health shows the need for improving the qualifications, training and skill base of early childhood educators to ensure they have the capacity to provide sensitive and culturally responsive programs to meet the complex needs of an increasing number of families and children (McDonald, 2010; CCCH, 2006; Moore, 2005).

Educators with low qualifications and limited training, as Shonkoff (2011) and Hamre & Pianta (2004) and others have identified, are at high risk of burning out, suffering from depression and poor emotional health which compromises their ability to develop the type of relationships that support young children’s learning and development. These findings provide compelling evidence on the importance of staff qualifications and training requirements in the NQF and the need to hold firm on these comparatively basic commitments if we are to raise the overall quality of early education and care provision in Australia.

Conclusion

‘However, under conditions where most provision depends on parental ability to pay and when financial survival and profit for many providers is precarious, external regulation to ensure adequate ratios and other staffing features is essential. It is an important protection for children and parents against understandable but potentially damaging pressures to cut staffing as the major expenditure’ (McGurk et al., 1995 p. 25).

While McGurk et al were writing about early childhood education and care in the UK context, their key message remains relevant for the current Australian context where there is ‘potentially damaging pressures to cut staffing’ requirements (ratios and qualifications) despite strong and consistent research evidence that this would lower quality overall and impact negatively on outcomes for children, families and educators.

The requirements contained in the NQF have been thoroughly considered by Federal and State Governments, with recognition that the changes would require both public and private investment in the early childhood sector ahead of full implementation. ECA strongly believes that the majority of services are supportive of the NQF and on track to meet the National Quality Standards. The release of NQS ratings later this year will provide objective data on this. There is no doubt that modest investment in workforce development and ECEC fee subsidies would certainly ease the transition, but above everything else there is a need for leadership and a firm commitment to the long-term benefits for children that the NQF reform agenda will deliver.

Acknowledgements

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References