

Early Learning: Everyone Benefits is a national campaign leading Australians to value the benefits of quality early learning for all children, and for Australia's future prosperity. The campaign is supported by a national coalition of early childhood and parent peak bodies, providers, community organisations and individuals.

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Every care has been taken in the preparation of this report, but the authors cannot be held responsible for the accuracy of the information herein or for any consequence arising from it.

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The following abbreviations are used in this report:

ABS Australian Bureau of Statistics
ACT Australian Capital Territory

AEDC Australian Early Development Census

ARIA Accessibility and Remoteness Index

of Australia

CLASS Classroom Assessment Scoring System

ECEC Early childhood education and care

ECERS Early Childhood Environment Rating Scale

EYLF Early Years Learning Framework

FDC Family day care

GDP Gross domestic product

HB Home-based

IRSD Index of Relative Socioeconomic

Disadvantage

LDC Long day care

NESB Non-English speaking background

NQF National Quality Framework

NQS National Quality Standard

NQA ITS National Quality Agenda IT System

NSW New South Wales

NT Northern Territory

OECD Organisation for Economic Co-operation

and Development

OSHC Outside school hours care

Qld Queensland

SA South Australia

SEIFA Socio-Economic Indexes for Areas

Tas. Tasmania

UK United Kingdom
US United States
VAC Vacation care

Vic. Victoria

WA Western Australia

YBFS Year before full-time schooling

## STATE OF EARLY LEARNING IN **AUSTRALIA 2019**

## **Executive summary**

The state of early learning in Australia can only be improved when policy-makers and practitioners understand its current strengths and limitations. This report, the third in the State of early learning in Australia series, provides the most comprehensive summary available of the early childhood education and care (ECEC) sector in Australia, highlighting trends over the past few years. The report also nominates clear national goals and performance indicators to help track progress in the future.

At a national scale, the picture presented in this report is largely positive; however, focusing on the detail reveals challenges. While the headline figures indicate strong national progress in ECEC provision and quality, closer examination highlights significant pockets of unmet need, and problems of affordability and workforce planning. The picture also differs between states and territories, where differences in the ECEC landscape combine with varying policy settings to produce inconsistent results for children and families.

The goal of fully realising the benefits of early learning for all children in Australia has not yet been reached.

## The benefits of early learning

The benefits of early learning for children have been well established through research in Australia and internationally: better preparedness for school; better results at school; and greater achievement in life after school (HighScope, 2019; Pascoe & Brennan, 2017). More immediately, young children benefit from early learning by developing the cognitive, social and emotional skills to help them thrive every day.

Data from the AEDC shows a positive correlation between preschool attendance and preparedness for school. Children who attend preschool are significantly less likely to be developmentally vulnerable compared to those who do not attend preschool. This is not explained by differences in socioeconomic status: all children in Australia, whether from advantaged or disadvantaged communities, benefit from preschool (AEDC, 2014).

### Equitable access to early learning

Unfortunately, the benefits to children and families of early learning are not evenly distributed across key equity groups in Australia. In the crucial year before school, too many children experiencing vulnerable or disadvantaged circumstances are missing out on sufficient hours of early learning. This includes Aboriginal and Torres Strait Islander children, children from low socioeconomic areas and children with disability (ABS, 2019a).

While recent data reveals the attendance of Aboriginal and Torres Strait Islander children at preschool has increased, children from remote areas of Australia are facing challenges that warrant greater intervention in the years before school.

#### Differences between states and territories

The state of early learning varies between Australia's states and territories. This is partly a result of structural factors, but also stems from current policy settings, which differ across jurisdictions.

For example, states where Aboriginal and Torres Strait Islander children are provided free or near-free access to preschool from age three—such as NSW, Vic., SA, WA and the ACT—tend to achieve the national Closing the Gap target of 95 per cent enrolment of Indigenous children in the year before school, whereas this is not achieved in Qld, where such provision is not made.

## Government funding

While total funding for ECEC—across Australian, state and territory governments—has been growing over the past decade, funding fell in real terms in the year to June 2018. This drop may be corrected in the future, once some state and territory governments begin to roll out three-year-old preschool, and with the inclusion of funding for the Australian Government's Child Care Package. Australia's funding of ECEC as a proportion of GDP is lower than the OECD average, with the rate of expenditure per child declining from 2016-2019. Research shows that for every dollar invested in early learning in the year before school, Australia gains at least two dollars in benefit (PwC Australia, 2019).

## Families, work and cost

Families benefit from their children's access to ECEC. For many families, ECEC is an essential tool in enabling parental participation in the workforce. In the four years to 2017, the number of families in which both parents worked full-time doubled, rising to one-third of all families with two parents (ABS, 2017a). The ECEC sector directly supports the Australian economy by enabling these parents—mothers, in particular—to work. In the year before school, families with children attending preschool reap a combined benefit of nearly \$1.5 billion through additional hours worked (PwC Australia, 2019).

However, the cost of early learning remains a barrier for some families, keeping them away from ECEC services or limiting them to fewer hours than they would like. In 2018, low-income families were spending nearly twice the proportion of their weekly income on ECEC as high-income families (Productivity Commission, 2019). A lack of access to affordable child care that meets their family's needs is cited by mothers as a key reason for not being employed in the capacity they wish to be (ABS, 2017b).

## Quality and workforce

It is not enough to simply provide sufficient places in ECEC services—children will only benefit if these services are of high quality. This requires services to maintain a continuous commitment to the National Quality Standadrd (NQS) and ensure educators are appropriately qualified. Importantly, assessment and rating processes across Australia show that the quality of ECEC services is generally equitable across the socioeconomic spectrum. Marginally more services rated as Exceeding NQS are found in more advantaged areas, but there is no substantial difference in the number of services not currently meeting the standard.

The ECEC workforce is critically important to children's outcomes (OECD, 2019d). Well-trained educators with high levels of professional wellbeing are intrinsic to quality interactions with children. However, there is a looming shortage of Bachelor-qualified early childhood teachers in Australia, with the Australian Government forecasting a need for an additional 5800 teachers each year to 2023 (Australian Government, 2019). Staff turnover and loss to the sector is also high. Approximately one in five educators express an intention to leave the sector in the next year. Those identifying intent to leave are undertaking higher level qualifications. Actual turnover rates are estimated to be 30-50 per cent, with the highest rates in remote areas (Irvine, Thorpe, McDonald, Lunn, & Sumsion, 2016; McDonald, Thorpe, & Irvine, 2016).

#### State of the data

The state of the data on early learning warrants attention. While this report collates the available data, there are notable limitations to the datasets on ECEC in Australia. There are significant data gaps in relation to children's attendance at ECEC services, children's long-term outcomes and the link between quality and characteristics of ECEC services and educators. Our knowledge of the ECEC sector and its impact on children and families would be more detailed if governments invested in new datasets, or in linking existing datasets. Improving outcomes for children depends on understanding the state of early learning now.

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## **KEY GOALS FOR THE NATION**

Internationally, ECEC has been recognised as critical for supporting children's development, closing social equity gaps and facilitating families' workforce participation. Collectively these benefits contribute to the wellbeing of societies and economies, both currently and in the future.

Over the past decade in Australia, the recognition of the significance of ECEC for the nation's wellbeing has been reflected in government policy and practice. Actions include the establishment of the Australian Children's Education and Care Quality Authority (ACECQA), and the development and implementation of the National Quality Framework (NQF) and the Early Years Learning Framework (EYLF). The ongoing collaborative work of ACECQA and state and territory education departments focuses on regulation and quality improvement in the ECEC sector. More recently, research has demonstrated the importance of the ECEC workforce in service quality improvement (Cassidy, King, Wang, Lower & Kintner-Duffy, 2016; Jeon, Buettner & Snyder, 2014; Li Grining et al., 2010; Pakarinen et al., 2010).

Everyone benefits when ECEC is accessible, of high quality and delivered equitably.

Key goals for the nation are to ensure that ECEC delivers the following benefits:

- For Australian children: Learning and development opportunities and experiences in a safe, inclusive and nurturing environment.
- For Australian families: Access to affordable, high-quality ECEC that offers the flexibility to meet their needs.
- For Australian society: Provision that addresses social and economic inequities, including those experienced by Aboriginal and Torres Strait Islander peoples, vulnerable and disadvantaged communities.
- For the Australian economy: Provision that addresses and supports Australian economic productivity including full employment, economic growth and building of human capital to support Australia's ageing population and ongoing productivity.

(COAG, 2018a)

This report provides a summary of the progress Australia is making in achieving these goals.

## The state of states and territories

## Queensland



 Developing an ECEC Workforce Action Plan. The Qld Government is currently consulting with the ECEC sector on initiatives under the plan.



 Not meeting the 95 per cent preschool target enrolment rate for Aboriginal and Torres Strait Islander children.

#### **New South Wales**



- Providing a subsidy for three-year-old Aboriginal and Torres Strait Islander children and children from low-income families to attend early learning in a range of settings.
- Subsidising access to community-based preschool for all three-year-olds.
- Achieving the 95 per cent preschool attendance target for Aboriginal and Torres Strait Islander children.
- Monitoring children through Best Start assessment at school entry to provide information on ECEC performance.



 Lowest proportion of children from low-income families
 (SEIFA quintile 1) attending 15 hours or more of preschool per week.

## **Australian Capital Territory**



- Highest rate of female labour force participation for women—with and without partners—with dependent children under 15 years.
- Developing a plan for subsidised access to government preschools for all three-year-olds.



 One of the highest percentages of ECEC services with no quality rating against the NQS (equal with WA).

#### Victoria



- Planning to implement subsidised access to preschool for all three-year-olds, across all settings.
- Funding to provide free access to TAFE courses in ECEC and to provide more professional development and support for early childhood professionals.



 Under-representation of children with disability in ECEC.

#### Western Australia



 Most marked decrease in developmental vulnerability from 2012-2018 for children entering their first year of school.



- The lowest percentage of economically advantaged children attending their full 600 hours of preschool per year.
- The highest proportion of ECEC services receiving Working Towards NQS or lower ratings.

#### Tasmania



- Implementing free access to preschool for three-year-olds experiencing disadvantage or vulnerability, across a range of settings.
- The lowest cost of child care for families after subsidies.



- The lowest proportion of children enrolled in ECEC actually attending for 15 hours per week.
- Lower representation of children with disability in ECEC.

## **BENEFITS**

## International goal

The human, social and economic benefits of ECEC are realised (OECD, 2017).

## Performance indicators

- Improved school readiness and ongoing life trajectories.
- Increased participation of parents in the workforce.
- Increased productivity and economic growth.

### **South Australia**



- High representation of children with disability in preschool programs.
- The highest proportion of ECEC services attaining an Exceeding NQS rating.



 The largest fall in percentage of single mothers with children (under the age of 15 years) participating in the labour force (2012-2019).

## Snapshot of progress

- Children who attend ECEC are 33 per cent less likely to be developmentally vulnerable when they start school than those who do not attend ECEC.
- Female labour force participation has increased from 45.2 per cent to 46.7 per cent over the past decade.
- Women's increased workforce participation can be—at least in part—attributed to their perception of ECEC service quality.
- Women's increased labour force participation, facilitated by ECEC, will increase Australia's GDP by approximately \$6 billion by 2050.

### **Northern Territory**



- 97 per cent of services have been rated against the NQS.
- NT Government expenditure on ECEC per child is the highest in the country.



- Currently failing to meet the 95 per cent enrolment target for Aboriginal and Torres Strait Islander children.
- Lowest proportion of enrolled Aboriginal and Torres Strait Islander children attending preschool within the reference week.
- Lowest percentage of economically disadvantaged children attending their enrolled 600 hours of preschool in the year before school.

# What are the benefits of ECEC for children?

Positive early life experiences benefit us all. The first five years of life set a foundation for life-long learning, achievement, health, wellbeing and productivity. The first five years are a crucial period for brain plasticity and development of cognitive, social and emotional processes.

The three key learning areas of early childhood are:

- social—learning to get along with others
- emotional—learning to regulate behaviour
- cognitive—learning to learn.

When children have inclusive, positive and rich early learning experiences, they are more likely to go on to become productive and included members of society. ECEC is one important way of providing positive early learning experiences, particularly for those living in circumstances of social vulnerability and disadvantage.

Developing strong early learning skills is important as it predicts later school success (O'Connor, O'Connor, Gray & Goldfeld, 2018). International studies have shown that high-quality ECEC establishes patterns of behaviour that improve school readiness and deliver benefits across a range of life-course domains, including:

- lifetime educational achievement—duration of education and education levels achieved (HighScope, 2019)
- lifetime employment productivity—productive employment, higher income and more contributions to the economy through taxes paid (HighScope, 2019)
- lifetime and intergenerational health—fewer teenage pregnancies, improved physical and mental health (Campbell et al., 2014; Jones, Greenberg & Crowley, 2015)
- lifetime social productivity and socioeconomic inclusion—less likely to come in contact with the criminal justice system, more socially integrated and active (HighScope, 2019).

## **Developmental Domain**

#### Physical health and wellbeing

Assesses children's ability to physically cope during a typical school day, including motor skills, coordination and energy levels.

### Social competence

Assesses children's ability to respect and get along with peers and adults, their confidence, independence, cooperation and ability to follow instructions.

#### **Emotional maturity**

Assesses children's emotional state and emotion regulation, including aggression, anxiety, concentration, prosociality and impulsivity.

#### Language and cognitive skills

Assesses children's reading, writing and basic maths, including ability to recognise numbers and shapes, read simple letters or words, and memory.

## Communication skills and general knowledge

Assesses children's communication with peers and adults, including storytelling, listening, understanding, speaking and articulating clearly in English, as well as some general knowledge and associations between words.

## **Developmentally Vulnerable**

May include children who are frequently hungry, tired, late, clumsy and/or inappropriately dressed.

May include children who do not get along with others, accept responsibility, or follow directions; have low self-confidence or self-control; and/or are disrespectful.

May include children who have difficulty regulating their emotion, including being aggressive, disobedient, inattentive, impulsive or easily distracted.

May include children who struggle with or are uninterested in reading, writing and/or numbers, as well as those who have memory difficulties.

May include children who have poor communication, articulation, general knowledge and/or comprehension, or those who have difficulties speaking English.

Figure B1. AEDC developmental domains and developmental vulnerability (Commonwealth of Australia, 2015).

## **Australian Early Development Census**

Currently, the main way to assess the development of children within the first five years of life in Australia is the Australian Early Development Census (AEDC). The AEDC, conducted every three years, reports on each child's development across a number of domains (Figure B1 on p. 6) and is completed by teachers in the first weeks of school entry. The AEDC also records teacher reports of which children attended ECEC (to their knowledge). Each census year, scores are compared to the cut-offs set in 2009 when the AEDC was first conducted. For each domain, the child's scores, comparative to these cut-offs, determine their developmental category:

- lowest 10th percentile = 'developmentally vulnerable'
- 10th-25th percentile = 'developmentally at risk'
- 25th-100th percentile = 'developmentally on track'.

(Commonwealth of Australia, 2015)

A decrease in the percentage of children who are vulnerable or at risk in each domain relative to 2009 suggests an overall improvement in outcomes. To close the gap between children, it is important to monitor and address barriers to early learning experienced by children who are at risk or vulnerable.

## Recent trends in the AEDC

In 2018, 96.4 per cent of children in their first year of school participated in the AEDC. Of these, 21.7 per cent of children were categorised as being 'developmentally vulnerable' in at least one domain, and 11 per cent in two or more domains (Australian Government, 2018).

The percentages of children in their first year of school who are vulnerable in each of the domains are shown in Figure B2. The strongest improvement over time has occurred in the communication skills and general knowledge domain.

Domain	2012	2015	2018
Communication skills and general knowledge	9.0	8.5	8.2
Emotional maturity	7.6	8.4	8.4
Physical health and wellbeing	9.3	9.7	9.6
Social competence	9.3	9.9	9.8
Language and cognitive skills	6.8	6.5	6.6

Figure B2. Percentage of children developmentally vulnerable in each AEDC domain (2012-2018) (Australian Government, 2018).

## State and territory analysis

Across Australia, the percentage of students entering the first year of school who are deemed developmentally vulnerable has remained fairly stable across the period 2012–2018. Notable differences across the states and territories include WA's 3.6 per cent decrease in developmentally vulnerable children in one or more domains. Conversely, the ACT has observed an increase in the percentage of developmentally vulnerable children; however, care should be taken due to the ACT's small population (Figure B3.1; AEDC, 2018).



Figure B3.1. Percentage of children deemed developmentally vulnerable in one or more domain(s) (2012-2018) (AEDC, 2018).

## Key equity groups

While the AEDC has recorded an overall trend towards reduced developmental vulnerability across Australia; some groups within our community still experience greater proportions of children classified as 'developmentally vulnerable'. For example, boys are more likely to be classified as developmentally vulnerable than girls (Figure B3.2 on p. 8) and Indigenous children are more likely to be classified as developmentally vulnerable than non-Indigenous children (Figure B4 on p. 8). Furthermore, over time, there has been little change in the proportion of developmentally vulnerable children within key equity groups (Figures B3.2-B6 on p. 8).

#### Gender

In their first year of school, males (27.9%) were more likely to be developmentally vulnerable compared to females (15.3%). Over the past three assessment periods (since 2012), the percentage of both genders assessed as developmentally vulnerable decreased slightly (Figure B3.2).

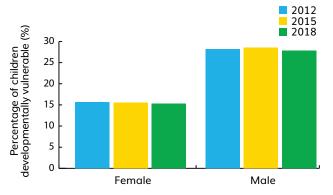


Figure B3.2. Developmental vulnerability across time by gender (2012–2018) (AEDC, 2018).

## Aboriginal and Torres Strait Islander children

In 2018, twice as many Indigenous children were developmentally vulnerable (41.3%) as their non-Indigenous counterparts (20.4%). Since 2012, however, the percentage of Indigenous children who were developmentally vulnerable has decreased more quickly (1.9%) than their non-Indigenous peers (0.5%) (Figure B4).

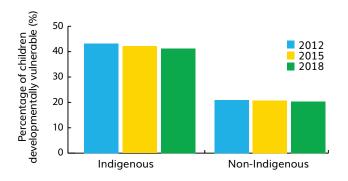


Figure B4. Developmental vulnerability across time for Indigenous and non-Indigenous children (2012–2018) (AEDC, 2018).

## Economically disadvantaged children

Fewer than 15 per cent of children in the least economically disadvantaged communities were developmentally vulnerable, compared to 32.3 per cent of children in the most disadvantaged communities<sup>1</sup>. For children living in the most disadvantaged communities, developmental vulnerability has decreased marginally (0.8%) since 2012, while for children living in the least economically disadvantaged areas, developmental vulnerability remained fairly stable (Figure B5).

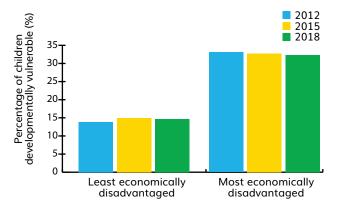


Figure B5. Developmental vulnerability across time for economically disadvantaged children (2012–2018) (AEDC, 2018).

#### Children in remote areas

Of children living in major cities, 21 per cent were vulnerable in at least one domain, compared to 45.5 per cent of children in very remote communities. For children living in very remote communities, developmental vulnerability has increased (1.2%) since 2012. For children living in major cities, developmental vulnerability remained fairly stable (Figure B6).

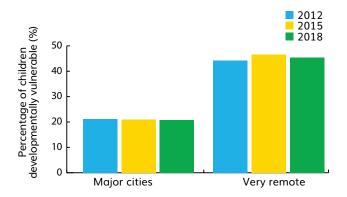


Figure B6. Developmental vulnerability across time for geographic location (2012–2018) (AEDC, 2018).

<sup>&</sup>lt;sup>1</sup> Economic disadvantage categories are based on SEIFA quintiles such that 'most economically disadvantaged' refers to SEIFA quintile 1 and 'least economically disadvantaged' refers to SEIFA quintile 5.

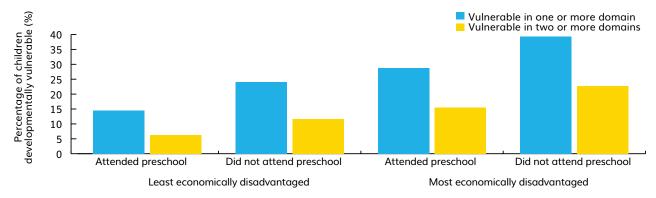


Figure B7. Developmental vulnerability in one/two or more domains by preschool attendance and economic disadvantage (2009) (AEDC, 2014).

## **ECEC** attendance and AEDC outcomes

Early childhood education has implications for later educational outcomes. For example, children who attend preschool are significantly less likely to be developmentally vulnerable than those who do not attend preschool (Figure B8). This is not explained by differences in socioeconomic status between children who attend preschool and those who do not, as children from both advantaged and disadvantaged communities benefited from preschooling (Figure B7; AEDC, 2014).

However, children from disadvantaged communities who attended preschool were more likely to be vulnerable than children from advantaged communities who attended preschool (Figure B7; AEDC, 2014).

For children experiencing the worst disadvantage, ECEC attendance can be life-changing. The recent study, Changing the life trajectories of Australia's most vulnerable children (Jordan & Kennedy, 2019), for example, demonstrates that intensive early education programs that incorporate support for parents make a significant difference in children's cognitive, social and emotional outcomes.

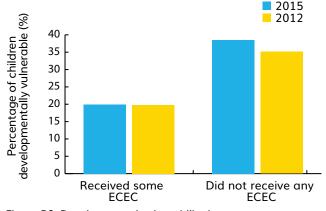


Figure B8. Developmental vulnerability in one or more domains by preschool attendance (2015, 2012) (Productivity Commission, 2019).

## How are Australia's families benefitting from ECEC?

As of 2017, of all couple families with at least one child aged up to four years, 57 per cent had both parents participating in the paid workforce (an increase from 2013, when 52 per cent of families had both parents working) and 37 per cent had one parent participating in the paid workforce (ABS, 2017b). Between 2013 and 2017, the number of couple families in which both parents worked full-time doubled, from 16 per cent to 33 per cent (ABS, 2017a).

While both men and women care for young children, women are still more commonly the primary carer and therefore women's workforce participation is a key indicator of the role ECEC plays in enabling parent workforce participation and supporting family income. Of all couples with at least one partner participating in the paid workforce, the proportion that included a single breadwinner father, whose wife or partner was not in the labour force, decreased from 36 per cent in 2013 to 31 per cent in 2017 (ABS, 2017b), suggesting an increase in women's labour force participation during this timeframe (ABS, 2017a). This trend in Australia aligns with OECD rates of female labour force participation (Figure B9).

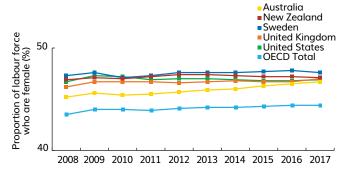


Figure B9. Female employment as a percentage of employment (2008-2017) (OECD, 2018c).

Furthermore, Australia's overall rate of female labour force participation has seen a clear upward trajectory, which brings us closer to other English-speaking OECD countries and Sweden (which is often seen as leading the way in terms of gender equity in the workforce).

Australia's improvement towards parity has been greater than those of other OECD countries—and the OECD overall—which have seen slightly less marked improvements towards parity. Nevertheless, although Australia's female labour force participation rate remains above the OECD average, it remains below that of other English-speaking countries.

Access to affordable ECEC is important for women's meaningful labour market participation. According to the Millennium Mums Report (Hewitt et al., 2017), demand for formal child care increases as children get older (Figure B10; Hewitt et al., 2017), and more mothers re-enter the paid labour market after the birth of a child (Figure B11; Hewitt et al., 2017).

Age of child	Formal care only (%)	Informal care only (%)	Mixed care (%)	No regular care (%)
6 months	11	23	5	61
1 year	25	26	13	36
2 years	40	18	25	17
3 years	47	12	27	14
4 years	48	11	29	13

Figure B10. Type of child care used by child age (Hewitt et al., 2017).

In Women and the Future of Work: Report 1 of the Australian Women's Working Future Project, Baird, Cooper, Hill, Probyn and Vromen (2018) found that, of working women aged under 40 years:

- more than three-quarters believe having access to care for children is either very important (48%) or fairly important (30%) for succeeding at work
- 84 per cent of those who were also looking for work indicate that having care for their children is important for their success at work.

A lack of access to affordable child care that meets their families' needs is cited by mothers as a key reason for not being employed in the capacity they wish to be.

According to the ABS (2017b), there are a number of reasons that mothers cite for not being able to work the number of hours they would like to each week:

- Approximately 10 per cent indicate that transport or distance from child care prevents them from working more hours.
- Nearly 62 per cent indicate that the cost of child care prevents them from working more hours.
- 10 per cent indicate that child care availability ('booked out/no places') prevents them from working more hours.
- 17 per cent indicate that lack of flexibility of care prevents them from working more hours.

In a 2014 ABS survey, more than 248 000 parents reported that they required additional formal child care—for most parents, this was for work-related reasons (Figure B12 on p. 11) (ABS, 2015). In the current context where both parents are working more than previously (ABS, 2017b), it is important that parents receive adequate childcare support so they can participate in the workforce.

A notable factor in the use of ECEC to enable workforce participation is a mother's perceptions of the quality of the services. In a longitudinal study of childcare uptake after the birth of a first child, Boyd, Thorpe and Tayler (2010) found the two most salient factors in mothers' decision making were the quality of care and the personal satisfaction of engaging in paid work. With regard to quality, women were only willing to return to work when they 'felt secure' that their ECEC service was of sufficient quality (Boyd et al., 2010). For an analysis of the quality of Australian ECEC services, see page 34.

Age of child	Full-time (%)	Long part-time* (%)	Part-time** (%)	On leave (%)	Not in the labour force (%)
6 months	11	13	13	35	26
1 year	14	25	22	10	26
2 years	18	29	19	8	24
3 years	20	30	18	9	20
4 years	21	33	18	7	20

Figure B11. Percentage of mothers in each employment status group by child age (Hewitt et al., 2017).

<sup>\*</sup> Long part-time refers to working 30–35 hours per week

<sup>\*\*</sup> Part-time refers to working fewer than 30 hours per week

	Before and/or after school care	Long day care	Total	
All reasons addition	al formal care c	urrently req	uired	
Work-related	86.5	57.6	61.7	
Personal	13.8*	16.0	19.5	
Beneficial for child	13.2	50.4	40.8	
Other	**	5.6*	5.8*	
Number of days additional formal care currently required				
1 day	34.8	38.1	44.6	
2 days	16.2*	26.1	21.3	
3 days or more	44.5	34.8	35.0	

<sup>\*</sup> Estimate has a relative standard error (RSE) greater than 25% and should be used with caution

(ABS, 2015).

Figure B12. Percentage of parents reporting reasons for requiring additional child care (for children 0-12) (ABS, 2015).

## State and territory analysis

Across Australia, the percentage of single mothers with dependent children (under the age of 15 years) participating in the labour force is smaller than mothers with partners. While SA has the largest discrepancy between the two groups, the ACT has the smallest (Figure B13; ABS, 2019d).

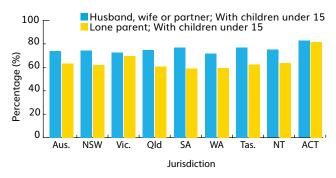


Figure B13. Labour force participation of women with and without partners (with dependent children; 2019) (ABS, 2019d).

## What are the economic benefits of **ECEC** in Australia?

When children attend quality ECEC services, parents are able to engage more fully in the workforce, and children receive optimal learning opportunities in the early years of life, with flow-on effects for children, parents and society more broadly. Reports by PwC Australia (2014, 2019) have predicted some of the economic benefits for Australia's GDP that are attributable to a high-quality early childhood education. Overall, PwC Australia (2019) projected a \$2 benefit for every \$1 spent on preschool

in the year before school, for a total benefit of \$4.74 billion distributed to the government (41%), parents and carers (31%), children in the program (21%), and employers and businesses (7%). Benefits include parental earnings and taxation; higher earnings as adults (and associated productivity and taxation) and decreased welfare usage over a lifetime; and reduced expenditure on special education, school repetition, health, welfare and crime-related expenditure.

In their 2014 analysis, PwC projected economic benefits to the Australian economy (increases in GDP<sup>2</sup>) in 2050.

- Benefits of children receiving quality ECEC: \$10.3 billion.
- Benefits of increased participation of vulnerable children: \$13.3 billion.
- Increased female workforce participation due to children attending ECEC: \$6 billion.

<sup>\*\*</sup> Estimate has an RSE greater than 50% and is too unreliable for general use

<sup>&</sup>lt;sup>2</sup> GDP impacts are in 2012–13 dollars.

## **ACCESS**

## National goal

All Australian children are able to benefit from ECEC. regardless of their families' background, circumstances or geographical location (Productivity Commission, 2019).

#### **Performance indicators**

- Increased rates of participation in Australian Government-approved ECEC services.
- Increased access to teacher-led preschool programs.
- Equity in access and attendance of diversity groups, including children from non-English speaking backgrounds (NESB), children with a disability, Aboriginal and Torres Strait Islander children, children experiencing economic disadvantage and children living in regional and remote Australia.

## **Snapshot of progress**

- There has been a steady increase in access to ECEC services for children aged birth to five years over the past 10 years, from just below 35 per cent in 2009, to nearly 45 per cent in 2018.
- However, there remains inequity in access to preschool programs. While 2.4 per cent of children live in remote areas, only 1.9 per cent attend a preschool program; 5.4 per cent of children are from an Indigenous background, but only 4.7 per cent attend a preschool program; 20.8 per cent of children are from an NESB background, but only 17.4 per cent attend a preschool program; and 6.7 per cent of children have a disability, but 6.3 per cent attend a preschool program.
- Data from 2018 shows that, on average, just over 90 per cent of children around Australia were enrolled in a preschool program in the year before full-time school (Productivity Commission, 2019). Tas. is the only Australian state or territory where 100 per cent of children aged in the state-specific year before school attend a preschool program.
- As of 2018, Aboriginal and Torres Strait Islander children's enrolment rate for preschool programs is higher than that of non-Indigenous children. However, Indigenous children are less likely to attend preschool than their non-Indigenous counterparts.
- Across Australia, children who live in an economically disadvantaged area have slightly lower preschool representation relative to their community representation.

## Access, enrolment and attendance in Australian ECEC

Access to high-quality ECEC programs is central to achieving equity and positive developmental outcomes for all Australian children. This section provides an overview of the types, number and accessibility of ECEC services in Australia, and examines Australia's progress in achieving the goal of universal access to ECEC for all Australian children.

The following issues will be examined in this section:

- Enrolment—the number of children who are enrolled in ECEC.
- Attendance—the number of hours that children are using ECEC services per week.
- Access—the number of children who require ECEC services and are able to access them for the hours needed.

ECEC is known as 'formal care', which is regulated care away from the child's home. In Australia, ECEC is provided within two broad service models: centre-based and home-based services (Figure A1 on p. 13). The majority of ECEC services are centre-based services and include long day care (LDC), preschool/kindergarten and outside school hours care (OSHC). Home-based services include family day care (FDC) and in-home care (note that most in-home care services are not part of the NQF).

Some children are also cared for informally. Informal care is non-regulated care, either in the child's home or elsewhere. It includes paid or unpaid care by brothers or sisters, grandparents, other relatives (including a non-resident parent), and other people such as friends, nannies, babysitters, neighbours, or organisations such as crèches at gyms (ABS, 2019c).

## Types of ECEC programs in Australia

The ECEC sector in Australia is usually described using two classifications that are associated with the age of the children attending:

- 1. Preschool services—providing a play-based learning program for children in the one or two years prior to them commencing full-time schooling. Figure A4 on p. 13 shows the diversity of terminology associated with the year before full-time schooling (YBFS) programs and the enrolment age requirements across Australian states and territories.
- 2. Childcare services—providing care to children aged 0-12 within a range of service types, excluding preschool (Productivity Commission, 2019).

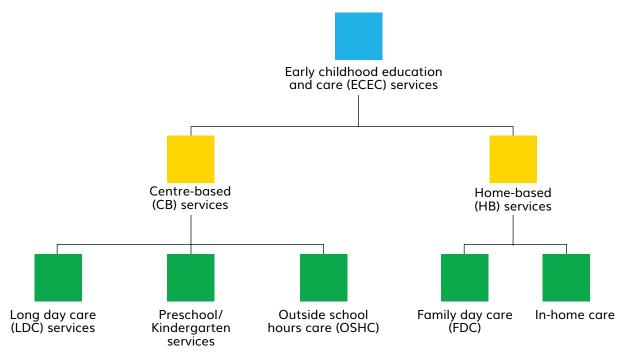


Figure A1. Structure of service types in Australia.

State/Territory	Program Name	Age of Entry: Preschool Program in the YBFS	Age of Entry: School
NSW	Preschool	4 by 31 July*	5 by 31 July
Vic.	Kindergarten	4 by 30 April	5 by 30 April
Qld	Kindergarten	4 by 30 June	5 by 30 June
WA	Kindergarten	4 by 30 June	5 by 30 June
SA	Preschool	4 by 1 May	5 by 1 May
Tas.	Kindergarten	4 by 1 January	5 by 1 January
ACT	Preschool	4 by 30 April	5 by 30 April
NT	Preschool	4 by 30 June	5 by 30 June

<sup>\*</sup> There are also special preschool access provisions in some states and territories for three-year-olds, including those from Aboriginal and Torres Strait Islander communities and those experiencing vulnerability and disadvantage.

Figure A4. Terminology and age requirements of YBFS programs across Australia (Productivity Commission, 2019).

Across the birth to five years age range, most of the children who attend ECEC attend a LDC service, followed by standalone preschool and FDC services (Figure A5; ABS, 2019c).

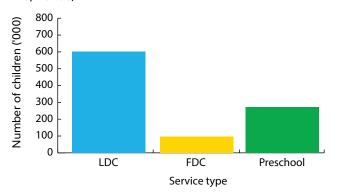


Figure A5. Number of children attending ECEC types (0–5 years) (ABS, 2019c).

However, the number of children attending different forms of ECEC changes over the course of the first five years of life. The number of children who are not receiving care or preschool decreases as children get older. This is the result of increased enrolment in LDC and FDC, which peaks at two to three years of age. This too declines from three to five years, as children enter preschool at around age four and their first year of full-time school around age five (Figure A6 on p. 14; ABS, 2019c).

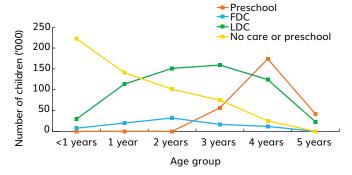


Figure A6. Number of children attending ECEC by age and ECEC type (2018) (ABS, 2019c).

## Preschool

The Australian Government highlights the importance of universal access to 600 hours of quality preschool in the year before full-time school through the National Partnership on Universal Access to Early Childhood Education. This is equivalent to 15 hours per week for 40 weeks of each year (Department of Education, 2019h). Preschool programs may be delivered in standalone preschools, centre-based services or school settings.

#### **Enrolments**

In 2018, there were more than 533 000 children enrolled in preschool across the country (ABS, 2019a). On average, children attending preschool are approximately four years old (Figure A73; Productivity Commission, 2019), putting them among the youngest preschoolers in the world (OECD, 2015). Importantly, 96.3 per cent of children classified as being in their year before full-time schooling across Australia were enrolled in at least 15 hours of preschool per week (Productivity Commission, 2019).

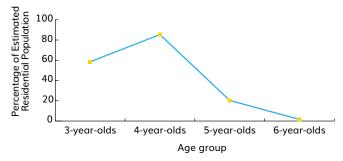


Figure A7. Proportion of age groups (3-6) enrolled in a preschool program (2017) (Productivity Commission, 2019).

In 2017, all states and territories had preschool enrolment rates above 80 per cent for children in the year before full-time school. The entire eligible population of Tas. was enrolled, while in the ACT and WA, almost all eligible children were enrolled. The enrolment rates of the remaining states were between 83.3 per cent (NSW) and 93.9 per cent (Vic.). Overall, the enrolment rate across Australia was 90.1 per cent (Figure A8; Productivity Commission, 2019).



Figure A8. Enrolment rates of children enrolled in a preschool program (YBFS) by jurisdiction (2017) (Productivity Commission,

Of the children who were enrolled in a preschool program, there was a stark difference between the states and territories in the proportions enrolled in preschool services and in LDC services. The majority of children (48.2%) were enrolled in a preschool program within an LDC service, with the remainder attending standalone preschools (42.9%) or attending more than one provider type (8.8%). Within preschools, children attended either a government or non-government preschool service, with most children attending non-government preschools (Figure A10; Productivity Commission, 2019).

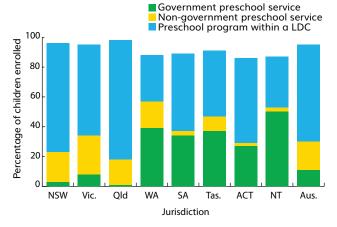


Figure A10. Proportion of children (3-6 years old) enrolled in a preschool program by sector (2017) (Productivity Commission, 2019).

<sup>3</sup> ABS counting strategies were changed in 2016. As a result, all children at long day care centres (of the appropriate age) are recorded as attending a preschool program. This has likely inflated the count of children aged three years enrolled in a preschool program. As can be seen in Figure A10, the high proportions of children counted within LDC services indicates that this is a risk to age-related interpretations and thus, age breakdowns are not included.

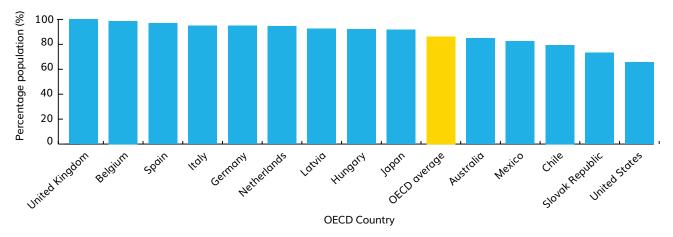


Figure A10.1. Preschool access for three- to five-year-olds around the world (OECD, 2019c).

\* Across OECD countries, Australia ranks just below the OECD average pf preschool enrolment per capita (84.9% compared to the OECD average of 86.3%).

## Preschool attendance

While enrolment in a preschool program is an essential first step, converting enrolment into regular attendance is an important task for policy and practice. When addressing attendance, there are two pertinent questions:

- If a child is enrolled, are they actually attending?
   A measure of this is whether they attended their preschool within a reference week.
- If a child is attending, how long do they attend for?
   Using a measure of hours attended per week controls for variation in days per week and hours per day that families may require child care.

In 2018, 98.4 per cent of three- to six-year-old children who were enrolled attended a preschool program in the reference week (ABS, 2019a).

Children attending preschool within the reference week spent an average of 24.5 hours attending their service (ABS, 2019a), although there are age-dependent differences in average attendance.

Of particular concern to the Australian Government is that, of the children enrolled in 600 hours of preschool in the year before school, 15 per cent do not attend for the full 600 hours. Of non-attenders, almost twice as many children (23.4%) were from the most disadvantaged areas, compared with those from the most advantaged areas (12.5%) (ABS, 2019a). Attendance also varies by funding type: for example, 38 per cent of children enrolled in government preschools, and 22 per cent of children enrolled in non-government preschools, are not attending for 600 hours per year (ABS, 2019a).

## **Equity of access**

It is important that disadvantaged populations are adequately represented in ECEC settings in order to achieve equity in access and, accordingly, outcomes for children's development. These populations include:

- children from a non-English speaking background
- Aboriginal and Torres Strait Islander children
- children in families experiencing economic disadvantage
- children living in regional and remote areas
- children with a disability or special needs.

As shown in Figure A11<sup>4,5</sup>, children with disabilities, those from non-English speaking backgrounds and those living in areas of economic disadvantage are more likely to be under-represented in preschool service enrolments (Productivity Commission, 2019).

Proportion of all children in preschool programs
Representation of children aged 3–5 years in the community, 2017

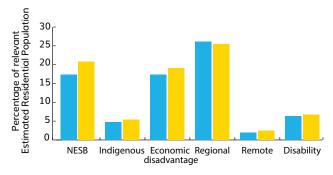


Figure A11. Representation of disadvantaged populations (3–5 years old) in the community versus enrolled in preschool services (Productivity Commission, 2019).

<sup>&</sup>lt;sup>4</sup> Economic disadvantage in this graph is measured by IRSD, which is a SEIFA measure. Classification of 'economically disadvantaged' in this graph represents the lowest IRSD quintile.

<sup>&</sup>lt;sup>5</sup> When the Productivity Commission collected this presented data preschool enrolment for NESB children was incomplete. Therefore, the proportional representation in services is inaccurate and no assertions can currently be made about this group.

## **Aboriginal and Torres Strait Islander** children and preschool

Closing the Gap Target: 95 per cent of all Indigenous four-year-olds enrolled in ECEC by 2025 (Department of the Prime Minister and Cabinet, 2019).

### **Enrolment**

The national enrolment rate of Aboriginal and Torres Strait Islander children in preschool programs is now higher than that of non-Indigenous children (95.1% vs 89.9%) (Figure A12; Productivity Commission, 2018). This meets the national Closing the Gap target of a 95 per cent enrolment of Indigenous children in the year before full-time schooling. However, this isn't always the case at the state and territory level. The target is being met in NSW, Vic., SA, WA and the ACT (where Aboriginal and Torres Strait Islander children are generally provided with free or near-free access to preschool from age three), but is not met in Qld, Tas. and the NT (Figure A12).

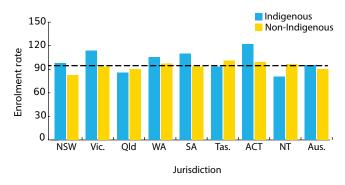


Figure A12. Preschool enrolment rate of Indigenous and non-Indigenous children in the YBFS across jurisdictions (2017) (Productivity Commission, 2018).

## More Indigenous children than ever before

Recent administrative data from the Commonwealth Department of Education, Australia, identified that 50 210 Indigenous children (aged birth to 12 years) are using childcare services including preschool. This is a marked increase from the previous quarter in June, 2018 when only 34 040 Indigenous children were recorded. This dramatic increase is partially due to the incorporation of Budget Based Funded (BBF) services into mainstream administrative collections, and the modified administrative definition of Indigenous children and families (Department of Education, 2019a).

#### **Attendance**

Despite high enrolment rates, the percentage of enrolled Indigenous children who attend preschool in each state and territory (excluding Tas.) is moderately but consistently smaller than their non-Indigenous counterparts—particularly in the NT (Figure A13; Productivity Commission, 2018). Indeed, within a reference week, Indigenous children were less likely than their non-Indigenous counterparts to attend preschool (ABS, 2019a). Of the children attending preschool across Australia, Indigenous children attend one hour less per week than non-Indigenous children.

This disparity between enrolment and attendance for Indigenous children is particularly pronounced for those in remote areas (Figure A14; Productivity Commission, 2018). Furthermore, Indigenous children are 17.7 per cent less likely to be on track in all domains of developmental vulnerability (61.2%) compared to non-Indigenous children (78.9%), and even less likely with increasing remoteness (Department of the Prime Minister and Cabinet, 2019), ECEC attendance is of greater importance to these children as it decreases the likelihood of developmental vulnerabilities at the time of starting school.

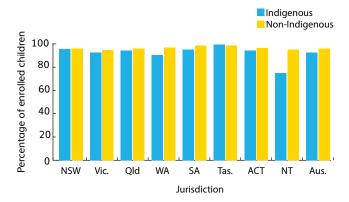


Figure A13. Proportion of children attending one or more hour per week of preschool in the YBFS across jurisdictions (2017) (Productivity Commission, 2018).

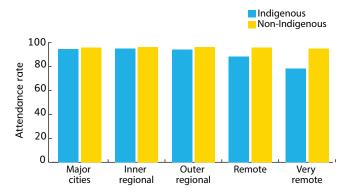


Figure A14. Preschool attendance rates of Indigenous and non-Indigenous children by geographical remoteness (Productivity Commission, 2018).

## Economic disadvantage

Children who are economically disadvantaged have slightly lower preschool representation relative to their community representation across all states and territories (Figure A15; Productivity Commission, 2019)6. Importantly, the National Partnership Agreement on Universal Access to Early Childhood Education mandates a 95 per cent benchmark target for preschool access and attendance for vulnerable and disadvantaged children within each jurisdiction. Enrolment and attendance by economic disadvantage varies across the states and territories, as demonstrated in Figure A16 (ABS, 2019b).

As shown in Figure A16, of the children enrolled in preschool programs within each jurisdiction, NSW has the lowest percentage of children experiencing economic disadvantage attending 15 or more hours of preschool in a given week.

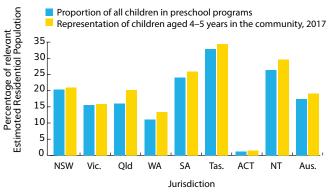


Figure A15. Representation of children (4-5 years; YBFS) in economically disadvantaged areas and within preschool across jurisdictions (2017) (Productivity Commission, 2019).

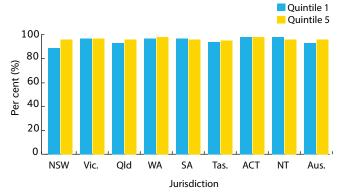


Figure A16. Percentage of children who are enrolled in preschool and attend 15 or more hours per week by SEIFA quintiles (ABS, 2019b).

The greater the economic disadvantage experienced by a child, the fewer hours they attend preschool per week (Figure A17). Children in the lowest SEIFA decile attend two hours less than average, whereas those in the highest SEIFA decile attend two hours more than average (ABS, 2019a).

#### Remoteness

There is no significant difference between the preschool enrolment population and the representation of children in regional or remote areas within the community, excluding in the NT, where the representation of children within remote communities is 43.9 per cent, but preschool representation is only 37.1 per cent (Productivity Commission, 2019). However, the average number of hours per week attended decreased as remoteness increased (Figure A18 on p. 18; ABS, 2019a).

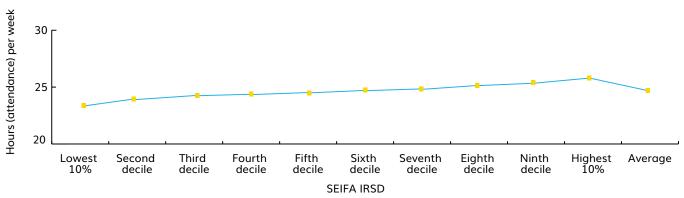


Figure A17. Average number of hours attending preschool by social/economic disadvantage (ABS, 2019a).

<sup>6</sup> Economic disadvantage in this graph is measured by IRSD, which is a SEIFA measure. Classification of 'economically disadvantaged' in this graph represents the lowest IRSD quintile.

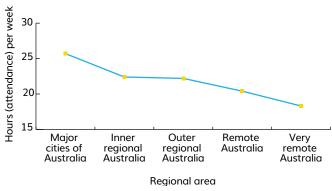


Figure A18. Average number of hours attending preschool by regional area (ABS, 2019a).

## Disability

Children with disabilities are under-represented within preschool services compared to their community representation, both nationally and across most jurisdictions (Figure A19; Productivity Commission, 2019). It is important to note that state and territory government data for children with disabilities is not directly comparable as the definitions of these groups can vary across jurisdictions. Furthermore, each jurisdiction comparison is based on differing total numbers of children in the community with disabilities (e.g. data from 2018 shows NSW = 4565 children with a disability, compared with ACT = 22 children with a disability) (Productivity Commission, 2019). This is significant as, within smaller jurisdictions, the absence of one child with a disability will produce a more pronounced representation discrepancy.

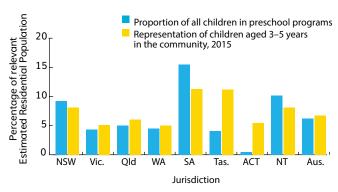


Figure A19. Representation of children (3-5 years) with disabilities within the community and preschool enrolments across jurisdictions (2017)7 (Productivity Commission, 2019).

## **Enrolment and attendance**

Following a steady increase over the past 10 years, an estimated 43.6 per cent of children aged birth to five years in Australia were accessing ECEC services (apart from preschools) in 2018 (Figure A20; Productivity Commission, 20198). While this steady increase in ECEC access is present across all states and territories, there remain differences in access between jurisdictions

(Figure A21; Productivity Commission, 2019). In 2018, the lowest enrolment rate was in the NT (29.5%), while the highest enrolment rate was in the ACT (54.1%).

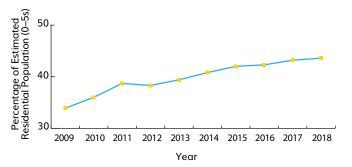


Figure A20. Proportion of birth to five-year-olds attending ECEC (non-preschool) (2009–2018) (Productivity Commission, 2019).



Figure A21. Proportion of birth to five-year-olds attending ECEC across jurisdictions (2018) (Productivity Commission, 2019).

Figure A22 illustrates that the percentage of children who attend ECEC increases with age, from less than 20 per cent at birth to almost full enrolment in preschool at five years of age (ABS, 2019c).

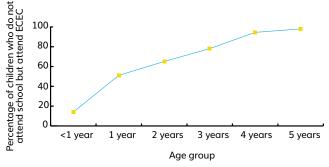


Figure A22. Percentage of children attending ECEC, including preschool, by age (ABS, 2019c).

<sup>&</sup>lt;sup>7</sup> Categorisation and counting inconsistencies between states and territories mean disability data is not comparable across jurisdictions.

<sup>&</sup>lt;sup>8</sup> For 2009, attendance was counted as the number of children attending approved care in all services except vacation care during the week 23–29 March 2009—the week in which vacation care attendance was measured varied due to different vacation care periods across Australia.

# Early learning and care: Birth to three-year-olds

## **Enrolment**

In 2018, 531 363 children aged from birth to three years attended ECEC. The proportion of children enrolled in non-preschool ECEC increases until age three, then decreases as children move into preschool (Figure A23; Productivity Commission, 2019). The majority of children attend centre-based services (ABS, 2019b).

Compared to formal care, informal care is more common for children under the age of one. Formal and informal care are used equally for one-year-olds; and informal care is used less for two- and three-year-olds (Figure A24; ABS, 2019c).

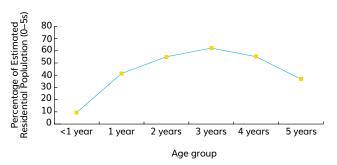


Figure A23. Proportion of children (0–5 years) who attend ECEC services excluding preschool (2018) (Productivity Commission, 2019).

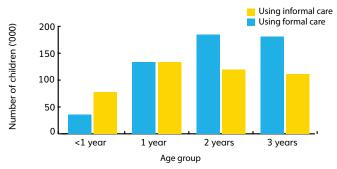


Figure A24. Number of children (0–3 years) who attend formal or informal care by age (2017) (ABS, 2019c).

The average attendance per week for formal care (20.5 hours) was higher than the number of hours children were cared for informally (14.8 hours) (Figure A25; ABS, 2019c).

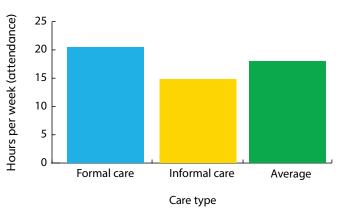


Figure A25. Hours per week attended at formal or informal care (2017) (ABS, 2019c).

## **Equity of access**

The number of hours spent in formal and informal care also differs slightly across SEIFA levels. The higher the tertile, the greater the number of hours spent in formal care, and the smaller the number of hours spent in informal care (Figure A26; ABS, 2019c).

There is little difference in the number of hours spent in formal and informal care across major cities, inner regional and outer regional areas. However, the amount of formal care attended by children in major cities is 2–2.6 hours above the amount of formal care attended by children in inner and outer regional areas (ABS, 2019b). Note that no data was available for remote or very remote areas.

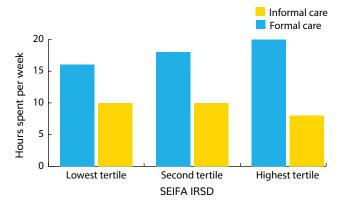


Figure A26. Hours spent at formal and informal care types by economic disadvantage (ABS, 2019c).

## **FUNDING**

## National goal

All Australian children are able to benefit from ECEC, regardless of their family's income (Productivity Commission, 2019).

#### **Performance indicators**

- Australia's investment in ECEC aligns with other OECD countries.
- Increased government investment per child, consistent with national economic and quality-improvement agendas.
- Equity in the proportion of family income expended on ECEC.

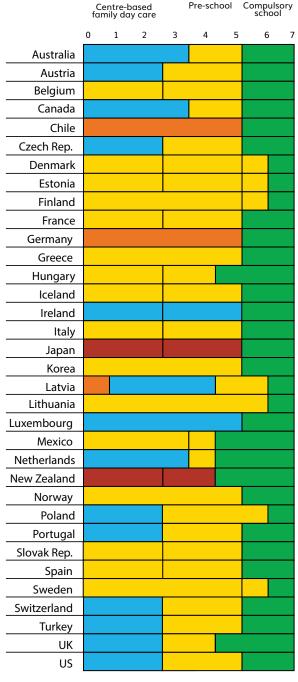
## **Snapshot of progress**

- International rankings show Australia's investment in ECEC is below the OECD average. It is ranked 11 among 21 OECD nations9.
- The rate of Australian Government investment in ECEC per child declined from 2016 to 2019.
- Lowest income families pay a higher proportion of their income for ECEC, even with government subsidies. Those on the lowest incomes pay almost double the proportion of their income after subsidies (8%), compared with those on high incomes (4.7%). Without subsidies, some low-income families pay as much as 29 per cent of their family income on ECEC.

#### Who funds ECEC?

## International comparisons

Public and private provision of ECEC varies considerably across OECD countries (Figure F1; OECD, 2016). In Australia, childcare programs for children from birth to three years are primarily privately funded, while funding for preschool-aged children (three to five years) is largely publicly funded.



Pre-school

- Public: Provision is largely publicly funded and managed (more than 50% of enrolments are in publicly operated facilities)
- Private: Provision is publicly and privately funded and is largely managed by private stakeholders (both for-profit and not-for-profit providers).
- Mixed: OECD report that provision is mixed
- Not classified: OECD do not report provision under mixed, public or private
- School: Compulsory schooling

Figure F1. Public and private provision of ECEC across OECD countries (OECD, 2016).

Across OECD countries, governments provide the primary source of funding to ECEC services. Australian governments tend to spend just below the OECD average by proportion of national GDP (0.7%) and per child (USD\$4000) (Figure F2 and Figure F3 on p. 21; OECD, 2019b). In comparison with other English-speaking countries, Australia spends more than the US and UK, but less than New Zealand, which spends nearly 1 per cent of its GDP on ECEC services (OECD, 2019b).

921 of 36 OECD nations are compared within this report. The 15 nations that were excluded had limited data for comparisons presented in this report.

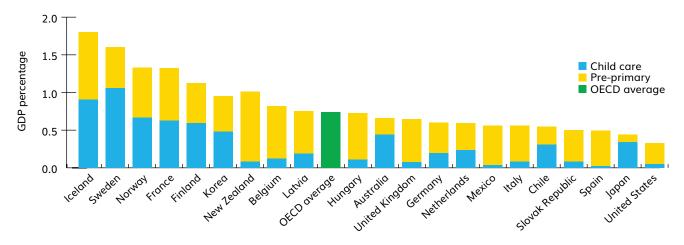


Figure F2. International comparisons—government funding of ECEC across OECD countries (GDP percentage) (OECD, 2019b).

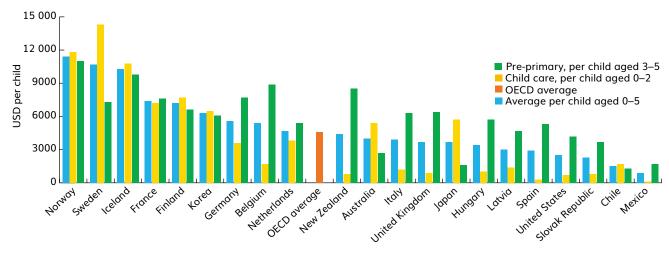


Figure F3. International comparisons—government funding of ECEC across OECD countries (USD per child) (OECD, 2019b).

## Who funds ECEC in Australia?

Australia's ECEC services are funded through a mixed-market model from three primary sources: the Australian Government; state and territory governments; and parents. Today, more than 64 per cent of funding comes from a combination of Australian Government and state/territory government funding, and 36 per cent of funding for ECEC services comes from private household or parental funding, for example, from the fees families pay (Figure F4 on p. 22; OECD, 2019a).

Australian families are expected to fund considerably more of the cost of ECEC than families in other countries (36 per cent in 2016, compared to less than 20 per cent in 20 other countries. Only two countries—UK and Colombia—surpass Australia in percentage of ECEC funding by households) (OECD, 2019a).

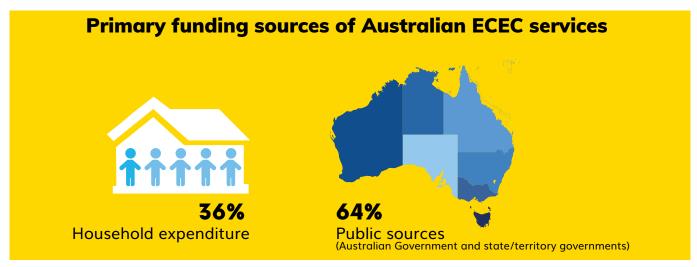


Figure F4. Primary funding sources of Australian ECEC services<sup>10</sup> (OECD, 2019a).

The Australian Government and state and territory governments are each responsible for different funding methods (Productivity Commission, 2019). Public investment in ECEC services through government funding helps to achieve equitable access to services for families across Australia and enables the benefits of ECEC to be realised for families and communities (Figure F5; Productivity Commission, 2019).

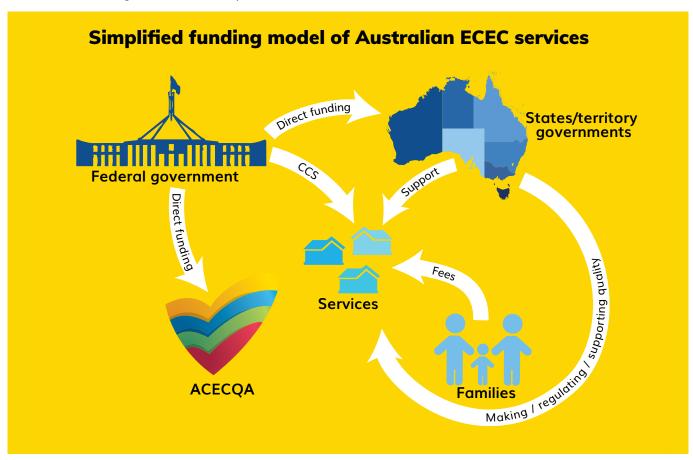


Figure F5. Simplified funding model of Australian ECEC services (Productivity Commission, 2019).

The Australian Government provides funding for extended-hour ECEC programs (i.e. LDC, FDC and in-home care) and contributes through National Partnership Agreements to the funding of preschool programs (Productivity Commission, 2019). States and territories are the primary funders of sessional preschool services and fund the regulation of ECEC services and some targeted services, but the amount and types of services funded varies. For example, NSW, Vic., Qld, SA and the NT provide funding for all preschool services for the year before full-time school, whereas WA, Tas. and the ACT only provide funding for sessional preschools and not for preschool programs delivered through LDC services (Productivity Commission, 2019).

<sup>&</sup>lt;sup>10</sup> OECD data derived from 2016 estimates.

## **Australian Government funding**

The Australian Government currently provides funding for ECEC services through three key funding pathways:

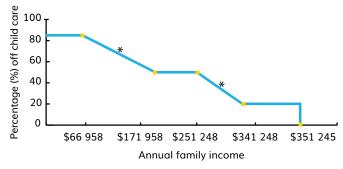
- Childcare subsidies for families through the Child Care Subsidy (CCS) program. Prior to July 2018, this was covered by two separate programs: the Child Care Benefit (CCB) and Child Care Rebate (CCR).
- Funding to states and territories to support the achievement of universal access to preschool through the National Partnership Agreement on Universal Access to Early Childhood Education.
- Australian Government-funded grants and tenders for services (e.g. Inclusion Development Fund or the Community Child Care Fund, both aimed at addressing barriers to inclusion) (Department of Education, 2019e, 2019f; Productivity Commission, 2019).

## Child Care Subsidy (CCS)

Families can apply for the CCS to help with the costs of accessing ECEC services. The amount of subsidy received depends on the combined annual family income, the service type (e.g. LDC, preschool, FDC, occasional care), the parental activity test and a work or study test determining eligibility for CCS. Any subsidy received is paid directly to the childcare service, and fees above and beyond those covered by the subsidies are covered by parents or carers of the children attending the services. Childcare centres are free to choose how much they charge, but this generally relates to the services they provide (e.g. the quality of the facilities, whether they provide meals, etc.) (Department of Education, 2019e).

The CCS replaced the CCB and CCR on 2 July 2018. A number of significant changes were legislated under the CCS (Department of Education, 2019e).

- Caps—an increase in subsidies for lower-income families from 50 per cent to 85 per cent of out-of-pocket expenses, up to an hourly rate cap, which varies based on the type of service (see Figure F6; Department of Education, 2019d). This change is in response to the rising cost of child care, which consistently exceeds the rise in general household income. There is also a cap on how much CCS a family can claim if they earn more than \$186,958 per annum—the current cap is \$10,190 per child (to 30 June 2019).
- Activity test—in order to access funding, both parents in a two-parent household must meet the activity test, unless exempt (Department of Education, 2019c). This includes a requirement of a minimum of eight hours working, training, volunteering, etc. per week.
- Payment of subsidies—the majority of CCS payments are typically made directly to service providers, rather than the payment going to the families (Department of Education, 2019e).
- Low-income families are entitled to the maximum out-of-pocket subsidy of 85 per cent, and those who do not meet and are not exempt from the activity test are entitled to 24 hours of subsided care per fortnight under the Child Care Safety Net.



Note: Income-based annual subsidy caps and hourly rate caps apply. Percentage decreases with every \$3000 of income over bracket.

Figure F6. Family annual income and corresponding CCS they may be able to receive (2018–19) (Department of Education, 2019d).

## **Child Care Safety Net**

The Child Care Safety Net was rolled out from July 2016, though some of the subsidies formally commenced with the new CCS scheme on 2 July 2018. The Child Care Safety Net was established to provide extra support for children experiencing vulnerability and comprises three components (Department of Education, 2019b):

#### 1. Additional Child Care Subsidy

A top-up subsidy that is made in addition to the CCS specifically for:

- a. children at risk of abuse, violence or neglect
- b. grandparents who are primary caregivers of their grandchildren
- c. short-term assistance for exceptional financially stressful situations
- d. parents transitioning from income support to work.

#### 2. Community Child Care Fund (CCCF)

Replaces the previous Budget-Based Funded program. Provides funding grants to ECEC services to reduce barriers to accessing quality ECEC in disadvantaged, regional, or remote communities through:

- a. support to ECEC services facing ongoing viability issues
- b. community-level support to reduce barriers for children to access ECEC services
- c. increasing available ECEC spaces in geographic areas of high and unmet demand—the Connected Beginnings program is one example, which 'provides for the integration of child care, maternal and child health, and family support services in a number of Indigenous communities experiencing disadvantage' (Department of Education, 2019f, 2019g).

## 3. Inclusion Support Programme

Assists mainstream services to improve inclusive practices for children with additional needs and/or disability.

Between June and September 2018, Australian Government expenditure covering both the CCS and Additional Child Care Subsidy was \$1.95 billion. The majority of this funding (78.7%) went towards centrebased day care (LDC and occasional care) (Department of Education, 2019a). It is important to note that some groups have indicated that the new subsidy arrangements are not serving the needs of children experiencing vulnerability (SNAICC, 2019).

## Funding by states and territories

Each state and territory develops and maintains its own curriculum that aligns with the national EYLF; funds support, training and development for ECEC providers; and implements strategies to improve services. The role of the state and territory governments in ECEC funding varies across jurisdictions, but generally includes:

- funding for preschool services (and sometimes other forms of childcare services)
- funding to support the National Partnership Agreement on Universal Access to Early Childhood Education (NPAUAECE)11
- regulating approved services under the NQF, and licencing new services under the NQF
- implementing strategies to improve ECEC programs
- providing support and development for ECEC providers.

(Productivity Commission, 2019)

In the 2017–18 financial year, state and territory government expenditure on ECEC services was \$1.8 billion (Figure F7 shows the per child expenditure for each state and territory), with preschool services accounting for 85.3 per cent of this expenditure (Productivity Commission, 2019). Each state and territory directed a greater proportion of ECEC expenditure to preschool services compared to other service types (Figure F8), aligning with the Australian Government's focus on ensuring universal access to quality preschool (Department of Education, 2019h).

States and territories contributed different proportions of their overall ECEC expenditure to childcare and preschool services, respectively. For example, WA and Vic. both expended nearly all their ECEC funds (96% each) on preschool services. In contrast, the NT was closer to parity: of the nearly \$68 million contributed to ECEC, 65 per cent funded preschool and 35 per cent funded other childcare services. Funding and expenditure are reported and legislated differently across the states and territories, therefore, it is important to highlight this limitation when reporting these figures.



Figure F7. State and territory governments' expenditure on ECEC per child (\$/child; 2017–18) (Productivity Commission, 2019).

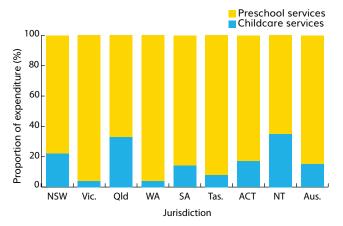


Figure F8. Proportion of ECEC expenditure (childcare services and preschool services) by state/territory (Productivity Commission, 2019).

<sup>11</sup> States and territories have autonomy in how the funding from the NPAUAECE is spent within their jurisdiction and allocation methods can vary considerably.

## State and territory ECEC initiatives

Across Australian states and territories, a range of universal and targeted initiatives are currently being implemented to improve child outcomes through provision of ECEC services. Universal provisions include moves to increase access in terms of hours or longevity, while targeted programs focus on vulnerable populations, providing wrap-around supports for families.

NSW	The NSW Government initiative Start Strong aims to provide at least 600 hours of quality early childhood education (ECE) for children in the year before primary school because of the associated cognitive, social and emotional benefits. The Start Strong budget was initially allocated \$115 million in 2016, and in 2017–2018 this budget was extended through to 2021 with a further \$217 million committed over four years. The Start Strong initiative requires services to allocate at least 75 per cent of the increased funding to directly benefit families through lower fees. In line with the program's equity agenda, Start Strong increased the funding for Aboriginal children and children from disadvantaged backgrounds to cover the full cost of service delivery (NSW Department of Education, 2019).
Vic.	From 2020, the Victorian Government will begin rolling out subsidised access to preschool (kindergarten) for all three-year-olds in the state. The expansion program will begin in select regional locations, before reaching all areas of Vic. in 2020 (for five hours per week), with full provision of 15 hours per week by 2029. Budgetary allocations for the new preschool policy include funding for infrastructure development and scholarships for qualifications in early childhood teaching (Andrews, 2019; Victorian Department of Education and Training, 2019).
Qld	Pathways for Early Learning and Development (PELD) aims to improve learning and development outcomes for children living in vulnerable families. The PELD approach involves educators working with family support workers to deliver child-focused programs as well as addressing the families' broader needs and challenges, such as housing, unemployment, family violence, substance dependency and mental health (Queensland Government, 2018).
WA	The KindiLink program operates in 38 public schools in WA. It provides six hours of free play-based learning each week for three-year-old Aboriginal children in the year before they start preschool (kindergarten). Children attend with a parent or carer, who is supported by a teacher and assistant to actively participate in the activities. Where space permits, younger members of the family may also attend KindiLink sessions (WA Department of Education, 2019).
Tas.	The Working Together for 3 Year Olds (WT3) initiative seeks to give eligible three-year-old children access to free, quality early childhood education. In 2019, eight service partners are participating in the WT3 pilot. Children are eligible for WT3 if their parent holds a Health Care Card and/or they are Aboriginal or Torres Strait Islander and/or they are engaged with child safety services. The program is scheduled for a wider rollout in 2020 (Tasmanian Department of Education, 2019).
SA	Children's Centres for Early Childhood Development and Parenting aim to promote health, learning and development for children at both an individual and community level. The Children's Centres and Child and Families centres include care, education, community development activities and family services. The key focus is on providing targeted responses to children and families requiring additional support within universal settings (South Australia Department for Education, 2017).
NT	The Families as First Teachers (FaFT) program is aimed at improving developmental outcomes for remote Indigenous communities within the NT. FaFT is a dual generational early learning program, working with families and children prior to school entry. The program includes facilitated adult-child interactions, adult learning opportunities and linking families with support services and agencies (Northern Territory Department of Education, 2019).
ACT	The Prep for Pre program provides children who require additional support with experience of what preschool will be like. The aim is to manage children's anxieties and build skills, as well as provide support for parents to be effective 'first teachers' and get them involved in their child's early education. Prep for Pre is a collaboration between education, family support and early intervention services. It offers supported pathways and developmental assessments for children prior to starting preschool. In 2019, the ACT Government announced that the program will be expanded to additional ECEC services from 2020 (ACT Government, 2017, 2019).

## How has funding of ECEC changed over time?

Total government spending on ECEC services per child steadily increased between 2009 and 2016 (Productivity Commission, 2019). A decline in spending was recorded between 2016-17 and 2017-2018 (Productivity Commission, 2019). This is the first time in the last decade that per child funding for ECEC has declined.

In the 2017–18 financial year, the Australian Government spent \$7.5 billion on ECEC, with \$1.8 billion covered by the state and territory governments (inclusive of National Partnership Agreement on Universal Access to Early Childhood Education funding) (Productivity Commission, 2019). This represented a fall in Australian Government funding of \$273 million compared with the previous year. Over the same period, the states and territories increased their expenditure by more than \$50 million. Despite the states and territories' funding increase, the Australian Government's reduction in funding created a total governmental funding reduction of \$219 million<sup>12</sup> from 2016-17 to 2017-18 (Figure F10.1; Productivity Commission, 2019).

Government funding sour	2016–17	2017–18	
Australian Government funding	\$273 million	\$7729 million	\$7455 million
NP UAECE funding (from Australian Government to state and territory governments)	▲\$4 million	\$421 million	\$425 million
State and territory government funding	\$50 million	\$1318 million	\$1368 million
TOTAL	\$219 million	\$9 469 million	\$9 247 million

(Adapted from Report on Government Services, Productivity Commission, 2019)

Figure F10.1. Changes in ECEC funding (2016–17 and 2017–18).

## Household funding

Childcare fees are a significant and growing expenditure item for many families. For example, before rebates are applied, median weekly fees at LDC services increased from \$345 per week in 2009 to \$460 per week in 2018, for 50 hours of care (despite a temporary decrease in the median cost of fees in 2010 and 2011) (Figure F10.2; Productivity Commission, 2019). Similarly, the median cost of FDC increased from about \$320 per week in 2009 to \$400 per week in 2018 (Productivity Commission, 2019).

The CCS helps reduce the costs of accessing ECEC services for households and prioritises funds for families in the lowest family income bracket (<\$66 958 in 2018–19), who are provided 85 per cent of the capped hourly rate of childcare fees as a subsidy (Department of Education, 2019d).

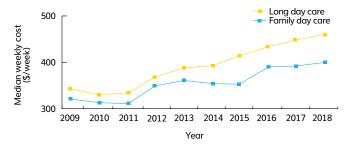


Figure F10.2. Median weekly cost of 50 hours of Australian Government CCB-approved childcare services, by selected service types (\$/week) (2017-18) (Productivity Commission, 2019).

CCS is a vital resource that makes ECEC services more accessible for many families. The out-of-pocket costs for families accessing child care dropped by 11.8 per cent after the introduction of the CCS in July 2018 (Tehan, 2018). Yet, despite the subsidy being means-tested, the funding model is still inequitable—low-income families spend a higher proportion of their income on ECEC than high-income families, even after subsidies. Although the CCS reduces the out-of-pocket expenses for low-income families to 7.9 per cent of their weekly income, this is still nearly double the proportion of income that high-income families contribute to ECEC, which is 4.7 per cent of their weekly income, after rebates (Figure F11; Productivity Commission, 2019).

<sup>&</sup>lt;sup>12</sup> Dollar amounts are adjusted to 2017–18 dollars thus accounting for inflation.

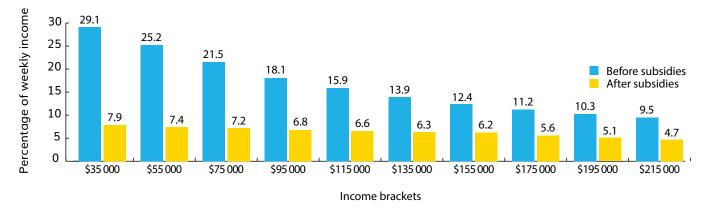


Figure F11. Centre-based day care: Out-of-pocket costs for families with one child in 30 hours child care, as a proportion of weekly disposable income, by gross annual family income, 2018 (%) (Productivity Commission, 2019).

Where families live in Australia also affects the cost of accessing ECEC services. Evidence shows families spend different amounts per hour on ECEC across different states (after subsidies are taken into consideration). For example, families in NSW spend, on average, \$6.70 per hour for ECEC services, more than any other state or territory in Australia. In contrast, Tas. has the most affordable child care in Australia, where families spend less than \$4 per hour, on average, to access an ECEC service (Figure F12<sup>13</sup>; ABS, 2019c).



Figure F12. Average cost per hour of child care for families in each jurisdiction of Australia after subsidies (2017) (ABS, 2019c).

It is also evident that whether families live in a major city, an inner regional area or outer regional area makes a difference to the cost of child care. Though it can be difficult for families to access ECEC in regional areas of Australia (Productivity Commission, 2019), they spend less per hour (\$4.40 for inner regional and \$4 for outer regional) than families who live in major cities (on average, \$6.40 per hour) (Figure F13; ABS, 2019c).

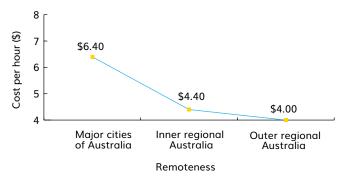


Figure F13. Average cost of child care per hour by region (2017) (ABS, 2019c).

Another way of understanding the cost of early learning and care is by looking at the cost per hour (after subsidies) for families living in different socioeconomic areas. Figure F14 shows that families living in the lowest SEIFA quintile pay just under \$4 per hour after subsidies, whereas families living in suburbs within the highest quintiles pay just over \$7 per hour for child care (ABS, 2019c).

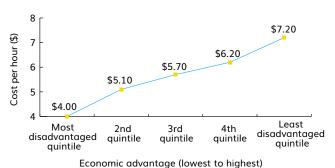


Figure F14. Average cost of care for families living in SEIFA quintiles, after subsidies (2017) (ABS, 2019c).

 $<sup>^{13}</sup>$  NT value has a large standard error (>25%, <50%), therefore should be interpreted with caution.

## WORKFORCE

## How is Australia growing and sustaining a high-quality ECEC workforce?

## National goal

Australia grows a skilled, stable and supported workforce to deliver positive outcomes for Australia's children (OECD, 2019d; Queensland Government Department of Education, 2019; SCSEEC, 2012).

#### **Performance indicators**

- Increase in the number of degree-qualified staff in the ECEC sector.
- Increase in the qualification level of all educators in FCFC services.
- Decrease in staff turnover and loss to the ECEC workforce.
- Addition of educator wellbeing and support as an index of ECEC quality.

## **Snapshot of progress**

- Between 2010 and 2017, the proportion of degree-qualified staff working in ECEC services increased by 2.6 per cent.
- Between 2010 and 2017, there was an increase (16.3%) in qualification levels, with the greatest gain (8%) in those achieving diploma qualifications.
- Staff turnover and loss to the sector is high. Approximately one in five educators expresses intent to leave the sector in the next year. Those identifying intent to leave are undertaking higher-level qualifications. Actual turnover rates are estimated to be 30-50 per cent, with the highest rates in remote areas.
- Staff wellbeing is an important index of ECEC quality, as stress has adverse effects on educator-child interactions and child outcomes (Whitaker, Dearth-Wesley & Gooze, 2015). Work conditions, supports and staff wellbeing would present an important index of ECEC quality in national data collections.

Delivery of high-quality ECEC programs is dependent on the availability of appropriately qualified and supported educators. Growing international evidence shows that the responsiveness of interactions between children and ECEC educators, while associated with educator qualification and ongoing training, is also intricately linked to educator wellbeing (see page 31). Growing and sustaining a qualified, motivated and responsive workforce that can support positive child outcomes requires balancing the demands placed on educators with proportionate professional recognition and support.

## Who delivers early education and care programs for Australia's children?

The most recent estimates available (2016) identified approximately 195 000 staff employed in childcare services in Australia (The Social Research Centre, 2017). The size of the workforce has steadily risen over the past eight years, reflecting the growing demand for ECEC services (Productivity Commission, 2019).

The 2016 Early Childhood Education and Care National Workforce Census (The Social Research Centre, 2017)14, identified that the majority (55.7%) of the ECEC workforce was employed in LDC services, followed by FDC (16.7%), OSHC (14.1%) and vacation care (12.1%).

The ABS Education and Work survey (ABS, 2018a) shows that majority of early childhood educators are aged between 25 and 44 years. A greater proportion of educators aged between 25 and 44 work in the pre-primary sector (53%) than in the school sector (47%). The age differences between the school education workforce and pre-primary education workforce are most notable, however, among those aged 15-24 years. There are considerably more pre-primary education workers (13%) aged 15-24 than school education workers (7%) (Figure W1).

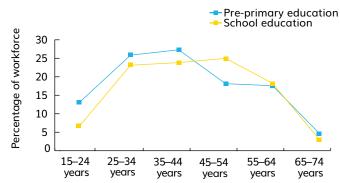


Figure W1. Age group representation within the pre-primary (ECEC) and school education systems (2018) (ABS, 2018a).

<sup>14</sup> The Early Childhood Education and Care National Workforce Census was last completed in 2017 by The Social Research Centre. It is the most current version of the census detailing information collected in 2016. Consistent with the timelines of previous three-yearly documents, we expect a revised edition detailing the 2019 workforce landscape next year (2020). Due to the recent legislative changes within the past three years, the estimations from this data may be different to today's estimates.

Compared with the school sector, where educators are all degree-qualified teachers, in the ECEC sector there are a range of roles that require varying levels of qualification (see below) (The Social Research Centre, 2017). Some staff in the ECEC sector are undertaking study towards a qualification, while some remain unqualified.

## Employment roles in ECEC services and typical associated qualification

Position	Typical qualification	Role
Director	Degree / Advanced Diploma	Management of the service, may include teaching
Early childhood teacher	Degree: B.Ed	Pedagogical leader and most typically provider of the preschool program
Lead educator	Diploma	Group leader of a room of children
Assistant educator	Certificate	Assistant to the group leader within a room

Since the implementation of the NQF in 2012, there has been a significant amount of upskilling of ECEC educators. The proportion of total staff without an ECEC-related qualification decreased over the past decade (Figure W2; The Social Research Centre, 2017). While upskilling occurred even before the NQF, it accelerated after its implementation, with the proportion of educators without formal qualifications decreasing from 30.2 per cent in 2010 to 18.0 per cent in 2013.

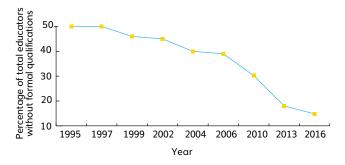


Figure W2. Proportion of educators without a formal qualification (1995–2016) (The Social Research Centre, 2017).

Data on the Australian ECEC workforce indicates 85.2 per cent of ECEC educators have some form of formal qualification: 38 per cent have a Certificate III or IV; 34.1 per cent have a Diploma or Advanced Diploma; and 11.9 per cent have a Bachelor's degree or above (The Social Research Centre, 2017). The remaining 14.8 per cent do not have an ECEC-related qualification. The distribution of qualifications varies markedly between service types (Figure W3; The Social Research Centre, 2017).

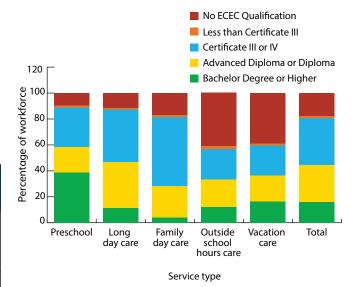


Figure W3. Educational attainment of the ECEC workforce by service type (2017) (The Social Research Centre, 2017).

Trends in qualifications for FDC and LDC between 2010 and 2017 show some increase in qualification levels, with the greatest gains seen in achievement of diploma qualifications (8%), while degree qualifications increased by 2.6 per cent in this time.

Consistent with the majority of OECD countries (OECD, 2018a), the Australian ECEC workforce is predominantly female. An estimated 97 per cent of those working in LDC and FDC are women. When all forms of service are included, this figure is 91 per cent, as relatively more males work in OSHC and occasional care. While 3 per cent of the Australian population is Indigenous, Aboriginal and Torres Strait Islander peoples comprise only 2 per cent of the ECEC workforce.

The ABS Education and Work survey (ABS, 2018a) shows that the majority of the ECEC workforce (approximately 80 per cent) was born in Australia. There is a similar pattern for school education, with approximately 78 per cent of those who work in school education born in Australia.

## What are the conditions of work for Australian ECEC educators?

In recognition of the importance of the quality of early experiences for children, families and the economy (COAG, 2018a, 2018b), quality improvement in ECEC has been a key policy goal of the Australian Government across the past decade. Professionalisation of the workforce has been a central strategy to achieve this goal and has been framed in terms of increasing credentials (qualifications and ongoing professional development) and accountability (demonstration of meeting regulated or legislated quality standards) (Cumming, Sumsion, & Wong, 2015; Grant, Comber, Danby, Theobald, & Thorpe, 2018; Grant, Danby, Thorpe, & Theobald, 2016; Oberhuemer, 2015; Roberts-Holmes, 2013).

## Working hours and pay

There are varying work hours across all ECEC positions (including short part-time, long part-time, full-time, long hours). Figure W4 represents the distribution of hours worked per week across varying service types. FDC educators worked longer hours than educators in any other service type (The Social Research Centre, 2017).

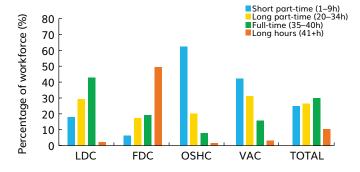


Figure W4. Proportion of ECEC work hours between service types (2016) (The Social Research Centre, 2017).

In the LDC sector, service directors work the longest hours, averaging 33 hours per week, while educators average 25 hours per week (The Social Research Centre, 2017).

### Early childhood teachers (B.Ed)

Teachers in preschool education work on a part-time basis more frequently than teachers in primary and secondary education. Figure W5 represents the data relating to bachelor-qualified teachers working in preschool education and in school education. Just over 40 per cent of teachers work full-time (35 hours or more per week) in preschool education, compared with 70 per cent of teachers working in primary and secondary school settings (ABS, 2018b). Early childhood teachers often work part-time, with an average work week of 29 hours.

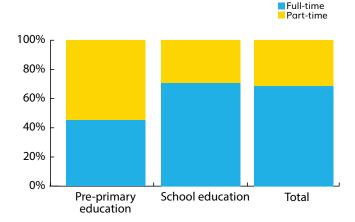


Figure W5. Proportion of teachers in pre-primary and school systems working part/full-time (2018) (ABS, 2018b).

The median hourly earnings differ for teachers working in preschool education compared with those working in school education settings. Full-time teachers in preschool education were paid \$32.20 per hour; fulltime teachers in school settings were paid \$46 per hour. Part-time teachers were paid less per hour than their full-time counterparts. The hourly rate of pay differed by up to \$13.80 per hour between preschool and school education settings (Figure W6; ABS, 2018b).

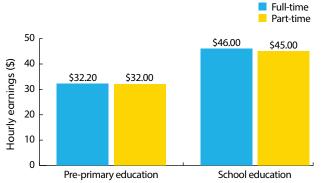


Figure W6. Median hourly earnings for full-time and part-time teachers in pre-primary and school systems (\$) (2018) (ABS, 2018b).

There is a significant difference in median weekly earnings between full-time teachers in preschool and school settings (Figure W7; ABS, 2018b).

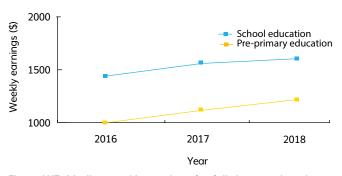


Figure W7. Median weekly earnings for full-time teachers in pre-primary and school systems (\$) (2016-2018) (ABS, 2018b).

Early childhood teachers (holding Bachelor's degrees) are the lowest paid in the education sector (McDonald et al., 2016). Lower pay for degree-qualified staff is compounded by inferior holiday entitlement compared to the school sector (four weeks per year compared with 12 weeks per year).

An Australian Government workforce projection shows that demand for Bachelor-qualified early childhood teachers is expected to grow rapidly over the next five years, with 29 000 new teachers required, or around 5800 new teachers each year to 2023 (Australian Government, 2019). However, commencements in early childhood teaching courses dropped from 6327 to 5640 in just two years (2015–2017), while completions fell from 3636 to 3079 (Department of Education and Training, 2019).

ECEC services are required to seek a waiver if they cannot meet the staffing requirements of the NQF. ACECQA reported that 3.9 per cent of services held a staffing waiver in June 2018, the same as in the previous year. The proportion of services with a waiver fell in major cities, but rose sharply in regional and remote areas (ACECQA, 2018b). This highlights the difficulty of attracting and retaining quality staff in regional and remote Australia—even as AEDC data shows that

children in these areas are much more likely to be developmentally vulnerable.

This emerging gap between demand and supply for early childhood teachers may be exacerbated by new NQF requirements that commence in 2020. The NQF specifies that all LDC services with more than 60 children must employ a second teacher or a suitably qualified person by 1 January 2020. In NSW and Vic., the expansion of preschool programs to three-year-olds may place additional demand on recruitment and retention of qualified early childhood teachers.

## ECEC educators (diploma and certificate)

Data on conditions of work for educators in ECEC documents low pay, instability in employment and evidence of unpaid work. In June 2019, the minimum wage for early childhood educators with a Certificate III or above was \$21.70/hour, or \$824.50/week before tax, as set by the Children's Services Award 2010 (Fair Work Commission, 2019). The award rate is marginally above the national minimum wage of \$18.93 per hour. It should be noted that some ECEC services pay above the award, reflecting the need to maintain staff (Irvine et al., 2016).

Although some ECEC educators are paid above the award, they also report that they regularly complete unpaid work over and above their contracted hours, in order to prepare for each class and keep up with administrative demands outside of their regular education duties (Irvine et al., 2016).

Australian Government employment projections point to very strong demand for early childhood educators over the next five years, with 184 000 job openings, or 36 800 per year (Australian Government, 2019). In 2017, the Diploma of Early Childhood Education and Care was the most popular VET qualification, with 67 532 enrolments nationally (2.7 per cent of total enrolments) (Joyce, 2019). Furthermore, upskilling on the job provides an important pipeline for higher skilled educators. In 2016, 24.7 per cent of Certificate III-qualified educators were studying for a diploma and 2.3 per cent for a bachelor, while 8.5 per cent of diploma-qualified educators were studying for a bachelor qualification (The Social Research Centre, 2017).

# How is Australia's ECEC workforce faring?

Educators' work environments are children's learning environments. International literature indicates that while qualifications and ongoing professional development are associated with more positive staff—child interactions in ECEC (OECD, 2018b), these are not a guarantee of higher-quality experiences for children. An emerging set of data identifies that staff wellbeing is linked to quality of interactions and child outcomes. For example, educator stress and emotional distress have been associated with a reduction in the emotional and organisational climate of the classroom (Jeon, Buettner, & Hur, 2016; Li Grining et al., 2010),

teacher responsiveness (Buettner, Jeon, Hur & Garcia, 2016; Castle et al., 2016) and professional commitment (Buettner et al., 2016). Educator stress has also been associated with poorer child outcomes including learning (Pakarinen et al., 2010) and behavioural difficulties (Jeon et al., 2014). Educator turnover not only represents the loss of educator skill and experience to the sector, but is a disruption to attachment relationships with children and families that affects child wellbeing and learning experiences (Cassidy et al., 2016).

Australian data on the wellbeing of the ECEC workforce is limited and, to date, largely qualitative. While the 'love' of the work is a key theme, findings also describe a lack of recognition and feelings of significant stress among educators, for example:

- dissatisfaction with wages and work conditions (Irvine et al., 2016)
- financial stress—many educators are dependent on parents or partners for financial support or are living in poverty (McDonald et al., 2016)
- the burden of regulatory demands (e.g. 'paperwork') taking them away from their work with children (Grant et al., 2016; Grant et al., 2018).

Quantitative (Irvine et al., 2016; Thorpe et al., under review) and qualitative data from a study of a representative sample of 1200 Australian ECEC educators (McDonald, Irvine & Thorpe, in press) indicates that the key factors sustaining educators in the workforce are:

- intrinsic motivation—for example, 'loving work with children and families'
- positive leadership and management—including reduced emphasis on paperwork
- family financial and emotional support.

'We are often considered mere babysitters, instead of being regarded as the professionals we are encouraged to be'—Research participant on pay, conditions and status of the ECEC workforce (Productivity Commission, 2014, p. 316).

Despite sustaining factors, the rates of staff turnover in ECEC are high. One study tracking staff movements over time revealed a 22 per cent turnover in 12 months. Those undertaking further study were most likely to leave their jobs once they achieved a higher level of qualification. Qualitative data suggests these educators were increasing their qualifications in order to move to the school sector, where pay and conditions are more favourable (Irvine et al., 2016).

High turnover rates in ECEC are also documented in international research. In the US, for example, ECEC staff turnover is more than double that of the schooling sector (Grant, Jeon, & Buettner, 2019; Phillips, Austin & Whitebook, 2016).

Data on Australian turnover rates is not available through the national early years workforce census, however, a recent study surveyed a nationally representative sample of 1200 ECEC educators across all levels of qualification and found that one in five intended to leave the sector within the next 12 months (Irvine et al., 2016; McDonald et al., 2016). In a detailed follow-up study of centres in remote, regional and urban sites, the researchers found turnover rates similar to those reported in the United States, with an average per annum rate of 33 per cent of educators exiting their centres, the majority of whom exited the sector altogether. Those most likely to leave were 'qualifying out' to the school sector or alternative employment. Family moves and maternity leave were also a factor in a highly feminised workforce. The data from this study also suggests that younger people were more likely to exit.

On average, Australian ECEC educators remain in the sector for 6.6 years and in their particular service for 3.3 years (The Social Research Centre, 2017). Fewer than 30 per cent of ECEC workers remain in the sector for more than 10 years (Figure W8; The Social Research Centre, 2017). Additionally, fewer than 10 per cent of ECEC workers remain in their current service for more than 10 years (The Social Research Centre, 2017) suggesting 'churn' in the sector.

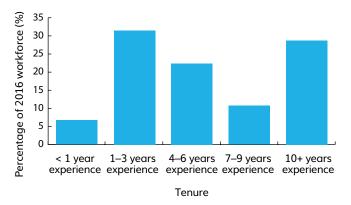


Figure W8. Tenure of staff within ECEC sector (2016) (The Social Research Centre, 2017).

Given the growing evidence on the link between educator stress and quality, the inclusion of indices of educator wellbeing in national datasets could assist in assessing and tracking the state of early learning.

## State and territory initiatives

Some states and territories have established workforce development initiatives to support the ECEC sector:

- NSW has released a new ECEC Workforce Development Strategy, backed by additional funding to promote careers in the workforce (NSW Department of Education, 2018).
- Vic. has announced major new initiatives to expand its ECEC workforce to support kindergarten for three-yearolds, with \$8 million for scholarships for early childhood teaching courses (Premier of Victoria, 2018); \$28.5 million to provide free access to two TAFE courses in ECEC; and \$92 million allocated for professional development and support of early childhood professionals (Victoria State Government, 2019).
- Qld has announced a Workforce Action Plan and is currently consulting with the sector on initiatives under the plan (Queensland Government, 2019).

## PROVISION AND QUALITY

# What is the type and quality of ECEC services in Australia?

## National goal

ECEC provision is of the highest quality necessary to deliver learning and development benefits for all of Australia's children (Productivity Commission, 2019).

#### Performance indicators

- Number and variety of ECEC services provided.
- Implementation of the NQF across all Australian states and territories.
- Increase in the number of services achieving Meeting NQS and Exceeding NQS ratings against the NQS; decrease in services rated Significant Improvement Required and Working Towards NQS.
- Equity in the NQS ratings across geographic and socioeconomic distribution.

## **Snapshot of progress**

- In the year to 2019, there was an increase in total ECEC capacity of 1 per cent, but a decrease in service variety. Since 2017, there has been a 23 per cent decline in provision of FDC places and a 2 per cent increase in centre-based provision.
- 94 per cent of ECEC services now hold a quality rating. Of these, 74 per cent of services are Meeting or Exceeding NQS. A total of 80 per cent of centre-based services are Meeting or Exceeding NQS. This figure is 92 per cent for standalone preschools, but only 46 per cent for FDC services.
- Using NQF assessments as an index, quality is improving—66 per cent of services previously classified as Working Towards have improved their overall quality rating on reassessment.
- 56 per cent of ECEC services provided by state/ territory and local government and 42.5 per cent of services provided by community-managed, not-forprofit organisations are Exceeding NQS. Only 20 per cent of ECEC services provided by private, for-profit organisations are Exceeding NQS.
- Equity of provision:
  - The provision of services is generally equitable across areas of advantage and disadvantage. Marginally more services rated as Exceeding NQS are found in more advantaged areas, but there is no substantial difference in the number not currently meeting the NQS.
  - Some variation in quality rating by jurisdiction is noted, with SA having more centres rated as Exceeding, and the NT and WA having higher rates of Working Towards NQS.

 The distribution of service quality by geographic region (city versus remote) is generally equitable.
 There are more Exceeding and Excellent services in urban locations. Quality Area 2—Health and Safety is identified as a specific area of concern in remote locations.

# What is provided in Australian ECEC services?

Research on the provision of ECEC has shown that intellectually stimulating, socially inclusive and emotionally responsive early childhood education has positive long-term effects for children. These effects include increased school readiness, successful academic achievement and increased school engagement (Manning, Wong, Fleming & Garvis, 2019; Vernon-Feagans, Mokrova, Carr, Garrett-Peters & Burchinal, 2019). This section discusses the provision of ECEC in Australia and how quality is regulated nationally to ensure all children have access to high-quality early childhood education.

## How many services are provided?

There are discrepancies in the actual number of ECEC services currently operating in Australia, due to differing definitions of early childhood education. Using ACECQA figures, 15 902 ECEC services were approved to operate under the NQF in February 2019 (ACECQA, 2019e).

In the first quarter of 2019, ACECQA reported a 2 per cent increase in centre-based services and a 23 per cent decrease in FDC services compared to 2018, together constituting a 1 per cent increase in total registered services at the time of data collection. In the three years to March 2019, the number of FDC services fell by 43.3 per cent, LDC services increased by 11.8 per cent, OSHC services increased by 5.5 per cent and the number of preschool services did not change (Figure P1 on p. 34; ACECQA, 2018d, 2019e).

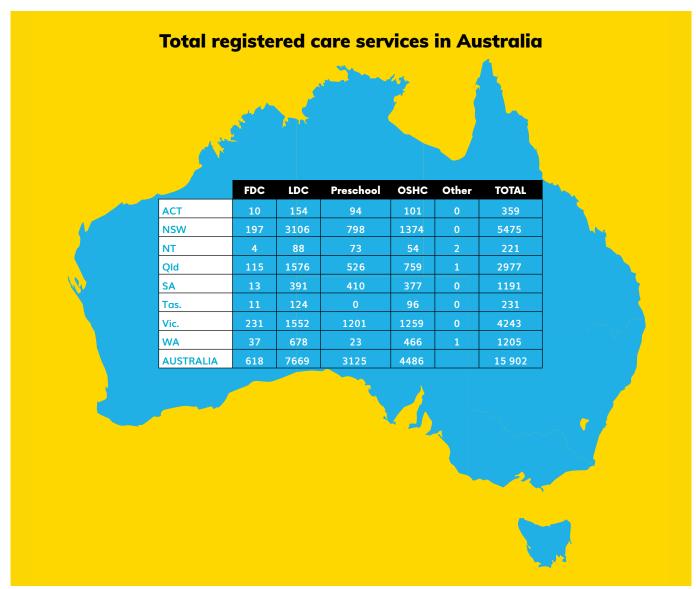


Figure P1. Total registered care services in Australia (Q1, 2019) (ACECQA, 2018d, 2019e).

## What is the quality of services provided?

Positive child outcomes are dependent on the quality of ECEC services provided. In recognition of the importance of maximising quality of provision, the NQF—a nationwide<sup>15</sup> system aiming to raise quality and drive continuous improvement and consistency in ECEC services—was established in 2012. There are four key roles of the NQF:

- defining minimum educator qualifications and educator-child ratios
- maintaining national registers of services, providers and educators
- providing assessment and quality-rating criteria through the NQS
- providing nationally approved learning frameworks, e.g. EYLF (DEEWR, 2009).

Changes over time in the rating of services provide a key indicator of progress in quality improvement, with particular focus on movement from Working Towards or below (Working Towards or Significant Improvement Required) to Meeting NQS or above (Meeting, Exceeding or Excellent). It should be noted that Excellent ratings are less likely to provide an indicator of quality as these are only provided on application by the service provider.

While the NQF details the standardised expectations of ECEC services Australia-wide, the state and territory regulatory authorities carry out the assessments of ECEC service compliance and quality within their jurisdictions (ACECQA, 2019a). Authorised Officers in each jurisdiction undertake the assessment of services<sup>16</sup> against the NQS—a set of seven quality areas, which comprise 40 elements (see Figure P2 on p. 35) (ACECQA, 2019b).

 $<sup>^{15}</sup>$  Excludes preschools/kindergartens in Tas. and WA as these are outside the scope of the NQF.

<sup>&</sup>lt;sup>16</sup> Quality ratings of Australian providers and services can be found here: www.acecqa.gov.au/resources/national-registers.

- Educational program and practice
- 2 Children's health and safety
- 3 Physical environment
- 4. Staffing arrangements
- 5 Relationships with children
- 6 Partnerships with families and communities
- **7** Governance and Leadership

## Significant Improvement Required

Service does not meet one of the seven quality areas or a section of the legislation and there is an significant risk to the safety, health and wellbeing of children.

The regulatory authority will take immediate action.

#### Working Towards National Quality Standard

Service provides a safe education and care program, but there are one or more areas identified for improvement.



#### Meeting National Quality Standard

Service meets the National Quality Standard. Service provides quality education and care in all seven quality areas.

MEETING

# National Quality Standard Service goes

**Exceeding** 

Service goes beyond the requirements of the National Quality Standard in at least four of the seven quality areas.

#### **Excellent**

Service promotes exceptional education and care, demonstrates sector leadership, and is committed to continually improving. This rating can only be awarded by ACECQA. Services rated Exceeding National Quality Standard overall may choose to apply for this rating.





Figure P2. The seven quality areas assessed under the NQF (ACECQA, 2019b). Image sourced from www.acecqa.gov.au.

Generally, services with lower quality ratings will be reassessed more frequently than those with higher quality ratings. However, a number of factors are considered in the scheduling of quality rating assessments (ACECQA, 2018a). These include:

- previous quality ratings (including at the quality area level)
- significant changes to the service that may affect service quality
- reports of serious events at the service (including incidents, complaints, non-compliance with the National Law) that could indicate a shift in service quality
- time since previous assessment—services must be assessed regularly, even if previous ratings were satisfactory, to ensure public information on service quality remains current and valuable.

## National assessment ratings

In the first quarter of 2019, 14 897 ECEC services (94%) in Australia had received quality ratings and 1005 (6%) had not received a quality rating, either because they were a new service or otherwise not yet assessed. A total of 3131 services received a quality rating of Working Towards NQS or lower (20%) (ACECQA, 2019c).

There was a significant disparity in quality ratings between centre-based services and FDC services: 80.2 per cent of centre-based services received a rating of Meeting NQS or above, while only 46.2 per cent of FDC services met the standard (Figure P3; ACECQA, 2019d).

Over the past five years, the proportion of services rated Meeting NQS or higher has increased, and the number of those receiving Working Towards or lower has decreased (Figure P4; ACECQA, 2019d).

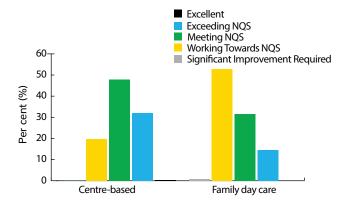


Figure P3. Overall quality ratings by service type (2019) (ACECQA, 2019d).



Figure P4. Proportional changes in quality ratings (Q1, 2014–19) (ACECQA, 2019d).

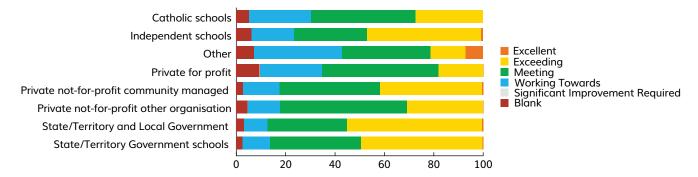


Figure P5. Percentage of services attaining NQS ratings by service management type (2019) (ACECQA, 2019d).

In 2016, ACECQA reported that since the inception of the NQF, the number of centre-based services being rated Working Towards (or below) was trending downwards, whereas the proportion of FDC being rated below Meeting NQS remained relatively unchanged (ACECQA, 2016). Excluding services that have not received a rating, the trend continues into 2019 (ACECQA, 2019d).

Quality assessment rating levels differ between centrebased services, LDC and preschool (ACECQA, 2019d). In 2019, the majority of preschool services (59%) are Exceeding NQS, while only 30 per cent of LDC and 16 per cent of OSHC services are Exceeding NQS. Only 7 per cent of preschool services are Working Towards NQS, while 21 per cent of LDC and 28 per cent of OSHC services received this rating.

Distributions of quality ratings also varied by service management type. The majority of services around Australia are private, for-profit services (ACECQA, 2019d). However, the service types with the largest proportion of services receiving Exceeding NQS ratings were government-managed services, private communitymanaged not-for-profit services and those associated with independent schools (Figure P5; ACECQA, 2019d).

Focusing on National Quality Area 1—Educational Program and Practice, there has been a general improvement in services meeting this area for LDC and OSHC services, but a reduction in the proportion of FDC services meeting this area (Figure P6; ACECQA, 2019d).

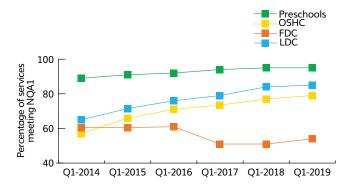


Figure P6. Percentage of services meeting NQA1—Educational Program and Practice over time (ACECQA, 2019d).

# Service quality improvement across time

Data from February 2019 shows that 7231 ECEC providers have received a reassessment. Of the 52.5 per cent (3495) that were previously rated Working Towards NQS, only 1 per cent received a lower reassessment rating (Significant Improvement Required), while 34 per cent maintained their Working Towards rating, 49 per cent improved to Meeting NQS, and 17 per cent increased to Exceeding NQS (ACECQA, 2019c)17. By 2018, 66 per cent (2459) of reassessed services had improved their overall rating to Meeting or Exceeding the NQS after receiving a Working Towards NQS rating (Figure P7 on p. 37; ACECQA, 2019e).

Of the services that required Significant Improvement, less than a quarter retained that rating after reassessment, while 64 per cent improved to Working Towards NQS and 12 per cent improved to Meeting NQS (an improvement rate of 76 per cent). While the majority of services in this category remain below the national standard, these significant improvements suggest that services are striving to improve the quality of their care (ACECQA, 2019e).

<sup>&</sup>lt;sup>17</sup> Improvement after reassessment may relate to routine assessment or may have been prompted by payment for a reassessment.

		Rating after reassessment					
		Significant Improvement Required	Working Towards NQS	Meeting NQS	Exceeding NQS	Total/ Improvement Rate	
Rating before reassessment	Significant Improvement Required NQS	19	50	9	0	78	
		24%	64%	12%	0%	76%	
	Working Towards NQS	19	1311	1903	635	3868	
		0%	34%	49%	16%	66%	
	Meeting NQS	1	443	1241	429	2114	
		0%	21%	59%	20%	20%	
	Exceeding NQS	0	142	425	604	1171	
		0%	12%	36%	52%	-	
	Total	39	1946	3578	1668	7231	

Figure P7. Ratings after reassessment (2019) (ACECQA, 2019e).

# State and territory analysis

The state with the greatest proportion of ECEC services rated Working Towards NQS in 2019 is WA, followed by the NT, NSW and the ACT—all above the national average of 21 per cent. The state with the greatest proportion of services Exceeding NQS is SA, followed by the ACT, Tas. and Vic.—all above the national average of 31 per cent (Figure P8; ACECQA, 2019e).

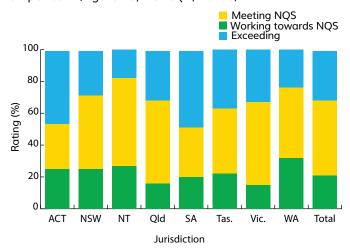


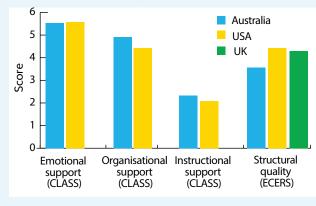
Figure P8. Overall quality ratings by state and territory (Q1, 2019) (ACECQA, 2019e).

# Comparison of ECEC quality with other countries

The Effective Early Education Experiences for Children (E4Kids) is the largest study of ECEC quality conducted in Australia, covering LDC, preschool and FDC services. The study examines the quality of educator-child interactions (CLASS; Pianta, La Paro & Hamre, 2008) and structural quality within each setting (ECERS; Harms, Clifford & Cryer, 2004).

Measures of educator-child interaction quality include those across emotional support (e.g. responsiveness, regard for student perspective), organisational support (e.g. behavioural management, transitions) and instructional support (e.g. scaffolding, facilitation of learning); while structural quality includes resources and program components (e.g. mealtimes, dramatic play).

When compared to international studies, Australian ECEC services were found to be comparable with those of the US in regards to the quality of educator-child interaction and lower than the UK and US on measures of structural quality (see graph) (Tayler, Ishimine, Cloney, Cleveland & Thorpe, 2013).



(Tayler et al., 2013.)

## Curriculum

The national curriculum for children from birth to five years, the EYLF, is designed to ensure high-quality provision of ECEC services (DEEWR, 2009). It covers the principles, practices and learning outcomes that help children with their transition to school and ongoing learning. The five intended outcomes of the EYLF are:

- 1. Children have a strong sense of identity.
- 2. Children are connected with and contribute to their world.
- 3. Children have a strong sense of wellbeing.
- 4. Children are confident and involved learners.
- 5. Children are effective communicators.

The EYLF emphasises play-based learning and building a learning program on a child's interests and abilities; and recognises that relationships with caring adults are vital to children's development. To this end, it has three core concepts:

- Belonging—building relationships with family, community, culture and place.
- Being—living in the here and now, allowing for time to play, trying new things and having fun.
- Becoming—learning and development through experience.

While there are some variations in how the EYLF is implemented across jurisdictions, the focus is on goal-driven learning outcomes delivered in a play-based curriculum, consistent with evidence for optimal child outcomes.

# Is quality of ECEC provision equitable?

To assess whether the quality of ECEC provision is equitably distributed, this report examines ACECQA data and associated datasets—SEIFA and ARIA—to assess variation by social disadvantage and regional location.

# Social disadvantage

According to the ACECQA Snapshot Q1 2019, the percentage of providers rated Meeting NQS or above is relatively stable across SEIFA classifications, ACECOA reports relative parity in service ratings across SEIFA decile scores. Rates of difference are relatively low, with the greatest difference (11%) between services rated as Exceeding NQS (Figure P9; ACECQA, 2019e).

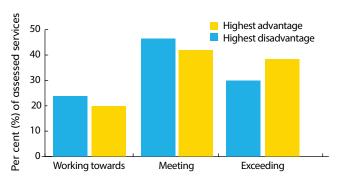


Figure P9. ACECQA NQS Rating by SEIFA (Q1, 2019) (ACECQA, 2019e).

The relative parity is also observed across time (Figures P10 and P11; ACECQA, 2019d). Of significance is the downward trend in the proportion of services receiving a rating of Working Towards and an increase in the proportion of services receiving a rating of Exceeding NQS. However, it should be noted that FDC is excluded from SEIFA classification because the operation of FDC services is not specific to one location.

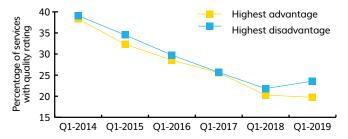


Figure P10. Proportion of Working Towards ratings (Q1, 2014–2019) (ACECQA, 2019d).

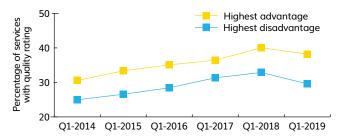


Figure P11. Proportion of Exceeding ratings (Q1, 2014–2019) (ACECQA, 2019d).

# **Geographical location**

ECEC services operating in outer regional, remote and very remote areas received relatively equitable ratings compared with their urban counterparts. Examination of the decline in centres not yet Meeting NQS across 2017–2019 shows that there is a comparable rate of decline between cities and remote areas (Figure P12).

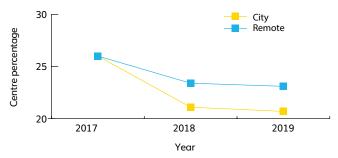


Figure P12. Proportion of centres rated Working Towards (city vs remote locations) (2017–2019) (ACECQA, 2019d).

# THE IMPORTANCE OF DATA

# Who is measuring and reporting on **ECEC** in Australia?

There are a number of key datasets used to report on ECEC in Australia. Most of the data reported here is drawn from the ABS, ACECQA NQA ITS quarterly data splits, and the AEDC (see Table 1 on p. 41).

In addition to publicly available data, a number of studies examining ECEC in Australia draw on specific research outcomes, presenting analyses of datasets that are not publicly available. These include:

- E4Kids—the largest study of ECEC quality conducted in Australia.
- Longitudinal Study of Australian Children (LSAC) representative data on Australian children and families.
- Millennium Mums—longitudinal data on workforce participation of women (more detailed than public datasets).
- Early Years Workforce Study—a comprehensive study of the early years workforce, including a nationally representative survey.

# Key contributions of datasets

The datasets listed in Table 1 provide valuable information about different aspects of ECEC in Australia, including:

- children's developmental vulnerability on entry to school across Australia
- ECEC access, enrolment and attendance for Australian children
- government and family expenditure on ECEC services in Australia
- quality of ECEC services in Australia
- qualifications and employment conditions of Australia's ECEC workforce.

#### Limitations of datasets

There are some notable limitations in how the publicly available datasets contribute to our understanding of the state of early learning and the benefits of ECEC in Australia. These limitations can be summarised across four key categories:

## 1. Data access

- Some datasets require payment of a fee to access individual-level data.
- Datasets that provide individual-level data are mostly not publicly available.

#### 2. Data detail

- Publicly available datasets typically rely on broad surveys or administrative data, and therefore limit the kinds of questions that can be answered.
- Publicly available data often only permits reporting of trends, due to data being grouped—as such, the reasons for a trend or pattern cannot be examined.
- ABS data is deliberately adjusted to avoid the release of confidential information, limiting detailed statistical analyses.
- Data is often fragmented and inconsistent across jurisdictions (i.e. differences in service delivery, funding models, transition to school across different states and territories).

## 3. Data linkage

- There are multiple legal and ethical implications and restrictions associated with linking publicly available datasets—this means it is not always possible to understand the relationship between different information collected about ECEC, children and families within Australia.
- Linking data across domains (e.g. education, health, child and family services) is costly and currently only performed for specific projects.

### 4. Data gaps

- Key limitations (gaps) in current publicly available datasets about ECEC in Australia include, but are not limited to:
- comprehensive data for children aged birth to three years, especially those experiencing vulnerability who may not access ECEC or other services
- detailed data for ECEC attendance and developmental outcomes as opposed to service provision
- odata on child experiences and delivery of the ECEC program
- o information about the relationship between educator characteristics (e.g. qualification) and **ECEC** quality
- the relationship between quality of ECEC services and educator characteristics and Australian children's long-term outcomes
- o information on turnover and the wellbeing of individual educators, both key components in delivering high-quality ECEC services (Whitaker et al., 2015)
- lack of reporting of data by different cohorts of children experiencing vulnerability (e.g. children in out-of-home care, children from culturally and linguistically diverse backgrounds, refugee children, etc.).

## Improving the data

Better systematic collection and linkage of data is necessary to guide better policy-making and commissioning of services in early years education. This would involve:

- more robust, comprehensive and longitudinal collection of early learning data to track the experience for the child (not just the services provided), e.g. hours of participation in early learning categorised by type, so the impact of factors such as the delivery setting and staff qualifications can be assessed
- more robust, comprehensive and longitudinal collection of early learning data to track outcomes for the child across ECEC and into school. For example:
  - running the AEDC every year, rather than every three years
  - introducing an AEDC equivalent to assess threeyear-olds (this could be a combined developmental and health check)
  - conducting consistent school-entry testing across states that goes beyond the AEDC (e.g. Best Start in NSW), to provide outcomes-based data earlier than Year 3 NAPLAN.
- better and ongoing data linkage and data matching across services (e.g. health, education) to provide a holistic and longitudinal view of children's needs and level of support provided—especially for those experiencing vulnerability. One-off linkages and population analyses can assist with identifying subgroups that need support, but 'real time' linkage is needed to find the individual within a target population and direct them to that support. Data linkage to the services received, both ECEC experience and broader social/health interventions, is also important to ascertain whether those services have improved the outcomes for the child. The recent Taylor Fry report for Their Futures Matter (2018) provides an example of the rich insight that can come from data linkage.

These various levels of data linkage create a range of privacy and consent issues that would need to be addressed. The goal should be to have clear and consistent requirements that protect and respect privacy, but avoid unnecessary duplication, delays and barriers.

Table 1. Datasets reporting on ECEC in Australia

#### Files/Datasets used

ABS Childhood Education and Care Survey (CEaCS) 2011, 2014, 2017

ABS Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016

ABS Labour Force, Australia: Labour Force Status and Other Characteristics of Families, 2017

ABS Microdata: Education and Work, May 2018 (SEW)

**ABS Preschool Education, 2018** 

ABS Household Expenditure, Income and Housing, 2015-16

ACECQA NQA ITS quarterly data splits (Q3 2013–Q1 2019)

Commonwealth of Australia, 2018, AECD Data Explorer^

OECD, 2019, PF3.1: Public Spending on Childcare and **Early Education\*** 

Productivity Commission. (2019). Report on Government Services, Chapter 3: Early Childhood Education and Care [data tables]\*\*

Productivity Commission. (2018). National Agreement Performance Reporting: National Indigenous Reform Agreement [data tables]

The Social Research Centre. (2017). 2016 Early Childhood Education and Care National Workforce Census (expecting a revised edition detailing the 2019 workforce landscape in 2020)\*

PwC Australia. (2014). Putting a Value on Early Childhood Education and Care in Australia\*

PwC Australia. (2019). A Smart Investment for a Smarter Australia: Economic Analysis of Universal Early Childhood Education in the Year Before School in Australia\*

- ^ AEDC data is available via: AEDC data explorer (public and free); Macrodata (application); Microdata (application); and Microdata for data linkage (application).
- \* Please note, this is a report, not a dataset.
- \*\* Please note, this is a report of data drawn from ABS datasets

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W: www.everyonebenefits.org.au

**E:** everyonebenefits@earlychildhood.org.au

T: 0475 554 999 or (02) 6242 1800

A: PO BOX 86, Deakin West, ACT 2600