

AEDC 2021 Data Story

A new summary indicator: Developmentally on track on five domains



Key summary indicators in the AEDC program

Historically, two summary indicators have been used in the AEDC program, with both focusing on rates of developmental vulnerability. These indicators report on the number of children developmentally vulnerable on one or more domain(s) (DV1), and developmentally vulnerable on two or more domains (DV2). In more recent cycles, there was significant interest in a summary indicator that shifts the focus from a deficit-based model to a focus on developmental strengths. In 2021, a new summary indicator was added to reporting AEDC data, reflecting this shift in focus. The new indicator, 'on track on five domains (OT5)' tells us how many children are on track across all five areas of their development when they start school. Exploring trends across the three summary indicators helps to demonstrate where progress has been made and where further work is needed.

What we know

Children do best when they have opportunities and support to develop a wide range of skills and abilities in their early years.

How well children are supported across all areas or domains of development is reflected in the OT5 measure and can help to identify where things are working well to support children's holistic development.

Key messages

- Child development has improved in Australia since the first AEDC collection in 2009, with an increase from 51 to 55 per cent of children on track on all five domains of their development.
- The language and cognitive skills (school-based) domain has seen the largest improvements from 2009 to 2021, with little change in the physical health and wellbeing, social competence, and emotional maturity domains over time.
- To improve the number of children on track on all five domains we need to ensure that children thrive in all areas of their development.
- Service responses and policies need to consider and balance children's development across each of the five domains, ensuring that improvements in certain domains are not gained at the expense of declines in others.
- Equity gaps in child development remain based on parents' level of education, whether children live in cities, regional or remote areas of Australia, and the State or Territory that children grow up in.

A snapshot of the 2021 Australian Early Development Census results



22%

of children developmentally vulnerable on one or more domain(s)



11%

of children developmentally vulnerable on two or more domains



55%

of children developmentally on track on all five domains

Why do we need a new summary indicator for the AEDC program?

Since 2009, the AEDC program has reported on two deficit-based summary indicators. This reporting approach was adopted to identify where children in Australia face challenges in their development. Many policies and programs aim to support communities facing adversities, thus, the two deficit-based AEDC indicators (DV1; DV2) are useful for targeting interventions. These indicators are also useful for evaluating programs and policies that focus on supporting children facing challenges in their development. Nevertheless, deficit-based indicators can be stigmatising for communities. Moreover, targets based on children being on track on all five domains of development recognise the importance of children's holistic development and the potential for all children to be well supported in their early years.

Strength-based approaches have their origins in social work, where practitioners are encouraged to work on identifying strengths in abilities, skills and characteristics rather than focusing on deficits (Saleebey, 1996). Similar approaches are used in community development, such as the asset-based community development approach (Kretzmann & McKnight, 1993) that focuses on strengths and assets within communities. Strength-based approaches provide a framework for engaging with individuals, families and communities in a more positive way with a focus on empowerment, collaboration, and capacity building. In 2021, the OT5 summary indicator was included in the [AEDC National Report](#) for the first time.

How do we define whether children are on track?

For each of the five domains, children receive a score between 0 and 10, with higher scores representing better development. In 2009, data from the first national AEDC collection provided a benchmark against which future results could be compared.

In 2009, children who scored above the 25th percentile (top 75 per cent of scores) were classified as

A case study: Closing the Gap target

In 2018-19, new targets were being considered for the [National Agreement on Closing the Gap](#). The AEDC data was recognised as a valuable dataset to understand whether children were thriving in their early years. When selecting the specific summary indicator for the target, there was a desire to take a strengths-based approach and thus 'on track on five domains (OT5)' was selected, as opposed to one of the two deficit-based indicators.

developmentally on track. The 25th percentile corresponds to a specific cut-off score on the 0-10 scale, and this cut-point is fixed over time. This means that changes in the percentage of children who are developmentally on track on each domain can be tracked to see whether child development is improving in Australia over time.

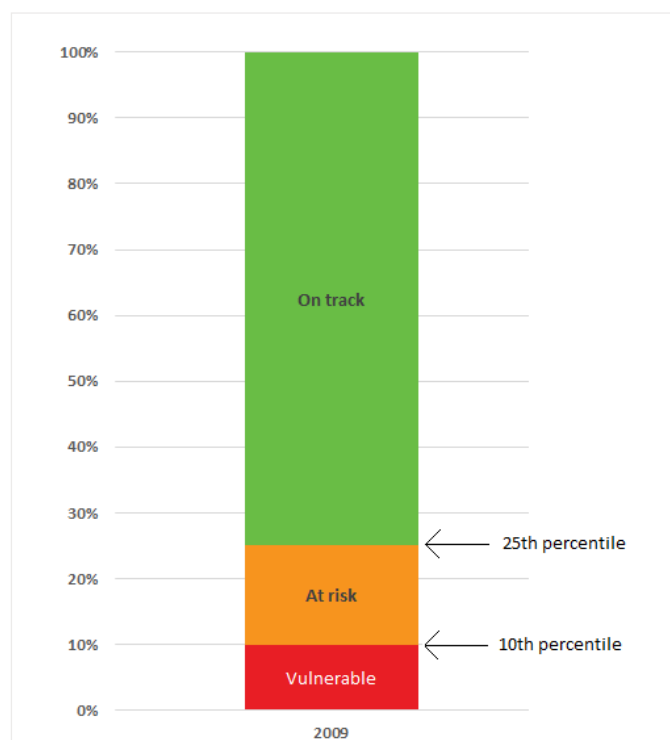


Figure 1: Definition of developmentally vulnerable, at risk and on track on AEDC domains. For more information visit [understanding the AEDC results](#).

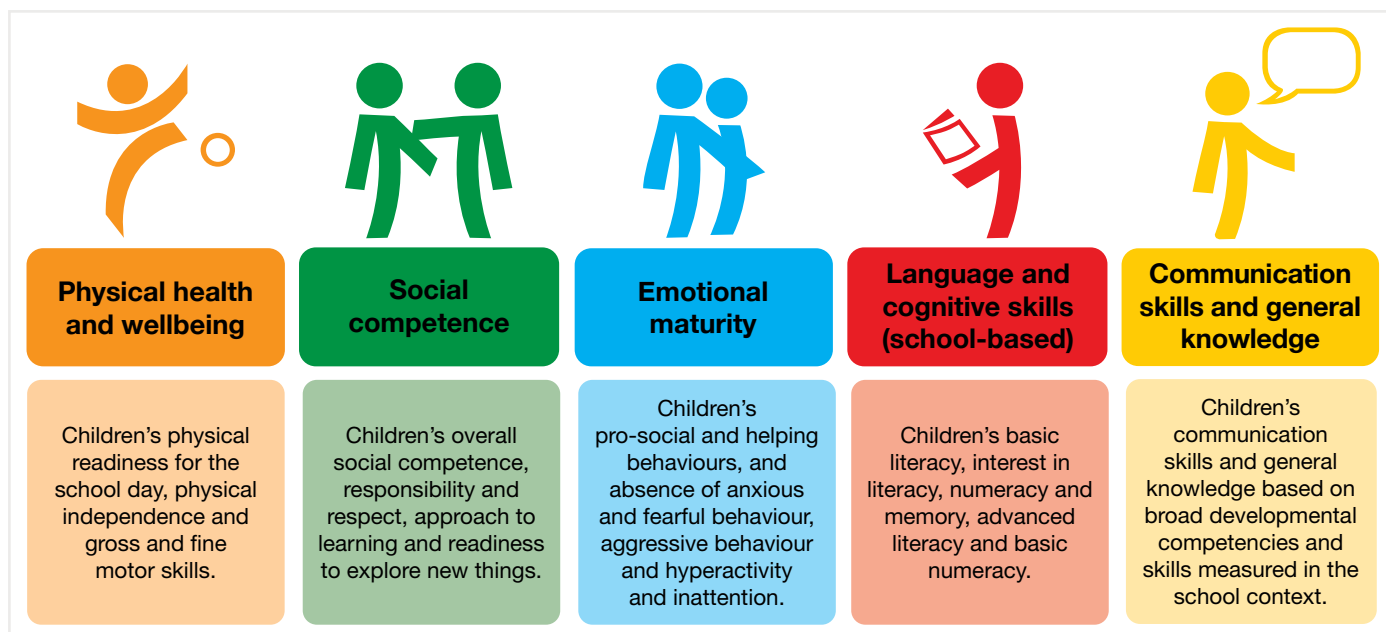


Figure 2: Five domains of the AEDC. For more information visit [about the AEDC domains](#)

The five developmental domains of the AEDC are shown in figure 2. If a child is 'vulnerable' or 'at risk' on any of these domains, then they will not be classified as OT5. Therefore, to improve the number of children 'on track on five domains', it is necessary to ensure that children thrive in all aspects of their development. If a new policy or program improves one aspect of development, such as physical health and wellbeing, but has no positive impacts on other domains, then this may not translate to improvements on the OT5 indicator. As such, it is important to consider the factors that support holistic development, and to explore trends in the percentage of children who are on track on each of the five AEDC domains over time.

Child development is improving in Australia but not across all domains

Since 2009, the largest improvements have been seen in the language and cognitive skills (school-based) domain, which measures children's emergent literacy and numeracy skills. From 2009 to 2015, there was a steady increase in the percentage of children on track on this domain from 77 per cent to 84 per cent, followed by a small reduction in 2018 and 2021. Smaller increases have also been seen in the communication skills and general knowledge domain, which measures oral and receptive language skills. The percentage of children on track on this domain increased from 75 per cent in 2009 to 77 per cent in 2021. Trends in the physical health and wellbeing, social competence, and emotional maturity domains have remained stable over time.

To increase the percentage of children on track on all five domains of their development, attention needs to shift to supporting the physical, social and emotional development of children in Australia. However, this needs to be done in a way that does not undermine the positive improvements that have been seen in the language and cognitive skills (school-based) domain over the past 12 years.

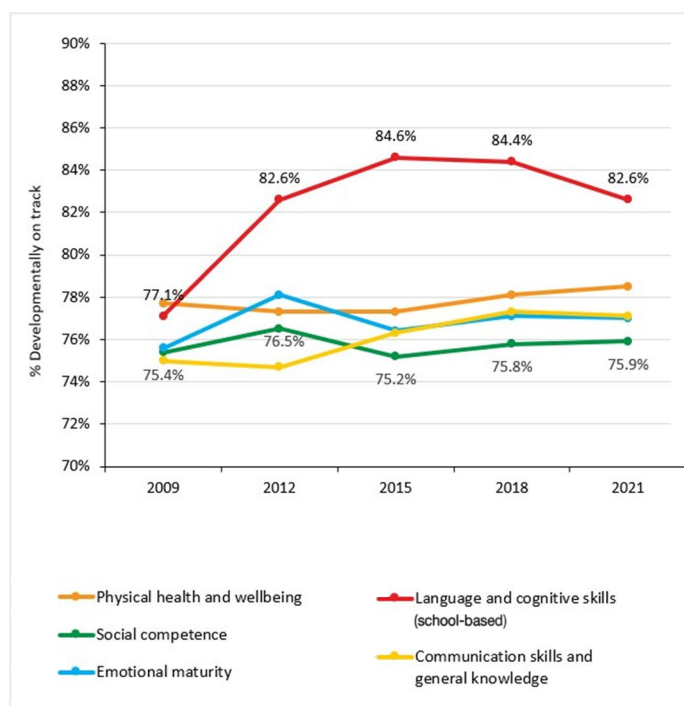


Figure 3: National trends in children on track on each AEDC domain (2009-2021)

Improvements in child development have been seen over time but large gaps persist

Australia has seen improvement over time in the percentage of children on track on all five domains. The percentage of children OT5 increased steadily from 51 per cent in 2009 to 55 per cent in 2018, before dropping for the first time in 2021. The opposite pattern has been seen for the two deficit-based indicators (DV1 and DV2).

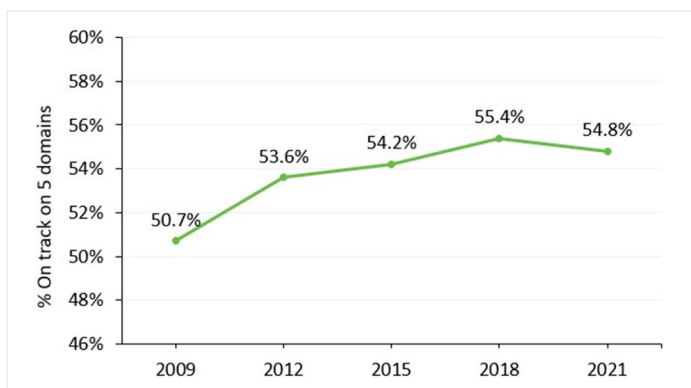


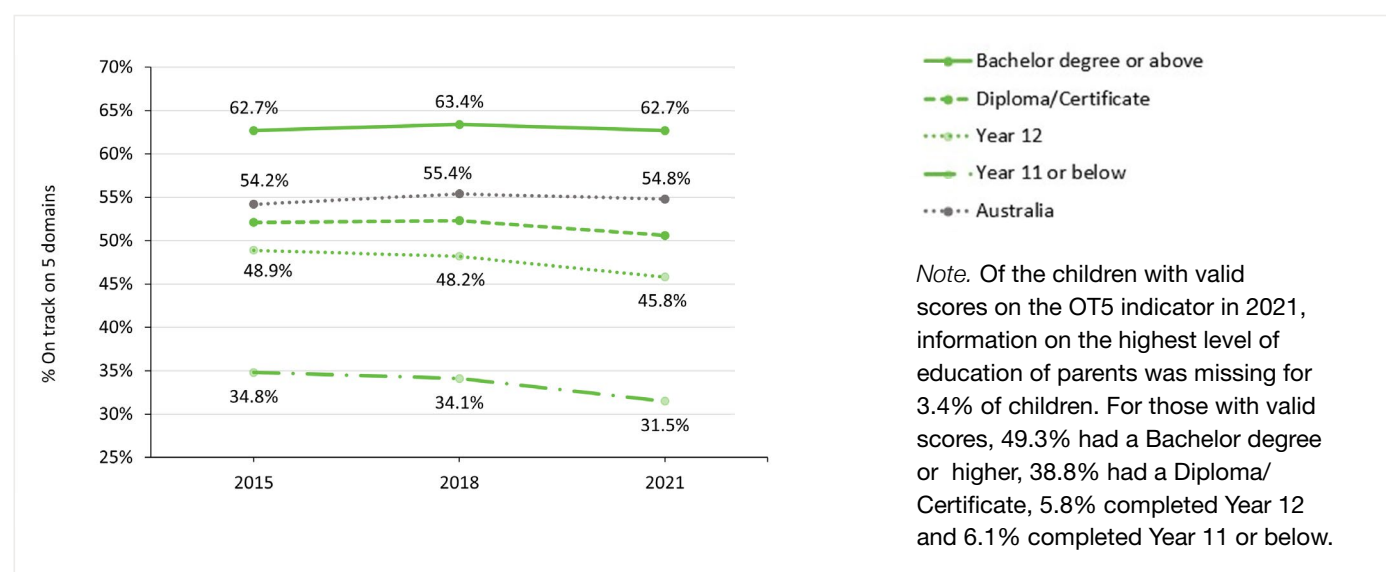
Figure 4: National trends in children on track on all five domains (OT5) 2009-2021

Despite these improvements, large differences in child development can be seen for children growing up in different familial, cultural, and community contexts. Within children's home environments, one of the key factors that impacts development is the educational attainment of their parents (Jeong et al., 2017). In the 2021 AEDC, children of parents who had completed a bachelor's degree or

Policies that support adolescents to complete high school and young adults to complete tertiary education are likely to have positive impacts on the development of future generations of children

above were 7.9 percentage points more likely to be on track on all five domains of their development than the national average. Children of parents who had completed Year 12 but no further studies were 9.0 percentage points less likely to be OT5 than the national average. Of those children of parents who had completed Year 11 or below, only 31.5 per cent were OT5 when they started school, and they were 23.3 percentage points less likely to be OT5 than the national average (see figure 5).

Another important factor supporting children's development is their access to health, social and early educational services and supports. Access to services can be more challenging in regional and remote areas of Australia. The Australian Bureau of Statistics divides communities into five geographical classes: major cities, inner regional, outer regional, remote, or very remote. Nationally, improvements in children starting school on track on all five domains are evident across all regions of Australia, however a gap remains between children living in major cities and children living in regional and remote areas of Australia, and this gap widened in 2021 (see figure 6).



Note. Of the children with valid scores on the OT5 indicator in 2021, information on the highest level of education of parents was missing for 3.4% of children. For those with valid scores, 49.3% had a Bachelor degree or higher, 38.8% had a Diploma/Certificate, 5.8% completed Year 12 and 6.1% completed Year 11 or below.

Figure 5: National trends in children OT5 by parents' highest level of education (2015-2021)

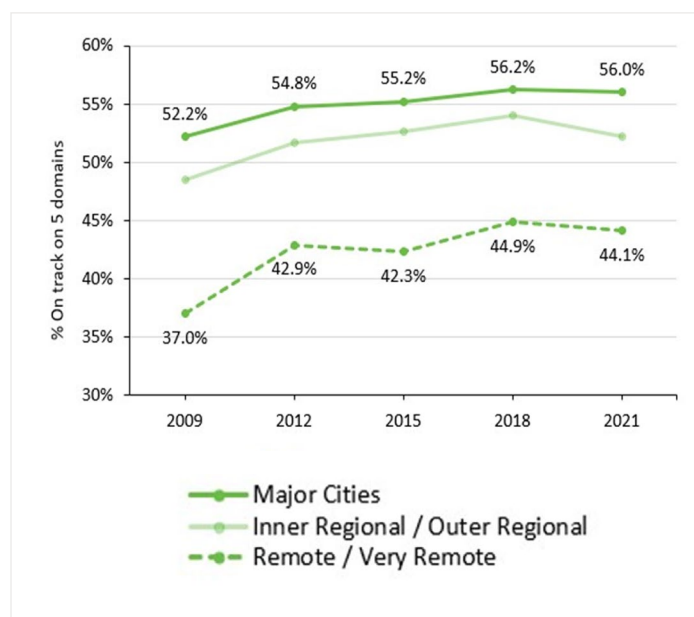


Figure 6: National trends in children OT5 by geographical remoteness (2009-2021)

In Australia, many of the health and education services that impact the lives of children and families, such as child and maternal health services and four-year old preschool, are delivered by State and Territory governments. As such, the jurisdiction that children grow up in impacts their experiences during the early childhood period. Exploring trends in OT5 within different jurisdictions can help to understand how variations in policies and contexts across States and Territories are differentially supporting children's development.

Western Australia and Queensland have seen large improvements (11 percentage points) in OT5, suggesting that the early life contexts and experiences of children growing up in these states have been improving over time. Persistent improvements in OT5 occurred in the Northern Territory from 2009 to 2018, followed by a decrease in 2021. South Australia has seen small but steady improvements since 2012. Victoria and New South Wales have remained stable over time with more than 55 per cent of children OT5. In the Australian Capital Territory there has been a persistent decline, and a similar decline was evident in Tasmania between 2015 and 2021.

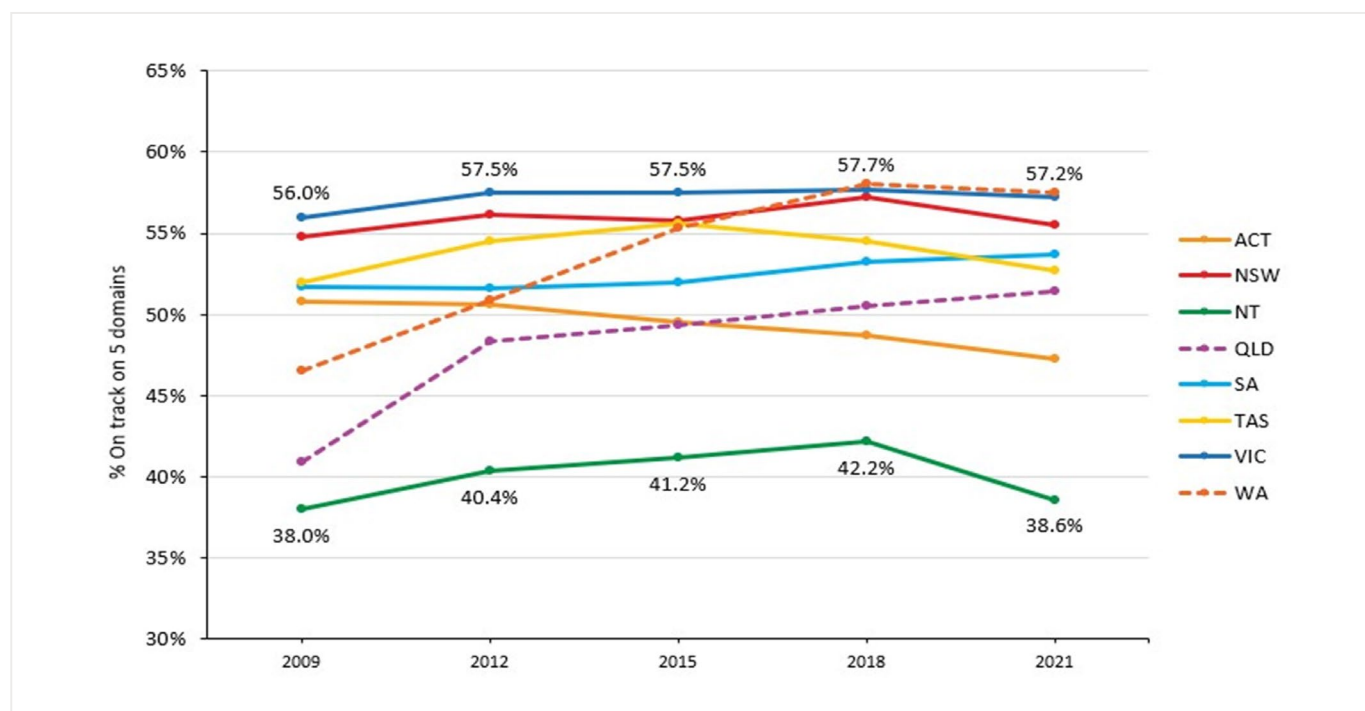


Figure 7: National trends in children OT5 across States and Territories (2009-2021)

Highlights

- In 2021, 55 per cent of children started school on track on *all* five domains of their development.
- Improvements have been made in language and cognitive skills (school-based) between 2009 and 2021.
- Small improvements from 2009 to 2021 have been made in communication skills and general knowledge.
- Little progress has been made in the physical health and wellbeing, social competence, and emotional maturity domains from 2009 to 2021.

References

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For further information

About AEDC 2021 Data Stories

AEDC 2021 Data Stories provide an in-depth exploration of some of the key findings from the [2021 AEDC National Report](#). This is the fifth issue in a series of seven AEDC Data Stories. The AEDC program is funded by the Australian Government. For further up-to-date information consult the AEDC website and its many resources: www.aedc.gov.au

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