



This factsheet provides researchers and organisations utilising AEDC data with guidelines to reference the AEDC, to understand what is measured and how vulnerability and summary indicators are calculated.

Summary

What is the AEDC - The Australian Early Development Census (AEDC) is a national program that tracks children's early development in Australia.

How is the information collected - In the AEDC, teachers report on the development of children in Term 2 or 3 of their first year of full-time school.

When is the AEDC collected - The AEDC has been conducted nationally every three years since 2009. The AEDC was previously referred to as the Australian Early Development Index (AEDI) and was re-branded in the lead up to the 2015 AEDC collection.

The Australian version of the Early Development Instrument (AvEDI)

The AEDC collects information on children's development using a teacher-completed instrument called the Australian version of the Early Development Instrument (AvEDI). The AvEDI was adapted from the Early Development Instrument (EDI), a Canadian instrument (Janus & Offord, 2007).

The AvEDI is a teacher-completed *child development instrument* not a questionnaire or survey.

Using the AvEDI, the AEDC measures five key domains of early childhood development that form the foundation for later good health, education and social outcomes. These domains are:



**Physical health
and wellbeing**



**Social
competence**



**Emotional
maturity**



**Language and
cognitive skills
(school-based)**



**Communication
skills and general
knowledge**



Adaptation/validation of the AvEDI

A series of validation studies were undertaken to ensure that the EDI was rigorously adapted for use in Australia. Detailed information on these studies can be found [here](#), and key references are provided below. Of particular note, the AEDC Indigenous Adaptation Study, funded by the Australian Government in 2007, was carried out by the Centre for Developmental Health and the Kulunga Indigenous Research Network at Perth's Telethon Kids Institute. This study supported the validation of the AEDC as a sensitive and appropriate measure of the development of Aboriginal and Torres Strait Islander children.

Silburn, S., Brinkman, S., Ferguson-Hill, S., Styles, I., Walker, R., & Shepherd, C. (2009). The Australian Early Development Index (AEDI) Indigenous Adaptation Study. Curtin University of Technology and Telethon Institute for Child Health Research: Perth, Australia.

[AEDI Indigenous Adaptation Study Report Nov 2009.pdf \(curtin.edu.au\)](#)

Sayers, M., Coutts, M., Goldfeld, S., Oberklaid, F., Brinkman, S., & Silburn, S. (2007). Building better communities for children; community implementation and evaluation of the Australian Early Development Index. *Early Education and Development*, 18(3), 519-534.

There is a large body of evidence that shows that the EDI and the AvEDI are psychometrically valid and reliable indicators of child development. A fact sheet providing an overview about research into the validity and reliability of the EDI and the AvEDI can be found [here](#), along with references to original academic articles. Key papers relevant to the psychometric properties of the AvEDI are listed below.

Brinkman, S., Silburn, S., Lawrence, D., Goldfeld, S., Sayers, M., & Oberklaid, F. (2007). Investigating the validity of the Australian Early Development Index. *Early Education and Development*, 18(3), 427-451. <https://doi.org/10.1080/10409280701610812>

Janus, M., Brinkman, S., & Duku, E. (2011). Validity and psychometric properties of the Early Development Instrument in Canada, Australia, United States and Jamaica. *Social Indicators Research*, 103(2), 283-297. <https://doi.org/10.1007/s11205-011-9846-1>

Brinkman, S., Gregory, T., Harris, J., Hart, B., Blackmore, S., & Janus, M. (2013). Associations between the Early Development Instrument at Age 5 and Reading and Numeracy Skills at Ages 8, 10 and 12: A Prospective Linked Data Study. *Child Indicators Research*, 6(4), 695-708. <https://doi.org/10.1007/s12187-013-9189-3>

Data collection process and procedures

Teachers complete the AvEDI based on their knowledge and observations of each child in their class after they have known the child and had the opportunity to observe their development for at least one month.

Children are not required to be present while teachers complete the AvEDI.

In addition to data about children's development, the AvEDI also collects information on any special needs the child has, early education and care experiences, and demographic and geographical information about the child and their parents/caregivers.

Each school participating in the AEDC is provided with teacher relief reimbursement payments to enable teachers to undertake teacher training and complete the AvEDI for each child in their class (it takes teachers around 20 minutes to complete each AvEDI).

The data is collected using a secure, online data entry system.

The data collection occurs between May and August (Term 2 and 3 of the school year in Australia).

The links below provide information on the items included in the AvEDI and the data collection procedures used in the AEDC program.

- [Australian Early Development Instrument questions and response criteria](#)
- [AEDC Data Dictionary](#)
- [AEDC Data Collection Technical Report](#)

For an overview of the AEDC/AEDI data collection, see:

Brinkman, S., Gregory, T., Goldfeld, S., Lynch, J., & Hardy, M. (2014). Data Resource Profile: The Australian Early Development Index (AEDI). *International Journal of Epidemiology*, 43(4), 1089-1096. <https://doi.org/10.1093/ije/dyu085>

How AEDC scores/indicators are calculated and reported

The AvEDI is comprised of 96 items that are used to measure development across the five developmental domains.

On each of the five AEDC domains, children receive a score from 0 to 10, which is calculated based on teacher responses to the relevant domain questions for each child. Higher scores reflect better development.

AEDC results are reported as the number and percentage of children who are, 'on track', 'developmentally at risk' and 'developmentally vulnerable' on each domain, based on a set of cut-offs that were developed using the baseline 2009 data. These cut-offs take into account age variations in the population of children in their first year of schooling, and have remained the same across each collection cycle to provide a reference point against which later AEDC results can be compared.

In addition, three summary indicators are calculated and used in reporting. These are:

- **DV1**



developmentally vulnerable on one or more domain(s) – *The percentage of children who are developmentally vulnerable on ONE or more AEDC domain(s)*

- **DV2**



developmentally vulnerable on two or more domains – *The percentage of children who are developmentally vulnerable on TWO or more AEDC domains.*

- **OT5**



on track on all five domains – *The percentage of children who are developmentally on track on all FIVE AEDC domains.*

These three indicators each signify a separate measure summarising AEDC domain results. There is no direct correspondence between these indicators. This means that, an increase in the percentage of children developmentally on track on all five domains won't necessarily correspond with a reduction in the percentage of children developmentally vulnerable on one or more or two or more domains. Children who are categorised as being 'developmentally at risk' are not reflected in these summary indicators.

Links to other relevant resources for researchers

- [AEDC Data Guidelines](#)

The AEDC Data Guidelines set out the principles and protocols governing the management, access, use, and dissemination of AEDC data in all its forms. The AEDC Data Guidelines succeeds the AEDC Data Protocol for 2015-2017.

- [Guide for researchers - creating research snapshots](#)

A guide for researchers in submitting a research snapshot for publication on the AEDC website.

- [Research snapshot template](#)

Template for creation for research snapshots for publication on the AEDC website.

- [Research snapshots references template](#)

Template for reference lists to accompany research snapshots.

Terminology tips

Correct terminology for referring to the AEDC, the AvEDI and the data collected is summarised below.

Say this	Not that
Australian version of the Early Development Instrument (first use and subsequently Instrument or AvEDI)	<ul style="list-style-type: none"> AEDC Checklist Early Development Instrument (unless referencing the Canadian Instrument) survey
domain (when referring to the aspects of development measured by the AEDC)	area
measure of child development	rate of child development
the AEDC is doing X	the AEDC are doing X
developmentally vulnerable	vulnerable
developmentally at risk	at risk
developmentally on track	on track
... developmentally on track, at risk or vulnerable ... (used within in a sentence)	... developmentally on track, developmentally at risk or developmentally vulnerable ...
category or categories (when referring to the general description of developmentally on track, at risk or vulnerable). For example; The result for the social competence domain for each category is: developmentally on track 80 per cent developmentally at risk ...	<ul style="list-style-type: none"> types groups
census of children in Australia	census of Australian Children
first year of full-time school	first year of formal school
number of children included	number of children surveyed
secure data collection system	secure web-based data entry system
Use lower case for domain names when within a sentence. For example; The domains are physical health and wellbeing; social competence; emotional maturity; ...	<p>Upper caps for each domain name when in a sentence.</p> <p>For example; The domains are Physical health and wellbeing; Social competence; Emotional maturity; ...</p>

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Since 2002, the Australian Government has worked in partnership with eminent child health research institutes, The Centre for Community Child Health at The Royal Children's Hospital, Melbourne, and the Murdoch Children's Research Institute, Melbourne, and the Telethon Kids Institute, Perth to deliver the Australian Early Development Census program to communities nationwide. The Australian Government continues to work with its partners, and with state and territory governments to implement the AEDC. This AEDC Data Story was developed by the Telethon Kids Institute on behalf of the Australian Government Department of Education.

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