

The early development outcomes of NSW children: results from the Australian Early Development Census

Snapshot

- Early life experiences of children impact their physical, emotional and social development.
- The Australian Early Development Census (AEDC) measures the development of children in their first year of full-time school.
- In 2018, the majority of NSW children were developmentally on track for each of the five AEDC domains.
- Around 1 in 5 NSW children were developmentally vulnerable on one or more domain, and around 1 in 10 NSW children were developmentally vulnerable on two or more domains.
- The developmental vulnerability of children in NSW has improved since 2009.
- NSW children are tracking slightly better than the Australian average.

Introduction

Children's environments and experiences shape their development. The Australian Early Development Census (AEDC) measures the development of children in their first year of school. It can tell us if children are developmentally on track or if they need more support through their school years.



image: Freepik.com

This Evidence to Action Note reports on how NSW has been tracking in the AEDC since 2009. Supporting early childhood development and ensuring children are ready for school is a key focus for the Department of Communities and Justice in applying the [NSW Human Services Outcomes Framework](#).






Why is measuring early childhood development important?

Early childhood development is increasingly recognised as a key predictor of future outcomes for children. Research has shown that investing time, effort and resources in the early years of a child's life has significant impacts on their behaviour, learning, health and wellbeing.^{1, 2, 3} Supporting early childhood development enables children to grow up with the skills to succeed, bringing benefits for them and the community as a whole.

What is the Australian Early Development Census?

The AEDC measures the early childhood development of children in Australia in their first year of full-time school. It measures this across five domains that predict later health, education and social outcomes (see Figure 1).

Figure 1. AEDC developmental domains

Physical health and wellbeing	
	Children's physical readiness for the school day, physical independence and gross and fine motor skills.
Social competence	
	Children's overall social competence, responsibility and respect, approach to learning and readiness to explore new things.
Emotional maturity	
	Children's pro-social and helping behaviours and absence of anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.
Language and cognitive skills (school-based)	
	Children's basic literacy, advanced literacy, basic numeracy, and interest in literacy, numeracy and memory.
Communication skills and general knowledge	
	Children's communication skills and general knowledge based on broad developmental competencies and skills.

Source: AEDC, www.aedc.gov.au

The AEDC is completed nationally every three years using the Australian version of the Early Development Instrument (AvEDI).

The AEDC is a population-based measure and is not designed to be an individual diagnostic tool. Results are reported publicly at a community level, acknowledging the diversity between local communities.

How does the AEDC measure ‘developmental vulnerability’?

For each of the five AEDC domains, children receive a score between zero and ten, where zero is most developmentally vulnerable. AEDC results are reported as the percentage of children who are considered to be ‘developmentally on track’, ‘developmentally at risk’ and ‘developmentally vulnerable’ on each domain.

In the first data collection cycle, in 2009, a series of cut-off scores were established for each of the five domains:

Developmentally on track	Children falling above the 25th percentile	Almost never have problems; have strong/excellent skills in the domain
Developmentally at risk	Children falling between the 10th and 25th percentile	Experience some challenges; have mastered some but not all skills in the domain
Developmentally vulnerable	Children falling below the 10th percentile	Experience a number of challenges; have poor skills in the domain

These cut-off scores have remained the same across all four collection cycles. They provide a reference point that future AEDC results can be compared to.

The AEDC also has two summary indicators that measure developmental vulnerability across all five domains. These summary indicators help identify children who are most vulnerable and who may need targeted support.

Developmentally vulnerable on 1 or more domain(s)	The percentage of children who are developmentally vulnerable on one or more AEDC domains
Developmentally vulnerable on 2 or more domains	The percentage of children who are developmentally vulnerable on two or more AEDC domains

More information about each of the AEDC domains and whether children are developmentally on track, at risk or vulnerable can be found in the [About the AEDC Domains](#) fact sheet.

How did NSW children perform in the 2018 AEDC?

In 2018,
97,732 

NSW children participated in the AEDC

Over
75% 

were developmentally on track for each of the five AEDC domains



1 in 5 were developmentally vulnerable on 1 or more domains



1 in 10 were developmentally vulnerable on 2 or more domains

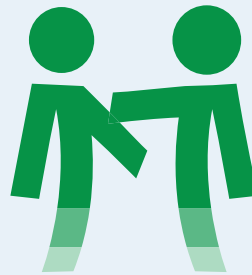


Physical health and wellbeing

78.5% of children were on track

12.9% were at risk

8.5% were vulnerable



Social competence

77.1% of children were on track

13.7% were at risk

9.2% were vulnerable



Emotional maturity

80.2% of children were on track

13.0% were at risk

6.8% were vulnerable



Language and cognitive skills (school-based)

87.2% of children were on track

7.6% were at risk

5.2% were vulnerable



Communication skills and general knowledge

76.8% of children were on track

15.3% were at risk

8.0% were vulnerable

How has NSW performed in the AEDC since 2009?

Overall, NSW children have improved since 2009

In NSW, the proportion of children who are developmentally vulnerable on two or more domains decreased from 10.3% in 2009 to 9.6% in 2018 (see Table 1). The proportion of children developmentally vulnerable on one or more domains also decreased, from 21.3% in 2009 to 19.9% in 2018. These changes are both statistically significant.

Table 1: Percentage of children developmentally vulnerable in NSW, 2009–18

	2009 (%)	2012 (%)	2015 (%)	2018 (%)
Developmentally vulnerable on 1 or more domains	21.3	19.9	20.2	19.9
Developmentally vulnerable on 2 or more domains	10.3	9.2	9.6	9.6

Source: AEDC Data Explorer, accessed 20 February 2019.

Looking at each AEDC domain, significant improvements occurred in three domains: emotional maturity, language and cognitive skills (school-based) and communication skills and general knowledge (see Figure 2).

The proportion of children developmentally vulnerable in the emotional maturity domain decreased from 7.4% in 2009 to 6.8% in 2018. The proportion of children developmentally vulnerable in the language and cognitive skills domain also decreased, from 5.9% in 2009 to 5.2% in 2018.

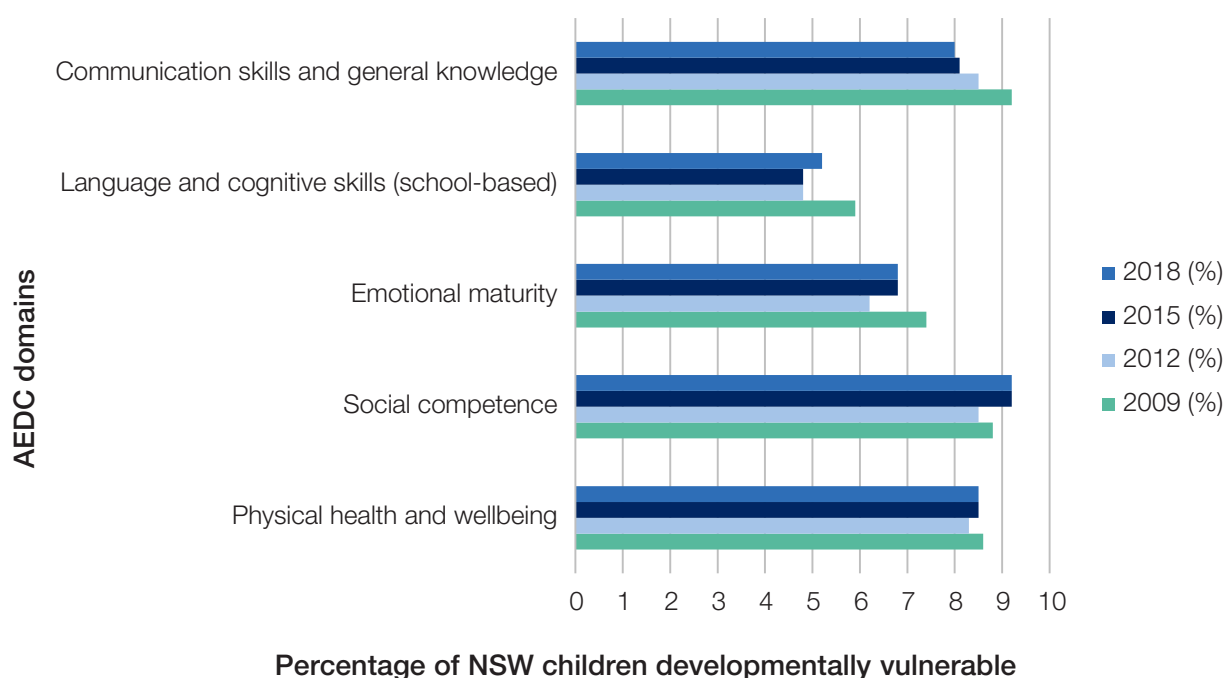
The biggest change occurred in the communication skills domain. The proportion of children developmentally vulnerable decreased from 9.2% in 2009 to 8.0% in 2018.

All of these changes were statistically significant.

There was also a slight improvement in the physical health and wellbeing domain, from 8.6% in 2009 to 8.5% in 2018. This change was, however, not statistically significant.

While progress has been made in these four domains, the proportion of children developmentally vulnerable in the social competence domain increased. In 2018, 9.2% of children were developmentally vulnerable in the social competence domain, while only 8.8% were in 2009. This change was also statistically significant.

Figure 2: Percentage of developmentally vulnerable children in each AEDC domain in NSW, 2009-18



Source: AEDC Data Explorer, accessed 20 February 2019.

How does NSW compare to other Australian States?

NSW children are tracking slightly better than the national average

In 2009, 11.8% of children in Australia were developmentally vulnerable on 2 or more domains, compared to 10.3% in NSW. Victoria (10.0%), Tasmania (10.8%), the ACT (10.9%) and South Australia (11.5%) also performed slightly better than the national average.

In 2018, 11.0% of children in Australia were developmentally vulnerable on 2 or more domains, compared to 9.6% in NSW. Victoria (10.1%), Western Australia (9.4%), and Tasmania (10.7%) also performed slightly better than the national average.

Table 2: Percentage of children developmentally vulnerable on two or more domains in Australia, 2009–18

	Australia	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
2009	11.8	10.3	10.0	15.8	11.5	12.2	10.8	23.4	10.9
2012	10.8	9.2	9.5	13.8	12.2	11.2	10.1	20.9	9.8
2015	11.1	9.6	9.9	14.0	12.2	10.5	10.7	23.1	10.3
2018	11.0	9.6	10.1	13.9	13.0	9.4	10.7	23.4	12.4

Source: AEDC Data Explorer, accessed 20 February 2019.

Where to from here?

The AEDC is an important resource that helps schools, communities and policy-makers understand how children are developing when they start their first year of full-time school. It provides useful information about what is being done well and what can be improved to better support children and their families.

At the government level, the AEDC data can help monitor the progress of communities over time and assess the impact of policy changes.

The Department of Communities and Justice can use the AEDC data to:

- identify vulnerable communities
- allocate resources and support to more effectively meet the needs of children and families
- track any improvements or changes in communities over time.

The AEDC Data Explorer

The AEDC data can be accessed through the [Data Explorer](#), an online tool available to the public.

You can explore the AEDC results of a specific community, access a 'community profile', monitor the progress of that community and compare it to others.

More information

For further information about the AEDC visit their website: www.aedc.gov.au

Produced by

Kathleen Blair

FACS Insights, Analysis and Research

NSW Department of Communities and Justice

320 Liverpool Rd, Ashfield NSW 2131

www.facs.nsw.gov.au

Email: facsiar@facs.nsw.gov.au

Endnotes

- ¹ Anderson, L, Shinn, C, Fullilove, M, Scrimshaw, S, Fielding, J, Normand, J & Carande-Kulis, V 2003, 'The effectiveness of early childhood development programs: A systematic review', *American Journal of Preventative Medicine*, vol. 24, pp. 32-46.
- ² Australian Institute of Health and Welfare 2015, *Literature review of the impact of early childhood education and care on learning and development: working paper*, AIHW, Canberra.
- ³ McLachlan, R, Gilfillan, G, & Gordon, J 2013, *Deep and persistent disadvantage in Australia*, Productivity Commission, Canberra.