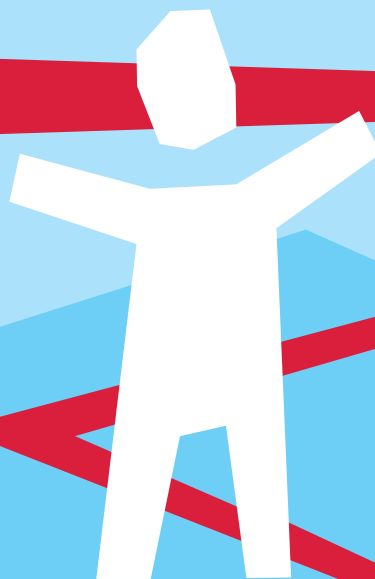


LIFTING OUR GAME

REPORT OF THE REVIEW
TO ACHIEVE EDUCATIONAL
EXCELLENCE IN AUSTRALIAN
SCHOOLS THROUGH EARLY
CHILDHOOD INTERVENTIONS

Susan Pascoe AM
Professor Deborah Brennan



DECEMBER 2017

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Dedication – Collette Tayler

This report is dedicated to Professor Collette Tayler in acknowledgment of her pioneering work in early childhood education and care. Professor Tayler made an extraordinary contribution to policy and practice in this domain, and was recognised for her expertise both in Australia and around the world. During her final days, Professor Tayler was encouraged by the opportunity presented by the Review to improve the learning opportunities for Australia's youngest citizens. She was generous in sharing her expertise with the Review, and made a valuable contribution to this report. She passed away just prior to its completion.

LETTER OF TRANSMITTAL

To commissioning senior officials from all states and territories,

We are pleased to provide you the Report of the Review to Achieve Educational Excellence in Australian Schools through Early Childhood Interventions.

It has been a privilege to undertake the Review and provide advice on how to improve outcomes for all Australian children. While the time available to us to undertake this work was brief, we have considered the evidence carefully and heard from a representative cross-section of stakeholders and experts.

Australia has much to be proud of in early childhood education. The achievements of recent years are significant. However, there is more to be done. It is time to embed the earlier reforms and begin further reforms to achieve better outcomes for Australia's children.

There is significant opportunity for early childhood education arrangements to contribute to improved educational and whole of life outcomes for Australian children, as well as increased workforce participation. This is a double dividend

for government investment. We were struck by the complexity for parents in navigating the early childhood education and care services, and the opportunity for governments to simplify these arrangements while consolidating high quality provision in a mixed market sector.

We have established contact with a number of related activities in Australia, including the Review to Achieve Educational Excellence in Australian Schools (chaired by Mr David Gonski AC), and the First 1,000 Days working group of the Prime Minister's Community Business Partnership (chaired by Ms Nicola Forrest). Together with our Review, this work provides a powerful evidence base that will allow governments to holistically consider the factors that influence a child's long-term wellbeing and development, from conception until the end of formal schooling. This places the child at the heart of our policy approaches.

We acknowledge the support and cooperation of every state and territory in completing the report in the timeframe, and hope they find this report a useful guide to inform future reform in early childhood education in Australia. We applaud their far-sightedness in seeking to establish a continuum

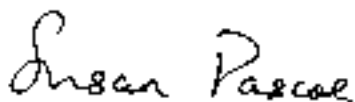
of learning, optimally support early childhood education and contribute to improvement of Australia's human capital.

We also acknowledge the input of the many people we heard from through this process. Their passion and commitment to improving the lives of Australia's children is impressive and inspiring. We are particularly appreciative of the advice of Associate Professor Tricia Eadie, Professor Matthew Gray and Professor Karen Thorpe, who were retained as supporting experts for the Review. We are especially grateful for the feedback provided by Professor Collette Tayler.

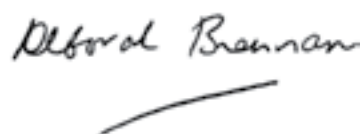
We greatly appreciate the time and wisdom of all those who contributed, although the analysis, findings and recommendations in this report are our responsibility alone.

Thank you for the opportunity to undertake this important work. We urge all governments to consider the findings and recommendations to improve educational outcomes and life experiences for children in Australia.

Yours sincerely,



Susan Pascoe AM



Professor Deborah Brennan
December 2017



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EXECUTIVE SUMMARY

The Review has been asked to consider, and make recommendations on, the most effective interventions to be deployed in early childhood, with a focus on school readiness, improving achievement in schools and future success in employment or further education. (See terms of reference, page 96.) It addresses these vital issues in full awareness of the range of policy goals served by early childhood provision and the efforts across jurisdictions to overcome historical divisions between care-focused and education-focused services.

Senior officials from all states and territories commissioned this Review. It comes at a time when long-term national funding arrangements for early childhood education are uncertain, and significant community discussion and governmental inquiry is occurring on how to improve Australia's educational performance. Despite funding increases, Australian school students' performance in national and international assessments has declined in real and relative terms.

The Review finds that quality early childhood education makes a significant contribution to achieving educational excellence in schools. There is growing evidence that participation in quality

early childhood education improves school readiness and lifts NAPLAN results and PISA scores. Children who participate in high quality early childhood education are more likely to complete year 12 and are less likely to repeat grades or require additional support. High quality early childhood education also has broader impacts; it is linked with higher levels of employment, income and financial security, improved health outcomes and reduced crime. It helps build the skills children will need for the jobs of the future.

Quality early childhood education and care is best considered as an investment, not a cost. Investment in early childhood education provides a strong return, with a variety of studies indicating benefits of 2-4 times the costs. Significant fiscal benefits flow to both the Commonwealth and state and territory governments.

These benefits are greater – often substantially so – for programs targeted at vulnerable or disadvantaged children. Support for these children is vital – children who start school behind their peers stay behind. Quality early childhood education can help stop this from happening, and break the cycle of disadvantage.

A key explanation for these broad and significant benefits lies in neuroscience. A substantial amount of brain development occurs in the years before school. This is the period when children learn to communicate, get along with others and control and adapt their behaviour, emotions and thinking. These skills and behaviours establish the foundations for future life skills and success. They are provided in most, but not all, homes. Quality early childhood education gives all children the best chance of establishing these capabilities. Without these foundations in place, children often struggle in school, and then often go on to become adults who struggle in life.

The benefits of quality early childhood education are widely accepted internationally. The evidence is extensive and consistent. Most comparable countries recognise this, and invest accordingly. In contrast, Australia is below the OECD average in terms of investment in early childhood education and participation in early childhood education. It is not surprising that Australia's school outcomes are of concern – Australia fails to invest early, and pays for it later.

Australia can and should do more for its children. Early childhood education offers a great opportunity for Australia to lift its game.

A way forward

Many of the essential elements of a strong early childhood system are already in place in Australia. The reforms of the past decade have been substantial, supported by significant effort and investment from all governments. Universal Access to early childhood education for all children in the year before school and the National Quality Framework provide national consistency and a foundation of quality assurance. They are vital features of the system and must be retained and properly resourced.

The diversity of early childhood settings and services, and the flexibility for services to be tailored to the circumstances of different children, communities and jurisdictions, are also strengths of the system. However, the Review also noted the lack of alignment between objectives of different levels of government, inconsistencies in relation to service eligibility and subsidies, and the complexity that parentsⁱ face in navigating their way through a mixed market sector with multiple funders and settings.

Given the impacts of early childhood interventions on school and other life outcomes, the Review encourages Australian governments to take a broader view of education to encompass both early childhood and schools. Early childhood education is one of many steps in the journey of lifelong learning; what happens in early childhood affects what happens in schools. If Australia is to improve school outcomes, a holistic approach to education must be taken.

For many families, access to early childhood education is combined with child care. Investing in integrating education and care creates the potential for a double dividend – promoting children's wellbeing, learning and development, and supporting parental workforce participation. If supporting workforce participation eclipses children's education, this opportunity is lost. Attending to these dual possibilities offers Australian governments the opportunity to maximise their investment. This means a change from the mindset of separating the concept of education from care.

There are clear ways for early childhood interventions to make a greater contribution to educational excellence in Australian schools, as well as improve child and community outcomes across a range of areas. The Review makes a series of recommendations as to how Australian governments can achieve this.

ⁱ Throughout this report and for simplicity, the term parent is used, to describe all adults with responsibilities for raising children, including other family members and carers.

The Review's recommendations embrace six key themes:

- **Embedding foundations for future reform and improved education and life outcomes** through a commitment to ongoing, adequate funding of Universal Access in the year before school and the National Quality Framework. Flexible arrangements for implementation and delivery of early childhood education to reflect local contexts should be preserved. Further, governments should make commitments to future reform and investment, embedding the early years as the foundation for education in Australia.
- **Progressively expanding access to quality early childhood education, for example preschool, for all three year olds.** In terms of improving school outcomes through early childhood interventions, the evidence points to this as the single most impactful reform Australia could undertake, with international comparisons highlighting it as the biggest gap in the current system. The case for this investment is compelling.
- **Targeting additional support for some children and families to promote access, equity and inclusion,** recognising that some children and their families require it in order to thrive. Nowhere is the evidence clearer than in the benefits of early intervention. A child who starts behind stays behind, which comes at enormous cost to him or her, the community and governments. Targeted, evidence-based early childhood interventions can prevent this from happening, and break intergenerational cycles of disadvantage.
- **Focussing on quality improvement and workforce issues,** given the importance of quality to child outcomes, and the importance of a skilled and stable workforce in delivering this. Dedicated, strategic approaches to both issues are required. Investing in quality and a stable, well-supported and professional workforce is vital.

THE REVIEW ENCOURAGES AUSTRALIAN GOVERNMENTS TO TAKE A BROADER VIEW OF EDUCATION TO ENCOMPASS BOTH EARLY CHILDHOOD AND SCHOOLS

- **Improving parent and community engagement** to build community consensus about the importance of the early years, and the fundamental role of parents as first and ongoing educators of their children. More support for parents will help them in this role. Building community and parent understanding of the importance of the early years will have significant benefits, including a deeper understanding of the role of the workforce.
- **Supporting associated transparency and accountability measures** to better understand early childhood education in Australia, assist with policy making and implementation, and enable better targeting of services and support.

Delivering the proposed reforms will take time and investment, but they are well supported by evidence, and the return on investment will be high. They will make a significant, cost effective contribution to children's lives in the present, their future school performance and their long-term outcomes, as well as to Australia's economy and community more broadly. The benefits will flow to children and their families, the community and both the Commonwealth and state and territory governments.

An ongoing commitment to adequate funding of Universal Access in the year before school and the National Quality Framework must be the first priority for all Australian governments. Without this, there is the risk of a reduction in the current level and quality of early childhood education in Australia. Some of the other recommendations may take longer to fully deliver, but aspects can be commenced quickly, including starting to address workforce issues, planning for and targeted delivery of early childhood education for three year olds, and initiatives to improve support to parents.

In arriving at these findings and recommendations, the Review has considered the extensive national and international evidence, and consulted with Australian and international experts and stakeholders. Further detail on the Review's process is on page 92.

Navigating this report

This report is divided into four parts.

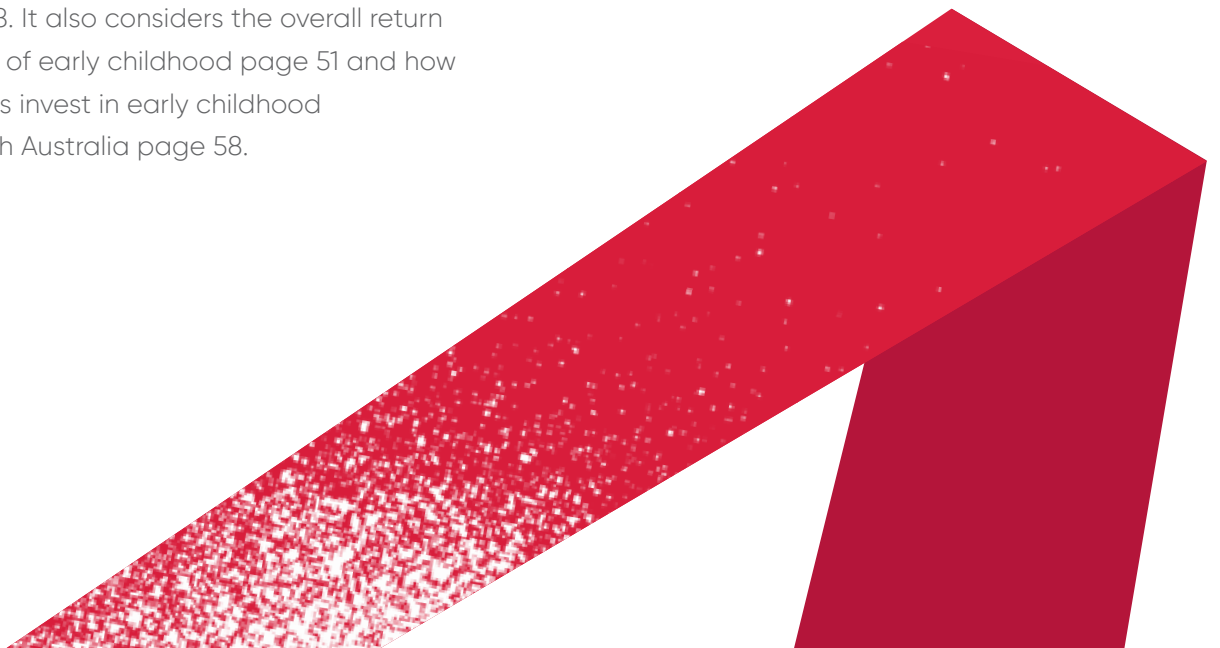
Part 1 provides an overview of the report, including this Executive Summary and a list of recommendations.

Part 2 provides context to early childhood interventions, detailing why early childhood is so important and describing early childhood systems and services in Australia.

Part 3 outlines the evidence of the impact of early childhood on school outcomes page 38 and other areas page 48. It also considers the overall return on investment of early childhood page 51 and how other countries invest in early childhood compared with Australia page 58.

Part 4 contains the Review's analysis of three key issues that are prominent in the literature and that featured in the consultations: the role of the workforce in delivering quality early childhood education page 62, the opportunity to expand access to early childhood education programs to all three year olds page 67 and the opportunity for investment in education and care to deliver a double dividend to governments page 71. It then concludes with the Review's overall findings and recommendations page 76.

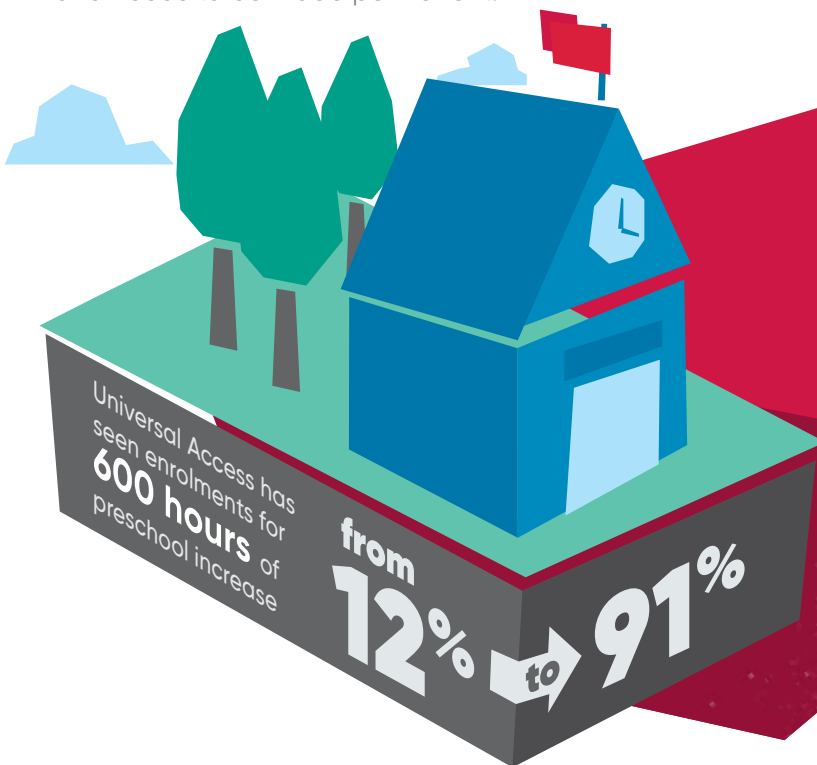
Throughout the report, a number of case studies from across Australia are included, highlighting areas of interest or promising practice.



SIX REFORM THEMES

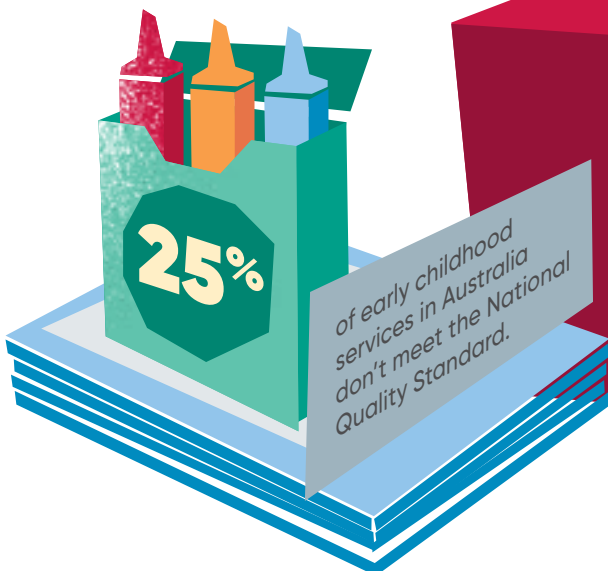
EMBEDDING FOUNDATIONS

Recent reform has been important and needs to be made permanent.



QUALITY AND WORKFORCE

Workforce and service quality are vital to improving outcomes.



A stimulating home learning environment can benefit children's **Year 3** NAPLAN reading scores by the equivalent of more than **four months** of schooling or **17 points**

PARENT AND COMMUNITY ENGAGEMENT

Parents are vital to the health, wellbeing, learning and development of their child.

EARLY CHILDHOOD EDUCATION FOR ALL THREE YEAR OLDS

Only **15%**
of 3 year olds

in Australia participate in pre-primary education, compared with the OECD average of

68.6%

Two years of early childhood education is of significant benefit to children.

ADDITIONAL SUPPORT FOR SOME CHILDREN AND FAMILIES

Children who start school behind stay behind, so should get more help earlier.

22%

of children start school developmentally vulnerable

TRANSPARENCY AND ACCOUNTABILITY

More and better data is vital to maximise return on investment.

There hasn't been a new birth cohort in the Longitudinal Study of Australian Children since

2003-2004

RECOMMENDATIONS

Embedding foundations for future reform

1. Australian governmentsⁱⁱ agree to permanent, adequate funding for Universal Access in the year before school and the National Quality Framework.
2. Australian governments preserve flexible early childhood education and care delivery on a jurisdictional basis, within nationally agreed objectives and standards.
3. Australian governments review the Melbourne Declaration on Educational Goals for Young Australians to embed the importance of the early years as the foundation for learning in core education frameworks and policies, including articulating governments' objectives for child outcomes.
4. Australian governments work towards early childhood education investment reaching at least the OECD average, as a proportion of GDP.ⁱⁱⁱ

Early childhood education for all three year olds

5. Australian governments progressively implement universal access to 600 hours per year of a quality early childhood education program, for example preschool, for all three year olds, with access prioritised for disadvantaged children, families and communities during roll out.

Access, equity and inclusion – additional support for some children and families

6. Future early childhood education investment and reform include a range of additional, targeted interventions for both children and their families, to ensure all children can fully benefit from a quality early childhood education and have the skills and attributes needed for school and later life. These interventions should be for children and their families both prior to, and during, their participation in early childhood education.
7. Australian governments promote and support full participation by three and four year olds

ⁱⁱ Recommendations are directed to all Australian governments, reflecting the current arrangements where responsibility is shared between the Commonwealth and state and territory governments.

ⁱⁱⁱ Defined as pre-primary education, ISCED 02.

in quality early childhood education programs, in particular to maximise participation by vulnerable or disadvantaged children.

Quality and workforce

8. Future early childhood education reforms emphasise quality, with targeted investment to support improvement, and the incremental strengthening of minimum standards under the National Quality Framework.
9. Australian governments consider opportunities to use funding levers to provide incentives for quality improvement by service providers, and consequences for services repeatedly failing to meet the National Quality Standard.
10. Australian governments agree to a new national early childhood education and care workforce strategy to support the recruitment, retention, sustainability and enhanced professionalisation of the workforce, thereby improving service quality and children's outcomes.
11. The strategy should consider, at a minimum, opportunities to improve:
 - a. service leadership capability
 - b. pre-service training quality and content
 - c. ongoing professional development of the workforce
 - d. responsiveness of pre-service training and ongoing professional development providers to the sector
 - e. consistency and applicability of workforce registration and professional standards
 - f. workforce attraction, stability and retention, including medium and long-term career paths
 - g. the impact of remuneration and conditions on workforce stability and retention, and quality of practice
 - h. workforce diversity, including Indigenous^{iv} communities
 - i. the status of the profession
 - j. responses to localised issues, including in regional and remote areas
 - k. engagement with parents.

Parent and community engagement

12. In recognition of the role of parents as the first and ongoing educator of their children, and as advocates for their children, Australian governments undertake an ongoing campaign to improve community understanding of the importance of the early years and all who care for and educate children, and to improve parent understanding of service quality.
13. Australian governments develop and invest in strategies to support early learning in the home environment, including programs to support parents in their educative role.

Transparency and accountability

14. Australian governments, in support of their investments in early childhood, develop and invest in an early childhood information strategy. The strategy should encompass all aspects of early childhood data, information and evidence, and aim to make a greater amount of information more accessible to more people.
15. The early childhood data and information strategy include better use of existing data and information, more frequent collection, the collection of new data and information, improved data and information sharing, and appropriate national governance arrangements to support the strategy and future reform.
16. Australian governments consider the optimal allocation of roles and responsibilities between levels of government for early childhood in order to address policy and delivery issues, improve clarity and reduce complexity for families, providers and governments, and thereby improve outcomes for children.

Implementation

17. Australian governments develop, through the Council of Australian Governments, a plan identifying short, medium and long-term actions for phased implementation of these recommendations.

^{iv} Throughout this report, and consistent with Commonwealth Government conventions, the term Indigenous is used to refer to Aboriginal and Torres Strait Islanders, except where other terms are used in titles or quotations. The Review notes the different preferences and conventions across Australia, and considers a consistent approach will aid understanding of the report.

What is early childhood?

As outlined in the terms of reference, and in line with the Early Years Learning Framework, the Review considers early childhood to be the period from birth until the commencement of formal schooling; broadly 0–5 years.

Other widely accepted definitions extend the concept of early childhood into the early years of school (0–8) but a more restricted definition is appropriate here, particularly given that the Review to Achieve Educational Excellence in Australian Schools is considering education for children from the commencement of school.

What is early childhood education?

Early childhood education is the planned support of early learning by a qualified early childhood educator¹ through a deliberate focus on the key elements that contribute to a child's learning, development and wellbeing. It is generally delivered in a venue away from the child's home in formal, government regulated and non-compulsory early childhood education and care settings.² The Review acknowledges that a great deal of learning also takes place outside these formal settings, especially in the home. Parents are a child's first teachers and play a vital role in the development and education of children.

Early childhood education is not the same as school education. Early childhood education is delivered through play-based learning, and skilled educators use intentional play-based learning to introduce concepts in ways that connect with a child's interest.³

Play-based learning (including in a group setting) builds on a child's natural sense of enquiry and discovery through hands-on exploration of the world around them.⁴ The evidence shows young children learn best when they are active decision-makers in their learning.⁵ Children's natural curiosity drives learning, and their expanded experiences in social contexts stimulate neural activity that shapes brain development.⁶ Purposeful play-based learning supports children to make sense of their world.⁷

THE IMPORTANCE OF THE EARLY YEARS

Educators have understood the importance of the early years for well over a century. In the past two decades, neuroscience has introduced powerful new evidence, helping us to understand why the early years are so important in establishing the underlying skills and behaviours that are essential to a child's lifelong learning, behaviour and health.

A child's environment and experiences in his or her early years set key pathways for life. Children's learning commences long before they enter school – children are born ready to learn. Each stage of brain development is cumulative⁸ and, as a consequence, children can enter school with clear differences in the cognitive and non-cognitive skills needed for school success.⁹ These differences predict later academic achievements¹⁰ and, once patterns are established, they become more difficult and expensive to change.¹¹

KindiLink, Western Australia

KindiLink is a play-and-learn initiative for three year old Indigenous children and their parents in Western Australia, operating free of charge at 37 public schools. The sessions run for a minimum of six hours per week and are planned and conducted jointly by early childhood teachers and Aboriginal and Islander Education Officers. Session activities reflect local contexts, interests, strengths and needs, drawing on Learning Games[®] and conversational reading, and have a clear focus on oral language.

The initiative aims to enhance a child's development and learning, support the confidence and capabilities of their parents and positively influence home learning environments. KindiLink also aims to foster productive home-school partnerships and future school attendance, leading into part-time kindergarten at school for 15 hours per week (in the year before schooling) and then full-time schooling.

Source: Department of Education, WA

A child's brain develops rapidly in the early years, with around 85 to 90 per cent of brain development occurring in the first five years of life.¹² A child's environment, experiences and relationships in the first 1,000 days (from conception to age two) are particularly significant for brain development.¹³

During the early years, children develop key skills required for positive learning and life outcomes, such as skills to solve problems, think, communicate, control their emotions and form relationships.¹⁴ In particular, self-regulation skills enable children to control their behaviour, emotion and thinking¹⁵ so that they can focus attention, be enthusiastic learners, persist in completing tasks and work in teams as well as independently. A key period in the development of self-regulation is between the ages of 3–5 as children expand their social world outside the family. Focussed interventions during this period support their healthy development.¹⁶

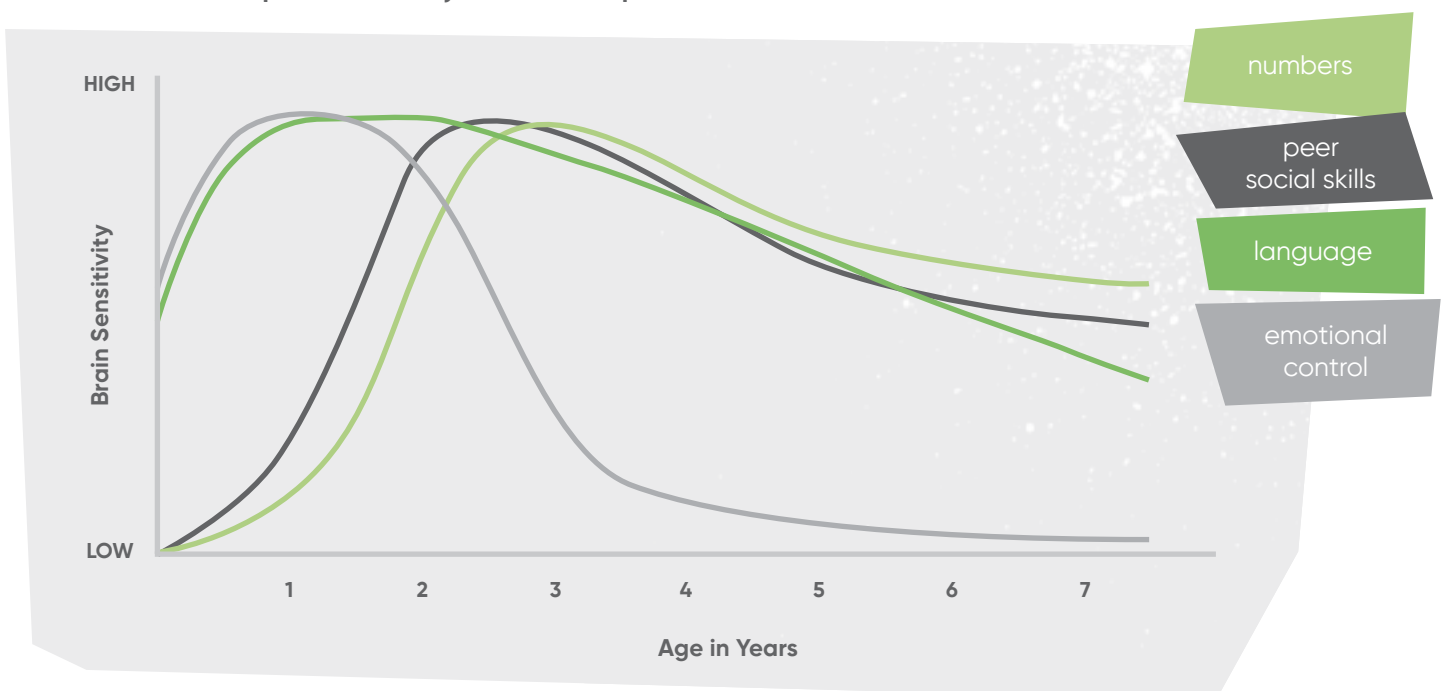
THE IMPORTANCE OF THE EARLY YEARS CONT.

Social and emotional skills are critical to enable children to thrive in the future economy. While it is difficult to predict the jobs that children will undertake in the future, it is clear that the nature of work is changing with increased automation and global interconnectedness. The Foundation for Young Australians predicts that in 2030, workers will spend 100 per cent more time solving problems, 77 per cent more time using science and maths skills and 17 per cent more time using verbal communication and interpersonal skills.¹⁷ In order to thrive in the workplaces of the future, today's children will need to develop high level cognitive and emotional skills, as well as the ability to deploy these skills in an enterprising way. They will need to be active problem solvers and communicators of ideas, with an appetite for ongoing learning.¹⁸

Early childhood education helps children to develop these key skills, in an environment that focuses specifically on them as children, bringing together their present and future needs. Collaboration between parents, communities and early childhood professionals ensures optimal opportunities are available for enhancing children's development in this formative stage of life.¹⁹

The early years provide a key window of opportunity to support children to develop the foundations of cognitive, creative, emotional, literacy and language skills that they will need for future success in education, work and life.²⁰ Early years science, technology, engineering and mathematics education builds upon the child's natural curiosity and sense of enquiry about the world, promotes positive experiences in science, mathematics and technology, and lays strong foundations in critical skills.²¹

Chart 1: Sensitive periods in early brain development



Source: Adapted from Council for Early Childhood Development (2010).²²

Factors influencing development and life outcomes

The first 1,000 days of life are the period in which children are at their most adaptable, but also their most vulnerable.²³ The external stressors experienced by a mother can be transferred to a child in utero, and the social circumstances of the family can directly influence the child's long-term health and wellbeing. Children born into poverty, with mental health problems, affected by homelessness or abuse and neglect are at a higher risk of poor developmental outcomes.

The First Thousand Days – An Evidence Paper

The First Thousand Days – An Evidence Paper, published by the Centre for Community Child Health in 2017, provides a compelling and comprehensive summary of the significance of the first 1,000 days. It finds there are multiple influences on children's development from conception to age two, including the family, community and broader society.

Parents and the home environment affect a child's development, health and wellbeing. Early adverse experiences lead the brain to place emphasis on developing neuronal pathways associated with survival, ahead of those that are essential to future learning and growth. What happens in the first 1,000 days can continue to affect the individual over their life. Adult health conditions like coronary heart disease, stroke, diabetes and cancer are often linked to pathways that originated during the first 1,000 days.

The paper illustrates that as a child grows, his or her ability to alter and change to make up for negative experiences and environments in the first 1,000 days becomes more difficult. While it is never too late to make changes, the first 1,000 days are an opportunity to build strong foundations for optimal development.²⁴

Poor health outcomes are linked to poverty, and reduced life chances generally commence at birth and continue throughout the life cycle.²⁵ Families experiencing poverty or socio-economic disadvantage often lack the financial, social and educational support experienced by families with higher socio-economic status. They may also have inadequate or limited access to community resources that promote and support children's development and school readiness.²⁶

In Australia, children of parents with higher incomes and higher educational attainment score higher on measures of early child development.²⁷ Research conducted in the United Kingdom by Professor Sir Michael Marmot found the more economically deprived a neighbourhood is, the lower the proportion of children, at age five, with a good level of development across a range of areas including cognitive, linguistic, social, emotional and behavioural skills. Australian Early Development Census data confirms this is the case with Australian communities.

Early child development is influenced in part by the quality of parenting, which is in turn influenced by the circumstances in which parenting takes place. Parents and their parenting decisions directly influence a child's early development and can establish patterns that affect a child's future health and wellbeing outcomes. Positive family bonds characterised by nurturing relationships, language-rich interactions and shared customs and routines provide a sense of safety and security for a child, and contribute to the development of skills for effective participation in society.²⁸

Internationally, governments are increasingly directing investment towards strategies or interventions aimed at addressing complex social issues such as low educational achievement, criminal behaviour, welfare dependence, family conflict and instability, unemployment and poverty.²⁹ Investments that occur early in a child's life have the potential not only to increase health, happiness and wellbeing in the here and now but

THE IMPORTANCE OF THE EARLY YEARS CONT.

also to offset future costs associated with remediating potential negative impacts. Such interventions range across health, education and community service provision. They include pre-natal and infant home-visitation programs, family-focused parenting programs and high quality early childhood education and care provision.

Pathways for Early Learning and Development, Queensland

The Pathways for Early Learning and Development program, recently launched by the Queensland Department of Education and Training, provides intensive service provision to vulnerable children and families to support early childhood learning, health and broader family needs, including:

- evidence-based early learning and development programs, with low staff-to-child ratios, and early childhood educators working alongside human service staff
- a combination of group (i.e. supported playgroup) and individual (i.e. home visiting) support, including facilitated activities to ensure parents' active and regular involvement
- supported access to child health specialists, such as speech pathologists.

The program is delivered by non-government organisations across twelve locations. An early childhood educator is integrated into existing intensive family support services for families experiencing multiple or complex forms of disadvantage, with the service provision tailored to local contexts and specific client group needs.

Implementation of the program follows a successful Intensive Early Childhood Development pilot (by the Departments of Education and

Training, and Communities, Child Safety and Disability Services), which embedded an early childhood learning and development focus in family support services. An independent evaluation found that the pilot had benefits for parents and children engaged in the pilot, including:

- 45% improvement in children's social/behavioural issues
- 40% improvement in children's speech/language delays
- 37% improvement in child safety concerns
- 39% improvement in parenting confidence
- 34% improvement in parent-child interactions
- 85% of children were at an 'adequate or better' level of school readiness.

Source: Department of Education and Training, QLD

The power of parenting

Children's early experiences can enhance or impede their potential, establishing either a robust or tenuous foundation upon which all further development and learning is formed. The longer children spend in adverse environments, the more pervasive and resistant to recovery are the effects. This points to the importance of the quality of the home environment and parenting in supporting a child's development. The US National Institute of Child Health and Human Development study concluded that parenting is the primary influence on a child's development.³⁰

Family factors such as parents' education and socio-economic status are important influences on the quality of the home environment. However, what parents do with their children has been

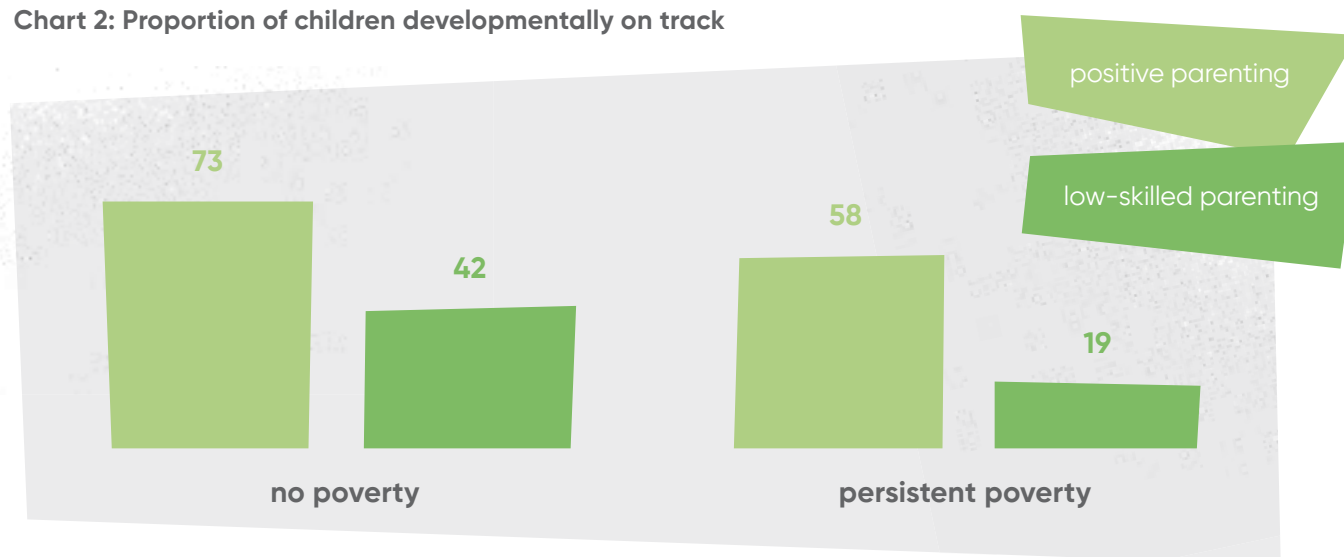
found to exert a greater and independent influence on their educational attainment.³¹ Children whose parents engaged regularly in home learning activities were found to be less likely to be at risk for special educational intervention.³²

The value of effective parenting in enhancing children's learning and development, and establishing positive attitudes to learning, is clear. Importantly, socio-economic status ought not to be a barrier to positive child development. Parents armed with knowledge about how to support their child's development through positive and nurturing interactions can make a difference to their child's current and future learning and development.

The Effective Provision of Preschool Education study (UK) found that mothers with few qualifications and from low socio-economic backgrounds can improve their children's progress and give them a better start at school by participating in activities at home that engage and stretch the child's mind. This includes reading with the child, teaching songs and nursery rhymes, painting and drawing, playing with letters and numbers, visiting the library, teaching the alphabet and numbers, taking children on visits and creating regular opportunities for them to play with their friends at home.³³

INVESTMENTS THAT OCCUR EARLY IN A CHILD'S LIFE HAVE THE POTENTIAL NOT ONLY TO INCREASE HEALTH, HAPPINESS AND WELLBEING IN THE HERE AND NOW BUT ALSO TO OFFSET FUTURE COSTS ASSOCIATED WITH REMEDIATING POTENTIAL NEGATIVE IMPACTS

Chart 2: Proportion of children developmentally on track



Source: Kiernan & Mensah (2011).

THE IMPORTANCE OF THE EARLY YEARS CONT.

A child's home environment can significantly influence later academic performance. For example, a stimulating home learning environment at the age of 2–3 years is associated with better language development and school readiness at 4–5 years and, in turn, better academic performance at Year 3 as measured by NAPLAN scores. Growing up in a stimulating home learning environment has been found to benefit children's Year 3 NAPLAN scores by the equivalent of more than four months of schooling or 17.0 points for reading and eight weeks of schooling or 10.8 points for numeracy.³⁴

Engagement between parents and children builds cognitive and language skills, positive dispositions to learning, thinking and reasoning skills while strengthening the social relationship between the parent and child, helping to counteract possible negative impacts associated with poor parental engagement.

A study using data from the UK Millennium Cohort Study found that positive parenting can counteract the effects of poverty, with children experiencing positive parenting but growing up in persistent poverty more likely to be developmentally on track than those not in poverty but experiencing low skilled parenting (see Chart 2).³⁵

Importance of childhood

Children are not just future, productive members of an economy. While the focus of this Review has been on the impacts of early childhood on future outcomes, it is vital to consider children as they are today, with rights to their own unique childhood. The child must be at the centre of early childhood services and policy.

By design, quality early childhood education and care services are focused on nurturing children in an environment in which the children are agents of their own learning. This recognises and celebrates what it means to be a child. Educators work with and plan for the child who is, rather than the adult to come. Acknowledging and prioritising the unique strengths and capabilities of each child gives them the gift of becoming themselves. Learning takes place in a social context where learning to make friends is as important as knowledge. By acknowledging the importance and uniqueness of childhood, the Review seeks to position quality early childhood education as relevant and appropriate for children now, and for establishing the foundations for success in later schooling and life.

“PRESCHOOL HELPS BUILD SOLID FOUNDATIONS IN WHICH TO CREATE GREAT ADULTS. IT ALSO HELPS US TO BECOME BETTER PARENTS. WE DON'T KNOW HOW OUR CHILDREN ARE GOING TO COPE IN A SITUATION BUT PRESCHOOL ALLOWS US TO EXPLORE THE POSSIBILITIES IN A SAFE AND NURTURING ENVIRONMENT.”

Jay Laga'aia, *It Makes You Think*

BACKGROUND TO EARLY CHILDHOOD IN AUSTRALIA

Education-focused and care-focused services for young children developed separately in Australia as in many other countries.³⁶ The division stems from the late 19th century when kindergartens (which later became preschools) and day nurseries (which evolved into long day care centres) were established under distinct auspices. Kindergartens operated for relatively short hours and were broadly focussed on providing educational experiences for children in the year or two before school, while day nurseries focussed on children's health and wellbeing, and operated for longer hours to support mothers' employment.³⁷ The founders of these early services took a broad view of how best to support children and families. Their work included home visits to the families of the children enrolled in their services and the establishment of supervised playgrounds in the inner suburbs.³⁸ Most states and territories became involved in early childhood education from the 1960s and 1970s, as preschools became integrated with or supported by the education sector. The Commonwealth Government supported integrated demonstration services (the Gowrie centres) in the six state capitals but it was not until the 1970s, with the passage of the *Child Care Act 1972*, that the Commonwealth Government became involved in the sector in a substantive way, by providing funds to long day care centres to support maternal employment.³⁹

These early arrangements established a division between education and care that remains largely in place. As a result, states and territories have generally been responsible for funding early learning (including preschool) and the regulation of early childhood services, while the Commonwealth retains responsibility for fee subsidies to support workforce participation. There has been some blurring of these roles with recent initiatives to integrate quality regulation across the sector.⁴⁰

The past decade has seen momentous reform in early childhood education and care in Australia. This has involved all levels of government and all service types, and has aimed to deliver greater integration between education-focused and care-focused forms of provision.

Early childhood reforms agreed to by the Council of Australian Governments (COAG) have led to significant sector change, drawing Australia closer to the evidence-informed baseline international standards and frameworks. These reforms include Universal Access to early childhood education for children in the year before school and a consistent National Quality Framework, supported by higher investment. This supports children's learning and development, parents' workforce participation, and promotes consistency and quality improvement across early childhood services in Australia. Nevertheless, the continued separation of functions between the states and territories

BACKGROUND TO EARLY CHILDHOOD IN AUSTRALIA CONT.

and the Commonwealth can sometimes lead to duplication and frustrate innovation as well as contribute to a lack of planning and coordination.

Brief overview of recent reforms

The National Early Childhood Development Strategy – Investing in the Early Years (the Strategy), endorsed by COAG in 2009, expressed the commitment of all governments to the vision ‘that by 2020 all children have the best start in life to create a better future for themselves and for the nation’.⁴¹ The Strategy aims for improved outcomes (health, cognitive and social) for all children by building a better early childhood development system that responds to the needs of all young children and their families, particularly the vulnerable or disadvantaged.

The Strategy also envisaged that a permanent National Agreement on Early Childhood Development would be developed for collaborative and comprehensive early childhood reform across the Commonwealth and states and territories. This has not yet occurred, with a succession of short-term National Partnerships instead being offered by the Commonwealth Government to support both Universal Access and the National Quality Framework (further detail on these is outlined below).

Universal Access

The first *National Partnership Agreement on Early Childhood Education* was agreed by COAG in November 2008. Through that and four subsequent short-term agreements, it has provided funding to states and territories to support quality early childhood programs for

all children in the year before school for 600 hours per year (or 15 hours per week), delivered by a qualified early childhood teacher.⁴² Prior to this, states and territories provided support for a variety of early childhood education programs. Universal Access has brought a degree of national consistency and Commonwealth Government funding to support this.

On average, the Commonwealth’s contribution has represented about 31 per cent of total government expenditure on preschool. However, because the systems and finances vary from jurisdiction to jurisdiction, the Commonwealth’s contribution represents between 14.3 per cent and 62 per cent of the total spending of individual jurisdictions on preschool programs.⁴³

The most recent agreement, which is not yet finalised, will lapse at the end of 2018.

National Quality Agenda

The National Partnership Agreement on the National Quality Agenda, agreed by COAG in December 2009, establishes the National Quality Framework. The National Quality Framework aims to deliver an integrated and unified national quality and regulatory system for early childhood education and care across most^v preschools, long day care, family day care and outside school hours care services. It drives continuous quality improvement of services through:

- a national legislative framework
- a National Quality Standard that sets a national benchmark for quality early childhood education and care (including minimum educator-to-child ratios and educator qualifications)

^vNote that some services, including some preschools, mobile services, and budget-based funded services, are not within the scope of the National Quality Framework, and therefore are not reflected in many data sets, such as ACECQA data.

- Belonging, Being, Becoming: the Early Years Learning Framework, which provides a nationally consistent early years curriculum framework
- a quality assessment and rating system that promotes transparency and accountability
- a regulatory authority in each state and territory that administers the National Quality Framework, including approval, compliance monitoring and rating of services
- a national body, the Australian Children's Education and Care Quality Authority, which works with the state and territory regulatory authorities to implement and administer the National Quality Framework.

The National Quality Standard aims to promote the safety, health and wellbeing of children and their educational and developmental outcomes through high-quality educational programs. It also aims to promote families' understanding of what distinguishes a quality service.⁴⁴

All governments have worked together to support the implementation of this historic reform, which replaced separate state and territory licensing regimes. The Review heard that states and territories have made a significant contribution towards regulation, in addition to the approximately \$141.4 million⁴⁵ made available to them by the Commonwealth Government since 2010 to progress the objectives under the National Quality Agenda until June 2018.⁴⁶

Regulatory authorities within each state and territory carry out the regulatory activities (including assessing and rating services), and authorised officers are vested with specific powers to monitor services, issue compliance directions and investigate legislative breaches. The National Partnership Agreement includes an 'ultimate intention' of states' and territories' funding around 60 per cent and the Commonwealth funding 40 per cent of the agreed nationally efficient cost from 2020.

The current National Partnership Agreement on the National Quality Agenda expects all services to be assessed and rated every three years, but only requires 15 per cent of services to be assessed and rated each year for jurisdictions to receive all available Commonwealth funding.⁴⁷ This would equate to all services being reassessed approximately every seven years, although the Review heard that in practice services are often reassessed more frequently – for example, lower quality services, and those otherwise considered higher risk (for example, due to complaints), are prioritised for re-rating.

Investment

Total Commonwealth, state and territory government expenditure on early childhood education and care services has grown rapidly over the past decade, from around \$3.03 billion in 2006–07⁴⁸ to \$9.1 billion in 2015–16. The vast majority of this funding has been to subsidise child care to support workforce participation, and is provided by the Commonwealth Government.⁴⁹

“OUR PRESCHOOL IS VERY FORTUNATE TO HAVE RECEIVED STATE AND LOCAL FUNDING TO BUILD A NEW PRESCHOOL INCLUDING A COMMUNITY ROOM. THE PARTNERSHIPS THAT WE CAN MAINTAIN FROM THIS AND BUILD ON IS SO REWARDING. AND THE INCREASE IN FUNDING HAS ASSISTED US GREATLY. THANK YOU!”

Preschool Director

BACKGROUND TO EARLY CHILDHOOD IN AUSTRALIA CONT.

As part of the 2017–18 Budget, the Commonwealth Government announced it will invest around \$37 billion on child care support over the next four years, which includes an increase of around \$2.5 billion to support the implementation of the new Jobs for Families child care package.⁵⁰

In terms of preschool expenditure, around \$1.35 billion was spent on preschool in 2015–16 by governments. The Commonwealth contributed about 30 per cent (\$408 million), with the states and territories providing 70 per cent (\$944 million). Since 2007–08, state and territory contributions to preschool funding have grown by about 67 per cent.⁵¹

More broadly, total government expenditure on school education in 2015 was \$53 billion. The states' and territories' contribution was \$38.1 billion (71.9 per cent) and the Commonwealth Government share was \$14.9 billion (28.1 per cent).⁵² The Commonwealth has also announced an additional \$23.4 billion in funding for Australian schools over the next 10 years through its Quality Schools package.⁵³ While this package is still being negotiated, states and territories will be required to continue making significant investments in schools.

Australian Early Development Census (AEDC)

In 2009, Australia became the first country in the world to collect national data on the developmental health and wellbeing of all children as they start school. The AEDC collects data triennially on five domains of early childhood development.⁵⁴ It is a very useful data set on Australian children's developmental progress at school entry, and has been found to be a good predictor of children's later academic and behavioural outcomes. All five AEDC domains have been found to be good predictors of later numeracy and literacy outcomes of children as measured by NAPLAN. Of the five AEDC domains, the "language and cognitive development" and the "communication skills and general knowledge" domains are the best predictors of scores on the NAPLAN assessments.⁵⁵

THE PAST DECADE HAS SEEN MOMENTOUS REFORM IN EARLY CHILDHOOD EDUCATION AND CARE IN AUSTRALIA. THIS HAS INVOLVED ALL LEVELS OF GOVERNMENT AND ALL SERVICE TYPES, AND HAS AIMED TO DELIVER GREATER INTEGRATION BETWEEN EDUCATION-FOCUSED AND CARE-FOCUSED FORMS OF PROVISION.

EARLY CHILDHOOD EDUCATION AND CARE SYSTEMS AND SETTINGS IN AUSTRALIA

The structure of early childhood education and care in Australia is complex. Australia's federated system of government has resulted in varied terminology, configuration of services and administrative and funding arrangements related to early childhood education and care across jurisdictions. The Review heard that many parents find it challenging to understand and navigate the system, and this view is supported by research.⁵⁶

A range of government and non-government organisations delivers early learning programs through a variety of settings including schools, community-based and privately owned centres, outreach programs in shared or temporary premises and family or home care settings. Mobile services operate in some rural and remote communities and some jurisdictions offer distance preschool programs.⁵⁷

Early childhood education and care services

At the end of September 2017 there were 15,574 education and care services approved under the National Quality Framework in Australia. These services comprised 46 per cent long day care (which may or may not provide a preschool program), 20 per cent preschool, 28 per cent outside school hours care, and five per cent family day care. There were 7,403 approved providers operating these services; 6,141 (83 per cent) providers operated only one children's education and care service, while one per cent operated 25 or more services.⁵⁸ There was a range of provider management types (see Table 1 over the page).

EARLY CHILDHOOD EDUCATION AND CARE SYSTEMS AND SETTINGS IN AUSTRALIA CONT.

Table 1: Number and proportion of approved early childhood services by provider management type

Provider management type	Number of services	Proportion of services
Private for profit	7,282	47%
Private not for profit community managed	3,554	23%
Private not for profit other organisations	2,070	13%
State/territory and local government managed	1,292	8%
State/territory government schools	720	5%
Independent schools	471	3%
Catholic schools	170	1%
Not stated/Other	15	0%
TOTAL	15,574	100%

Source: ACECQA Q3 Snapshot 2017.

Early learning programs

Formal early learning is generally delivered through a preschool program. A preschool program is a 'structured, play-based learning program delivered by a degree qualified teacher aimed primarily at children in the year or two before they commence full time schooling'.⁵⁹ It is a 'coherent learning and development-focused program that uses intentional teaching strategies, appropriate for young children'⁶⁰ and is equally concerned with the development of children's emotional and social wellbeing as the foundations for literacy, numeracy and science, knowledge and understanding.⁶¹

Preschool programs are delivered in a range of settings including dedicated preschools and long day care centres. Government (state, territory or local), the community sector, the private sector or non-government schools can manage these services.

Dedicated preschool services are often funded by state governments with a small parent fee or fee-free and have hours similar to school settings. In contrast, preschool programs delivered through non-government school early learning centres, and community and privately provided long day care services, often offer extended hours to meet the workforce participation needs of families. These services may spread the preschool program

across the whole day or concentrate it in certain hours. Fees in long day care can be substantial, although part of the cost is offset by Commonwealth, and sometimes state, subsidies.

In 2016, there were 11,070 service providers delivering a preschool program – 38 per cent were a preschool (either stand-alone or as part of a school) and 62 per cent were within a long day care service.⁶² Around 51 per cent of children enrolled in a preschool program in the year before school were enrolled within a long day care centre, and 43 per cent received their program in a preschool.⁶³ Their enrolment across the range of providers of preschool programs was as follows: 16.9 per cent in government preschool, 25.6 per cent in non-government preschool, 3.3 per cent in government long day care, and 46.5 per cent in non-government long day care (including both for profit and not for profit).⁶⁴

It is useful to distinguish between preschool programs for four year olds (or in the year before school), and preschool programs for three year olds.

Through the Universal Access National Partnership, Commonwealth, state and territory governments support four year old preschool. Parents may pay a contribution, although in 2016, 24 per cent of children enrolled in a preschool were in preschool programs that were fee-free.⁶⁵

Across Australia, there are wide variations in how and where four year old preschool programs are delivered. In South Australia, Western Australia, Tasmania, Northern Territory and the Australian Capital Territory, government preschools are the main providers of preschool in the year before school. By contrast, most children in New South Wales, Victoria and Queensland receive a preschool program in the year before school through long day care services and non-government preschools.⁶⁶

Table 2: Proportion of preschool enrolments by service type

Service type	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
Government preschool	5%	12%	2%	58%	67%	58%	77%	56%
Non-government preschool	27%	39%	25%	5%	26%	17%	5%	3%
Long day care	68%	49%	73%	37%	8%	25%	18%	41%

Source: ABS 4240, Review analysis. Excludes children enrolled in multiple preschools or multiple service types. ABS data may differ from jurisdictional analysis due to collection anomalies.

Jurisdictions also provide a range of programs offering early learning and development opportunities for younger children. Most offer highly targeted programs that provide access to three year old preschool – for example Indigenous children – or children in the child protection system.

Jurisdictions also offer a range of innovative delivery models to meet the unique needs of rural

and remote communities, such as mobile services and online programs. These programs are important as they maximise early educational opportunities for children who might not otherwise have the opportunity available to them. Technological changes and digital delivery will continue to support innovation in home and community learning.

EARLY CHILDHOOD EDUCATION AND CARE SYSTEMS AND SETTINGS IN AUSTRALIA CONT.

Rural Care program, South Australia

The South Australian Department for Education and Child Development (DECD) Rural Care program provides child care to around 450 children per year in rural and remote communities, where the traditional model of centre-based long day care would not be viable due to the small numbers of children requiring care. The Rural Care program is designed to support the workforce participation and economic wellbeing of parents and communities that may not otherwise have access to long day care.

The program is offered alongside DECD preschools (with leadership from the preschool director or school principal) to achieve economies of scale. Further efficiencies are achieved through the centralised administration of fees and the child care management system.

Rural Care services can offer care for a minimum of seven child places at any one time and depending on demand from communities, additional places are made available. Services offer care for 10 hours per day, five days a week for 50 weeks per year, to children aged 0-12 years through long day care, after preschool and school care, and respite care for families.

Source: Department for Education and Child Development, SA

Other informal programs are offered to families to support a child's early learning and development from birth through to school. For example, playgroups provide a safe environment for children to learn through unstructured, free play with similar aged children on a regular basis prior to starting

school. They also provide an opportunity for parents to help support their child's development, and assist parents to develop social connections and their parenting skills and confidence.⁶⁷

Community playgroups are set up and run by parents and caregivers. Supported playgroups are facilitated by a trained early childhood professional and aim to support children and families with particular needs or vulnerabilities.⁶⁸

A desire for flexibility is also reflected in the growth of family day care in Australia. Some parents are seeking a home-based and 'family-like' environment for their children. Providing small group sizes, home-like routines and a consistent educator, family day care can provide an option for parents

“ I FEEL LIKE I AM SUPPORTED AS A PARENT AND I FEEL THAT I AM ENCOURAGED TO EXPLORE NEW OPTIONS IF I DON'T KNOW WHAT I AM DOING AS A PARENT IS RIGHT. I WAS REALLY WORRIED ABOUT MY CHILD'S SPEECH AND LANGUAGE AND A FEW WEEKS LATER I WAS GIVEN SOME WRITTEN RESOURCES BY ONE OF THE TEACHERS. I TOOK IT HOME, READ IT, TRIED OUT THE SUGGESTIONS AND THE LANGUAGE DEVELOPMENT HAS BLOSSOMED! ”

Parent, Learning Together program

seeking an alternative to centre-based education and care. Family day care providers and educators are subject to same National Quality Framework, and may also be eligible for Commonwealth Government fee subsidies.

The importance of transition to school is reflected in the National Quality Standard, which requires services to collaborate with other organisations to enhance children's learning and wellbeing. It also requires that continuity of learning and transitions for each child are supported by the sharing of relevant information. Ensuring effective and positive transitions also supports the continuity of a child's learning and development and supports professionals to quickly develop effective and respectful relationships with families. Placing greater emphasis on the continuity of learning recognises that building on children's prior and current experiences helps them to feel secure, confident and connected.

Supporting parents and parenting

The Commonwealth and state and territory governments invest in a range of programs and initiatives to support parents. This includes maternal, family and child health services (known by a variety of names across Australia) that offer a mix of service based, outreach and home visiting services. There are also parenting help and advice phone lines, parenting programs and different types of integrated service centres that welcome children and their families for play, support or care.

Child and Family Centres, Tasmania

Tasmania's Child and Family Centres (CFCs) are designed for children from birth to age five and their families. CFCs are a collaborative service delivery model that bring together service providers from different disciplines, professions, government agencies, organisations and the community to achieve a common purpose – to engage, support and work with families

to improve the education, health and wellbeing of young children and their families.

The services offered in each CFC are based on local needs, and may include antenatal services, early learning, child and family health, oral health, general health, immunisation, nutrition, playgroups and children's therapies. Each CFC has the Child Health and Parenting Service as a collaborative service partner to provide child health, growth and development assessments, parent support and information, and early intervention services.

One of their main goals is to ensure children have the best possible start in life. This is particularly important in Tasmania, where the cycle of disadvantage within families and across generations remains a barrier and continues to prevent many children from realising their potential. Breaking this cycle is one of the most persistent challenges facing the state.

Early qualitative evidence suggests that the collaborative service delivery model is successfully engaging families to give children the best start in life, and parents found the centres welcoming, respectful and inclusive.

Source: Department of Education, TAS

Governments and non-government organisations also support a range of targeted parenting programs. These programs can be focused on skills for managing a child's behaviour, understanding a child's development, promoting positive development, forming attachment and maintaining strong bonds between children and parents, along with health-related skills such as good nutrition. These programs often reside in, or are funded by, a range of government agencies, including health, education and social services portfolios. The Review heard of numerous examples of successful programs focussed on supporting parents, or both parents and children. Contributing to the success of these programs was a commitment to engaging with parents in

EARLY CHILDHOOD EDUCATION AND CARE SYSTEMS AND SETTINGS IN AUSTRALIA CONT.

an authentic manner, recognising and respecting the complexities and challenges faced by many families, and showing respect for the culture and backgrounds of families and communities by adjusting programs to reflect local contexts.

Families as First Teachers, Northern Territory

Families as First Teachers (FaFT) is an evidenced-based early childhood program that improves lifelong education, health and wellbeing for children (from birth to the year before school), and their families.

Children and families attending FaFT participate in programs delivered by a qualified early childhood teacher and a qualified Abecedarian educator. The program includes play-based activities designed to increase a child's learning and development by building the capacity of parents and caregivers to become an integral part of school, and local community partners who are invested in early childhood. 67 per cent of educators employed for the program are Indigenous community members.

The FaFT program operated in 32 sites in 2016-17, primarily in remote Indigenous communities, with 1,887 children and 1,792 parents and carers participating in the program for an average of one day a week.

FaFT is also an employment pathway. In one community, eight parents who have graduated from the FaFT program are now employed in early learning programs.

A survey of 530 participating parents found that 495 knew more about how to help and support their child to learn and develop as a result of attending FaFT. Respondents also believed that the early learning activities the FaFT program delivered helped their children to be ready for school. Not only does this program model improve outcomes for children and engage parents, it also provides an education, training and employment pathway.

Source: Department of Education, NT

"I LEARNT AT PLAYGROUP THAT READING WITH YOUR CHILD IS VERY IMPORTANT. I DIDN'T KNOW THIS; I THOUGHT IT WAS ONLY FOR OLDER CHILDREN. NOW I TRY TO READ TO HIM FOR 15 MINUTES EVERY DAY."

Parent, Learning Together Program

HOW AUSTRALIA IS PERFORMING

All Australian governments are investing in the early childhood system to ensure the best possible start for Australia's children. Initiatives include Universal Access to preschool, the National Quality Framework, and new data collections to inform early childhood development policy and practice.

While these initiatives are improving outcomes, there are quality gaps and opportunities to do more to ensure all children participate in quality education and care irrespective of background or location.

Progress is being made

As a result of the Universal Access initiative, all children now have access to a preschool program in the year before full-time school. In 2015, all states and territories exceeded the 95 per cent benchmark for children enrolled in a preschool program in the year before formal schooling, up from 77 per cent in 2008. Importantly, the proportion of children enrolled in 600 hours of preschool has increased significantly, from 12 per cent in 2008 to 91 per cent in 2015.⁶⁹ Increasing population and enrolment, and the qualification requirements under the National Quality Framework, have driven workforce growth, with the number of early childhood teachers having increased 48 per cent between 2011 and 2016, making this one of the highest growth occupations in Australia in recent years.⁷⁰

Participation in long day care and preschool services has been steadily increasing, and in a growing number of areas families have a range

of early childhood education and care services available to support their needs. However, gaps remain in some geographical areas, especially for parents seeking early childhood education and care for babies and toddlers. In some communities, only one type of service is available, such as a preschool or a long day care centre. Across Australia around 35 per cent of children from birth to two years of age and almost two thirds of three year olds participate in early education and care programs.⁷¹ Around 21 per cent of three year olds attending an education and care service receive a preschool program (provided in either long day care or sessional preschool).⁷² The increase in three year olds benefitting from preschool reflects the introduction of targeted state and territory government support for some children in this age cohort, plus the fact that some parents enrol their children in preschool programs without additional subsidy. AEDC data from 2015 indicated that around 35.5 per cent of children attended playgroups prior to starting school, with attendance higher among children living in regional and remote areas.⁷³

While AEDC results identify many areas for improvement, there are some positive trends. There has been a steady increase in the proportion of children developmentally on track in the 'language and cognitive skills' and the 'communication skills and general knowledge' domains.⁷⁴

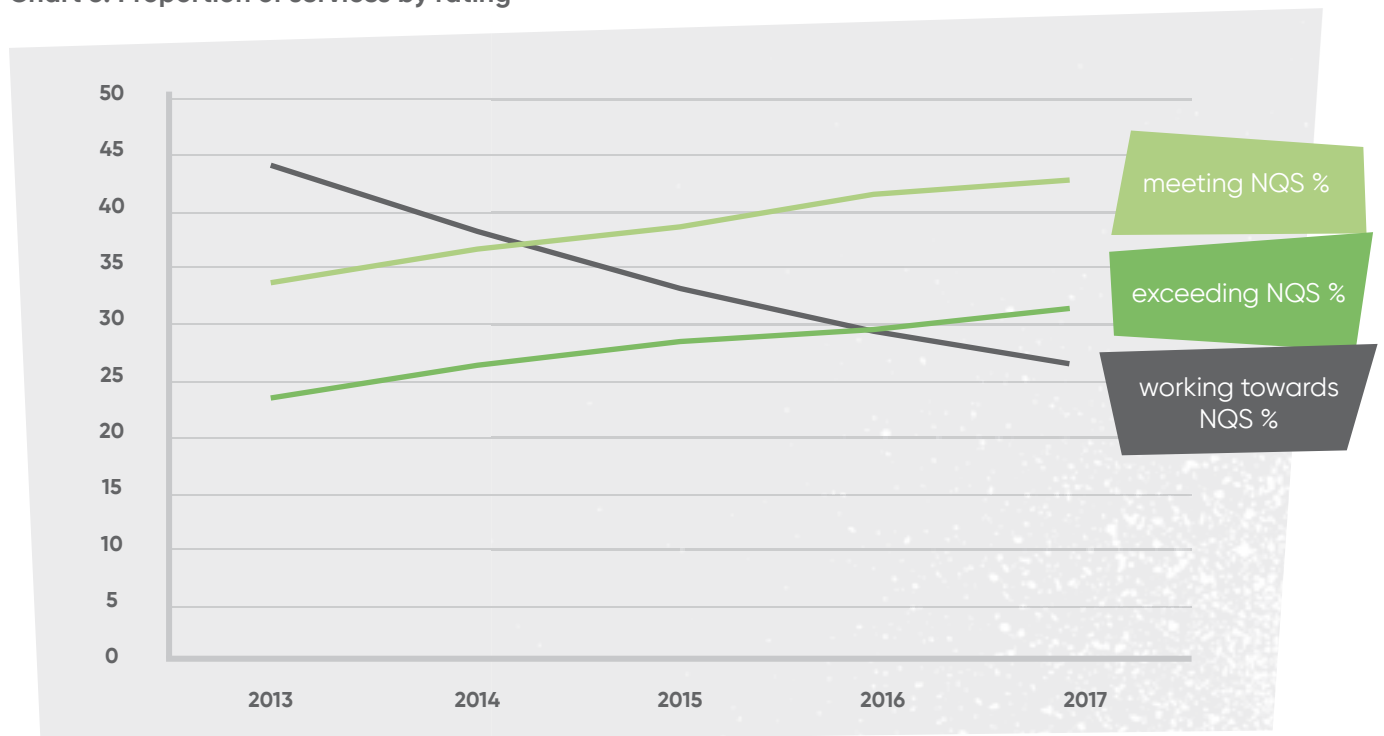
The National Quality Framework is establishing strong foundations for a quality early childhood education and care system. At the end of

HOW AUSTRALIA IS PERFORMING CONT.

September 2017, 93 per cent of early childhood education and care services under the National Quality Framework had been assessed, with 75 per cent 'meeting' or 'exceeding' the National Quality Standard, and 25 per cent 'working towards' (i.e. not meeting) the National Quality Standard.⁷⁵

There is evidence that the National Quality Framework is promoting continuous quality improvement – 57 per cent of services have improved their quality rating when reassessed.⁷⁶ The general trend over time has been for an increasing proportion of services to meet or exceed the National Quality Standard, and a declining proportion to be not meeting it.

Chart 3: Proportion of services by rating



Source: ACECQA Snapshots Q2, 2013, 2014, 2015, 2106, 2017.⁷⁷

Attendance and participation

As of 2015, all jurisdictions are meeting their preschool enrolment targets of 95 per cent,⁷⁸ however those who are not enrolled are disproportionately children who are experiencing disadvantage or whose family or community circumstances render them vulnerable to exclusion and disadvantage. Children from a non-English

speaking background, Indigenous children, children with a disability, children from remote areas and children residing in the most disadvantaged areas are all less likely to be enrolled than the general population.⁷⁹

There is a range of potential barriers that may influence children and families' participation in early childhood education and care services.

These can include cost, parents' preferences and understandings about the benefits of early education and child development, service operating hours and location, limited transport options to and from services, services not meeting needs or being inclusive, lack of awareness of available services and administrative complexity.⁸⁰

Lower participation of Indigenous families in early learning programs may also relate to cultural issues, fear of racism or being negatively judged, distrust of government and early childhood services, and also staffing issues such as recruiting and retaining Indigenous staff.⁸¹

Strategies to promote preschool participation among Indigenous children have included increased employment of Indigenous staff in preschool services, mobile and outreach preschools for children in rural and regional communities, programs for Indigenous families that provide culturally safe environments and support parental engagement and participation, and increased financial assistance.⁸²

Australian data on preschool attendance (distinct from enrolment) is limited. However, the available data shows around a quarter of those enrolled were not attending for the full 15 hours, with that proportion higher for Indigenous children.⁸³ Some jurisdictions have data from government-run preschools, but national data comes from an annual survey conducted in the middle of winter when many children are likely absent due to illness. Notwithstanding the absence of reliable data, it is clear that there is room to improve the full participation of all children in their early education setting. It is likely that better data would support planning for effective interventions.

Start Strong, New South Wales

In 2014, NSW implemented the Preschool Funding Model (PFM), which introduced funding for two years of preschool for disadvantaged and Indigenous children, in addition to preschool

funding for all children in the year before school. Between 2013 and 2016, the number of children in the lowest SEIFA quintile enrolled in early childhood education increased by 27%, and the number of Indigenous children enrolled increased by 52%.

Start Strong is building on the success of the PFM and making 600 hours of preschool participation more affordable through increased investment. Start Strong allocates the highest base rate to children who are from low income or Indigenous backgrounds aged three years and above, with an increase of funding of up to 64 per cent. Additional loadings are also available to provide English language assistance and to support participation in regional and remote services.

Under Start Strong, preschools must pass on 75 per cent of any funding increase to reduce fees, with priority to be given to lowering fees for Indigenous and low-income families. The majority of community preschools have received an increase in funding under Start Strong, which is allowing preschools to reduce fees and increase accessibility.

Gosford Preschool, for example, has extended its operating hours and has lowered its fees to the same level as 25 years ago. The preschool has also increased its 600-hour enrolments, doubling the number of equity children enrolled. In the New England region, Wee Waa and District Preschool has used increased funding under Start Strong to offer two fee-free days for Indigenous children, employ additional staff and expand its preschool bus service. These examples illustrate sector-wide trends of increased 600-hour participation and lower daily fees, which are shown in preliminary data from the 2017 NSW Community Preschool Census, including a reduction in fees by 25% on average.

Source: Department of Education, NSW

HOW AUSTRALIA IS PERFORMING CONT.

Service quality and equity

While great progress has been made in raising the assessed standard of early childhood education and care services, 25 per cent of services are not meeting the National Quality Standard. Of concern, 19 per cent of services are not meeting the standard relating to educational program and practice (the most important element from an early childhood education perspective).

Of services assessed and rated, Catholic schools, private for-profit services and government schools are not meeting the National Quality Standard

at above average rates. Government managed services (of which there are more) perform better, with the lowest proportion of these services not meeting the National Quality Standard when compared with all other provider types. Long day care services (some of which provide a preschool service, some of which do not) are significantly more likely to not meet the National Quality Standard than standalone preschool services (25 per cent compared with 8 per cent) and significantly less likely to exceed the National Quality Standard (31 per cent compared with 58 per cent).⁸⁴

Table 3: Quality ratings by provider type – all early childhood services

Provider type	Working towards National Quality Standard (%)	Meeting National Quality Standard (%)	Exceeding National Quality Standard (%)
Private for profit	33	45	20
Private not for profit community managed	17	40	42
Private not for profit other organisations	17	50	33
State/territory and local government managed	10	30	59
State/territory government schools	30	39	31
Independent schools	22	26	50
Catholic schools	36	36	28

Source: ACECQA Snapshot Q3 2017. Note this includes all assessed early childhood services (for example, outside school hours care).

Table 4: Quality ratings for long day care and preschool services

Service type	Working towards National Quality Standard (%)	Meeting National Quality Standard (%)	Exceeding National Quality Standard (%)
Long day care	25	44	31
Preschools	8	33	58

Source: ACECQA Snapshot Q3 2017.

Long day care services are also more likely to be the subject of substantiated breaches arising from complaints to the regulatory authority – with 28 per cent of the 6,927 long day care services in Australia subject to substantiated breaches in 2015–16 compared with two per cent of the 3,962 preschools.⁸⁵ Although the materiality of a substantiated breach can vary, these figures are of real concern given the large number of children attending long day care services.

In addition, there are particular quality challenges facing children from a disadvantaged or remote background. Perhaps contributing to lower rates of participation, families in low socio-economic areas generally have fewer and lower quality early childhood education and care services available in their area.⁸⁶ Given the link between quality and outcomes see page 62, this is particularly concerning. Providing already disadvantaged children access to lower quality services can compound the effects of disadvantage, rather than ameliorate them.

Likewise, families living in remote areas tend to have lower quality early childhood education and care services available, with only 25 per cent of remote services and 17 per cent of very remote services exceeding the National Quality Standard, compared with 33 per cent of services in major cities and inner regional Australia.

Female workforce participation

Access to early childhood education and care for children increases opportunities for parents, especially mothers, to participate in the workforce. Women's disproportionate responsibility for caring for children, combined with the lack of appropriate, affordable early childhood education and care, is a significant barrier to women being employed or working more.⁸⁷ The Commonwealth Government has committed to reducing the gender gap in labour force participation between men and women and has recently announced a strategy to boost women's labour force participation.⁸⁸

Analysis of Census data shows increased employment for mothers of children in each of the years before children are school age.⁸⁹ Although part-time work is more prevalent than full-time work for mothers with children below school age, some mothers work full-time from the time their children are infants, and around one in five mothers whose youngest child is four or five years old now works full-time. The proportion of mothers in full-time employment increases in line with the age of the youngest child, with full time-employment fairly steady at 14 per cent for mothers whose youngest child is one year old, 15–17 per cent for those whose youngest is two years old, and so on.

HOW AUSTRALIA IS PERFORMING CONT.

Early childhood outcomes

There has been very limited improvement in the proportion of children developmentally vulnerable across the three collections of the AEDC. Overall, the 2015 AEDC results are very similar to those of 2012, with 22 per cent (or approximately one in five) children in their first year of full-time schooling

developmentally vulnerable on one or more domains.⁹⁰ This was the same as 2012, although lower than 2009 (23.6 per cent).⁹¹

Some groups are significantly overrepresented in developmental vulnerability at school entry, as Table 5 shows. Such significant inequality of outcomes is a large concern.

Table 5: Proportion of children vulnerable on AEDC domains, by characteristic

Selected characteristics	Developmentally vulnerable on one or more domains (%)	Developmentally vulnerable on two or more domains (%)
Least disadvantaged quintile	15.5	6.7
Female	15.5	6.8
Speak only English at home	20.4	10.2
Major city	21	10.2
OVERALL POPULATION	22	11.1
Remote area	27.5	15.4
Language background other than English	27.8	14.2
Male	28.5	15.3
Most disadvantaged quintile	32.6	18.4
Indigenous children	42.1	26.2
Very remote area	47	31.8

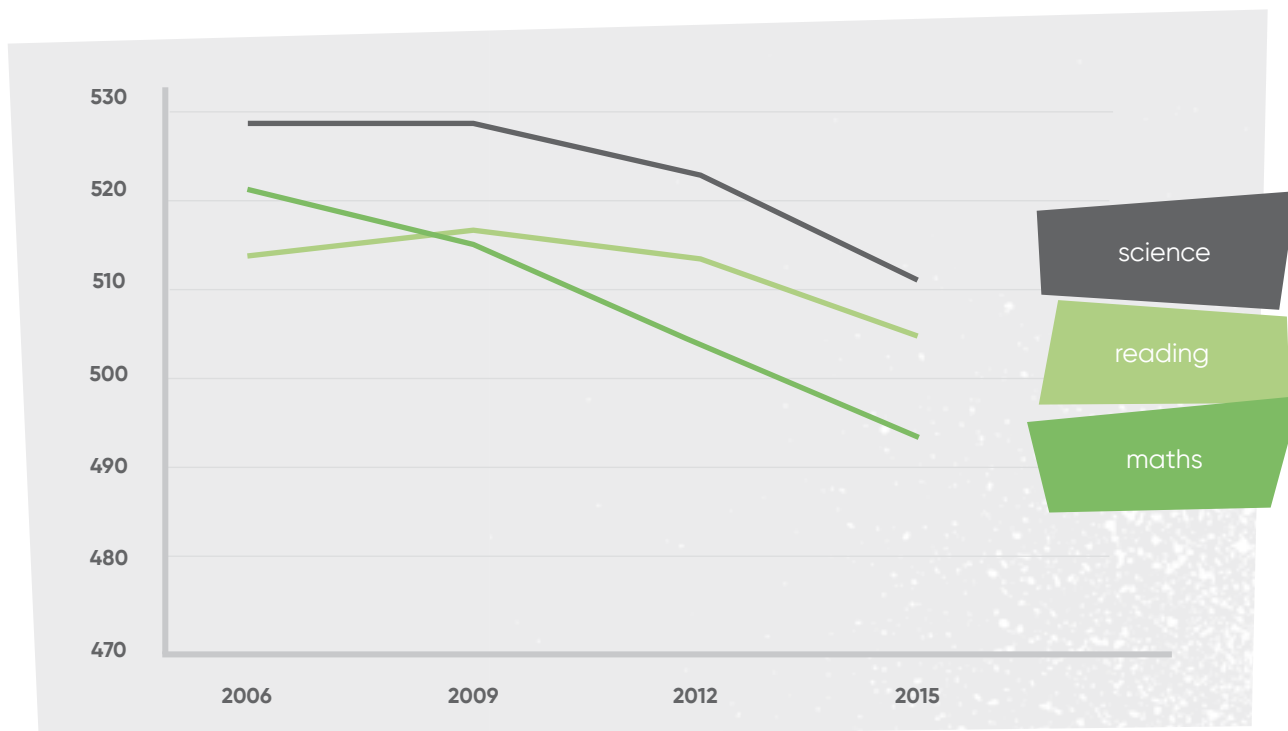
Source: AEDC 2015.⁹² Note: children can have multiple characteristics – for example, be male and from a remote area.

School outcomes

The most common international comparisons used for school education achievement are the OECD Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS).

PISA considers achievement at age 15. Australia continues to perform above the OECD average in PISA results, but in recent years has shown a consistent decline in performance across mathematics, reading and science.

Chart 4: Australia's performance in PISA across maths, reading and science, 2006 – 2015



Source: PISA 2015.

In 2011, the Review of Funding for Schooling concluded that 'over the last decade the performance of Australian students has declined at all levels of achievement',⁹³ and results have fallen further since then. Australia's PISA results show that the gap between advantaged and disadvantaged students is more prominent than for other nations, and Australia's performance is relatively weak compared with equally developed nations.⁹⁴

Additionally, Australian results in TIMSS have shown little improvement. Over the twenty years of the study, Australia has the same average achievement in Year 8 maths, Year 4 science and Year 8 science, although there has been improvement at Year 4 maths.⁹⁵ Around one-third of Year 4 students and around one-third of Year 8 students also fail to achieve the nationally agreed proficient standard, set by the Australian Curriculum, Assessment and Reporting Authority as the TIMSS intermediate benchmark.⁹⁶

IMPACT OF EARLY CHILDHOOD INTERVENTIONS ON SCHOOL OUTCOMES

The Review's analysis of international and Australian evidence found that high quality early childhood education has a substantial, positive impact on school outcomes for all children. It also found that two years of preschool has significantly increased benefits compared with one year, and that 15 hours a week is the minimum dosage required for most children.

OECD analysis of PISA results has established that two years of early childhood education is the minimum duration needed to improve student performance at age 15. A number of international research studies show that high quality early childhood education leads to:

- improved school readiness
- higher achievement and commitment at school
- decreased special education placements
- decreased grade repetitions
- increased rates of high school completion.

Research undertaken in Australia has confirmed that preschool attendance promotes strong developmental outcomes and successful school transitions for all children. In addition, attendance at preschool is associated with a significant positive association with later NAPLAN outcomes, particularly in the domains of Numeracy, Reading and Spelling.

Early childhood education has the capacity to reduce the impact of disadvantage on educational outcomes and reduce cost pressures in schools by ensuring that fewer children start behind.

Overall, the evidence base makes a clear case that an important part of educational success in school is investing in high quality early childhood education for all Australian children.

There is compelling evidence that early childhood education can improve Australia's school performance and student achievement. High quality programs that are relevant to local communities and contexts help to build strong cognitive and non-cognitive skills, securing the foundations for future learning.

As noted earlier, children's brains are developing rapidly in the early years. Early childhood education helps to enhance children's learning at this critical stage to create a foundation for lifelong learning, skill development and wellbeing.⁹⁸ Experiences at preschool help children to develop their vocabulary, communication skills, maths skills and problem solving abilities, as well as the ability to concentrate, follow instructions and get along with others⁹⁹ – skills that are critical to later success in a school classroom.

Despite significant increased government investment in school education, Australian students' performance in national and international assessments has declined in real and relative terms.¹⁰⁰ This is evident in both NAPLAN and PISA results, and has been identified by the Commonwealth Government as one of the reasons it has established the current Review to Achieve Educational Excellence in Australian Schools. Investing in high quality early childhood education has the capacity to reverse this decline.

Moreover, the benefits of investing in high quality early childhood education extend beyond positive school performance. Studies highlight that early childhood education breaks down the barriers to educational success faced by children in disadvantaged circumstances. A child who performs well at school is more likely to stay in school, go on to further study and have better employment prospects. A child who does not perform well in school is more likely to disengage from education and drop out of school altogether, leaving him or her without the basic skills they need for life.¹⁰¹ Other benefits include reducing the need for special educational placements and remedial education as children move through school, which reduces financial pressure on schools and parents.¹⁰²

“LEARNING STARTS IN INFANCY, LONG BEFORE FORMAL EDUCATION BEGINS, AND CONTINUES THROUGHOUT LIFE. EARLY LEARNING BEGETS LATER LEARNING AND EARLY SUCCESS BREEDS LATER SUCCESS, JUST AS EARLY FAILURE BREEDS LATER FAILURE. SUCCESS OR FAILURE AT THIS STAGE LAYS THE FOUNDATION FOR SUCCESS OR FAILURE IN SCHOOL, WHICH IN TURN LEADS TO SUCCESS OR FAILURE IN POST-SCHOOL LEARNING.”

James Heckman, Nobel Laureate⁹⁷



IMPACT OF EARLY CHILDHOOD INTERVENTIONS ON SCHOOL OUTCOMES CONT.

Impact of early childhood education on school outcomes – international

A significant body of international evidence demonstrates that early childhood education has a positive impact on school outcomes. For example, a consensus statement from The Brookings Institution concludes:

Convincing evidence shows that children attending a diverse array of [preschool] programs are more ready for school at the end of their [preschool] year than children who do not attend [preschool]. Improvements in academic areas such as literacy and numeracy are most common.¹⁰³

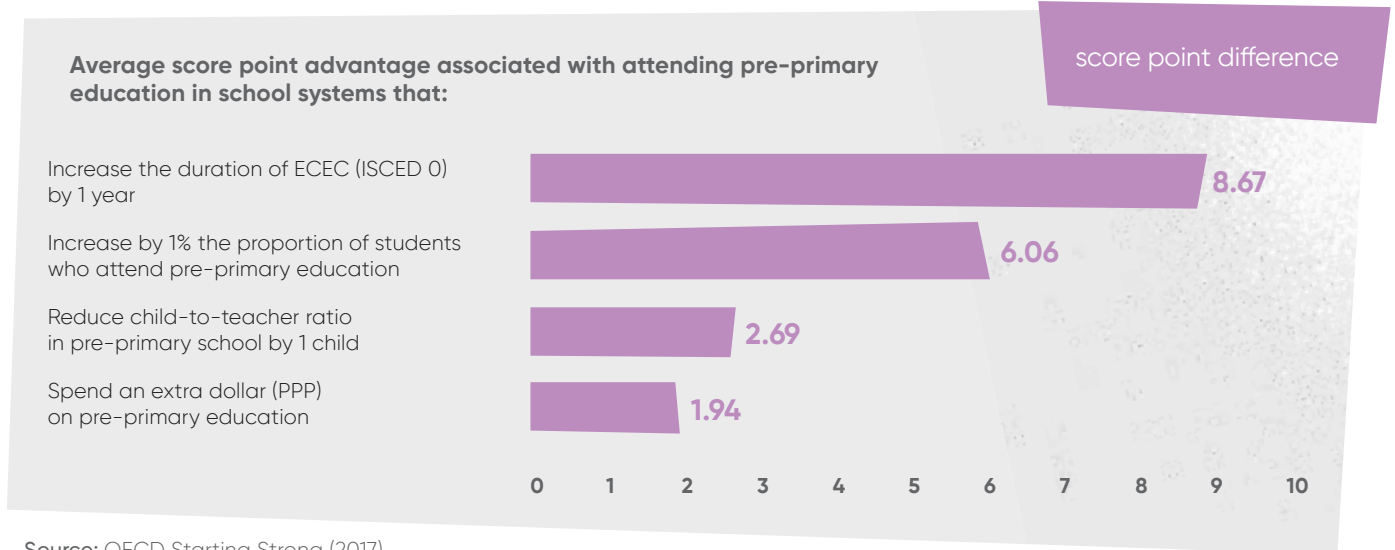
The OECD similarly identifies that early childhood education provides a crucial foundation for future learning by promoting key cognitive and non-cognitive skills that are important for success in school, particularly for disadvantaged children: 'children who are already falling behind in the first few years of their childhood face greater obstacles to catch up and succeed at school and beyond'.¹⁰⁴

The OECD analysed data from the 72 countries that participated in PISA 2015 to examine the relationship between early childhood education and academic performance at age 15. Key findings include:

- students who attended early childhood education and care outperformed students who had not
- a child who has no pre-primary education is nearly twice as likely to perform poorly in education than a child who has attended more than one year of pre-primary education
- two years of early childhood education is the minimum duration needed to have a good chance of reaching a good level of performance at age 15.¹⁰⁵

PISA data shows that better student performance at age 15 is strongest in school systems that provide a longer duration of pre-primary education to a larger proportion of the student population, have smaller child-to-teacher ratios in pre-primary education and invest more per child at the pre-primary level of education.



Chart 5: Early childhood education and care inputs that improve student performance at age 15

Source: OECD Starting Strong (2017).

A comprehensive meta-analysis undertaken in 2017 and provided to the Review in advance of publication consolidated the findings from 22 high quality research studies in the United States. It provides an up-to-date estimate of the overall impact of participation in early childhood education programs. The meta-analysis of the impact of both targeted and universal programs found that early childhood education plays a significant role in reducing the need for special education placements and grade repetitions, and in increasing high school graduation rates.¹⁰⁶ It shows that participation in early childhood education leads to an:

- 8.1 percentage point decrease in special education placement
- 8.3 percentage point decrease in grade repetition
- 11.4 percentage point increase in high school graduation.¹⁰⁷

The following summaries of key longitudinal studies from the United Kingdom and the United States further demonstrate how early childhood education improves the educational performance and outcomes of all students.

Effective Provision of Preschool, Primary and Secondary Education (EPPSE) study (UK)

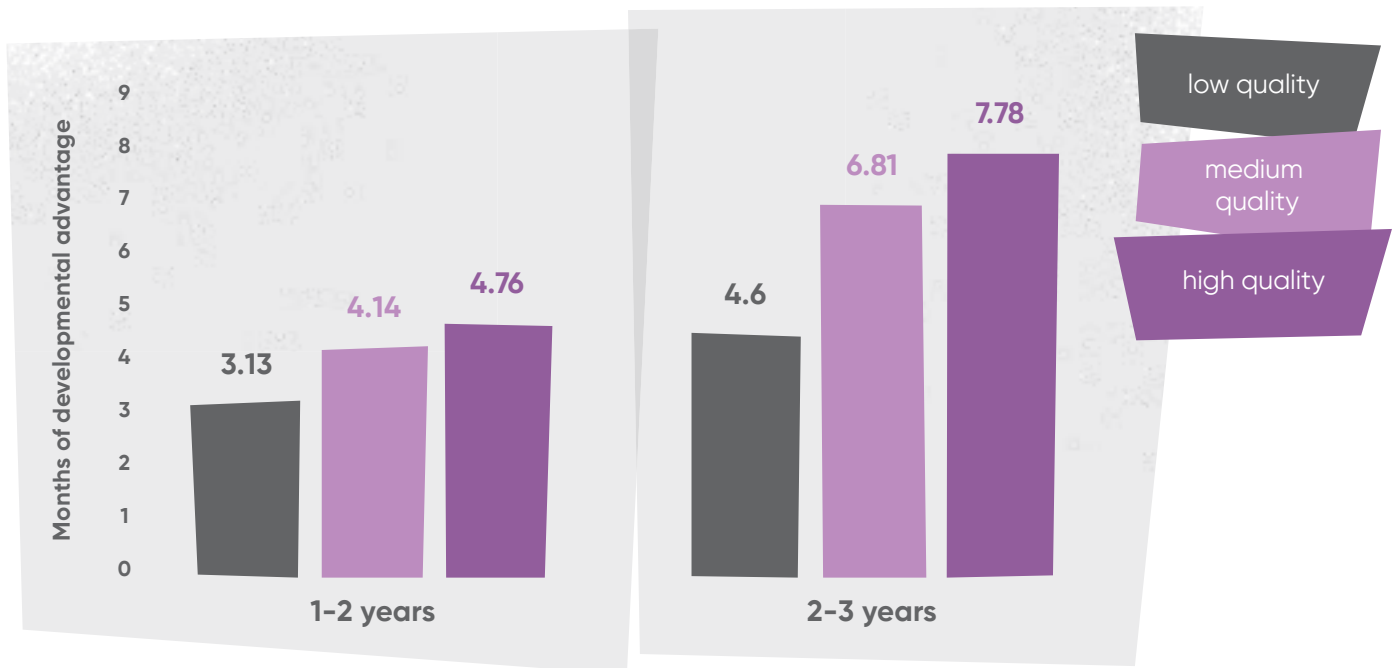
The EPPSE project investigated the influence of preschool on academic and social-behavioural outcomes for children from a range of backgrounds in the UK from 1997 to 2014. 2,800 children were recruited to the study from six English local authorities, which covered urban and regional areas, and a range of socio-economic levels. These children had attended 141 services across the private, voluntary and local government sectors, including preschools and playgroups.¹⁰⁸

The key finding from EPPSE is that for all children, regardless of their background or circumstance, preschool has a positive and long-term impact on social-behavioural development, and on achievement and progress at school and beyond.¹⁰⁹

EPPSE found that children who had attended preschool had higher social and cognitive skills at school entry compared with those who did not. Children who had attended a high quality preschool for two to three years showed better development in language, pre-reading, early number concepts and non-verbal reasoning.¹¹⁰ These children were nearly eight months ahead in their literacy development compared with those who had not attended preschool.

IMPACT OF EARLY CHILDHOOD INTERVENTIONS ON SCHOOL OUTCOMES CONT.

Chart 6: Developmental advantage (months) based on duration and quality of preschool



Source: Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj, I. (2015).

The study found that high quality preschool continues to influence outcomes throughout schooling. At ages six to eleven, children who had attended a high quality preschool had statistically significant better attainment in reading and maths.¹¹¹ At age 16, better school results were attributed to those who had attended either a high quality preschool (49 score points), or preschool for two to three years (51 score points), compared with those who had not attended preschool.¹¹² The study also found that students who attended preschool were more likely to go on to higher academic study.

While preschool was found to have improved outcomes for all children, EPPSE concluded that high quality preschool particularly improves the

educational outcomes for disadvantaged children.¹¹³ For example, high quality preschool was specifically associated with enhancing maths outcomes for disadvantaged students at age 11. Preschool also acted as an effective preventative measure for special education placements; one in three children were at risk of developing learning difficulties during preschool, but this fell to one in five once children started primary school, due to the early intervention of preschool.¹¹⁴

EPPSE has laid the foundation for major reforms in the UK early childhood system, including universal access to early childhood education for children aged three and four, as well as for the most disadvantaged 40 per cent of two year olds.¹¹⁵

US studies on high quality early childhood interventions for disadvantaged children

A series of longitudinal studies conducted in the US provides further evidence that high quality early childhood education offers enduring educational benefits, particularly for children from disadvantaged backgrounds.

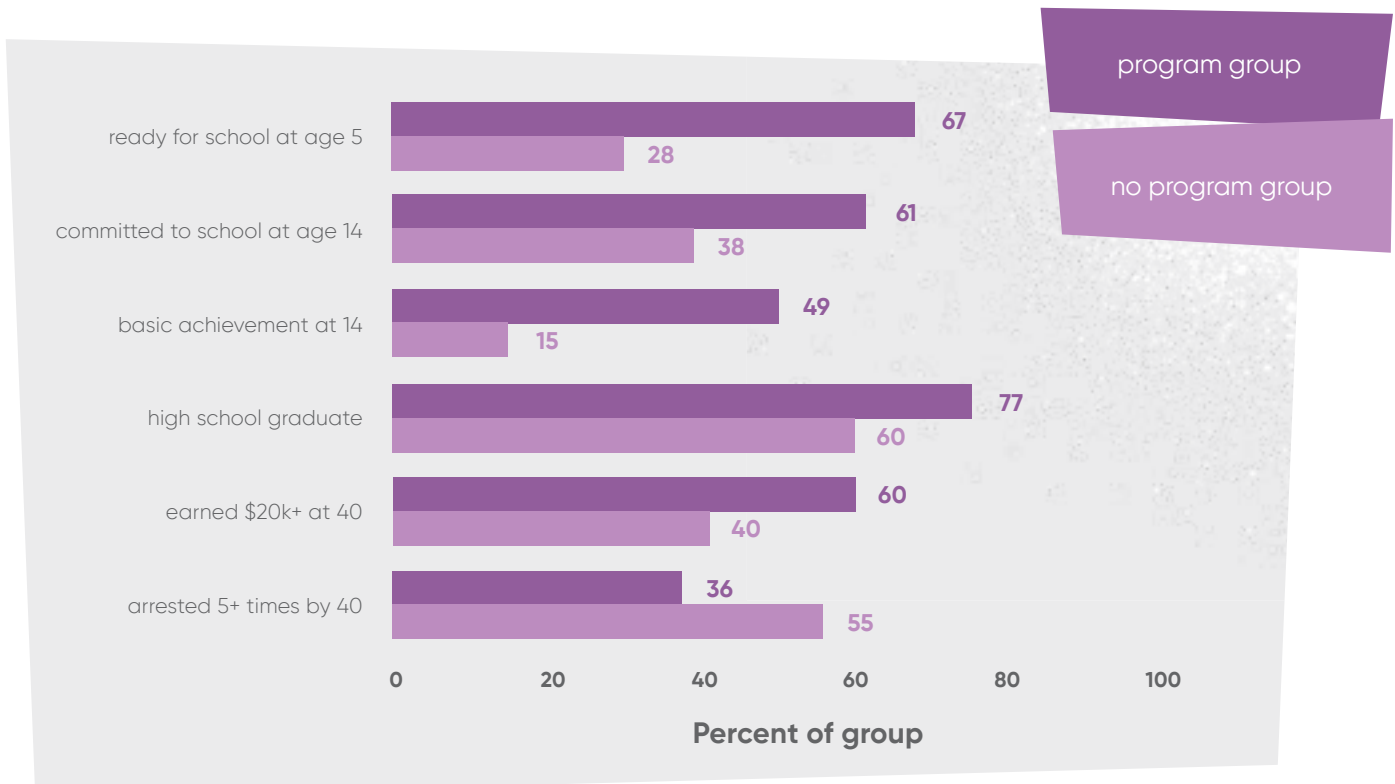
The Perry Preschool Program,¹¹⁶ the Abecedarian Project¹¹⁷ and the Chicago Longitudinal Study/Child Parent Center Program¹¹⁸ are influential in the early childhood literature because they provide compelling, experimental and longitudinal evidence of the benefits of early childhood education. All three studies provided high quality early childhood programs to children who were at risk of poor outcomes due to neighbourhood poverty, family low-income status or other forms of social, economic or educational disadvantage. Additional wrap around interventions such as home visits, health and nutrition services and parental education programs were also provided.

The studies operated in different US locations between 1962 and 1986, with data being collected at multiple points through to adulthood, comparing outcomes for those who participated (program group) with the control group (no program group).

All three studies concluded that the interventions had significant and long-term educational benefits for the children who participated. Key benefits included:

- ▀ improved school readiness
- ▀ higher achievement at school
- ▀ improved commitment to school and reduced absences
- ▀ decreased special education placements
- ▀ fewer grade repetitions
- ▀ increased high school graduation rates.

Chart 7: Key findings from Perry Preschool Program – program group vs no program group



Source: Schweinhart, Lawrence J et al, (2005).

IMPACT OF EARLY CHILDHOOD INTERVENTIONS ON SCHOOL OUTCOMES CONT.

While these studies related to the impact of targeted (rather than universal) programs, and began decades ago, they provide a robust source of evidence to support the long-term effects –

and potential – of quality early childhood education. The findings of the three studies are summarised in Table 6.

Table 6: Summary of critical educational milestones in three key US longitudinal studies

Characteristic Milestone	Perry Preschool Program age 40		Abecedarian Program through age 21		Chicago Longitudinal Study/ Child-Parent Center Education Program through age 28	
	% IN TREATMENT GROUP	% IN CONTROL GROUP	% IN TREATMENT GROUP	% IN CONTROL GROUP	% IN TREATMENT GROUP	% IN CONTROL GROUP
Transition to school (ready for school at age five)	67	28	–	–	–	–
Basic level of achievement at age 14	49	15	–	–	–	–
Commitment to school (age 14)	61	38	–	–	–	–
Special education placement	15	34	24	48	16	21.3
Grade repetition	–	–	30	49	23	38
High school graduation	77	60	70	67	71	64

Sources: Schweinhart, Lawrence J et al, (2005); Barnett, W. S., & Masse, L. N. (2007); Reynolds, A. et.al (2011).

Note: – denotes data was not collected for characteristic/milestone.

“I AM SO SURPRISED AT HOW MUCH MY GRANDDAUGHTER HAS LEARNT THIS YEAR AT KINDERGARTEN. I CAN SEE THAT SHE LOVES SOLVING REAL PROBLEMS, WHERE SHE CAN TRY OUT HER IDEAS. THIS KIND OF LEARNING HAS ALSO REALLY BROUGHT ON HER LANGUAGE.”

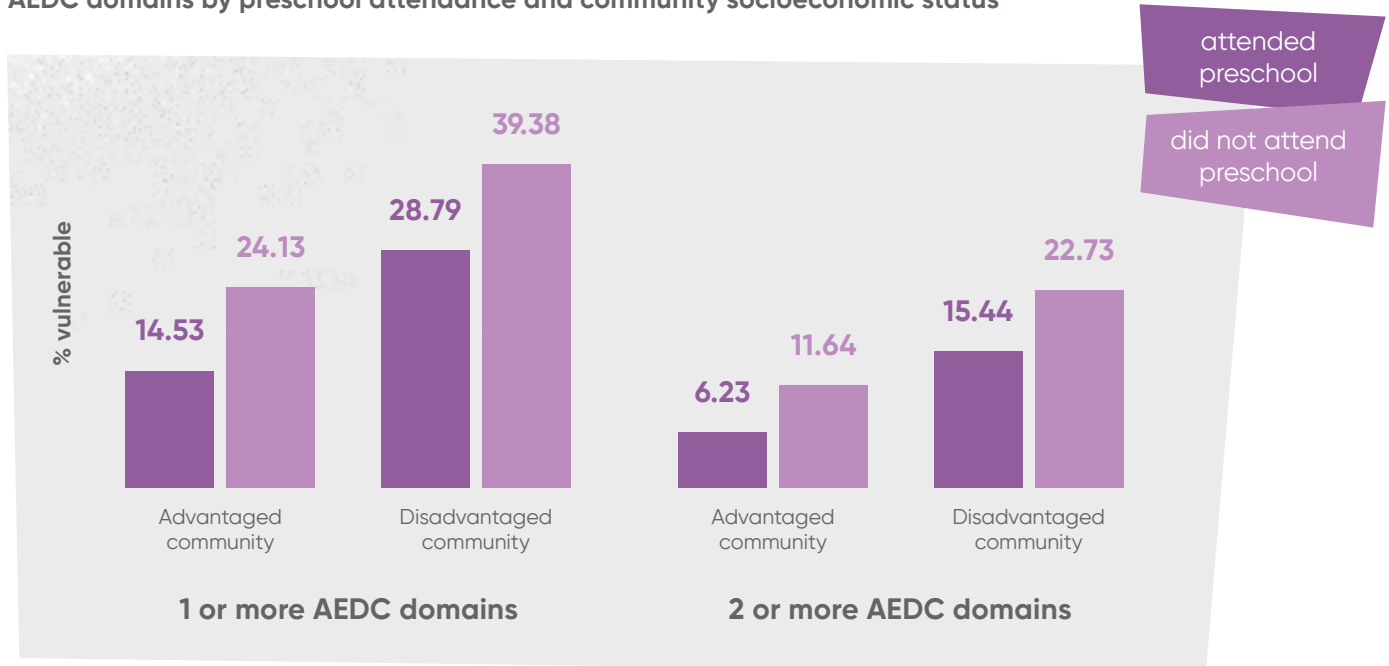
Grandfather of a three-and-a-half year old Indigenous girl attending preschool.

Impact of early childhood education on school outcomes – Australia

Consistent with the international evidence, Australian data illustrates that preschool attendance has a positive influence on all children by supporting strong developmental outcomes

and successful school transitions. The AEDC shows that children who have attended preschool are significantly less likely to be developmentally vulnerable at school entry compared with those who have not, displaying even greater differences for children from disadvantaged communities.¹¹⁹

Chart 8: Proportion of children developmentally vulnerable on one or more, or two or more, AEDC domains by preschool attendance and community socioeconomic status



Source: Australian Government – Research snapshot (2014).

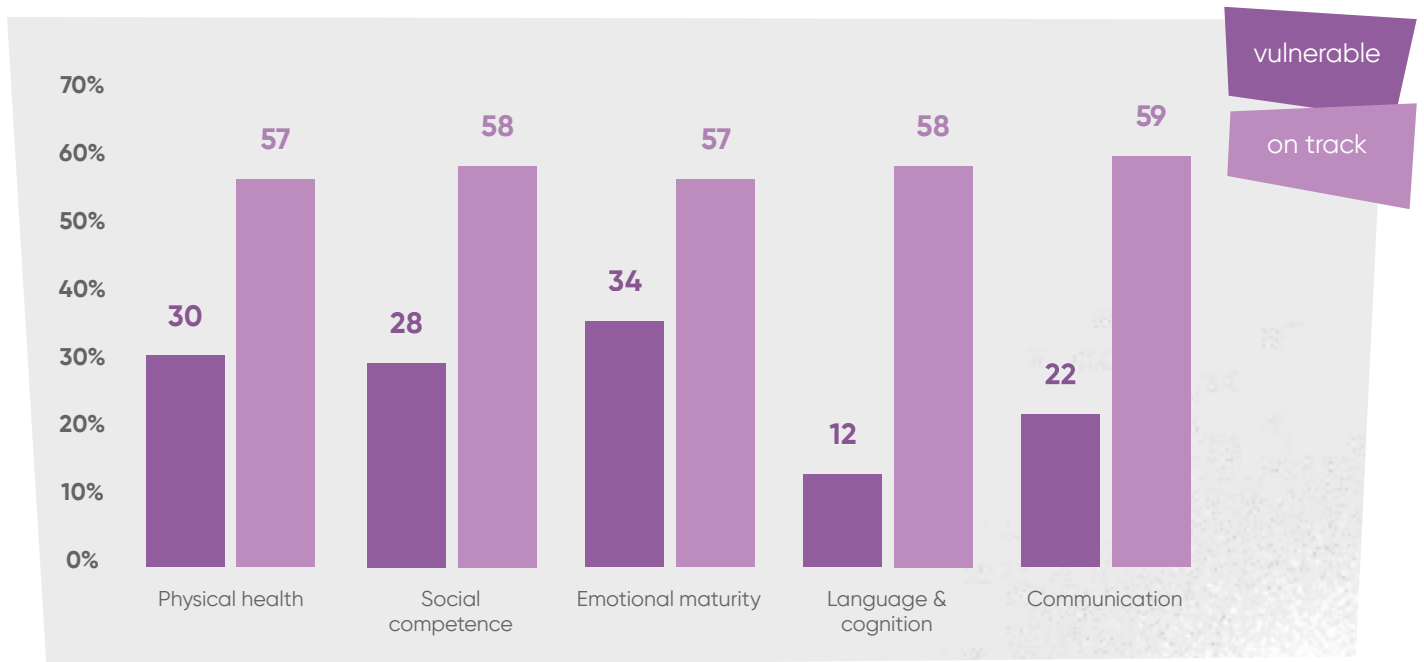
The most recent AEDC data shows that 22 per cent of children start school vulnerable on one or more of the AEDC domains. These children are at much greater risk of doing poorly in their education and dropping out of education early, without the skills they need to go on to tertiary education or vocational training.¹²⁰

Analysis undertaken in Victoria has confirmed the predictive value of the AEDC on school outcomes.

The analysis found that children who were vulnerable on any of the five AEDC domains at school entry are much less likely to achieve in the top two bands of NAPLAN reading by the time they reach Year 3. This is especially noticeable when looking at children who are vulnerable in the language and cognition domain. These children are almost five times less likely to achieve in the top two bands in NAPLAN.¹²¹

IMPACT OF EARLY CHILDHOOD INTERVENTIONS ON SCHOOL OUTCOMES CONT.

Chart 9: Proportion of children achieving in the top two Year 3 NAPLAN bands (reading) by AEDC vulnerability domain



Source: The State of Victoria's Children Report 2015.

Further, analysis of data from the Longitudinal Survey of Australian Children has found that attendance at preschool has a significant positive impact on later NAPLAN outcomes, particularly in the domains of Numeracy, Reading and Spelling. The direct causal effects of preschool attendance are equivalent to 10 to 20 NAPLAN points or 15 to 20 weeks of schooling at the Year 3 level, three years after attending preschool.¹²²

Longitudinal research has also found that Indigenous children's participation in preschool results in large improvements in reading and literacy outcomes both in the short term (two years after participation, at ages 5-7) and also in the longer term (3-5 years after participation). There is also evidence of a positive longer term benefit from preschool and child care participation on mathematics ability and abstract reasoning, as well as on developmental outcomes.¹²³

Duration (number of years)

Research has shown that participating in an early childhood education program for two years, rather than one, has a significant positive influence on children's outcomes. This is evident for all children but is even greater for those experiencing vulnerability and disadvantage, particularly in closing achievement gaps prior to starting school.

OECD analysis found that children who attend early childhood education for two years or more perform better at age 15. For example, in the PISA 2015 science assessment, the average difference between students who had attended more than one year of early childhood education and those who had attended one year or less was the equivalent gap of nearly one-and-a-half years of formal schooling (41 points).¹²⁴ After accounting for student and school-level socio-economic status, students who had attended early childhood education for one year or more scored an average of 25 points higher in the PISA science assessment compared with those who had not – the equivalent to nearly a year of formal schooling.¹²⁵

Data from international benchmarking assessments shows that in the countries with near-universal participation in preschool there is a strong correlation between more years of pre-primary education and Grade 4 test scores.¹²⁶

International studies, such as the Perry Preschool Program and EPPSE, found that all children benefit from participating in at least two years of early childhood education, with vulnerable and disadvantaged children receiving the maximum benefit.¹²⁷ EPPSE, which targeted all cohorts of children, found that there were no additional benefits to attending full days rather than part days and concluded that an extended period of preschool experience on a part-time basis is more likely to be advantageous than a shorter time period of full-time provision.¹²⁸

Dosage (hours per week)

Evidence on the optimal number of hours per week of early childhood education is less conclusive than the evidence on the number of years of attendance, or the evidence on the importance of the quality of programs. However, a UNICEF report on benchmarks for early childhood services in OECD countries concluded that 15 hours per week reflects the general consensus of the literature, and should be considered a minimum dosage.¹²⁹

Analysis undertaken on an early childhood longitudinal study in the United States found that a minimum dosage of 15 hours per week was necessary for substantial impacts on cognitive outcomes, and that outcomes were optimised when children started before age four.¹³⁰ Increasing the dosage for disadvantaged or vulnerable children is likely to have additional benefits.¹³¹

In considering dosage in an Australian context, the Mitchell Institute considered 15 hours of early childhood education per week be taken as the minimum dosage. The institute also acknowledged that, internationally, countries are offering closer to 20 and 30 hours per week.¹³²



OTHER BENEFITS OF EARLY CHILDHOOD INTERVENTIONS

The benefits of participating in high quality early childhood education are far-reaching and long-term. Improved school performance is not the only benefit.

Skills developed in early childhood contribute to broader and longer-term outcomes, including improved employment prospects, health and wellbeing, and social outcomes such as reduced reliance on social services and less interaction with the justice system.

As discussed earlier, a child's environment and experiences in his or her early years can set pathways for life. The early years are critical for developing the key foundational skills and capabilities necessary throughout life.

The skills associated with self-regulation, the cognitive and life skills that require working memory, mental flexibility and self-control are, in the main, developed in the early years. These skills enable individuals to plan, focus attention, remember instructions and juggle multiple tasks successfully. They underpin school achievement, positive behaviours, good health and successful transition to work.¹³⁴ They increase the potential for later success because the individual is better organised, able to solve problems that require planning, and is prepared to adjust to changing circumstances. For society, the outcome is greater prosperity due to an innovative, competent and flexible workforce.¹³⁵

A number of non-cognitive skills are important to an individual's employability in the long term. A lack of social and emotional skills has been identified as a barrier to employment, including for low-skilled jobs.¹³⁶

Several longitudinal studies have demonstrated the importance of early childhood interventions and the effectiveness of early childhood education in improving life outcomes for children.

Predictions on adult life-course outcomes – Dunedin Study

The Dunedin Multidisciplinary Health & Development study of human health, development and behaviour follows the lives of 1,037 people born between 1 April 1972 and 31 March 1973.¹³⁷ The study provides an illustration of how early childhood interventions, especially those that enhance self-regulation, are likely to bring about a greater return on investment than harm reduction programs targeting adolescents alone.¹³⁸

Now in its fourth decade, the study has been able to track myriad life outcomes for participants. At age three, participants underwent a 45-minute assessment, considering capabilities such as language, motor skills, tolerance and impulsivity, which resulted in a summary 'brain health index'. Analysis of subsequent data found that this index predicted with considerable accuracy whether the children would form part of 22 per cent of the

cohort that would experience the vast majority of adverse adult outcomes.¹³⁹ By midlife, this 22 per cent of the study cohort accounted for:

- 81 per cent of criminal convictions
- 78 per cent of prescriptions for pharmaceutical drugs
- 77 per cent of fatherless child-rearing
- 66 per cent of welfare benefits
- 57 per cent of nights spent in hospital
- 54 per cent of cigarettes smoked
- 40 per cent of excess kilograms (obesity).¹⁴⁰

Effective Provision of Preschool, Primary and Secondary Education (EPPSE) study (UK)

The EPPSE study found that students who attended preschool were more likely to go on to higher academic study.¹⁴¹ In addition, the Institute for Fiscal Studies used EPPSE data to predict future returns to an individual and to society. The Institute found that attending a high quality preschool setting had an estimated lifetime earnings benefit to the individual of £26,788, and £35,993 for an average household. These increased earnings translate into a benefit to the Treasury of £8,090 per household.¹⁴²

Perry Preschool, Abecedarian and Chicago Longitudinal Study/Child-Parent Center studies (US)

To measure the long-term impacts of early childhood education, the Perry Preschool,¹⁴³ Abecedarian¹⁴⁴ and Chicago Longitudinal Study/Child-Parent Center¹⁴⁵ studies looked at a range of social, health and personal variables in adulthood for program and control groups. Comparing the outcomes shows benefits of early childhood education. Across all three studies, participants in the program group had better life experiences than those in the control group. Findings across each study included:

- higher rates of post-secondary education – program group participants in the Abecedarian study were more than twice as likely to attend college than those in the control group¹⁴⁶
- increased likelihood of employment – the Perry Preschool study found that program group participants were 20 per cent more likely to be employed¹⁴⁷
- higher earnings potential – participants in the Perry Preschool program group earned, on average, \$320 more per month at age 27 compared with those in the control group. At 40, those who were in the program group earned \$548 more per month, on average¹⁴⁸
- lower rates of imprisonment and arrest – the control group in the Chicago Longitudinal Study/Child-Parent Center study were 13 per cent more likely to have been arrested and 33 per cent more likely to have been imprisoned¹⁴⁹
- a decrease in access to social services – the Perry Preschool study found that 59 per cent of program participants received government assistance by the age of 27, compared with 80 per cent of the control group¹⁵⁰
- lower rates of prescription drug use and smoking – 55 per cent of the control group in the Abecedarian study were likely to smoke, compared with 39 per cent of the program group¹⁵¹
- improved adult health – participants in the Abecedarian Project had significantly lower prevalence of risk factors for cardiovascular and metabolic diseases in their mid-30s.¹⁵²

Table 7 summarises key data from the three US longitudinal studies – the Perry Preschool Study through Age 40 study,¹⁵³ the Abecedarian program¹⁵⁴ and the Chicago Child-Parent Center Education Program.¹⁵⁵

OTHER BENEFITS OF EARLY CHILDHOOD INTERVENTIONS CONT.

Head Start Preschool Program (US) – health benefits

The skills associated with self-regulation are key determinants of an individual's future health-related decisions. According to the OECD, non-cognitive skills, including self-control and self-regulation, are more important than cognitive skills in helping individuals to avoid obesity.¹⁵⁶ A study in the United States examined the link

between children's participation in a preschool program (Head Start) on changes in body mass index (BMI).¹⁵⁷ The study found participation was associated with sustained benefits in relation to children's BMI, with children having significantly healthier BMIs than children in the control group. Additionally, the children showed either maintenance of, or ongoing improvement in, BMI during the first academic year of enrolment.

Table 7: Comparison of health, welfare and justice outcomes – three US Longitudinal studies

Characteristic Milestone	Perry Preschool Program age 40		Abecedarian Program through age 21		Chicago Longitudinal Study/ Child-Parent Center Education Program through age 28	
	% IN TREATMENT GROUP	% IN CONTROL GROUP	% IN TREATMENT GROUP	% IN CONTROL GROUP	% IN TREATMENT GROUP	% IN CONTROL GROUP
Post-secondary education	70 College Graduate	36	36 College attendance	14	–	–
Employment	76	62	64	50	91 And completed secondary school	88
High prestige employment	–	–	–	–	28.2	21.4
Home ownership	37	28	–	–	–	–
Health cover	–	–	–	–	75.9	63.9
Personal savings (males)	73	36	–	–	–	–
Social services	71	86	–	–	–	–
Imprisonment	6	17	14	21	15.2	21.1
Arrests	32	47	8	12	47.9	54.3
Prescription drugs	17	43	–	–	16.5	23
Marijuana	48	71	18	39	–	–
Smoking	–	–	39	55	–	–

Sources: Barnett, W. S., & Masse, L. N. (2007) and Schweinhart, L. Lawrence J et al, (2005) and Reynolds, A. et.al (2011).

THE RETURN ON INVESTMENT FROM QUALITY EARLY CHILDHOOD EDUCATION

Quality early childhood education is a sound long-term investment

Decades of international research has demonstrated the power of quality early childhood education to improve a child's cognitive and social abilities, with substantial economic and social benefits. Nobel prize-winning economist James Heckman argues that the economic return on investment in the early years is higher than the return on investment at any other time during childhood.¹⁵⁸

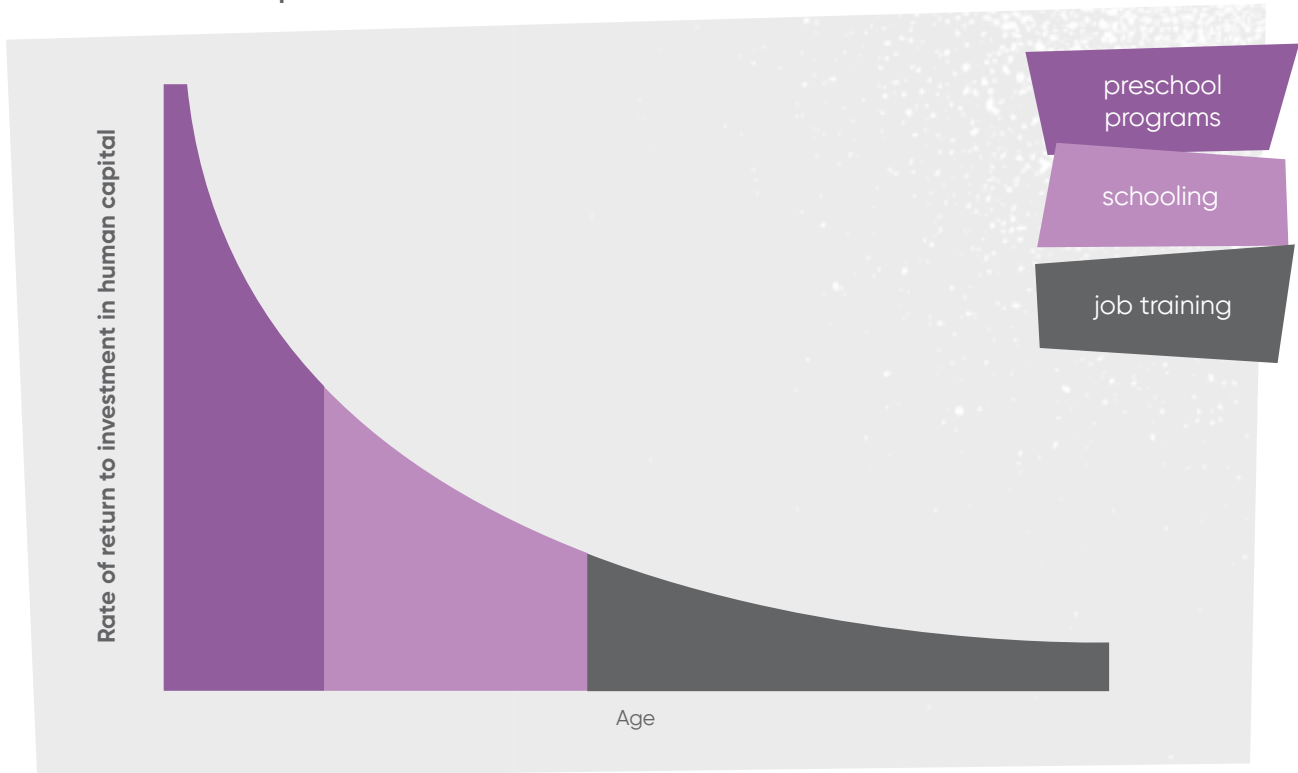
Although calculations of costs and benefits vary, economic analyses consistently highlight that investment in early learning has significant net benefits that accrue to the individual, society and governments. These returns span multiple domains, including productivity gains, health benefits and reduced costs associated with crime. Some of these benefits only become apparent as children enter adolescence and adulthood, but the benefits are significant – and they persist and grow in successive generations.¹⁵⁹ In an Australian context, fiscal benefits flow to both Commonwealth and state and territory governments.

Estimates of the benefit-cost ratio (BCR) of such investment are as high as 17 dollars for each dollar initially spent based on analysis of the landmark Perry Preschool Program targeted at highly disadvantaged children. More modest estimates place this ratio as 2-4 dollars for every dollar invested in universal preschool – a ratio considered to be more realistic in the contemporary context. Returns in this lower range still provide ample justification for public investment.

While per-child economic returns are likely to be higher for disadvantaged children, the greatest benefits to society are achieved through universal access, where all children benefit from high quality early childhood education.¹⁶⁰

THE RETURN ON INVESTMENT FROM QUALITY EARLY CHILDHOOD EDUCATION CONT.

Chart 10: Heckman equation



Source: Heckman (2006).

Review of the cost-benefit literature

There is considerable and consistent evidence that investment in quality early childhood education has a strong return on investment. Table 8 summarises some of the best-known cost-benefit analyses of early childhood education programs, showing returns that range from 2.62 to 17.07.

“EVERYONE IS TRYING TO DO THEIR BEST AND EVERYONE WANTS US TO BUILD A BETTER COUNTRY WITH SMARTER KIDS. BUT THAT IS ONLY POSSIBLE IF THE EDUCATIONAL FOUNDATIONS ARE PROPERLY LAID.”

Harold Mitchell, in The Sydney Morning Herald, 3 November 2017

Table 8: Early childhood education cost-benefit analysis results

Program (follow-up age)	Location	Cohort	Benefit-Cost Ratio(s)
Perry Preschool (aged 40)	Michigan (US)	Targeted	7.1-17.07 ¹⁶¹
Abecedarian (aged 21)	Carolina (US)	Targeted	2.67-6.3 ¹⁶²
Chicago Child-Parent Center Program (aged 26)	Chicago (US)	Targeted	10.83 ¹⁶³
Head Start (meta-analysis)	US	Targeted	2.63 ¹⁶⁴
Tulsa Universal Pre-K Program (aged five)	Oklahoma (US)	Targeted	2.82-4.08 ¹⁶⁵
Other analyses			
US state and district preschool programs (2017)	US	Targeted and universal	5.74 ¹⁶⁶
Spain expansion of universal access to preschool from one year to two (2016)	Spain	Universal	4.3 ¹⁶⁷
US two years of universal preschool (2015)	US	Universal	8.9 ¹⁶⁸
US state and district preschool programs (2014)	US	Targeted and universal	4.2 ¹⁶⁹
US investment in childhood development and education (2014)	US	Targeted and universal	8.6 ¹⁷⁰
Canadian early childhood education (2012)	Canada	Universal	2.78 ¹⁷¹
Expanding enrolment rates to the OECD average (2017)	Canada	Universal	5.83 ¹⁷²
Texas two years of universal early childhood education (2006)	Texas (US)	Universal	3.4 ¹⁷³
California early childhood education (2005)	California (US)	Universal	2.62 ¹⁷⁴

Note: discount rates and assumptions vary.

Much of the literature draws from evaluations of small-scale programs targeting disadvantaged children, such as the Perry Preschool Program that ran in the 1960s and provided intensive parenting support in addition to early education. Using a randomised controlled trial design, the benefits of the Perry Program were found to far exceed their costs with a BCR of 17.1 at follow-up at age 40.

Analysis conducted by Heckman in 2010 found lower but still substantial benefit-to-cost ratios of 7.1-12.2; this took into account some issues with the initial study's randomisation protocol and used alternative assumptions about the social cost of crime.¹⁷⁵

THE RETURN ON INVESTMENT FROM QUALITY EARLY CHILDHOOD EDUCATION CONT.

The Chicago Child-Parent Center Program provides a more recent, larger scale example, using a matched-case control design. The Chicago Program ran in the 1980s and involved the provision of early childhood education and supporting family services for disadvantaged children. It was found to have a BCR of 10.83 at follow-up (age 26).

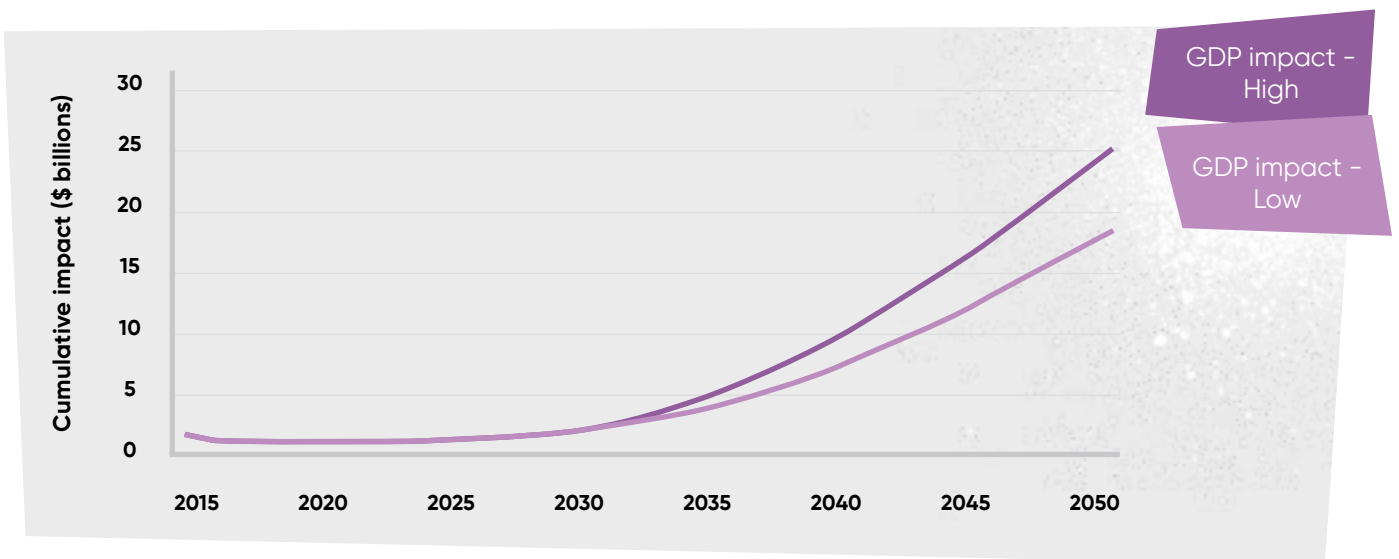
These core studies have informed other prospective and meta-analyses of investment in universal early childhood education across the United States and Canada, with BCRs ranging from 2.62 to 8.9. The lower range BCRs found in more recent analyses are considered to be in part due to the fact that there are now higher rates of participation in early childhood education than at the time of earlier studies.¹⁷⁶

Applying the evidence-base to the Australian context

Until further studies are undertaken domestically, Australia is largely reliant on international evidence quantifying the economic benefits of early childhood education. When applying the existing evidence base to local contexts, it is necessary to adjust for issues such as local levels of disadvantage and preschool program quality and dosage.

Economic modelling undertaken by PwC in 2014 examined the return on investment in an Australian context, including moderating the scale of expected benefit to account for key points of difference, conservatively assuming a BCR of 2.69.¹⁷⁷ The analysis showed that investment in

Chart 11: Combined economy-wide impacts of improving quality of and access to Early Childhood Education and Care in Australia (PwC analysis) ¹⁷⁸



Source: PwC – Putting a value on early childhood education and care in Australia (2014).

quality early childhood education and care provides net benefits to government through improved productivity as a result of increased female workforce participation, increased educational outcomes for participating children and decreased expenditure on remedial education, criminal justice and health services.

It found cumulative net fiscal savings to government of between \$1.6 billion and \$1.9 billion by 2050 (in net present value terms), as well as contributions to GDP from increased participation in quality early childhood education and care and increased female workforce participation.

Table 9: Economic effects of quality early childhood education

Outcome	Timing of effect	Who accrues the benefit?		
		PARTICIPANTS	GOVERNMENTS	SOCIETY
Reduced child abuse and neglect	Childhood	+	+	
Improved school readiness	Adulthood	(+)	(+)	
Higher achievement tests	Adulthood	(+)	(+)	
Reduced special education use	School years		+	
Reduced grade retention	School years		+	
Increased high school graduation	Adulthood	(+)	+	
Increased higher education attainment	Adulthood	-	-	
Higher earnings and taxes paid	Adulthood	+	+	
Reduced crime	Adolescence to adulthood		+	+
Reduced welfare use	Adolescence to adulthood	-	+	
Improved health and health behaviours	Adolescence to adulthood	+	+	+

Source: Phillips, D, et al. (2017).

Note: + denotes a favourable effect; - denotes an unfavourable effect. Parentheses indicate monetisable effect is indirect, i.e. through linkages to later outcomes.

The economic benefits of quality early childhood education

A range of economic benefits may be realised in the immediate, medium and longer term. These benefits accrue to participants of quality early childhood education, governments and broader society. Key benefits are shown in Table 9. Evaluations of the effects of early childhood education to date have primarily focused on academic outcomes, notably cognitive skills, achievement, and grade level promotion and retention. As less is known about effects on social-

emotional outcomes that might be important for later academic and life success, it is possible the degree of benefit shown in the literature is understated.¹⁷⁹

It can take 8-15 years for total benefits to exceed costs, but benefits continue to accrue and exceed costs, even after discount rates are applied.¹⁸⁰ This is particularly evident from longitudinal studies that have closely observed effects over time, such as the Chicago program (ages 20 and 26) and the Perry Program (ages 27 and 40).

THE RETURN ON INVESTMENT FROM QUALITY EARLY CHILDHOOD EDUCATION CONT.

Interim fade-out effects do not undermine other longer-term gains

A growing body of evidence shows that early childhood education can generate substantial long-term gains in educational attainment, health, earnings and crime reduction, even if there is interim fadeout of test score gains as children progress through schooling.¹⁸¹ Gains in social and emotional skills obtained in preschool programs may not be captured on standardised tests but continue to create benefits well into adulthood.¹⁸² This is supported by studies evaluating the US Head Start program, where short-run test score improvements fade after a few years, yet long-term evaluations indicate that participants are more likely to graduate from high school and less likely to commit crimes.¹⁸³ EPPSE also suggested that fade-out is less likely if the early childhood education is of the highest quality.¹⁸⁴

! NO-ONE DISPUTES THAT CHILDREN ARE OUR MOST PRECIOUS ASSET, YET WE ARE GEARED TO APPROACH CHILD DEVELOPMENT AS AN AFTERTHOUGHT, ATTEMPTING TO REMEDIATE THE CONSEQUENCES LATER IN LIFE WHEN IT IS MORE COSTLY, MORE DIFFICULT AND TO PUT IT BLUNTLY – TOO LATE. !

Nicola Forrest, from address to Early Childhood Learning and Development Conference, 20 April 2017

In order for the effects of quality early childhood education to last and be maximised over time, preschool cannot be viewed in isolation from subsequent years of schooling. Children's early learning trajectories depend on the quality of their learning experiences not only during preschool, but also after.¹⁸⁵ Further, there is a need to ensure a seamless transition from preschool to school education, including adequate transmission of information on individual students and considered efforts by schools to build upon the early childhood education foundation.

Distribution of benefits

Large portions of the economic returns of high-quality early childhood education accrue to participants in the form of higher lifetime earnings and greater wellbeing. However, governments also benefit.

The Commonwealth Government benefits significantly through higher taxes paid on earnings, and saves through reduced unemployment benefits, and other social services and health costs. This is additional to any gains from income tax received from higher parental workforce participation. Given higher educational attainment, the Commonwealth Government may also have slightly higher expenditure in higher education.

The state and territory governments benefit from lower health and justice costs, and lower remediation costs in schools (less additional support and grade repetitions). They also benefit moderately from higher income levels (through payroll taxes), to balance the potential for increased schooling costs due to higher retention rates.

Modelling of an earlier early childhood education reform proposal indicated that in Australia, 65 per cent of fiscal benefits would flow to the Commonwealth Government and 35 per cent to state and territory governments.¹⁸⁶

Skills for future jobs and the future economy

Advances in technology are changing the workplace and it is important to prepare today's children for tomorrow's jobs. Just as many of today's jobs didn't exist twenty years ago, it is not definitively known what the jobs of the future will be. But there is good understanding of the core skills that will be needed to succeed.

The ability to apply knowledge creatively and effectively is increasingly in demand, and is the key to support future skills and employment.¹⁸⁷ Cognitive skills such as literacy, numeracy and critical analysis, paired with soft skills such as creative thinking, curiosity and people skills will support the future workforce to thrive in what will likely be an economy driven by science, technology, engineering and maths.¹⁸⁸ The foundations for these skills are established in early childhood education.¹⁸⁹ Quality early childhood education supports the development of competent learners and citizens who will thrive in society and the economy in the future. As noted by Professor Iram Siraj, "Early years learning has a stronger focus on whole-of-child development than school education. Future learners will need an excellent start in early learning if they are to cope with mid-to-late 21st century challenges."¹⁹⁰

HOW AUSTRALIA COMPARES TO THE REST OF THE WORLD

In light of the compelling evidence base, many countries around the world invest more than Australia in early childhood education. While there has been valuable reform and investment in early childhood education in Australia, there is more work to be done if Australia is to be on par with, or ahead of, its international counterparts.

Australia ranks below the OECD average for:

- investment in early childhood education (as a proportion of GDP)
- enrolment rates for three and four year olds
- number of hours of early childhood education provided per week.

Australia has seen a consistent decline in its performance in international tests such as the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS).

However, Australia does perform well in its provision of an agreed, evidence-based national early childhood curriculum and the National Quality Framework.

International analysis of early childhood education provision provides a comparative perspective on policy options and opportunities for reform.

While international comparisons need to be considered in terms of the educational, social, political, historic and cultural context of the individual country, there are some general conclusions that can be drawn.

Early childhood education provision

Governments around the world continue to invest in the expansion of early childhood education. As in Australia, the rationale for this investment is generally twofold: to promote positive child development outcomes and to support workforce participation, primarily for women. Many countries have worked hard to overcome the historical division between care and education so that these services are not delivered in separate settings.

Investment takes many forms, including universally funded and delivered early education, universally provided early childhood education with supplementary family support to enhance access and promote participation, targeted access to early education and/or wrap-around services for specific cohorts of children and their families.

The Economist Intelligence Unit's Starting Well Index,¹⁹¹ published in 2012, assessed the extent to which governments across the OECD and major emerging economies provide an effective, inclusive early childhood education environment for children aged between three and six years with a focus on availability, affordability and quality. Australia ranked 28 of 45 – and while the report noted Australia was then in the midst of the Universal Access and National Quality Standard reforms, and has some world-leading preschools, it also noted 'the availability and affordability of these vary widely, and quality is not consistent.'¹⁹²

The OECD also highlights that sustained public financial support is critical for the growth and quality of early childhood education programs.¹⁹³

The UK and New Zealand, for example, have invested strongly in early childhood education in recent years. The UK has introduced a range of measures to strengthen the early childhood workforce, improve the quality of early education and increase accessibility. England provides fifteen hours free early education for three and four year olds as well as the 40 per cent of two year olds living in the most disadvantaged areas.¹⁹⁴ New Zealand has also lifted its game in respect of early childhood education and care (see box on following page).

Table 10 below provides an overview of Australia compared with the OECD average across a range of key measures. The UK and New Zealand are also shown.

Table 10: Comparisons of early childhood education measures

Measure	OECD Average	Australia	Australia rank	New Zealand	United Kingdom
INVESTMENT					
Investment in early childhood as a proportion of GDP – total	0.81	0.49	28 out of 33	0.91	0.50
Investment in pre-primary (ISCED 02) as a proportion of GDP (subset of total)	0.61	0.20	24 out of 26	0.52	0.46
PARTICIPATION					
4yo enrolment in early childhood education	85.9	85.2	23 out of 35	91.8	98.6
3yo enrolment in pre-primary education (ISCED 02)	68.6	15.0	31 out of 35	87.3	83.7
DOSAGE					
Hours of early childhood teaching in the year before school	911	584	20 out of 21	924	–
Hours per week (based on 40 weeks per year)	22.7	14.6	20 out of 21	23.1	–

Source: OECD Starting Strong 2017,¹⁹⁵ Review analysis.

Note: – denotes unavailable data. Ranking varies as not all OECD countries have data for every measure.

HOW AUSTRALIA COMPARES TO THE REST OF THE WORLD CONT.

Early childhood in New Zealand

New Zealand, like Australia, offers a range of early childhood education and care options for families including parent-led services, specific, culturally based services and home and centre-based education and care services. Early childhood education and care in New Zealand focuses on integrated service delivery with a range of options available to families to meet their needs. Services cater for children from a range of ages with kindergartens offering programs for children aged 2–5 years. Strong emphasis is placed on the value of parents in children's education and cultural practices. Language and perspectives are acknowledged and catered for.

Both New Zealand and Australia have a curriculum framework to guide educators' planning and decision-making to support and enhance the learning and development of young children. Both frameworks span birth to school age.

New Zealand provides a legal entitlement for children to early childhood education and care. Families with children aged 3, 4 or 5 can access 20 hours of early childhood education fully subsidised for up to six hours a day and up to 20 hours a week.

New Zealand ranked higher than Australia across Maths, Reading and Science according to the 2015 PISA results.¹⁹⁶

Overall investment

Australia invests less than 0.5 per cent of GDP in early childhood education and care, well below the OECD average of 0.8 per cent of GDP. Nordic countries (Norway, Sweden, Denmark and Finland) invest significantly more – between 1.2 and 2 per cent.¹⁹⁷

The OECD classifies early childhood expenditure as either 'early childhood educational development' (International Standard Classification of Education 01 [ISCED 01], generally focused on 0–2 year olds, such as a long day care program) or 'pre-primary' (International Standard Classification of Education 02 [ISCED 02], generally focused on 3–5 year olds, such as a preschool program). Australia lags the OECD average on pre-primary education in particular, investing just 0.2 per cent of GDP, compared with the OECD average of 0.6 per cent. As a proportion of GDP, Australia invests less in pre-primary education than every OECD country for which data is available except Ireland and Switzerland.

Access and participation

OECD data shows that Australia has slightly below average enrolment for four year olds in early childhood education.¹⁹⁸ Australia also has slightly below average enrolment for three year olds, but Australia's three year olds are primarily enrolled in lower-level early childhood educational development (ISCED 01) programs. In terms of pre-primary education (ISCED 02), Australia has 15 per cent enrolment, well below the OECD average of 68.6 per cent. This trend of three year olds in lower level programs is only otherwise seen in Brazil and Greece, with every other country having more three year olds enrolled in pre-primary education than early childhood educational development. Australia is one of only three countries (along with Switzerland and Italy) to see a decline in pre-primary enrolment at age three since 2005.¹⁹⁹

As the data suggests, most other countries provide access for three year olds to some form of universal early childhood education. World Bank data shows that in 2015, of the 207 jurisdictions examined, the vast majority provide two or three years of pre-primary education. Only 11 provide one year – Algeria, Angola, Bermuda, Gibraltar, the Islamic Republic of Iran, Ireland, Nigeria, the Philippines, South Africa, Sri Lanka and Australia.²⁰⁰

Dosage and access

OECD data also shows that the number of hours of teaching (referred to as dosage) in the year before school is significantly lower in Australia than the OECD average. When considering government investment in early childhood education, dosage is reflective of the broader education, social and economic policy platforms on which early childhood education provision is based. A number of countries have increased the dosage of preschool education including the United Kingdom (expanding to up to 30 hours per week).²⁰¹

In addition to increasing the number of hours of early childhood education, many countries now provide a legal entitlement to a place in early childhood education for children and are moving to ensure free access for children in the pre-primary year(s). In 2015, most OECD countries provided free access to early childhood education and care to all children for at least the last year before entering primary school. In these countries, children's dosage ranges from 12-to-40-plus hours per week. Belgium, France, Ireland, Italy, Korea, Luxembourg, Mexico, New Zealand, Portugal, Slovak Republic, Slovenia and Sweden all offered free, unconditional access to 15 hours or more of pre-primary education for three and four year olds.²⁰²

Curriculum

One area where Australia performs well is its national early childhood curriculum. The provision of an agreed, evidence-based curriculum contributes significantly to quality early childhood education provision. A curriculum framework can provide more consistent provision by articulating scope, sequence and learning goals. Almost all OECD countries have some form of curriculum or framework in place to inform educators' practice and maximise consistent quality across different settings.

Evidence suggests effective curriculum frameworks in early childhood incorporate a balance of 'hard' and 'soft' skills.²⁰³ Most curricula focus on the development of skills, knowledge and dispositions that establish sound foundations for future learning and successful engagement in society. These typically include aspects of early literacy and numeracy, and emphasise the importance of language development, thinking skills and problem solving.

In addition to prioritising learning and development, learning frameworks provide advice for educators on effective pedagogical approaches and strategies for monitoring children's learning and development progress. Australia is one of many OECD countries with a national learning framework or curriculum, the Early Years Learning Framework, which is for children from birth to school age.

National Quality Framework

The National Quality Framework is notable in an international context for its scope and application. It aims to bring consistency and quality to a diverse and highly complex system. The Review is not aware of a similar-scale initiative elsewhere in the world.



THE IMPORTANCE OF QUALITY AND THE WORKFORCE

The quality of early childhood education is vital to its effectiveness, and the most important factor in delivering quality is a skilled and stable workforce. According to the International Labour Organization, 'evidence increasingly demonstrates that [early childhood education] personnel are central to realizing universally accessible, high-quality [early childhood education] provision'. The workforce is therefore an essential consideration in delivering a service of sufficient quality to deliver positive learning and developmental outcomes for children.²⁰⁴

Recent Australian research makes a valuable contribution to our understanding of quality, and our knowledge about how to improve it. But it is also clear that the workforce remains a significant challenge in Australia for a number of interrelated reasons.

Quality early childhood education

There are two generally accepted components of quality in early childhood education and care – process quality and structural quality. Process quality relates to the quality of interactions in the program and includes elements of the emotional, organisational and instructional environment. Structural quality supports process elements and refers to characteristics such as educator-to-child ratios, space, resources, group sizes, staff

qualifications and the educational curriculum.²⁰⁵ Research shows that process quality is a significantly stronger predictor of child outcomes than structural quality.²⁰⁶

The E4Kids study (funded by the Australian Research Council in partnership with the Victorian and Queensland education departments) was undertaken by the Melbourne Graduate School of Education in partnership with the Queensland University of Technology. It is a recent, Australian study that comprehensively assessed the impact of early childhood education and care on children's learning and development. It is a longitudinal study, tracking more than 2,000 children over a number of years, in both Victorian and Queensland services.²⁰⁷ Because of the weighting and sampling techniques applied, the findings are of broader application than only those services where data was collected.

E4Kids concluded that the quality of adult-child interactions is the most significant driver of child development, but that even in services that meet or exceed the National Quality Standard, these interactions may not be of sufficient quality to overcome educational disadvantage. Using a standard international measurement process known as the classroom assessment scoring system (CLASS), the study found that 87 per cent of services scored poorly on the quality of active

teaching and learning support provided. The Review heard from international experts who found this most concerning, given its importance on child outcomes.

Of further note is the E4Kids finding that, in general, quality is inversely correlated with disadvantage – services in lower socioeconomic areas were assessed to have lower teaching quality than services in higher socioeconomic areas.

The National Quality Framework is an important foundation for learning. It provides a nationally consistent understanding of quality, and a transparent way to measure and report on it. It can be used to ensure a minimum ‘quality floor’ across the sector and it provides a lever through which future improvement can be driven; investing fully in the regulatory process is central to delivering the necessary improvement.

A COMPREHENSIVE LITERATURE REVIEW ON DETERMINANTS OF QUALITY IN CHILD CARE FOUND THAT, OVERALL, THE MOST INFLUENTIAL FACTORS AFFECTING QUALITY, ACROSS AGE GROUPS AND SERVICE SETTINGS, ARE THE EDUCATION, QUALIFICATIONS AND TRAINING OF THE WORKFORCE

Workforce

A professional and skilled workforce is fundamental to achieving quality early childhood education and high-quality learning and development outcomes.²⁰⁸ It is now widely recognised that in addition to parents and carers, educators and pedagogies are the most influential factors on child wellbeing, development and learning.²⁰⁹ Both the National Quality Standard and the Early Years Learning Framework have increased the expectations placed on teachers and educators in early childhood settings. Members of staff working in early education and care are required to understand child development, to help design and deliver individualised, play-based learning experiences and to engage with parents and the community.

A comprehensive literature review on determinants of quality in child care found that, overall, the most influential factors affecting quality, across age groups and service settings, are the education, qualifications and training of the workforce.²¹⁰ Higher educator qualifications are associated with better child outcomes.²¹¹

The evidence in E4Kids confirms, in a local context, this link between higher-level qualifications and improved child cognitive outcomes.²¹²

Separate analysis, using data from the Longitudinal Study of Australian Children, found that both the level and specialisation of the qualifications was important – a child whose teacher had a diploma or degree in early childhood education or child care gained the most from attending preschool, shown by higher NAPLAN scores.²¹³

A quality service requires a skilled and stable workforce. High quality teaching is a skill like any other – it needs to be taught well, maintained over time and refreshed as our understanding of child learning and development increases. Work-related and context-specific professional development can contribute significantly to the

THE IMPORTANCE OF QUALITY AND THE WORKFORCE CONT.

quality of the program delivered and enhance the effectiveness of interactions between educators and children. Access to and participation in professional development is related to higher quality skills regardless of the caregivers' educational background.²¹⁴

A recent early childhood education and care workforce study investigated the personal, professional and workplace factors that influence the recruitment, retention and engagement of educators in centre-based early childhood education and care services. The study found that most educators enjoyed their work and appreciated its value, but one in five was planning to leave the profession, with poor wages and conditions a driving factor. Educators undertaking study to improve their qualifications were most likely to be planning to leave. This was particularly the case in long day care, where many educators upgrading to teacher qualifications planned to move to standalone preschools or schools, where they could expect higher professional status as well as better pay and working conditions. Many educators in this highly feminised workforce said they could only afford to remain in the early childhood sector because of financial support from their partner or family.²¹⁵

Recent research commissioned by the NSW Government from the University of Wollongong provides clear, actionable direction for effective professional development of the early childhood workforce.²¹⁶ The Review expects that the Victorian Advancing Early Learning study, due to be released shortly, may provide similar guidance. A recent Mitchell Institute report provides further guidance for governments, identifying pre-service education, low wages and difficult working

conditions, service leadership, ongoing professional learning and better use of data as priorities for action.²¹⁷

Internationally, Singapore has established a National Institute of Early Childhood Development, under the ambit of the National Institute of Education, to drive strategic and professional aspects of early childhood training. This includes curriculum design and development, academic governance and faculty development. The Institute will offer both pre- and in-service training.²¹⁸ While this is only one possible model, it shows a strong level of commitment to the early childhood workforce, and could provide useful guidance for Australian governments.

The challenges associated with the workforce extend beyond knowing how best to prepare and support educators. The complexity and skill required of early childhood educators is not always understood or appreciated in the community and is not reflected in the wages paid to most educators. Through its consultations, the Review heard extensively about the many workforce challenges facing the sector, including attraction and retention, low remuneration, weak long-term career prospects, variable entry and registration standards, and lack of workforce diversity (including gender and cultural background). While many of these elements were consistent across the country, remote and regional workforce issues were often identified as particularly challenging. Registration requirements vary across the country, and in some cases no teacher registration is required.²¹⁹

The Review heard that there are substantial disparities in teacher compensation between child care and preschool services. In most

jurisdictions, preschool teachers are paid less than their counterparts in primary schools, while educators in long day care are even more poorly compensated yet they may be working longer hours, have less leave and have more demanding working conditions. The wages of these educators do not reflect the responsible, professional job that they perform for children, families and the community.

The Review was particularly concerned by some of the views expressed by a number of stakeholders across the country about the quality of pre-service training by some university and vocational education and training providers, and the preparedness of many graduates as a result. The Review heard that some graduates from both sectors are inadequately trained or skilled to work in early childhood settings. Stakeholders identified a lack of knowledge of child development, insufficient practical experience in early childhood settings and challenges engaging with diverse communities and families. Some stakeholders spoke of education and training providers not being responsive to feedback from employers and the sector. While the Review was unable to fully investigate these concerns in the time available, they were raised with sufficient frequency and in such a wide range of jurisdictions that further investigation is clearly warranted.

In acknowledging these concerns about pre-service training, the Review does not seek in any way to impugn the professionalism or dedication of the workforce. Educators and teachers play a critical role in supporting children to thrive and learn, often working for low pay and in challenging circumstances. Most take a highly professional approach to their work and would like to remain in the industry. Retention of staff is vital, since close, ongoing relationships between educators and children underpin social and emotional learning: 'Stability and consistency in staffing enables children and families to build trusting and secure relationships with educators and this, in turn,

supports the early childhood education and care program to respond appropriately to the needs and aspirations of each child and provide effective support for families when required'.²²⁰

The Review heard acknowledgement that workforce issues are complex and interlinked, and also disappointment at the lack of a strategic, national approach to solving these issues, particularly since the *National Early Years Workforce Strategy*²²¹ lapsed at the end of 2016 and has not been replaced. Several stakeholders also noted that the Commonwealth Government previously provided funding for professional development, but this has now stopped. The Review was heartened to hear that services and jurisdictions are taking steps to invest in the workforce (see case study on next page), and individual educators are also pursuing professional development, but considers that systemic rather than individual solutions are needed to address workforce issues and improve quality.

The Review notes that these challenges are not unique to Australia. For example, the OECD highlights issues with the professional standing of the early childhood workforce,²²² and whilst there has been an increase internationally in the level of qualification required to be a teacher in pre-primary education, salaries are still below those of other tertiary-educated workers.²²³

! (THERE IS) NEED FOR A PROFESSIONAL (EARLY CHILDHOOD EDUCATION AND CARE) WORKFORCE – CHILDREN AND PARENTS DESERVE PROFESSIONALS. !

Early Childhood Education and Care Stakeholder, Workforce Development Policy Workshop, 30 May 2016²²⁴

THE IMPORTANCE OF QUALITY AND THE WORKFORCE CONT.

Early Childhood Scholarships Program, Australian Capital Territory

The ACT Education Directorate Early Childhood Scholarships Program delivers scholarships to the early childhood education and care sector to support the implementation of the National Quality Framework.

The Program supports individuals who are already working in, or want to work in, early childhood education and care to gain an early childhood teaching qualification and undertake higher level professional development.

The objectives of the Program are to:

- encourage individuals to improve their skills for the benefit of the children they educate and care for, and to contribute to the continuing implementation of the National Quality Framework in the ACT
- provide incentives to individuals to undertake higher level professional development
- contribute to an increase in the number of degree-qualified educators in the ACT
- raise the profile of the early childhood education and care sector in the ACT
- provide educators with improved employment outcomes and career paths.

The Program is recurrently funded to provide 75 participants with up to \$6,000 over four years towards costs associated with attaining early childhood teaching qualification. This includes purchasing leave for study release or attendance at classes, residential schools or practicum placements, course-required materials, equipment, text books and learning support services such as tutoring.

Source: Education Directorate, ACT

EXPANDING ACCESS TO EARLY CHILDHOOD EDUCATION TO ALL THREE YEAR OLDS

Currently in Australia, all governments support Universal Access to a preschool program for children in the year before school (four year olds), while most states and territories fund highly targeted access for three year olds. As a result, while almost all four year olds are enrolled in a preschool program, only 21.3 per cent of three year olds are enrolled.²²⁵ While there are data limitations, it is generally considered that those three year olds not participating in a preschool program, or any form of early childhood education and care, are disproportionately children from disadvantaged or vulnerable backgrounds.²²⁶

From both the literature and the consultations, there is consensus that a broader group of disadvantaged three year olds should have access to early childhood education than is currently the case.

In addition, there was broad support through the consultations for universal access for three year olds, with many stakeholders identifying it as the single most important reform that the Review should consider.

This view is supported by international evidence, which has generally concluded that universal access to preschool for three year olds as well as four year olds is preferred.

A comprehensive review of the research on the effects of early childhood education upon child development was undertaken for the European Union. It found that '[f]or provision for three years onwards the evidence is consistent that preschool provision is beneficial to educational and social development for the whole population.'²²⁷

In the United States, kindergarten is the educational program for five year olds (equivalent to the first year of schooling in Australia), and pre-k refers to programs for three and four year olds (which Australia would usually call preschool). A Brookings Institute project developed a series of consensus statements about the impact of state-funded pre-k programs, which concludes:

[T]he scientific rationale, the uniformly positive evidence of impact on kindergarten readiness, and the nascent body of ongoing inquiry about long-term impacts lead us to conclude that continued implementation of scaled-up pre-k programs is in order as long as the implementation is accompanied by rigorous evaluation of impact.²²⁸

The Productivity Commission in a recent report was of a similar view, noting that:

Formal educational programs, prior to starting school, can play a role in child development

EXPANDING ACCESS TO EARLY CHILDHOOD EDUCATION TO ALL THREE YEAR OLDS CONT.

and education. There are positive development outcomes for all children from about three years and above from taking part in quality preschool and early childhood education and care programs. There is evidence of immediate socialisation benefits for children, increased likelihood of a successful transition into formal schooling and improved performance in standardised test results in the early years of primary school as a result of participation in preschool programs. The benefits are even greater for children from disadvantaged backgrounds and can persist into adulthood.²²⁹

The Productivity Commission has also drawn attention to some of the benefits for disadvantaged children of universal provision.²³⁰ The Productivity Commission noted that universal programs:

- lead to higher participation for all children
- avoid some of the difficulties of accurately determining eligibility for a targeted program, noting that 'although children from disadvantaged backgrounds are over represented in the population of developmentally vulnerable children, they do not make up the majority of such children, as the largest numbers of vulnerable children are located in the middle of the social gradient'²³¹ and developmentally vulnerable children are 'spread across all socioeconomic groups'²³²
- avoid stigmatising participants
- avoid cohort effects – with disadvantaged children interacting with children from a variety of backgrounds.

The Productivity Commission's observations about the benefits of universal access for disadvantaged groups are supported by international evidence. One examination found:

If the United States shifted its preschool policy from a focus on children in poverty to a universal approach, benefits to children in poverty would increase while other children benefitted as well. Universal public preschool education would be at least as educationally effective as the current targeted approach, reach a much greater percentage of children in poor and low-income families, and provide educational benefits to children from middle income families.

Another source of increased effectiveness is peer effects on learning. In addition, parents from higher income families may be better advocates for quality.

Even though a universal approach will cost more, the added benefits are likely to far exceed the added costs as universal public preschool education is likely to produce far greater economic benefits than an income-targeted approach.²³³

The Mitchell Institute considered the international evidence base in an Australian context and found:

Access to a high-quality preschool program is one of the few proven strategies for lifting outcomes for all children.

Evidence from here and overseas shows that providing access to high-quality three year old preschool programs lays the foundation for

enduring success at school and in a range of outcomes that matter for future prosperity, including literacy, numeracy and social and emotional wellbeing.

Preschool programs that are accessible to all children are one of the best strategies we have to support children to develop the foundational skills they need to meet their potential and pursue their talents.

International evidence shows that two years of preschool has more impact than the one year currently provided in Australia.²³⁴

It has been suggested that 'more research evidence is needed to weigh up the value of universal (versus targeted) approaches in the Australian setting.'²³⁵ For example, the cultural, contextual and temporal differences in some of the overseas studies compared with the contemporary Australian context, and the challenges of untangling the effects of three year old preschool from other factors, are often cited as reasons to discount existing evidence.

THERE WAS BROAD SUPPORT THROUGH THE CONSULTATIONS FOR UNIVERSAL ACCESS FOR THREE YEAR OLDS, WITH MANY STAKEHOLDERS IDENTIFYING IT AS THE SINGLE MOST IMPORTANT REFORM THAT THE REVIEW SHOULD CONSIDER

There will always be challenges translating findings from different times and contexts to contemporary Australia. However, governments seek to make evidence-based decisions on the best information available. As outlined elsewhere in the report, some of the benefits of quality early childhood education only accrue decades after the intervention, when elements like higher wages and lower crime rates can be evident. If a randomised control trial about early childhood education had begun in Australia 35 years ago, it could be producing robust evidence today. But there would still be arguments against its application; for example, that Australian society has changed greatly in the intervening years or that the early childhood education and care system had changed dramatically. Conversely, a randomised control trial commencing tomorrow, to fully capture contemporary settings and issues, would not produce equivalent results for decades, when the same arguments would apply.

The Review finds the case for universal access to early childhood education for three year olds compelling. The national and international research, and the level of provision in comparable jurisdictions, is more than sufficient to support the claims of the benefits of universal early childhood education, and to justify further investment in this critical foundational area.

The fact that all children benefit from early childhood education but some benefit more, because of their disadvantage or vulnerability, is not a reason to stop short of universal provision. Individuals living in circumstances of disadvantage benefit from a variety of government programs and services more than others; this is inherent in the nature of universal services and disadvantage. While there will always be a need to prioritise government expenditure, the question is what is the best investment to make for the longer term across all possible initiatives, not just within early childhood. Targeted interventions can be very effective in addressing equity concerns. But if

EXPANDING ACCESS TO EARLY CHILDHOOD EDUCATION TO ALL THREE YEAR OLDS CONT.

Australia is seeking to achieve educational excellence, it requires a universal service.

There are a number of ways to design an early childhood education system that recognises that all children benefit from early childhood education, but some benefit more or require additional support. This is known as a proportionate universalism approach. For example, disadvantaged children can receive a greater subsidy or free access (promoting participation), more hours per week, a more intense experience (e.g. higher qualified teachers or a higher educator-to-child ratio), or additional supports (e.g. access to allied health professionals). This is consistent with the concept of needs-based funding in schools – some children need more support to achieve the same outcome (see school readiness funding example opposite).

**THE REVIEW
FINDS THE CASE
FOR UNIVERSAL
ACCESS TO EARLY
CHILDHOOD
EDUCATION FOR
THREE YEAR OLDS
COMPELLING**

School Readiness Funding, Victoria

School readiness funding will provide Victorian kindergarten services with additional resources to better support the children who need more help to reach school developmentally on track. It increases the total kindergarten system funding in Victoria by about 10 per cent. Similar to needs-based funding in schools, the amount of funding that a service will receive will depend on the number and concentration of students at their service facing educational disadvantage, and the level of disadvantage faced.

School readiness funding will resource services with a kindergarten program to provide appropriate, evidence-based interventions that build the capability of staff and work directly with children, for example:

- ▀ resources and curriculum for specialised programs
- ▀ child psychologists or other health professionals, to work with children and build the skills of staff
- ▀ employment of additional staff members.

Source: Department of Education and Training, VIC

EDUCATION, CARE AND THE OPPORTUNITY FOR A 'DOUBLE DIVIDEND'

The long-term objective of integrating education and care was the subject of some discussion throughout the Review's consultations. While Australia's current approach to early childhood education and care was identified as providing a range of service delivery options for parents, concerns were raised about the lack of alignment between funding streams, policy objectives and subsidy eligibility. This lack of alignment means that Australia misses out on the double dividend that could result from a system with a dual focus on enhancing children's learning and development, and supporting workforce participation.

The past decade of reform in Australia has begun to bring greater cohesion across the early childhood education and care sector. The National Quality Framework has brought most early childhood education and care services – including long day care and preschools – under a single, consistent regulatory and quality framework, and this is a significant step forward. However funding arrangements remain more bifurcated, resulting in a complex landscape that is difficult for parents to navigate.

A higher level of integration would better reflect the needs of families. Parents want quality early childhood education for their children, and many need this to be delivered in a way that supports

their participation in the workforce. Child development research supports this approach – children benefit from engagement with skilled educators, irrespective of setting.

However, a number of factors prevent this objective from being fully realised.

Instead of recognising the many different service delivery models, funding arrangements and access rules for 'care' and 'education' are generally separate, with the Commonwealth Government prioritising workforce participation and setting access rules for child care subsidies, and states and territories generally setting funding and access rules for education.

"I HAVE BEEN SO GRATEFUL FOR THE CARE AND LEARNING MY DAUGHTER RECEIVES WHILST SHE IS AT THE CHILDREN'S CENTRE. MY DAUGHTER IS ALWAYS HAPPY TO GO TO HER CENTRE AND THE PEOPLE MAKE ME FEEL SO WELCOME. I DON'T KNOW WHAT I WOULD DO IF THEY WERE NOT THERE FOR US."

Kyama, parent of a child attending preschool

EDUCATION, CARE AND THE OPPORTUNITY FOR A 'DOUBLE DIVIDEND' CONT.

For example, the sometimes limited hours of preschools can restrict workforce participation or require families to coordinate multiple services to meet work commitments. It is difficult for a parent to arrange practical working arrangements around the standard 600 hours under Universal Access if they are delivered as two x 7.5 hour days, or three x 5 hour days of preschool, for 40 weeks each year, unless there is additional care provided (often known as 'wrap-around hours').

However, under new funding rules, a 'service that primarily provides an early educational program to children in the [year before school] such as a preschool'²³⁶ is not eligible to receive the Child

Care Subsidy. By preventing preschools from accessing the Child Care Subsidy, it essentially prevents them from offering the additional wrap-around hours that support workforce participation (as parents would have to pay the full cost of the extra hours). This may have particular impacts in some smaller, rural and remote communities, where the preschool service may be the only service available. It is also a notable contrast to schools, where outside school hours care services (which essentially provide wrap-around hours for school-aged children) can receive the Child Care Subsidy.

THE OPPORTUNITY FOR GOVERNMENTS, THROUGH A MORE COMPLEMENTARY, INTEGRATED APPROACH TO EDUCATION AND CARE, IS SIGNIFICANT – TO DRIVE BOTH IMPROVED CHILD OUTCOMES AND WORKFORCE PARTICIPATION. THIS WOULD ENABLE GOVERNMENTS AND FAMILIES TO REAP A DOUBLE DIVIDEND FROM THEIR INVESTMENT

The division also manifests in the way data is collected, with some data collections focused on care aspects and others focused on education. These data gaps and inconsistencies have, at times, complicated the Review's attempts to understand the system. For example, the most recent early childhood education and care workforce census did not collect data on the workforce in standalone preschool services, but did collect data on the workforce delivering preschool in a long day care setting.

However, there is also a degree to which the distinction is real – evidence suggests there is a material difference in a child's outcomes depending on the qualification level of the staff.

The Review has considered at length the significant opportunities for early childhood education to improve child outcomes. There are also significant opportunities to improve economic outcomes by supporting increased workforce participation.²³⁷ Currently female workforce participation is more than 10 percentage points lower than male workforce participation.²³⁸ A mother whose youngest child is aged 0–4 is significantly less likely to be in the workforce than a mother with older children – 54 per cent compared with more than 75 per cent of women with children 5–14 years of age.²³⁹

What is clear to the Review is that current arrangements are suboptimal for both families and governments. The opportunity for governments, through a more complementary, integrated approach to education and care, is significant – to drive both improved child outcomes and workforce participation. This would enable governments and families to reap a double dividend from their investment.

“QUALITY BUT AFFORDABLE CHILD CARE IS WHAT PARENTS NEED AND THERE MAY BE MORE OF A ROLE FOR GOVERNMENT IN THIS. IF WE REALLY WANT TO GET PRODUCTIVITY UP IN THE WORKPLACE AS SUCH THAT WE GET WOMEN INTO FEELING SUPPORTED IN THE WORKPLACE AND KNOWING THEIR CHILDREN HAVE QUALITY CARE THIS NEEDS TO BE OUR FOCUS.”

Gail Kelly, in *The Daily Telegraph*,
25 August 2017

KEY FACTS AND STATISTICS

Between **85%** and **90%**

of brain development happens in the first

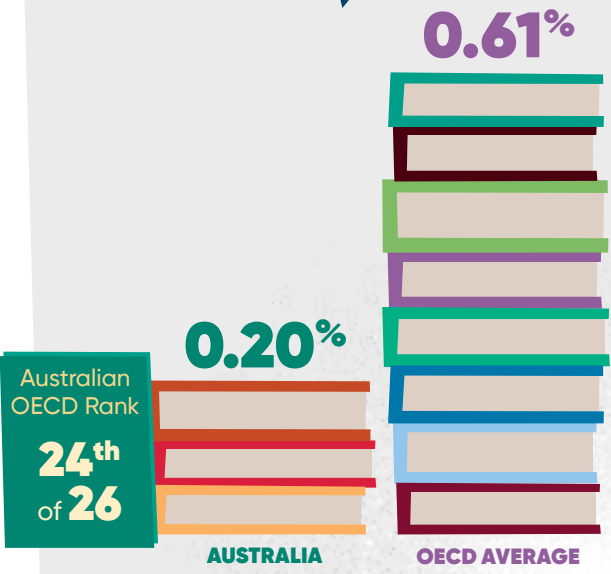
5 YEARS OF A CHILD'S LIFE

CHILDREN WHO PARTICIPATED IN A HIGH QUALITY EARLY CHILDHOOD EDUCATION PROGRAM WERE FOUND TO BE:

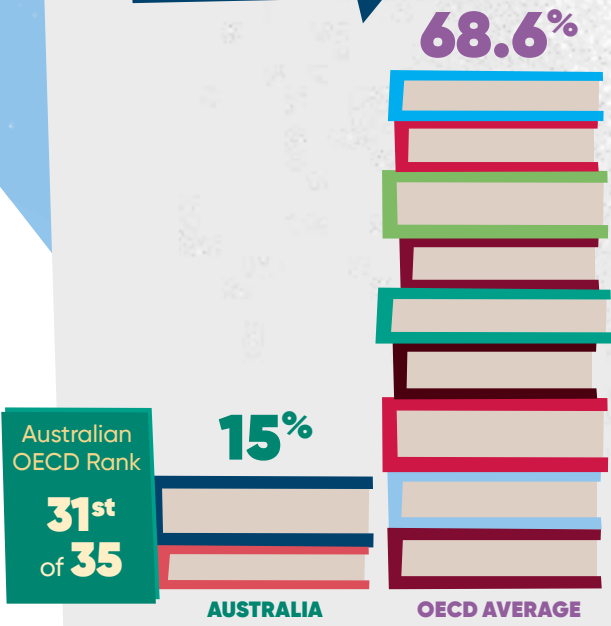
- more likely to be ready for school
- higher achievers in school
- less likely to need special education placements
- less likely to repeat a grade in school
- more likely to complete high school
- more likely to go on to further education
- more likely to be employed, and at a higher wage.

A+

INVESTMENT IN PRE-PRIMARY AS PROPORTION OF GDP



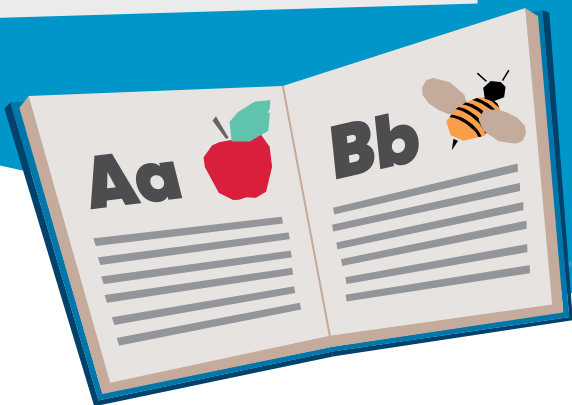
3YO PARTICIPATION IN PRE-PRIMARY EDUCATION



4YO AVERAGE HOURS (PER YEAR)



4YO ENROLMENT RATE IN EARLY CHILDHOOD EDUCATION



FINDINGS AND RECOMMENDATIONS

General observations

Australia has made great progress over the past decade in early childhood education. Governments now have an opportunity to embed this progress and consolidate it with further reform, drawing on the latest research and evidence.

The Review was struck by the quantity, quality and consistency of the evidence on the benefits of quality early childhood education. It provides clear guidance on what future reform should involve.

Education does not begin at school – children are born ready to learn. There is strong evidence of the critical nature of home and care settings in the first 1,000 days of life, and of pre-school learning.

Children are learning constantly wherever they are. Learning does not only happen in a classroom. In early childhood especially, children learn through play, exploration, relationships and interactions with others. How children interact with adults is vital to this, be they parents, teachers or others. While parents are the first educators of their children, there is also evidence of the benefits of quality early childhood education.

Education is a lifelong activity, building on previous skills, knowledge and experiences. Government policies that recognise this maximise the benefits of public investment in education by achieving gains for individuals' development as well as for the economy and society.

Participating in quality early childhood education can improve a child's short, medium and long-term outcomes across a range of measures,

including educational performance and engagement, lifetime employment and wage prospects, health and decreased involvement in crime.

It is in early childhood that the essential foundations for future skills are laid. This is when children develop not just their cognitive skills, but the creativity, resilience and emotional intelligence that they will need throughout their lives. These are the skills needed to succeed in the jobs of the future.

Early childhood education can make a significant difference in the lives of all children. But it is particularly powerful for disadvantaged children. Quality early childhood education can help a child arrive at school ready to learn, but those who start school behind often stay behind for life. Quality early childhood education can break the cycle of disadvantage.

In considering how and why to resource early childhood learning, quality is an essential qualifier – high quality early childhood education is of great benefit to all children, but the same cannot be said for low quality early childhood education.

The single most important determinant of quality in early childhood education is the interaction between educator and child. The preparation and ongoing development of the workforce is therefore essential to quality.

Australia has some strong foundations in place. For the most part, children grow up in happy, supportive homes, with parents who endeavour to give them the best possible chance of a healthy, happy and successful life.

Great strides have been made, particularly with the introduction of the National Quality Framework and Universal Access. Universal Access has significantly increased the number of children voluntarily participating in early childhood education and is beginning to show benefits. The National Quality Framework is highly regarded and a valuable platform for future quality improvement. There is considerable goodwill and expertise in the sector.

Importantly, these reforms have also shown that significant changes are possible; that they can be planned, staged and delivered relatively quickly and effectively, that the sector will support them and that parents will take them up.

Australia's challenge now is to solidify these foundations and build upon them, so that every Australian child has the best possible start in life.

REFORM THEME ONE: EMBEDDING FOUNDATIONS FOR FUTURE REFORM

To ensure the essential architecture and funding arrangements are in place, the support of all governments for Universal Access in the year before school, and the National Quality Framework, should be made permanent.

The Review heard consistently that the short-term funding arrangements for both Universal Access and the National Quality Framework cause uncertainty and hamper planning, with five National Partnership Agreements for Universal Access in just 10 years. It is also a lost opportunity for governments to show sustained commitment to quality early childhood education, thereby reinforcing its value to parents and the community. It would be retrograde for Australia to stop these initiatives.

The Review also noted the great variety of ways in which early childhood education is delivered across Australia, including through government and non-government schools, standalone preschools

or kindergartens, long day care services, mobile services or distance education such as 'schools of the air'. Quality early childhood education that improves children's outcomes can be delivered in each of these settings.

The range of settings allows families and governments the flexibility to choose the settings that are most appropriate for them, their children, their community and their other service systems.

The Review considers that future arrangements should continue the current approach to recognise the diversity of communities and systems across Australia, and allow services, supports and pedagogies to be tailored to the specific needs and circumstances of communities and locations. Every jurisdiction faces different challenges – for example, remote communities or different historical delivery models – and future arrangements should allow the flexibility required to deal with these.

RECOMMENDATIONS

1. Australian governments^{vi} agree to permanent, adequate funding for Universal Access in the year before school and the National Quality Framework.
2. Australian governments preserve flexible early childhood education and care delivery on a jurisdictional basis, within nationally agreed objectives and standards.

The remaining findings and recommendations address future investment and reform. This language is deliberate – both investment and reform are required.

All Australian governments should agree upon a set of principles and goals for Australian children aged 0–5. This could involve revisiting the COAG Early Childhood Strategy, *Investing in the Early Years*. A more ambitious approach would be to consider the values and principles that underpin learning from 0–18 by refreshing the 2008 *Melbourne*

^{vi} Recommendations are directed to all Australian governments, reflecting the current arrangements where responsibility is shared between the Commonwealth and state and territory governments.

FINDINGS AND RECOMMENDATIONS CONT.

Declaration on Educational Goals for Young Australians. This should include specific objectives of early childhood education and care systems and investment.

Following this, the Review considers it would be worthwhile to review the Early Years Learning Framework, to ensure alignment of learning outcomes with the principles and goals articulated by governments, and currency with contemporary knowledge and best practice. Consideration could also be given to measurement against desired outcomes, and how the Framework can give more assistance to educators with their program planning and learning goals for individual children.

Governments currently distinguish between early childhood education and school education in ways that can be arbitrary and counterproductive. While children learn in different ways at different ages, this changes gradually – children who finish preschool in December learn in a similar way when they start schooling in January. And the learning and development in preschool this year affects a child's educational performance in school next year. Children's learning and development is cumulative, building on all the learning that has occurred previously – at home, in early childhood settings and at school. When governments recognise this, and treat both early childhood and school education as essential elements of the Australian education system, they can improve continuity and engagement in learning, and therefore lift learning outcomes. Seeking to improve educational outcomes for children but only considering schools is narrow and inefficient.

There is a serendipitous opportunity for Australian governments to take a broader approach to

education with future funding arrangements for both school and early childhood currently being considered by governments. The concurrent initiative of the Prime Minister's Community Business Partnership that is looking at the first 1,000 days provides an opportunity for governments to consider policies that optimise individual learning and development from 0-18, and maximise the return on their education investment.

RECOMMENDATION

3. Australian governments review the Melbourne Declaration on Educational Goals for Young Australians to embed the importance of the early years as the foundation for learning in core education frameworks and policies, including articulating governments' objectives for child outcomes.

While great strides have been made in recent times, the current levels of investment and quality of care in Australia are insufficient to maximise children's outcomes. Australia can do more for its children. A conceptual change is required to place the child at the heart of policy development, and to allow investment and reform to flow from that principle.

The evidence is clear that increased investment in quality early childhood education would deliver a high return and be worthwhile for any government. It would contribute significantly to improved school and other outcomes, and fiscal benefits would accrue to both Commonwealth and state and territory governments. There is a good reason that almost every other developed nation in the world invests more than Australia in early childhood education and provides universal

access to more than one year of early childhood education before school; it is an investment that pays significant dividends.

The proposed reforms will not require significant additional expenditure in the short term. Any expansion of early childhood education will likely take some time to deliver given the need for developing and expanding the workforce and, in many cases, infrastructure.

Governments already contribute significantly, particularly to school education and early childhood services that support workforce participation. The Review notes the Commonwealth Government has committed to increase its contribution to school education and child care subsidies over the coming years. States and territories have significantly increased their investments as well. Additional investment in early childhood education could come from new investment by governments or reallocation of this existing and future expenditure, or a combination of the two. Additional investment in early childhood education by governments is one potential source of new funding, but reallocation of existing and future education expenditure or a combination of some reallocation plus new funding are also options.

Directing a portion of existing and future education expenditure to supporting learning and wellbeing in the years before school would be consistent with the Review's conclusions that increased investment in early childhood education will improve school outcomes, and that learning and education should be more broadly conceived, encompassing at least the time from birth until the age of 18.

Australian governments' investment in school education (as a proportion of GDP) is around the OECD average.²⁴⁰ With the significant increase in schools funding recently announced,²⁴¹ this is likely to increase to above the OECD average in schools. However, as noted earlier, Australia's investment in early childhood education remains

significantly below the OECD average. The evidence shows that it is less expensive and more effective to intervene early than to address problems later in schools, when they become greater and more entrenched. As noted earlier, the return on investment is high in the early years, with estimates ranging from \$2.62 to \$17 for every dollar invested.

In view of the current level of investment, the Review considers that achieving OECD average investment in pre-primary education is an appropriate first goal. Once achieved, consideration can be given to more ambitious targets.

The Review notes that the Commonwealth's current significant investment in early childhood is predominantly directed to facilitate parental workforce participation. As best as the Review can determine, the Commonwealth has articulated no objectives or targets with respect to outcomes for the children whose care they are subsidising. As discussed earlier, the Review considers this to be a missed opportunity. It is possible to reap a double dividend from this investment, to support a child's learning and development as well as a parent's workforce participation.

RECOMMENDATION

4. Australian governments work towards early childhood education investment reaching at least the OECD average, as a proportion of GDP.^{vii}

REFORM THEME TWO: EARLY CHILDHOOD EDUCATION FOR ALL THREE YEAR OLDS

In addition to settling ongoing, adequate funding for Universal Access to early childhood education for four year olds (see recommendation 1), governments should move to expand access for three year olds – providing every Australian child with access to a quality, age appropriate, evidence-based early childhood education program.

^{vii} Defined as pre-primary education, ISCED 02.

FINDINGS AND RECOMMENDATIONS CONT.

The case for extending universal access to three year olds is strong. Many jurisdictions already provide targeted support, and moving to universal access for children in this age group will make a real and cost-effective contribution to improving school outcomes in Australia.

The national and international research, and the level of provision in comparable jurisdictions, is more than sufficient to support the claims of the benefits of early childhood education, and to justify investment in this critical foundational area. The understanding of brain development helps explain why the early years are so important for long-term outcomes. The potential of quality early childhood education to improve a range of outcomes, in the short, medium and long term is well established by an abundance of research. Almost every other developed nation in the world has come to the same conclusions – almost all invest more than Australian governments do and provide at least two years of early childhood education. The case for investment is strong.

THE POTENTIAL OF QUALITY EARLY CHILDHOOD EDUCATION TO IMPROVE A RANGE OF OUTCOMES, IN THE SHORT, MEDIUM AND LONG TERM IS WELL ESTABLISHED BY AN ABUNDANCE OF RESEARCH

Expansion of access to early childhood education for three year olds should maintain the principle used for Universal Access for four year olds, with all governments contributing. Each jurisdiction should be able to implement the policy and deliver a quality early childhood education program in ways that respond to their own communities, circumstances, systems and service types.

This will require the support of both the Commonwealth Government, and the state and territory governments. Investment will be required in the early childhood workforce, and, in many cases, in infrastructure.

The Review recognises that this represents a significant reform and will take some time to roll out. Different jurisdictions will face different challenges and start from different positions. The roll out will need to be carefully planned and implemented so expansion does not come at the expense of quality or have unintended consequences, such as disadvantaged four year olds being displaced from an existing preschool program.

Where practicable, the roll out should prioritise access for disadvantaged children, families and communities, given that disadvantaged children will benefit the most from it.

RECOMMENDATION

5. Australian governments progressively implement universal access to 600 hours per year of a quality early childhood education program, for example preschool, for all three year olds, with access prioritised for disadvantaged children, families and communities during roll out.

REFORM THEME THREE: ACCESS, EQUITY AND INCLUSION – ADDITIONAL SUPPORT FOR SOME CHILDREN AND FAMILIES

Recognising that all children can benefit from a quality early childhood education is not the same as saying the best approach is for every child to receive the same support or service. Governments do not have to choose between a universal or targeted approach. The best approach is one where every child receives a baseline level of quality early childhood education, and disadvantaged and vulnerable children and their families receive additional support. This is consistent with the concept of needs-based funding in schools – some children require more resources and support to achieve the desired outcome. In early childhood, this approach is often referred to as proportionate universalism.

The Review heard that the nature of disadvantage and vulnerability can vary greatly between families, communities and groups, and responses need to be tailored to circumstance, sometimes at an individual level.

While cost is often identified as a barrier to access, and can be a significant factor, it is not the only barrier. Other factors such as the ability to access transport to and from a service, or complex enrolment or administrative processes, can be barriers. In some cases, families do not feel welcomed by services or feel judged by them. English fluency, distance and remoteness or a child's health issues or disability are also commonly identified as barriers.

Families in disadvantaged or vulnerable circumstances often feel these barriers most acutely. When confident and well-resourced families encounter barriers or complications, they are likely to find a way around them. This is less likely with disadvantaged families; those who would benefit most from the services. Efforts must be made to reach out to these children and

families, engage with their ideas and concerns, welcome them, include them and make it as easy as possible for them to fully participate.

The Review noted that many initiatives that are now accepted parts of schooling in Australia – such as free government school provision, school buses or alternative transport supports, programs for children with a disability, visiting health professionals, breakfast clubs and parent engagement – could be paralleled in early childhood.

There are a number of ways to design an early childhood education system that recognises some children need more help to fully participate and benefit.

For example, disadvantaged children could receive a greater subsidy or free access (promoting participation), more hours of service per week, a more intensive service (e.g. a higher educator-to-child ratio), or additional supports (e.g. a visiting allied health professional). The workforce supporting some children could have higher qualifications or receive targeted training (e.g. in trauma-informed practice or working with particular cultural groups). The school readiness funding being introduced in Victorian preschools is an example of how this additional support can be provided with flexibility and rigour through a needs-based funding system.

Other, related services can also be provided – for example, earlier education programs (such as supported playgroups), interventions designed to address existing barriers (such as transport to and from services), programs designed for parents to improve the home learning environment, programs that enable parents to participate alongside their child, programs tailored to specific communities or issues, or facilitation or support workers to help with service access. Services to parents before preschool can enhance the home learning environment and a child's earliest years, but also can help build connections and trust between families and services. This helps encourage participation and is important to the effectiveness of preschool.

FINDINGS AND RECOMMENDATIONS CONT.

In some cases, the issues in accessing early childhood education are only part of broader challenges being confronted in a child's family. For these families, early childhood interventions can provide a powerful opportunity to break the cycle of intergenerational disadvantage. From both the literature and visiting services first hand, it is clear that early childhood services can provide a 'soft entry point' for parents into other supports; to feel part of a community, access health and social services and supports, and gain work experience or educational qualifications. They can also help build parental engagement with the education system, which can be helpful when children transition to school.

The Review was fortunate to visit a number of services, including a Child and Family Centre in Tasmania, and hear about the Families as First Teacher program in the Northern Territory. Both were powerful demonstrations of the ability of early childhood services to improve the lives of parents and children. It was therefore not surprising that some of the examples from the early childhood literature that have the highest return on investment are those that provide earlier or additional intervention for families and children, such as home visiting or other parenting support. Combined with early childhood education, these additional, targeted interventions engage parents and strengthen a child's learning both in and outside the home.

While early childhood education services are voluntary in every jurisdiction across Australia, the Review considers all governments should aspire to full participation. The alacrity with which parents took the opportunity to enrol their children in four year old preschool suggests they value it.

Aiming for full participation is important for two reasons. First, the evidence shows early childhood education is of significant benefit. It should therefore be the aim of every government that every child benefits from it. Second, in the absence of full participation, it is likely to be the disadvantaged that disproportionately miss out. The extra effort to encourage and support their full participation is vital. There is a clear need to engage with families that currently do not take part in early childhood education.

The Review acknowledges that achieving the target of full participation will be difficult. Better data is required to understand who does and does not attend, and why. There will always be children who are unable to attend (for example, due to illness). Primary school attendance rates, for example, are below 94 per cent in Australia.²⁴² And early childhood education in Australia is voluntary, not compulsory. But full participation is a worthy aspiration.

RECOMMENDATIONS

6. Future early childhood education investment and reform include a range of additional, targeted interventions for both children and their families, to ensure all children can fully benefit from a quality early childhood education and have the skills and attributes needed for school and later life. These interventions should be for children and their families both prior to, and during, their participation in early childhood education.
7. Australian governments promote and support full participation by three and four year olds in quality early childhood education programs, in particular to maximise participation by vulnerable or disadvantaged children.

REFORM THEME FOUR: QUALITY AND WORKFORCE

There has been significant improvement in the quality of early childhood education in Australia as shown by the National Quality Framework data. However, it is also clear that further improvement is required to maximise child outcomes, especially for vulnerable and disadvantaged children. The E4Kids research provides compelling evidence on this.

Our understanding of what constitutes quality early childhood education is relatively new and still improving. The National Quality Framework is also relatively new, and services and educators continue to adjust to it. The important thing is to recognise that further and continuous improvement is required and to work towards it. Over time, this must include raising minimum acceptable standards, informed by the growing evidence of what is most effective at improving child outcomes.

A long-term, strategic approach to quality improvement, supported by investment, is required.

The Review notes that although there are significant differences between jurisdictions, early childhood education and care in Australia is in many ways heavily marketised. However, like many other markets, it does not operate in a pure market sense. There is no perfectly informed consumer with many available choices, and there is no real quality floor – many services that do not meet the National Quality Standard continue to operate and receive government support. The ‘consumer’ is considered to be a small child or their parent. For parents, choice can often be limited by place availability, service proximity, transport, cost or personal circumstances. The Review heard that many parents do not fully understand the importance of a quality early childhood service or know how to find out about an individual service’s quality rating or understand the rating even if they do find it.

One in four early childhood services do not meet the National Quality Standard and the Review also heard, anecdotally, that some services are not concerned with this, perhaps because they view their market as captive and with no other choice. There is some support for this in the available data; of the 2,179 services originally rated as ‘Working Towards National Quality Standard’, 30.6 per cent remained at that level when later reassessed.²⁴³

Government funding – for either preschool or child care – is by far the dominant force in the ‘market’, and the most powerful lever available to drive quality improvement. Government should use it more to get the best value for money from its own investments, as well as to improve child outcomes.

In the long term, governments should consider whether public funds or subsidies should be available to services that consistently fail to meet minimum quality standards.

RECOMMENDATIONS

8. Future early childhood education reforms emphasise quality, with targeted investment to support improvement, and the incremental strengthening of minimum standards under the National Quality Framework.
9. Australian governments consider opportunities to use funding levers to provide incentives for quality improvement by service providers, and consequences for services repeatedly failing to meet the National Quality Standard.

The quality of the workforce is critical to early childhood education achieving the desired learning outcomes.

The single most important element of service quality is the interaction between child and educator, and training and qualifications improve these interactions.

Consultations conducted in the course of the Review, as well as research related to the early

FINDINGS AND RECOMMENDATIONS CONT.

childhood workforce, emphasise several related elements. These include: the quality and appropriateness of pre-service training in both universities and vocational education and training institutions, entry and registration standards, ongoing professional development, workforce diversity, the need for viable career paths, the importance of service leadership, strategies to address turnover and instability within the workforce, the ability of the workforce to engage with parents and the status of the early childhood education profession in the community. The low wages of many in the sector was also raised in many consultations. It is difficult to progress the professionalisation of the workforce without the appropriate conditions to attract and retain a suitably skilled workforce.

There are cost and funding implications to any solution. But if increased investment in the workforce leads to improved quality of practice, it would improve the overall return on investment in early childhood education. While great strides have been made, particularly with the introduction of the National Quality Framework, further improvement and professionalisation of the workforce is required. This will require effort and contribution from all involved, including an ongoing commitment to quality improvement. An expansion of access to

early childhood education, as recommended by the Review, may assist in creating greater scale in the sector. But this will not be sufficient to solve all issues. The workforce has contributed to an extraordinary period of reform and yet the Review heard of many educators earning little above the minimum wage and many trained early childhood teachers earning significantly less than their primary school counterparts.

The National Early Years Workforce Strategy lapsed at the end of 2016, and there is no nationally agreed vision and long-term framework for the early childhood education and care workforce. This is a clear opportunity for all governments to again develop and commit to a strategic approach to the development and support of the workforce, informed by the latest evidence and research on educational quality and practice.

RECOMMENDATIONS

10. Australian governments agree to a new national early childhood education and care workforce strategy to support the recruitment, retention, sustainability and enhanced professionalisation of the workforce, thereby improving service quality and children's outcomes.

IT IS DIFFICULT TO PROGRESS THE PROFESSIONALISATION OF THE WORKFORCE WITHOUT THE APPROPRIATE CONDITIONS TO ATTRACT AND RETAIN A SUITABLY SKILLED WORKFORCE.

11. The strategy should consider, at a minimum, opportunities to improve:
- a. service leadership capability
 - b. pre-service training quality and content
 - c. ongoing professional development of the workforce
 - d. responsiveness of pre-service training and ongoing professional development providers to the sector
 - e. consistency and applicability of workforce registration and professional standards
 - f. workforce attraction, stability and retention, including medium and long-term career paths
 - g. the impact of remuneration and conditions on workforce stability and retention, and quality of practice
 - h. workforce diversity, including Indigenous communities
 - i. the status of the profession
 - j. responses to localised issues, including in regional and remote areas
 - k. engagement with parents.

REFORM THEME FIVE: PARENT AND COMMUNITY ENGAGEMENT

A common theme across the Review's consultations and the literature is the vital importance of parents in their child's learning and development. In the first 1,000 days and beyond, parents provide the crucial home environment for children, and are a child's best advocate and protector. They are a child's first teacher and help imbue in children a love of learning and a sense of aspiration. They are vital to establishing and supporting a child's development. This role is particularly important in the early years, but continues through a child's life.

A child's education and development can be thought of as a joint venture between parents, early childhood services and educators, and schools and teachers. In many cultures and groups, including Indigenous communities, the broader community takes a vital role in child raising.

The Review saw and heard of many examples where services are working to engage effectively with parents. A number of examples are highlighted in the report. However, it is clear that more can be done. There are also examples of parents engaging with services, with many serving on governing boards or other committees.

Every parent wants what is best for his or her child, but some need additional support in their parenting. Not all parents understand how much development occurs in the early years, and some have not experienced good parenting themselves and do not know where to start. Some are struggling with the challenges of parenting, or balancing parenting with other parts of life such as employment or education. Some are struggling with other life challenges, such as unemployment, poor health, poverty or family violence.

Better parent support would be of substantial benefit. For most parents, this need not be complex. It could include giving clear messages to help parents and the broader community understand the key milestones of child development, the importance of play and emotional support, and the value of early childhood education. For parents with more complex circumstances additional support is needed, and the Review discussed earlier the opportunities of multi-generational approaches and evidence-based programs such as supported playgroups.

Parents are not only the primary caregivers and first educators of children; they also have an important role as an advocate or agent for their child. Better informing parents about early childhood development would make them better advocates for their children, promoting an improved understanding of the importance of the early years and the nature of early childhood education and care service quality. It is common to hear of parents searching for the best school for their child – for example, looking at the *My School* website. Some families even move suburbs in order to access a better school's catchment

FINDINGS AND RECOMMENDATIONS CONT.

area. If that desire for a child to have the best possible education was better harnessed in early childhood, parents might seek out higher-rated services for their child's education and care. While in many places there is limited choice, parents could also put pressure on lower-rated services to improve, just as they can speak to a principal if they think their child isn't getting enough support at school. Having parents help drive quality improvement would complement – but could not be a substitute for – government action to improve service quality. Parental buy-in on quality improvement is an important characteristic of a sustainable system.

The National Quality Framework provides a significant amount of information that parents could use as informed consumers, but it is not well communicated to them. The Review has heard that many parents don't know it exists, what it means or why it is important.

Better communication of information to parents could also help them navigate the service system. Many are confused by different terms across services or jurisdictions; for example, the differences (or similarities) between child care, long day care, preschool, kindergarten, and early childhood education and care services.

Improving community and parental understanding of the importance of early childhood and service quality would also help to raise the standing of the early childhood education and care workforce. Rather than regarded solely as carers, their educative role would be acknowledged and they would be considered alongside other professionals such as school teachers or allied health workers.

RECOMMENDATIONS

12. In recognition of the role of parents as the first and ongoing educator of their children, and as advocates for their children, Australian governments undertake an ongoing campaign to improve community understanding of the importance of the early years and all who care for and educate children, and to improve parent understanding of service quality.
13. Australian governments develop and invest in strategies to support early learning in the home environment, including programs to support parents in their educative role.

REFORM THEME SIX: TRANSPARENCY AND ACCOUNTABILITY

Having a strong evidence base, informed by good data, is an essential element of policymaking and implementation.

Data can help identify children at risk and support tailored and early interventions; not just in terms of education but also across other services including health and child protection. At a service level, data can identify high and low performing services. High performing services can provide valuable lessons for other services and low performing services can be more readily identified as needing help. For parents, data can help drive consumer choice. For governments, building the evidence base can help with policy and program development, funding decisions and accountability, and can underpin communities of practice.

The Review has benefitted from extensive international evidence and data, and some Australian evidence and data. Both the AEDC and National Quality Standard ratings provide a richness of information that many other sectors or jurisdictions do not have. But they are collected infrequently, which can be a limitation in a sector undergoing significant change. More frequent assessments and ratings is one option for reform; another would be the development of more efficient and targeted assessments (for example, focussed on educational programs and practice) that are able to be undertaken more frequently.

The National Quality Standard ratings are particularly important as they form, in effect, the quality floor in which the sector operates. They are important to ensure the safety, wellbeing and development of children, but also the effectiveness and integrity of the significant government investment in the sector. Appropriately funding the regulatory bodies administering the National Quality Framework is vital, as is having sufficient information to inform future changes to the National Quality Framework to increase minimum quality expectations.

Attendance data in preschool is often patchy and open to multiple interpretations, so it is not always clear how many children are attending or for how long. Nor is there a good understanding of developmental growth of children within a program or service. Improved formative assessment would better support educators to understand a child's needs and tailor their programs accordingly. Individual data sets are not always systemically linked to other data, making it difficult to track children over time to measure long-term impacts or identify long-term issues.

There is no systemic sharing of good practice in Australia, such as jurisdictions and services sharing their knowledge about what does and does not work. Nor are program evaluations always undertaken systematically and rigorously, or shared broadly.

Longitudinal studies are particularly rich sources of evidence for policy makers, but there hasn't been a new birth cohort in the Longitudinal Study of Australian Children (LSAC) since 2003–2004. There have been significant changes to early childhood services since then that LSAC would not be able to inform policy makers about. The Productivity Commission has already recommended that new cohorts be established at regular intervals,²⁴⁴ and the Review supports this.

More data should be collected and it should be shared and made available. Wherever possible (respecting the privacy of individuals), information should be readily available to parents, governments, academics and services. Given the diversity of the sector, with many different parties involved in service provision, information should not be restricted only to governments or a limited few.

Data sharing would also enable better targeting of services and support. For example, some jurisdictions target additional support to families with a healthcare card. But this is a blunt measurement of disadvantage and does not allow for gradations, so a family that earns a dollar over the threshold may be significantly disadvantaged compared with one earning a dollar below the threshold, despite there being a limited apparent difference in circumstances. The sharing of income data would enable better targeting of support.

A number of these issues reflect a lack of coordination or a lack of early childhood data infrastructure to bring data sources, governments and other interested parties together.

None of these observations should be interpreted as suggesting that there is insufficient evidence to confirm the value of quality early childhood education or to support the findings and recommendations of this report. There is no absence of international research and there is a growing body of Australian evidence. The evidence is clear. But more evidence, collected at more regular intervals, would assist with quality and service improvement, support parent choice and maximise child outcomes and return on investment.

FINDINGS AND RECOMMENDATIONS CONT.

RECOMMENDATIONS

14. Australian governments, in support of their investments in early childhood, develop and invest in an early childhood information strategy. The strategy should encompass all aspects of early childhood data, information and evidence, and aim to make a greater amount of information more accessible to more people.
15. The early childhood data and information strategy include better use of existing data and information, more frequent collection, the collection of new data and information, improved data and information sharing, and appropriate national governance arrangements to support the strategy and future reform.

Allocation of responsibilities

The Review has been struck throughout the course of its work by the intersection of Commonwealth and states' and territories' roles and responsibilities in early childhood.

While both levels of government are concerned with the same children and families, policy settings are not always aligned or complementary. The involvement of multiple levels of government can also increase complexity for families and services as they try to navigate fragmented service delivery, programs and funding streams. A number of stakeholders expressed frustration that the

Commonwealth's current focus on supporting workforce participation through child care was a missed opportunity to also benefit the child's education, and that current funding rules do not always support workforce participation or improved child outcomes.

A number of the Review's recommendations indicate that there is a system stewardship function not being adequately performed; for example, the absence of a current workforce strategy and the lack of a systemic approach to sharing information or effective practice.

Importantly, shared or unclear responsibilities can also dilute accountability, as each level of government points to the other as responsible. Clearly articulating roles and responsibilities is vital.

A re-definition or re-allocation of responsibilities could be considered to clarify responsibilities and reduce funding complexity. For example, it has been previously suggested that states and territories could take full or greater responsibility for the learning, development and care of children prior to entering formal schooling.²⁴⁵ Such an approach would not preclude nationally consistent approaches to issues such as quality or workforce development, and would require the availability of funding to be matched with the allocation of responsibilities. The Review does not suggest the states and territories could simply take on additional responsibilities – given the

AN ONGOING COMMITMENT TO ADEQUATELY FUNDING UNIVERSAL ACCESS IN THE YEAR BEFORE SCHOOL AND THE NATIONAL QUALITY FRAMEWORK MUST BE THE FIRST PRIORITY FOR ALL AUSTRALIAN GOVERNMENTS

historical and current vertical fiscal imbalance in Australia, the fiscal implications of any change would need to be carefully considered. For the purpose of its recommendations, the Review has not assumed any change to current roles and responsibilities, but thinks that there would be benefit in considering and clarifying the allocation of roles and responsibilities.

RECOMMENDATION

16. Australian governments consider the optimal allocation of roles and responsibilities between levels of government for early childhood in order to address policy and delivery issues, improve clarity and reduce complexity for families, providers and governments, and thereby improve outcomes for children.

IMPLEMENTATION

The Review recognises that adoption and full implementation of these recommendations will take time. Addressing workforce issues and providing early childhood education to all three year olds will take years, and a phased approach to implementation will be required. Different jurisdictions start with different strengths and will face different challenges (for example, supporting remote communities). They will start from different points, given existing variation. Further work will be required by jurisdictions to consider detailed phasing of implementation. However, the Review considers it useful to provide some guidance as to sequencing.

An ongoing commitment to adequately funding Universal Access in the year before school and the National Quality Framework must be the first priority for all Australian governments. Without this, there is the risk of a reduction in the current level and quality of early childhood education in Australia, and too much uncertainty to effectively address other issues and opportunities.

Other recommendations may take longer to fully deliver but aspects can be commenced quickly. This includes starting to address workforce issues,

planning and targeted delivery for early childhood education for three year olds, and initiatives to improve parent engagement and support.

Workforce and quality are critical, and longer-term policy work should commence immediately. In the shorter term, targeted, 'no regrets' investments could be made; for example, in supporting professional development or initiatives to improve workforce diversity. Work to investigate and address more complex issues, such as the quality of pre-service training and the use of funding levers to drive quality improvement, will take longer to complete, but could also commence quickly.

Early childhood education for three year olds will take many years to fully implement but planning should commence quickly, and access can be phased in, with priority given to children in vulnerable and disadvantaged circumstances.

Actions to implement the recommendations relating to parent engagement and support, and additional support for vulnerable and disadvantaged children and families, can also begin quickly. A number of successful models and programs exist, some of which have been highlighted in this report.

Work on the early childhood information strategy should also commence concurrently. Quality information will support the planning, delivery and evaluation of the other recommendations.

What has often been missing in Australia has been a sense of urgency in progressing early childhood education reform. The window for early childhood interventions is relatively brief, and once the time has passed for a child, the opportunity is gone. The faster governments act, the sooner children, governments and society will see the benefits.

RECOMMENDATION

17. Australian governments develop, through the Council of Australian Governments, a plan identifying short, medium and long-term actions for phased implementation of these recommendations.

GLOSSARY

Australian Children's Education and Care Quality Authority (ACECQA)

ACECQA is an independent national authority responsible for overseeing implementation of the National Quality Framework.

Australian Early Development Census (AEDC)

The AEDC is a triennial population measure of how young children have developed by the time they start school. It measures five critical areas of early childhood development, referred to as domains: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, and communication skills and general knowledge.

Benefit cost ratio (BCR)

A BCR seeks to represent the benefits of an investment compared to its cost. A BCR of greater than one indicates the benefits exceed costs.

Classroom Assessment Scoring System (CLASS)

CLASS is an observational instrument to assess classroom quality with a focus on the processes in which educators interact with children. It describes multiple dimensions of teaching that are linked to student achievement and development: emotional/behavioural support, classroom organisation and instructional support.

Council of Australian Governments (COAG)

COAG is the peak intergovernmental forum in Australia. It consists of the Prime Minister, all state Premiers and territory Chief Ministers, and the Australian Local Government Association.

Dosage

Dosage refers to the number of hours of early childhood education provision (for example, per week or per year) and is often linked with duration (number of years of provision).

Early Childhood Education and Care (ECEC)

ECEC refers to the variety of arrangements that provide education and care for children, including preschool and child care.

Four year old (or three year old)

Generally used to refer to a child who turns four (or three) years of age on or before a date defined by a jurisdiction in a calendar year. For example, the term four years old is typically applied to children eligible for participation in a Universal Access to preschool program in the year before school. Generally, these children attain the age of four years by a defined date in the calendar year. Noting that jurisdictions use different dates for determining eligibility, children may be three years of age at the start of the calendar year, or turn five during in the year depending on age eligibility criteria.

International Standard Classification of Education (ISCED)

The International Standard Classification of Education (ISCED) is an internationally recognised standard for the naming and recognition of different levels of education, which seeks to make the varied structures of education systems more comparable across countries.

Kindergarten (see also preschool)

Kindergarten is a term used in some jurisdictions for an early childhood education program, known in other jurisdictions as preschool. In this report, the term preschool is used for clarity, as kindergarten is also used to refer to the first year of formal schooling in some jurisdictions.

Long day care	Operated in a child care centre, long day care provides education and care for children aged six weeks to five years, usually for at least 10 hours a day, Monday to Friday, for at least 48 weeks a year. Most are also eligible for child care subsidies.
Organisation for Economic Co-operation and Development (OECD)	The OECD is an international organisation that aims to promote policies that will improve the economic and social wellbeing of people around the world and establish international standards on a range of factors. It has 35 member countries and publishes a range of reports and data to support governments.
National Assessment Program – Literacy and Numeracy (NAPLAN)	NAPLAN is an annual assessment for Australian students in years 3, 5, 7 and 9. The tests cover skills in reading, writing, spelling, grammar and punctuation, and numeracy.
National Quality Framework (NQF)	The NQF aims to raise quality and drive continuous improvement and consistency in ECEC, and includes the National Quality Standard and associated assessment and rating system, the Early Years Learning Framework (a nationally consistent early years curriculum), a regulatory authority in each state and territory to administer the NQF, and ACECQA.
National Quality Standard (NQS)	The NQS sets a consistent national benchmark for the quality of education and care services. It brings together seven key quality areas important to outcomes for children, and gives services and families a better understanding of the attributes of a quality service.
Parents	The term parents is used in this report to refer to all adults with significant responsibilities for raising children including mothers, fathers, grandparents, foster or kinship carers, guardians, and other family members, carers or members of the community.
Programme for International Student Assessment (PISA)	PISA is a triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year old students in 72 countries in science, mathematics, reading, collaborative problem solving and financial literacy.
Proportionate universalism	This concept involves the implementation of a common (universal) provision at a population level for all, with extra support for those with additional needs. Also known as progressive universalism.
Preschool	Preschool refers to an early childhood education program provided to children before school (known as kindergarten in some jurisdictions). A bachelor-qualified teacher usually delivers it. A range of service types delivers preschool including long day care services, standalone preschool services or preschools attached to schools.
Self-regulation	Self-regulation is the ability to monitor and control one's own behaviour, emotions or thoughts, altering them in accordance with the demands of the situation. It includes the ability to inhibit first responses, resist interference from irrelevant stimulation and persist on relevant tasks even when not enjoyable.
The Review	The Review to Achieve Educational Excellence in Australian Schools through Early Childhood Interventions, undertaken by Ms Susan Pascoe AM and Professor Deborah Brennan.
Trends in International Mathematics and Science Study (TIMSS)	TIMSS is an international assessment conducted on a four-year cycle of the mathematics and science knowledge of students in years 4 and 8 around the world. Internationally comparative data enables participating nations to compare students' educational achievement across borders.
Universal Access	Universal Access (capitalised) is the term used to describe the Commonwealth, state and territory governments' current commitment to a quality preschool program available to all children in the year before school. A program considered to meet Universal Access requirements is one delivered by an early childhood teacher that meets NQF requirements, for 600 hours a year (equivalent to 15 hours per week for 40 weeks). The term universal access (uncapitalised) is used to describe the concept of access to a service being provided to all relevant children.
Year before school	Refers to the year before full-time schooling, recognising differences in the school starting age between jurisdictions, and that in some jurisdictions preschool can be considered part of a school or school system.

REVIEW PROCESS

Senior officials from the first ministers' departments of all states and territories commissioned the Review. The Review members were appointed in late August 2017, with an original reporting date of 27 October 2017. This was subsequently extended by agreement.

All commissioning jurisdictions contributed to the Review, including through the provision of financial and logistical support, staffing and information. The Review appreciates the cooperation and support of all the commissioning jurisdictions.

The Review has been supported by a small secretariat, with members contributed from the Queensland, South Australian and Victorian public services.

In addition, the commissioning jurisdictions arranged three supporting experts to advise the Review: Associate Professor Tricia Eadie, Professor Matthew Gray and Professor Karen Thorpe. In addition, Professor Collette Tayler provided further expert advice.

The Review's work has involved two key aspects.

Firstly, examination of existing information, data, evidence and literature that was relevant to the terms of reference. In addition to publicly available information, some individuals and organisations shared confidential insights, including detail of unpublished research and evaluations that have informed the Review's work but have, by agreement, not been attributed.

Secondly, the Review undertook targeted consultations across Australia. While limited to a degree by the time available, the Review travelled to each state and territory, and heard from government officials, service providers, early childhood practitioners, unions, peak bodies, academics, parent representatives and others with interest or expertise in the area. The Review was also able to meet with a number of international early childhood experts.

The Review's consultations sought views on current successes, challenges and priorities in early childhood. The consultations helped identify areas for further investigation and provided valuable perspectives on the different challenges and opportunities across Australia.

Many themes from the consultations were consistent across jurisdictions, relating to key areas such as early childhood training and workforce, greater connection and/or integration of education and health services, and partnerships with families. There were strong and consistent calls for sustainable policy and funding for Universal Access, the National Quality Framework and a new wave of early childhood reform, particularly for three year olds.

The Review heard of many jurisdiction-specific issues such as funding anomalies, challenges in dispersed, rural or remote communities, and acknowledgement of cultural perspectives in service delivery for Indigenous communities.

In addition to hearing from a broad range of stakeholders, the Review was able to draw upon considerable public information, including submissions to previous inquiries and reviews. Therefore, while the Review's timeframes meant that a public call for submissions or broader consultation was not practicable, it is confident that it has sufficient breadth of perspective.

The Review appreciates the time, thought and candour of all those consulted. In order to encourage candour, the Review undertook its consultations on a confidential basis, on the understanding that views would not be attributed to individuals, organisations or jurisdictions.

While informed greatly by the cooperation of the commissioning jurisdictions, consultations and supporting experts, the analysis, findings and recommendations in this report are those of the Review alone.



ABOUT THE REVIEWERS

Susan Pascoe AM, FAICD, FIPAA, FACE

Susan Pascoe is President and Chair of the Australian Council for International Development (ACFID), Chair of the Community Director's Council and of the Principals Australia Institute Certification Advisory Board.

Ms Pascoe was the inaugural Commissioner for the Australian Charities and Not-for-profits Commission (ACNC), Australia's first national, independent regulator of charities, from 2012-2017.

Prior to this appointment, Ms Pascoe was Commissioner of the State Services Authority in Victoria where she chaired regulatory and governance reviews. She was appointed in 2009 as one of three Commissioners for the Royal Commission into Victoria's Black Saturday Bushfires.

Ms Pascoe's earlier career was in education. She served as President of the Australian College of Educators, CEO of the Victorian Curriculum and Assessment Authority and Chief Executive of the Catholic Education Commission of Victoria. Ms Pascoe chaired the Australian National Commission for UNESCO and has chaired or served on a number of education, health and government boards.

Ms Pascoe's significant achievements were acknowledged in 2007 when she was appointed Member of the Order of Australia for service to education. In 2016 she was awarded the Leadership in Government Award for her outstanding contribution to public administration in Australia.



Professor Deborah Brennan PhD, FASSA

Deborah Brennan is Professor in the Social Policy Research Centre (SPRC), UNSW. Her research focuses on gender and social policy, especially early childhood education and care, family benefits and parental leave. She is an international expert on the impact of private markets on human services. Deborah has active research collaborations with scholars in the UK, Canada and New Zealand. She works closely with government agencies, non-government organisations and community groups. Her current research on the connections between care marketisation and reliance of low-paid migrant labour is funded by the Australian Research Council and the Social Sciences and Humanities Council of Canada.



Professor Brennan has provided advice to governments in Australia, Canada and the UK and has held visiting positions at the London School of Economics, Oxford University and Trinity College Dublin. A former president of the Australian Political Science Association and the Inaugural President of the National Association of Community Based Child Care, she is the author of several books and numerous scholarly articles, book chapters and reports on gender, politics and family policy.

TERMS OF REFERENCE

REVIEW TO ACHIEVE EDUCATIONAL EXCELLENCE IN AUSTRALIAN SCHOOLS THROUGH EARLY CHILDHOOD INTERVENTIONS

Evidence from organisations such as the Organisation for Economic Co-operation and Development (OECD) is clear that countries with high levels of performance in school education and post school outcomes base this success on strong early childhood foundations. The Commonwealth Government's new school funding reforms will result in increased levels of investment in schools by the Commonwealth. This is in addition to current record investments in education by States and Territories.

The Commonwealth Government has established the Review to Achieve Educational Excellence in Australian Schools, to be chaired by Mr David Gonski AC, to provide advice on how this extra Commonwealth funding should be used by Australian schools and school systems to improve school performance and student achievement (Gonski Review). The terms of reference for the

review are limited to interventions by schools and school systems.

State and territory officials have commissioned an additional piece of work, which takes the Gonski Review Terms of Reference and applies this to the years before school (0-5 years) (Early Childhood Review). The intention is that the Early Childhood Review report will complement the Gonski Review and will inform discussions on the role of early childhood education in improving school performance and student achievement.

States and Territories acknowledge that a quality early childhood education and care experience can be achieved in different ways and through different service settings. The Early Childhood Review will examine the effectiveness of quality early childhood interventions generally, noting that these interventions can be delivered across a range of different education and care settings in the years before school, within the context of the national laws and quality standards and Early Years Learning Framework.

The Early Childhood Review will report to the commissioning jurisdictions and be made

available to all COAG members. It will examine evidence and make recommendations on the most effective interventions to be deployed in early childhood. In particular, the Early Childhood Review will focus on the effective and efficient use of funding to:

- Improve children's school readiness, with a particular focus on disadvantaged and vulnerable children
- Improve learning and development outcomes across all cohorts of students and Australia's national performance, as measured by national and international assessments of student achievement
- Improve the preparedness of school leavers to succeed in employment, further training or higher education.

To support these recommendations, the Review will also:

- Examine the return on investment in early childhood education, including in improving school performance and student achievement, national economic productivity and general educational and life outcomes.
- Propose related transparency and accountability measures that support the effective monitoring, reporting and application of investment.

The Review Panel will draw on education experts, academics and practitioners with experience in education systems and teaching and learning methodologies, both internationally and within Australia, as well as states and territories and representatives of providers of early childhood services.

The Early Childhood Review will provide its final report to commissioning jurisdictions no later than 27 October 2017, ahead of COAG discussions about early childhood reform and the progress of school funding reforms at the second COAG meeting in 2017.^{viii}

^{viii} The anticipated COAG meeting did not proceed, and the deadline for the final report was extended by agreement.

ENDNOTES

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