



An Australian Government Initiative

A Snapshot of Early Childhood Development in Australia 2012

Australian Early Development Index (AEDI)
National Report

Re-issue



The Australian Government and State and Territory Governments are working in partnership with The Royal Children's Hospital Centre for Community Child Health in Melbourne, the Murdoch Childrens Research Institute, and the Telethon Institute for Child Health Research, Perth, to deliver the AEDI. The Social Research, Melbourne, is managing the AEDI data.



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- Community members across Australia who participated in a community consultation with The Royal Children's Hospital Centre for Community Child Health.
- AEDI state and territory coordinators and their coordinating committees who have assisted in the development of the AEDI National Report and the AEDI data collection.
- Key groups that have provided expert advice, support and feedback throughout the report's development: the AEDI National Committee and the AEDI Executive Working Group.
- Organisations responsible for delivering the second national implementation of the AEDI: The Royal Children's Hospital Centre for Community Child Health, the Murdoch Childrens Research Institute, the Telethon Institute for Child Health Research and the Social Research Centre.

Executive summary

In 2012 the Australian Early Development Index (AEDI) was completed nationwide for the second time. *A Snapshot of Early Childhood Development in Australia 2012 – AEDI National Report*, provides a second opportunity to review the picture of early childhood development outcomes for Australian children.

In the 2012 data collection, information was collected on 289,973 Australian children in their first year of formal full-time school, representing 96.5 per cent of all Australian children enrolled to begin school in 2012.

The results from the AEDI are publicly available and provide communities around Australia with information about how local children have developed by the time they start school, across five areas of early childhood development: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based), and communication skills and general knowledge.

In addition to this national report, the 2012 AEDI results are reported at the community level. This can help communities understand how their local children are doing compared with the rest of Australia. Communities can use the AEDI results to develop and evaluate their efforts to improve outcomes for children. Community profiles and mapped results, providing visual representation of the degree and concentration of developmental vulnerability at the community level, are available online at maps.aedi.org.au.

In the year before entering formal full-time school, 94.8 per cent of all Australian children are reported to have had some form of non-parental early childhood education and/or care experience. Across Australia there is diversity in the languages spoken by children with 305 languages other than English spoken in the home. There are also 14,173 (4.9 per cent) children with reported chronic physical, intellectual and medical needs (special needs status).

Key findings

2012 results

- The majority of children are doing well on each of the five AEDI developmental domains.
- Overall in Australia, 22.0 per cent of children are developmentally vulnerable on one or more domain/s.
- Overall in Australia, 10.8 per cent of children are developmentally vulnerable on two or more domains.
- The majority of Aboriginal and Torres Strait Islander children are developmentally on track on each of the five AEDI developmental domains. However Indigenous children are more than twice as likely to be developmentally vulnerable than non-indigenous children.
- There are children in Australia who only speak English, but are reported as not proficient in English. These children are more likely to be developmentally vulnerable on all the AEDI domains.
- Females are less likely to be developmentally vulnerable on one or more domains compared to males. However, males show a greater change (2.0 percentage points) over their 2009 results when compared with females (1.1 percentage points).

Comparative results

- The 2012 AEDI collected data on 289,973 children in their first year of formal full-time school, compared with 261,147 children in 2009, representing a response rate of 96.5 per cent and 97.5 per cent respectively.
- Approximately one in five (22.0 per cent) children enrolled in their first year of formal full-time school are developmentally vulnerable on one or more domains in 2012, compared with 23.6 per cent in 2009.
- A little more than four in 10 (43.2 per cent) Indigenous children are developmentally vulnerable on one or more domains in 2012, compared with close to five in 10 (47.4 per cent) in 2009.
- Nationally, a lower proportion of children are developmentally vulnerable across each of the five developmental domains in 2012 compared with 2009 except in the physical health and wellbeing domain, which remains unchanged at 9.3 per cent.



1 Introduction

There is clear evidence from Australia and overseas that the early years of a child's life have a profound impact on their future health, development, learning and wellbeing.¹ Research shows investing in resources to support children in their early years of life brings long-term benefits to them and the whole community.

Early childhood development outcomes are important markers of the welfare of children, and can predict future health and human capital. It is therefore important for Australia to transparently collect, evaluate and publicly disseminate relevant information and evidence.

It is in this context the Council of Australian Governments (COAG) recognised the need for all communities to have information about early childhood development and endorsed the Australian Early Development Index (AEDI) as a national progress measure of early childhood development. The Australian Government and state and territory governments are working in partnership with The Royal Children's Hospital Centre for Community Child Health in Melbourne, the Murdoch Childrens Research Institute, and the Telethon Institute for Child Health Research, Perth to deliver the AEDI. The Social Research Centre, Melbourne, is managing the AEDI data.

The AEDI is a measure of how young children are developing in different communities across Australia. The results from the AEDI will help communities, governments and policy makers pinpoint services, resources and support that young children and their families need to give children the best possible start in life. The information from the 2009 AEDI collection has already been embraced by community organisations and governments across Australia, including establishment of mobile playgroups in Far North Queensland and Western Australia, a Linking Schools and Early Years project in Victoria and the Dads and Kids program in South Australia.

1.1 About the AEDI

The AEDI is a population measure of children's development as they enter school. It is an adapted version of the Canadian Early Development Instrument (EDI),² developed in response to communities' increasing interest in knowing how their children were developing.

A population measure places the focus on all children in the community and therefore the AEDI reports on early childhood development across the whole community. It is recognised that moving the focus of effort from the individual child to all children in the community can make a greater difference in supporting efforts to create optimal early childhood development.

The AEDI measures five areas of early childhood development from information collected through a teacher-completed checklist:

- physical health and wellbeing
- social competence
- emotional maturity
- language and cognitive skills (school-based)
- communication skills and general knowledge.

History of the AEDI

The second national rollout of the AEDI benefits from more than 10 years of implementing the AEDI in Australia and the Early Development Instrument (EDI) in Canada.

Following its development in Canada, the EDI was successfully trialled in the northern metropolitan suburbs of Perth in 2002 and 2003.³ Between 2004 and 2008⁴ the Australian Government funded the Australian Early Development Index: Building Better Communities for Children project. This project adapted the Canadian EDI for use in Australia by carrying out validity studies,⁵ and trialling and evaluating the implementation of the adapted EDI—the AEDI—in 60 communities across Australia.⁶

By 2009 the AEDI was rolled out nationally for the first time, further work was undertaken to ensure the AEDI was relevant to Australia's culturally diverse population.^{7,8}

“ The AEDI provides schools with critical data about children’ s early learning experiences and has informed the design of effective curriculum and practice, while engaging families and the wider community in working towards the same goals.”

Karen Modoo - Director of Early Childhood Curriculum Programs and Policy, Teaching Learning and Inclusion

In 2012 the collection of AEDI data was completed using the same approach as in 2009. Teachers completed the AEDI Checklists for children in their first year of formal full-time school on a secure web-based data-entry system developed for the AEDI by the Social Research Centre, Melbourne. Checklists were completed by teachers based on their knowledge and observation of the children in their class, along with demographic information from school enrolment forms.

1.2 A snapshot of early childhood development in Australia

Both nature and nurture (genes and environment) influence children’ s development. The quality of children’ s earliest environments and the availability of appropriate experiences at the right stages of development are crucial determinants in building the brain’ s architecture.^{9,10}

Supporting environments that promote optimal early childhood development greatly increases children’ s chances of making a successful transition to school; achieving better learning outcomes while at school; and better education, employment and health success following school completion.¹¹⁻¹⁴

This report provides the second national snapshot of early childhood development in Australia. In 2012, AEDI Checklists were completed across Australia for 289,973 children (96.5 per cent of the children enrolled in their first year of formal full-time school) by 16,425 teachers from 7,417 government, Catholic and independent schools (95.6 per cent of schools with eligible children).

Although information for the AEDI is collected by teachers, results are reported for the community where children live, not where they go to school. The AEDI results are geographically mapped to provide communities with a picture of their strengths and vulnerabilities in early childhood development on five developmental areas. The AEDI results are released through:

- *A Snapshot of Early Childhood Development in Australia 2012 – AEDI National Report*, which provides a summary snapshot of the national, state and territory AEDI results.
- Online maps, which provide a visual representation of the results at the community level, available at www.aedi.org.au.
- AEDI Community Profiles, which provide community-level AEDI results and contextual information about the community, available at www.aedi.org.au.
- AEDI School Profile, which presents the AEDI results for children within a school. They are available to their respective schools; however the principal can share the school results with community stakeholders.
- Community Results Tables, which provides a one-page summary of the AEDI results within a Local Community*. Publicly available at www.aedi.org.au.

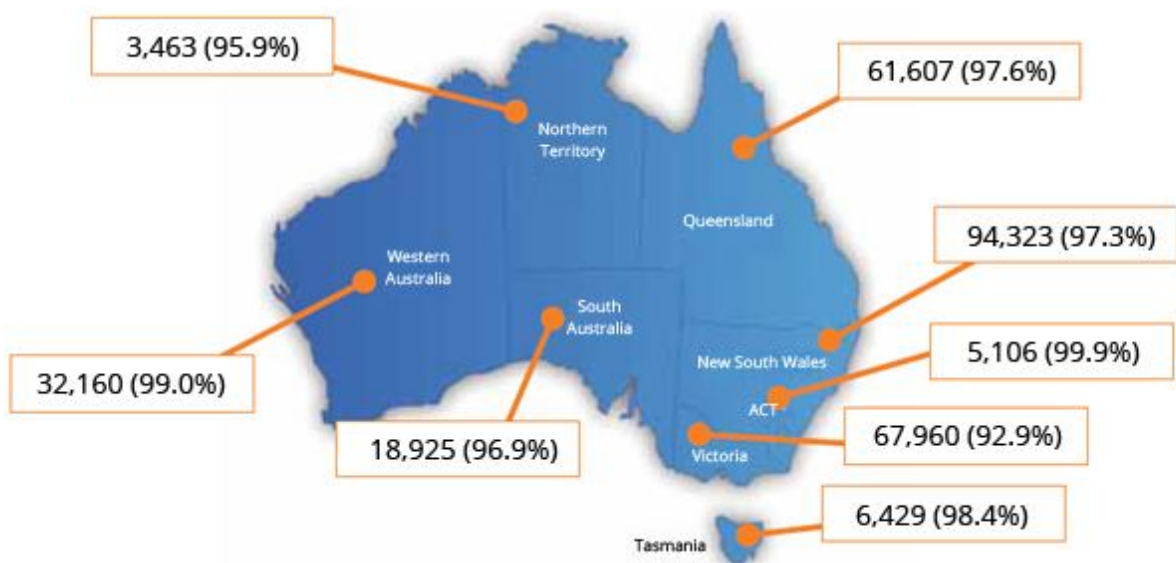
A range of resources to help communities understand the AEDI results, including the Using the AEDI guide and fact sheets, are available at www.aedi.org.au.

*See relevant definition of terms

An overview of the number of AEDI Checklists completed by states and territories in 2012 is shown in Figure 1.1.

Figure 1.1: A snapshot of Australia's children, completion of AEDI Checklists by state/territory (2012)

(Total = 289,973, 96.5%)



Note: The AEDI 2012 Checklist completion figures represent the proportion of children in their first year of formal full-time school as reported through the 2012 February school census and is therefore based on where the child attended school and not where the child lives.



2 Early childhood development

results across Australia

This section of the report provides the early childhood development results across Australia.

Key findings

- The second national AEDI collected data on 289,973 children in their first year of formal full-time school.
- The majority of these children are doing well on each of the five developmental domains of the AEDI.
- There are children in Australia who are developmentally vulnerable as they enter school.
 - 22.0 per cent of Australian children are developmentally vulnerable on one or more of the AEDI domain/s.
 - 10.8 per cent of Australian children are developmentally vulnerable on two or more of the AEDI domains.

Demographic

Geographic location

- There are higher proportions of developmental vulnerability on all AEDI domains for children living in very remote areas of Australia.
- Although there is only a small number of children living in very remote parts of Australia (n=2706), a high proportion (44.4 per cent) of children are developmentally vulnerable on one or more domains.
- In major cities (n=188,065) there is a smaller proportion (21.1 per cent), but higher numbers (39,682) of children developmentally vulnerable on one or more domains.

Socioeconomic status of communities where children live

- There are higher proportions of children who are developmentally vulnerable on each of the AEDI domains living in the most socioeconomically disadvantaged Australian communities.
- 31.7 per cent of children living in the most socioeconomically disadvantaged Australian communities are developmentally vulnerable on one or more of the AEDI domains.
- 17.4 per cent of children living in the most socioeconomically disadvantaged Australian communities are developmentally vulnerable on two or more of the AEDI domains.
- The average age of children at the time the AEDI Checklists were completed was 5 years and 7 months.
- 5.3 per cent of all Australian children surveyed are reported to be Aboriginal and Torres Strait Islander children.
- 7.5 per cent of all children surveyed were born outside Australia from 187 different countries.

Sex

- Boys are more likely to be developmentally vulnerable than girls on all of the AEDI domains.
- Boys are more likely to be developmentally vulnerable on two or more of the AEDI domains (14.8 per cent) than girls (6.8 per cent).

Indigenous children

- The majority of Indigenous children are developmentally on track on all the AEDI developmental domains. However, Indigenous children are more than twice as likely to be developmentally vulnerable than non-indigenous children.
- 43.2 per cent of the 15,490 Indigenous children are developmentally vulnerable on one or more of the AEDI domains.
- 26.0 per cent of Indigenous children are developmentally vulnerable on two or more of the AEDI domains.

Language diversity

- 20.0 per cent of children who are proficient in English and have LBOTE* status are developmentally vulnerable on one or more of the AEDI domain/s, compared with 93.7 per cent of children who have LBOTE* status and are not proficient in English.
- 8.3 per cent of children who are proficient in English and have LBOTE* status are developmentally vulnerable on two or more of the AEDI domains, compared with 58.0 per cent who have LBOTE* status and are not proficient in English.
- There are children in Australia who only speak English but are reported as not proficient in English. These children are more likely to be developmentally vulnerable or at risk on all the AEDI domains.

* See relevant definition of terms

2.1 AEDI domains

Australia is a vibrant multicultural society and the children are culturally diverse.¹⁵ The AEDI provides results that can be used by communities to support all children.¹⁶ Universal trends in children's development are used in the AEDI Checklist, enabling it to be implemented in communities with distinct cultural practices with minimal modifications.

Influences on child development are wide ranging and consideration of the demographic and cultural context of the children surveyed in each community is therefore important. In particular, when interpreting the AEDI results where there are smaller numbers of children, special consideration of the demographics and cultural context is needed.

The AEDI reports on five domains of children's development: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based), and communication skills and general knowledge.

These five developmental domains are closely linked to the predictors of good adult health, education and social outcomes.^{11,17} A description of the AEDI domains and sub-domains is provided in Figure 2.1.

Figure 2.1: AEDI domains and sub-domains

Physical health and wellbeing	Social competence	Emotional maturity	Language and cognitive skills (school-based)	Communication skills and general knowledge
Physical readiness for the day	Overall social competence	Pro-social and helping behaviour	Basic literacy	Communication skills and general knowledge
Physical independence	Responsibility and respect	Anxious and fearful behaviour	Interest in literacy, numeracy and memory	
Gross and fine motor skills	Approaches to learning	Aggressive behaviour	Advanced literacy	
	Readiness to explore new things	Hyperactivity and inattention	Basic numeracy	

AEDI data collection

Teachers complete the AEDI Checklist made up of approximately 100 questions for each child in their class. Each of the five AEDI domains has a corresponding set of questions from the AEDI Checklist. AEDI data is collected for individual children and reported at a group level (national, state/territory or community).

AEDI score

Responses from the AEDI questions are added together to determine an AEDI domain score. Up to five AEDI domain scores are calculated for each individual child.

To determine whether an individual domain score is 'on track', 'at risk' or 'vulnerable', national AEDI 'cut-offs' * were established during the first national AEDI data collection in 2009.

To create the national AEDI cut-offs in 2009, all the children's AEDI domain scores were ranked from the lowest to highest score.

Scores ranked in the lowest 10 per cent were classified as developmentally vulnerable. Scores ranked in between 10 per cent and 25 per cent were classified as developmentally at risk. Scores ranked in the highest 75 per cent were classified as developmentally on track. These national AEDI cut-offs will continue to be applied in future AEDI data collections providing a baseline to track children's developmental outcomes across Australia over time.

How are the AEDI results reported?

AEDI results are presented as the number and proportion of children who are:

- on track
- developmentally at risk
- developmentally vulnerable.

The median (middle) score* for each domain is also presented at a national and state/territory level.

Information about children with special needs* is not included in the AEDI domain results tables because of the already identified substantial developmental needs of this group. However, teachers complete background information on children with special needs to enable communities to be responsive to all children in their community.

There are a number of resources available to assist in understanding the 2009 and 2012 results including the Using the AEDI guide, fact sheet, frequently asked questions, and the Comparative Results Tool available at www.aedi.org.au.

* See relevant definition of terms

2.2 Physical health and wellbeing domain

This domain measures children's physical readiness for the school day, physical independence and gross and fine motor skills.

Figure 2.2: Physical health and wellbeing domain

	Children developmentally vulnerable	Children on track
Physical readiness for school day	Have at least sometimes experienced coming unprepared for school by being dressed inappropriately, coming to school hungry or tired.	Never or almost never experienced being dressed inappropriately for school activities, and do not come to school late, hungry or tired.
Physical independence	Range from those who have not developed one of the three skills (independence, handedness, coordination), to those who have not developed any of these skills.	Are independent regarding their own needs, have an established hand preference and are well coordinated.

**Gross and
fine motor
skills**

Range from those who have an average ability to perform skills requiring gross and fine motor competence and good or average overall energy levels, to those who have poor fine and gross motor skills, poor overall energy levels and physical skills.

Have an excellent ability to physically tackle the school day and have excellent or good gross and fine motor skills.

Table 2.1: AEDI results for physical health and wellbeing domain (2012)

	No. of children	Median score* 0-10	Developmentally vulnerable	Developmentally at risk	On track	
			Below the 10th percentile# (Per cent)	Between the 10th and 25th percentile# (Per cent)	Between the 25th and 50th percentile# (Per cent)	Above the 50th percentile# (Per cent)
Australia	273,922	9.6	9.3	13.4	19.5	57.8
Socio-economic status of communities where children live (SEIFA Index for Relative Disadvantage)						
Quintile 1 (most disadvantaged)	51,040	9.6	14	15.6	20.3	50.0
Quintile 2	51,305	9.6	10.7	14.6	20.4	54.4
Quintile 3	53,558	9.6	8.9	13.3	19.7	58.1
Quintile 4	55,945	10.0	7.8	12.9	18.9	60.4
Quintile 5 (least disadvantaged)	61,586	10.0	6	11.0	18.5	64.5
Geographic location (ASGS Remoteness Areas)						
Major Cities	189,204	9.6	8.6	13.0	19.2	59.2
Inner Regional	51,237	9.6	10	14.3	20.3	55.4
Outer Regional	26,236	9.6	11.2	13.6	20.1	55.0
Remote	4,456	9.6	11.7	13.9	20.5	53.8
Very Remote	2,789	9.2	20.6	15.6	23.1	40.7
Sex						
Male	138,001	9.6	11.9	14.6	22.0	51.5
Female	135,921	10.0	6.7	12.1	17.0	64.2
Indigenous						
Indigenous	14,052	9.2	20.4	17.0	22.2	40.4
Non-indigenous	259,870	9.6	8.7	13.2	19.4	58.7
Language diversity						
LBOTE*^	52,471	9.6	9.9	13.7	19.2	57.1
Proficient in English*	45,685	10.0	7.1	12.5	19.1	61.3
Not proficient in English	6,664	7.9	29.5	21.9	20.2	28.4
English only^	221,451	9.6	9.2	13.3	19.6	58.0
Proficient in English	214,276	9.6	7.8	13.0	19.7	59.5
Not	6,830	7.1	51.5	22.2	16.6	9.7

proficient in English						
State/Territory						
NSW	89,481	10.0	8.3	13.7	18.9	59.2
VIC	64,061	10.0	7.8	11.1	18.7	62.5
QLD	58,209	9.6	11.6	15.5	20.8	52.1
WA	30,834	9.6	9.8	12.2	20.2	57.8
SA	17,445	9.6	10.2	14.5	19.3	56.0
TAS	6,121	9.6	9.9	12.3	21.7	56.2
ACT	4,628	9.6	10.6	16.9	20.3	52.2
NT	3,143	9.6	15.0	13.1	20.4	51.4

* See relevant definition of terms.

^ The subsets of these categories do not equal the total because teachers have selected the ' Don' t know' response.

The AEDI cut-offs used to determine whether an individual score is ' on track' , ' at risk' or ' vulnerable' were established from the 2009 AEDI data and will remain the same for future data collections.

Note: Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses.

Note: Figures may not add up to 100% due to rounding.

2.3 Social competence domain

This domain measures children's overall social competence, responsibility and respect, approaches to learning and readiness to explore new things.

Figure 2.3: Social competence domain

	Children developmentally vulnerable	Children on track
Overall social competence	Have average to poor overall social skills, low self-confidence and are rarely able to play with various children and interact cooperatively.	Have excellent or good overall social development, very good ability to get along with other children and play with various children, usually cooperative and self-confident.
Responsibility and respect	Only sometimes or never accept responsibility for actions, show respect for others and for property, demonstrate self-control, and are rarely able to follow rules and take care of materials.	Always or most of the time show respect for others, and for property, follow rules and take care of materials, accept responsibility for actions, and show self-control.
Approaches to learning	Only sometimes or never work neatly and independently, are rarely able to solve problems, follow class routines and do not easily adjust to changes in routines.	Always or most of the time work neatly, independently, and solve problems, follow instructions and class routines, easily adjust to changes.
Readiness to explore new things	Only sometimes or never show curiosity about the world, and are rarely eager to explore new books, toys or unfamiliar objects and games.	Are curious about the surrounding world, and are eager to explore new books, toys or unfamiliar objects and games.

Table 2.2: AEDI results for social competence domain (2012)

	No. of children	Median score* 0-10	Developmentally vulnerable	Developmentally at risk	On track	
			Below the 10th percentile# (Per cent)	Between the 10th and 25th percentile# (Per cent)	Between the 25th and 50th percentile# (Per cent)	Above the 50th percentile# (Per cent)
Australia	273,534	9.2	9.3	14.3	21.9	54.6
Socio-economic status of communities where children live (SEIFA Index for Relative Disadvantage)						
Quintile 1 (most disadvantaged)	50,994	9	13.6	17.3	22.7	46.3
Quintile 2	51,238	9.2	10.6	15.3	22.3	51.8
Quintile 3	53,495	9.4	9	14.2	21.8	55
Quintile 4	55,809	9.4	7.7	13.2	21.8	57.3
Quintile 5 (least disadvantaged)	61,511	9.6	6.3	11.8	21	60.9
Geographic location (ASGS Remoteness Areas)						
Major Cities	188,936	9.4	8.9	13.7	21.8	55.6
Inner Regional	51,181	9.2	9.1	15.1	22.4	53.3
Outer Regional	26,180	9.2	10.9	15.2	21.7	52.1
Remote	4,452	9	11.4	16.2	22.3	50.1
Very Remote	2,785	8.3	18.6	21.6	22.3	37.6
Sex						
Male	137,817	9.0	12.7	17.8	23.6	45.9
Female	135,717	9.6	5.8	10.7	20.1	63.3
Indigenous						
Indigenous	14,041	8.3	18.7	20.7	23.0	37.7
Non-indigenous	259,493	9.4	8.8	13.9	21.8	55.5
Language diversity						
LBOTE*^	52,383	9.2	11.2	15.5	22.8	50.5
Proficient in English*	45,642	9.4	7.8	13.9	22.7	55.7
Not proficient in English	6,640	6.9	34.8	27.0	23.7	14.5
English only^	221,151	9.4	8.8	14.0	21.7	55.5
Proficient in English	214,022	9.4	7.6	13.6	21.7	57.1
Not	6,825	6.0	45.2	26.6	19.4	8.7

proficient in English						
State/Territory						
NSW	89,373	9.4	8.5	13.5	21.6	56.4
VIC	63,896	9.4	8.1	13.3	21.5	57.1
QLD	58,186	9.2	11.5	15.6	22.3	50.5
WA	30,799	9.2	8.4	14.7	22.2	54.7
SA	17,418	9.2	11.3	15.2	22.4	51.2
TAS	6,104	9.4	8.2	14.8	22.1	54.9
ACT	4,619	9.2	8.6	15.9	23.5	52.0
NT	3,139	8.8	14.9	18.5	21.1	45.5

* See relevant definition of terms.

^ The subsets of these categories do not equal the total because teachers have selected the ' Don' t know' response.

The AEDI cut-offs used to determine whether an individual score is ' on track' , ' at risk' or ' vulnerable' were established from the 2009 AEDI data and will remain the same for future data collections.

Note: Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses.

Note: Figures may not add up to 100% due to rounding.

2.4 Emotional maturity domain

This domain measures children's pro-social and helping behaviour, anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.

Figure 2.4: Emotional maturity domain

	Children developmentally vulnerable	Children on track
Pro-social and helping behaviour	Never or almost never show most of the helping behaviours including helping someone hurt, sick or upset, offering to help spontaneously, and inviting others to join in.	Often show helping behaviours including helping someone hurt, sick or upset, offering to help spontaneously, and invite others to join in.
Anxious and fearful behaviour	Often show most of the anxious behaviours; they could be worried, unhappy, nervous, sad or excessively shy, indecisive; and they can be upset when left at school.	Rarely or never show anxious behaviours, are happy, and able to enjoy school, and are comfortable being left at school.
Aggressive behaviour	Often show most of the aggressive behaviours; they get into physical fights, kick or bite others, take other people's things, are disobedient or have temper tantrums.	Rarely or never show aggressive behaviours and do not use aggression as a means of solving a conflict, do not have temper tantrums, and are not mean to others.
Hyperactivity and inattention	Often show most of the hyperactive behaviours; they could be restless, distractible, impulsive, they fidget and have difficulty settling to activities.	Never show hyperactive behaviours and are able to concentrate, settle to chosen activities, wait their turn, and most of the time think before doing something.

Table 2.3: AEDI results for emotional maturity domain (2012)

	No. of children	Median score* 0-10	Developmentally vulnerable	Developmentally at risk	On track	
			Below the 10th percentile# (Per cent)	Between the 10th and 25th percentile# (Per cent)	Between the 25th and 50th percentile# (Per cent)	Above the 50th percentile# (Per cent)
Australia	272,682	8.7	7.6	14.2	24.2	53.9
Socio-economic status of communities where children live (SEIFA Index for Relative Disadvantage)						
Quintile 1 (most disadvantaged)	50,735	8.5	10.9	16.9	25	47.2
Quintile 2	51,132	8.7	8.5	15	24.7	51.8
Quintile 3	53,301	8.7	7.4	14.5	24.3	53.9
Quintile 4	55,699	8.8	6.5	13.2	24.1	56.1
Quintile 5 (least disadvantaged)	61,338	9	5.5	12	23.4	59.1
Geographic location (ASGS Remoteness Areas)						
Major Cities	188,178	8.8	7.1	13.8	24.4	54.7
Inner Regional	51,177	8.7	8.2	14.7	23.8	53.3
Outer Regional	26,161	8.7	8.7	15.5	24.5	51.3
Remote	4,435	8.7	9.2	15.9	23.8	51.2
Very Remote	2,731	8.1	18.7	19.4	23.6	38.3
Sex						
Male	137,205	8.5	11.8	18.6	26.0	43.6
Female	135,477	9.2	3.4	9.8	22.5	64.3
Indigenous						
Indigenous	13,981	8.2	15.6	19.7	24.9	39.7
Non-indigenous	258,701	8.8	7.2	13.9	24.2	54.6
Language diversity						
LBOTE*^	52,039	8.6	7.9	16.2	26.4	49.5
Proficient in English*	45,350	8.7	6.0	14.0	26.3	53.7
Not proficient in English	6,562	7.3	21.1	30.9	27.0	21.0
English only^	220,643	8.8	7.6	13.8	23.7	54.9
Proficient in English	213,362	8.8	6.9	13.2	23.7	56.2
Not	6,777	6.9	30.3	29.6	23.9	16.2

proficient in English						
State/Territory						
NSW	88,988	8.8	6.2	12.6	23.6	57.6
VIC	63,775	8.8	7.2	13.5	23.3	56.1
QLD	57,988	8.5	9.3	15.8	25.8	49.2
WA	30,678	8.5	8.3	16.2	25.8	49.7
SA	17,370	8.7	9.3	15.5	24.0	51.3
TAS	6,149	8.8	8.1	14.8	23.1	54.0
ACT	4,620	8.8	7.2	13.8	24.4	54.6
NT	3,114	8.4	13.5	19.0	23.2	44.3

* See relevant definition of terms.

^ The subsets of these categories do not equal the total because teachers have selected the ' Don' t know' response.

The AEDI cut-offs used to determine whether an individual score is ' on track' , ' at risk' or ' vulnerable' were established from the 2009 AEDI data and will remain the same for future data collections.

Note: Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses.

Note: Figures may not add up to 100% due to rounding.

2.5 Language and cognitive skills (school-based) domain

This domain measures children's basic literacy, interest in literacy, numeracy and memory, advanced literacy and basic numeracy. This domain mainly reflects teachers' scores for children's language and cognitive skills based on those necessary for school (with English as the language of instruction) and does not necessarily reflect children's proficiency in their home language.*

Figure 2.5: Language and cognitive skills (school-based) domain

	Children developmentally vulnerable	Children on track
Basic literacy	Do not have most of the basic literacy skills; they have problems with identifying letters or attaching sounds to them, rhyming, may not know the writing directions and even how to write own name.	Have all the basic literacy skills including how to handle a book, are able to identify some letters and attach sounds to some letters, show awareness of rhyming words, know the writing directions, and are able to write their own name.
Interest in literacy/numeracy and memory	May not show interest in books and reading, or maths and number games, or both, and may have difficulty remembering things.	Show interest in books and reading, maths and numbers, and have no difficulty with remembering things.
Advanced literacy	Have only up to one of the advanced literacy skills; cannot read or write simple words or sentences, and rarely write voluntarily.	Have at least half of the advanced literacy skills such as reading simple words or sentences, and writing simple words or sentences.
Basic numeracy	Have marked difficulty with numbers, cannot count, compare or recognise numbers, may not be able to name all the shapes and may have difficulty with time concepts.	Have all the basic numeracy skills and can count to 20, recognise shapes and numbers, compare numbers, sort and classify, use one-to-one correspondence, and understand simple time concepts.

* Children from Language Backgrounds Other Than English may be proficient in their home languages.

Table 2.4: AEDI results for language and cognitive skills (school-based) domain (2012)

	No. of children	Median Score* 0-10	Developmentally vulnerable	Developmentally at risk	On track	
			Below the 10th percentile# (Per cent)	Between the 10th and 25th percentile# (Per cent)	Between the 25th and 50th percentile# (Per cent)	Above the 50th percentile# (Per cent)
Australia	273,896	9.6	6.8	10.6	21.7	60.9
Socio-economic status of communities where children live (SEIFA Index for Relative Disadvantage)						
Quintile 1 (most disadvantaged)	50,992	9.2	12	14.3	22.9	50.8
Quintile 2	51,311	9.2	8.1	12.1	22.9	57
Quintile 3	53,536	9.6	6.6	10.8	22.1	60.5
Quintile 4	56,002	9.6	4.8	9.1	21.2	65
Quintile 5 (least disadvantaged)	61,567	9.6	3.3	7.6	19.9	69.2
Geographic location (ASGS Remoteness Areas)						
Major Cities	189,170	9.6	5.9	10	21.5	62.7
Inner Regional	51,293	9.6	7.4	11.3	21.2	60.2
Outer Regional	26,202	9.2	9.3	12.7	23.4	54.7
Remote	4,445	8.8	12.4	14.2	26.6	46.8
Very Remote	2,786	8.1	26	18.4	24.6	31
Sex						
Male	137,986	9.2	8.5	12.5	23.6	55.4
Female	135,910	9.6	5.1	8.7	19.8	66.5
Indigenous						
Indigenous	14,017	8.1	22.4	19.5	24.0	34.0
Non-indigenous	259,879	9.6	5.9	10.1	21.6	62.3
Language diversity						
LBOTE*^	52,423	9.2	9.6	12.5	22.2	55.7
Proficient in English*	45,666	9.6	5.7	10.4	22.1	61.8
Not proficient in English	6,624	6.5	36.7	26.8	22.8	13.6
English only^	221,473	9.6	6.1	10.2	21.6	62.1
Proficient in English	214,143	9.6	4.8	9.7	21.7	63.8
Not	6,808	5.8	47.7	24.6	17.8	9.9

proficient in English						
State/Territory						
NSW	89,450	9.6	4.8	8.0	17.7	69.6
VIC	64,195	9.6	6.1	9.9	19.4	64.6
QLD	58,122	9.2	9.1	12.4	24.7	53.8
WA	30,798	8.8	8.6	15.6	33.8	42.0
SA	17,432	9.6	6.8	10.3	20.1	62.8
TAS	6,166	9.6	7.1	12.3	19.0	61.5
ACT	4,609	9.6	3.9	9.5	20.2	66.3
NT	3,124	8.5	20.8	17.2	25.5	36.6

* See relevant definition of terms.

^ The subsets of these categories do not equal the total because teachers have selected the ' Don' t know' response.

The AEDI cut-offs used to determine whether an individual score is ' on track' , ' at risk' or ' vulnerable' were established from the 2009 AEDI data and will remain the same for future data collections.

Note: Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses.

Note: Figures may not add up to 100% due to rounding.

2.6 Communication skills and general knowledge domain

This domain measures children's communication skills and general knowledge. This is based on teachers' observations of broad developmental competencies and skills as measured in the school context.*

Figure 2.6: Communication skills and general knowledge domain

	Children developmentally vulnerable	Children on track
Communication skills and general knowledge	Range from being average to very poor in effective communication, may have difficulty in participating in games involving the use of language, may be difficult to understand and/or have difficulty in understanding others and may show little general knowledge.	Have excellent or very good communication skills and can communicate easily and effectively, can participate in story-telling and imaginative play, articulate clearly and show adequate general knowledge.

* Children from Language Backgrounds Other Than English may be proficient in their home languages.

Table 2.5: AEDI results for communication skills and general knowledge domain (2012)

	No. of children	Median score* 0-10	Developmentally vulnerable	Developmentally at risk	On track	
			Below the 10th percentile# (Per cent)	Between the 10th and 25th percentile# (Per cent)	Between the 25th and 50th percentile# (Per cent)	Above the 50th percentile# (Per cent)
Australia	273,855	9.4	9.0	16.3	18.7	56.0
Socio-economic status of communities where children live (SEIFA Index for Relative Disadvantage)						
Quintile 1 (most disadvantaged)	51,047	8.8	14.8	19.8	20.2	45.2
Quintile 2	51,287	9.4	10.2	18.1	19.1	52.6
Quintile 3	53,524	9.4	8.8	16.1	18.9	56.1
Quintile 4	55,931	9.4	6.8	15.3	18.2	59.7
Quintile 5 (least disadvantaged)	61,577	10	5.1	12.9	17.4	64.5
Geographic location (ASGS Remoteness Areas)						
Major Cities	189,123	9.4	8.8	16	18.4	56.8
Inner Regional	51,258	9.4	8.3	17.1	18.8	55.7
Outer Regional	26,220	9.4	9.9	16.5	20	53.7
Remote	4,454	9.4	9.5	17.8	20.6	52.1
Very Remote	2,800	8.1	19.2	19.2	22.3	39.3
Sex						
Male	137,959	8.8	11.3	18.7	20.1	49.9
Female	135,896	10.0	6.6	13.9	17.2	62.3
Indigenous						
Indigenous	14,057	7.5	19.9	22.5	22.0	35.6
Non-indigenous	259,798	9.4	8.4	16.0	18.5	57.2
Language diversity						
LBOTE*^	52,443	8.1	18.2	20.9	20.1	40.7
Proficient in English*	45,707	8.8	7.5	22.9	22.9	46.7
Not proficient in English	6,658	1.9	91.9	6.9	1.2	0.0
English only^	221,412	9.4	6.8	15.2	18.4	59.7
Proficient in English	214,331	9.4	4.1	15.4	18.9	61.6
Not	6,840	2.5	91.3	7.6	1.1	0.0

proficient in English						
State/Territory						
NSW	89,460	9.4	8.5	16.8	17.2	57.5
VIC	64,038	9.4	8.0	14.6	16.7	60.7
QLD	58,203	8.8	10.7	17.9	21.2	50.1
WA	30,837	9.4	9.1	14.3	22.9	53.8
SA	17,439	9.4	8.9	17.4	18.0	55.7
TAS	6,114	9.4	6.6	15.6	17.2	60.6
ACT	4,622	9.4	8.1	18.5	18.8	54.7
NT	3,142	8.8	14.4	17.1	21.9	46.6

* See relevant definition of terms.

^ The subsets of these categories do not equal the total because teachers have selected the ' Don' t know' response.

The AEDI cut-offs used to determine whether an individual score is ' on track' , ' at risk' or ' vulnerable' were established from the 2009 AEDI data and will remain the same for future data collections.

Note: Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses.

Note: Figures may not add up to 100% due to rounding.

2.7 Overall results on one or more, or two or more AEDI domain/s

The proportions of children who are developmentally vulnerable on one or more developmental domain/s and developmentally vulnerable on two or more developmental domains are provided in Table 2.6. These children are considered to be at particularly high-risk developmentally.

Table 2.6: AEDI results vulnerable on one or more, or two or more domain/s (2012)

	No. of children	Developmentally vulnerable on one or more domain/s (Per cent)	No. of children	Developmentally vulnerable on two or more domains [#] (Per cent)
Australia	272,282	22.0	273,275	10.8
Socio-economic status of communities where children live (SEIFA Index for Relative Disadvantage)				
Quintile 1 (most disadvantaged)	50,748	31.7	50,883	17.4
Quintile 2	51,068	24.8	51,180	12.4
Quintile 3	53,240	21.5	53,439	10.4
Quintile 4	55,516	18.6	55,793	8.5
Quintile 5 (least disadvantaged)	61,231	15.2	61,495	6.5
Geographic location (ASGS Remoteness Areas)				
Major Cities	188,065	21.1	188,762	10.1
Inner Regional	50,956	22.5	51,139	11.2
Outer Regional	26,070	24.9	26,157	13.1
Remote	4,431	26.9	4,447	14.1
Very Remote	2,760	44.4	2,770	27.9
Sex				
Male	137,119	28.2	137,620	14.8
Female	135,163	15.7	135,655	6.8
Indigenous				
Indigenous	14,011	43.2	14,011	26.0
Non-indigenous	258,271	20.9	259,264	10.0
Language diversity				
LBOTE ^{**^}	52,107	29.5	52,277	14.6
Proficient in English [*]	45,370	20.0	45,579	8.3
Not	6,661	93.7	6,608	58.0

proficient in English				
English only [^]	220,175	20.2	220,998	9.9
Proficient in English	213,116	17.9	213,930	7.9
Not proficient in English	6,837	93.7	6,810	72.3
State/Territory				
NSW	88,921	19.9	89,260	9.2
VIC	63,584	19.5	63,889	9.5
QLD	57,994	26.2	58,107	13.8
WA	30,631	23.0	30,770	11.2
SA	17,355	23.7	17,399	12.2
TAS	6,086	21.5	6,104	10.1
ACT	4,594	22.0	4,616	9.8
NT	3,117	35.5	3,130	20.9

* See relevant definition of terms.

[^] The subsets of these categories do not equal the total because teachers have selected the ' Don' t know' response.

[#] The denominator for this calculation may differ from the denominator for ' developmentally vulnerable on one or more domain/s' as there are varying numbers of children with valid scores for each summary indicator.

Note: Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teacher' s these children do not contribute to the domain analyses.

Note: Figures may not add up to 100% due to rounding.



3 2009 & 2012 comparative

results

This section of the report provides national comparative data for early childhood development for two AEDI cycles, 2009 and 2012.

Key findings

- The 2012 AEDI collected data on 289,973 children in their first year of formal full-time school, compared with 261,147 children in 2009, representing a response rate of 96.5 per cent and 97.5 per cent respectively.
- Approximately one in five (22.0 per cent) children enrolled in their first year of formal full-time school are developmentally vulnerable on one or more domains in 2012, compared with 23.6 per cent in 2009.
- A little more than four in 10 (43.2 per cent) Indigenous children are developmentally vulnerable on one or more domains in 2012, compared with close to five in 10 (47.4 per cent) in 2009.
- In 2012, females (15.7 per cent) are less likely to be developmentally vulnerable on one or more domains compared to males (28.2 per cent). However, males show a greater change (2.0 percentage points) over their 2009 results when compared with females (1.1 percentage point).
- Nationally, a lower proportion of children are developmentally vulnerable across each of the five developmental domains in 2012 compared with 2009 except in the physical health and wellbeing domain, which remains unchanged at 9.3 per cent.
- The language and cognitive skills domain show the largest proportional change across each of the five developmental domains between 2012 and 2009.
- In 2012, a lower proportion of children living in very remote Australia are developmentally vulnerable on one or more domains (44.4 per cent compared to

47.1 per cent in 2009) and two or more domains (27.9 per cent compared to 30.5 per cent in 2009).

- The proportion of children living in the most socioeconomically disadvantaged areas who are developmentally vulnerable on one or more (32.0 per cent) or two or more (17.5 per cent) domains in 2012 is the same as 2009.

Table 3.1: Proportion of children developmentally vulnerable by AEDI domain and state/territory, 2009 and 2012

	Physical health and wellbeing (Per cent)		Social competence (Per cent)		Emotional maturity (Per cent)		Language and cognitive skills (Per cent)		Communication and general knowledge (Per cent)	
	2009	2012	2009	2012	2009	2012	2009	2012	2009	2012
Australia	9.3	9.3	9.5	9.3	8.9	7.6	8.9	6.8	9.2	9.0
State/Territory										
New South Wales	8.6	8.3	8.8	8.5	7.4	6.2	5.9	4.8	9.2	8.5
Victoria	7.7	7.8	8.4	8.1	8.3	7.2	6.1	6.1	8.3	8.0
Queensland	11.0	11.6	12.1	11.5	11.0	9.3	15.6	9.1	10.5	10.7
Western Australia	10.1	9.8	7.7	8.4	8.8	8.3	12.0	8.6	8.9	9.1
South Australia	10.0	10.2	10.1	11.3	10.3	9.3	6.1	6.8	8.0	8.9
Tasmania	10.0	9.9	8.7	8.2	8.5	8.1	7.7	7.1	7.0	6.6
Australian Capital Territory	9.4	10.6	8.9	8.6	9.0	7.2	5.7	3.9	8.9	8.1
Northern Territory	18.7	15.0	17.9	14.9	15.4	13.5	22.5	20.8	17.5	14.4

Note: A lower number in 2012 (compared with 2009) means there has been a decrease in the proportion of children developmentally vulnerable.

The proportion of children developmentally vulnerable on one or more domains in 2009 and 2012 is provided in Table 3.2. The final column indicates the change in the developmental vulnerability of children between surveys and the significance of this change.

Table 3.2: Proportion of children developmentally vulnerable, 2009 and 2012

	2009		2012		Comparative result [#]
	No. of children [^]	Developmentally vulnerable on one or more domain/s (Per cent)	No. of children [^]	Developmentally vulnerable on one or more domain/s (Per cent)	
Australia	246,421	23.6	272,282	22.0	O
Sex					
Male	124,249	30.2	137,119	28.2	O
Female	122,172	16.8	135,163	15.7	O
Indigenous					
Indigenous	11,190	47.4	14,011	43.2	O
Non-indigenous	235,231	22.4	258,271	20.9	O
Language diversity					
LBOTE ^{†~}	43,853	32.2	52,107	29.5	O
Proficient in English	37,435	21.8	45,370	20.0	O
Not proficient in English	6,334	93.7	6,661	93.7	6
English only ^{†~}	202,568	21.7	220,175	20.2	O
Proficient in English	195,958	19.3	213,116	17.9	O
Not proficient in English	6,482	93.8	6,837	93.7	S
State/Territory					
New South Wales	82,710	21.3	88,921	19.9	O
Victoria	57,277	20.3	63,584	19.5	O
Queensland	52,603	29.6	57,994	26.2	O
Western Australia	26,052	24.7	30,631	23.0	O

South Australia	15,009	22.8	17,355	23.7	P
Tasmania	5,699	21.8	6,086	21.5	S
Australian Capital Territory	4,180	22.2	4,594	22.0	S
Northern Territory	2,865	38.7	3,117	35.5	O

* See relevant definition of terms.

~ The subsets of these categories do not equal the total because teachers have selected the 'Don't know' response.

^ Results for children with special needs are not included in the results. If there are a certain number of questions not answered by teachers these children do not contribute to the domain analyses.

The difference between the proportion of vulnerable children in 2009 and 2012 is statistically significant if it exceeds the critical difference. See *Comparing results: 2009-2012* fact sheet for further information at www.aedi.org.au.

† The subsets of these categories do not equal the total because teachers have selected the 'Don't know' response.

O Significant decrease in vulnerability S Decrease in vulnerability but not significant

P Significant increase in vulnerability T Increase in vulnerability but not significant

6 No change in vulnerability



Reload images

4 Profile of Australia's children

The information in this section of the report summarises demographic, language, non-parental early childhood education and/or care, school transition and other support information on the children surveyed for the AEDI.

Language diversity

- 19.8 per cent of Indigenous children speak languages other than English in the home, with 109 different languages spoken.
- 19.1 per cent of all Australian children speak languages other than English in the home (including Indigenous languages). There are 305 different languages spoken.

Geographical location

- Most Australian children (68.9 per cent) live in major cities, 28.4 per cent live in regional areas and only 2.7 per cent live in remote or very remote Australia.

Non-parental early childhood education and/or care experiences and school transition

- In the year before entering formal full-time school, 94.8 per cent of all Australian children are reported to have had some form of non-parental early childhood education and/or care experience (such as family day care, preschool or kindergarten, or care by a grandparent).
- The majority of Australian children are reported to have a successful transition into the school environment.
 - 75.3 per cent of children are making good progress in adapting to the structure and learning environment of the school.
 - 72.4 per cent of children have parent(s)/caregiver(s) who are actively engaged with the school and supporting their child's learning.

– 73.0 per cent of children are regularly read to/encouraged in their reading at home.

Note: for 27,125 children, the form of non-parental early childhood education and/or care before entering formal full-time school was not known or not reported by the teacher.

Support

- 4.9 per cent of children are reported as having chronic physical, intellectual and medical needs (special needs status*).
- 10.3 per cent of all children are identified by teachers as requiring further assessment.

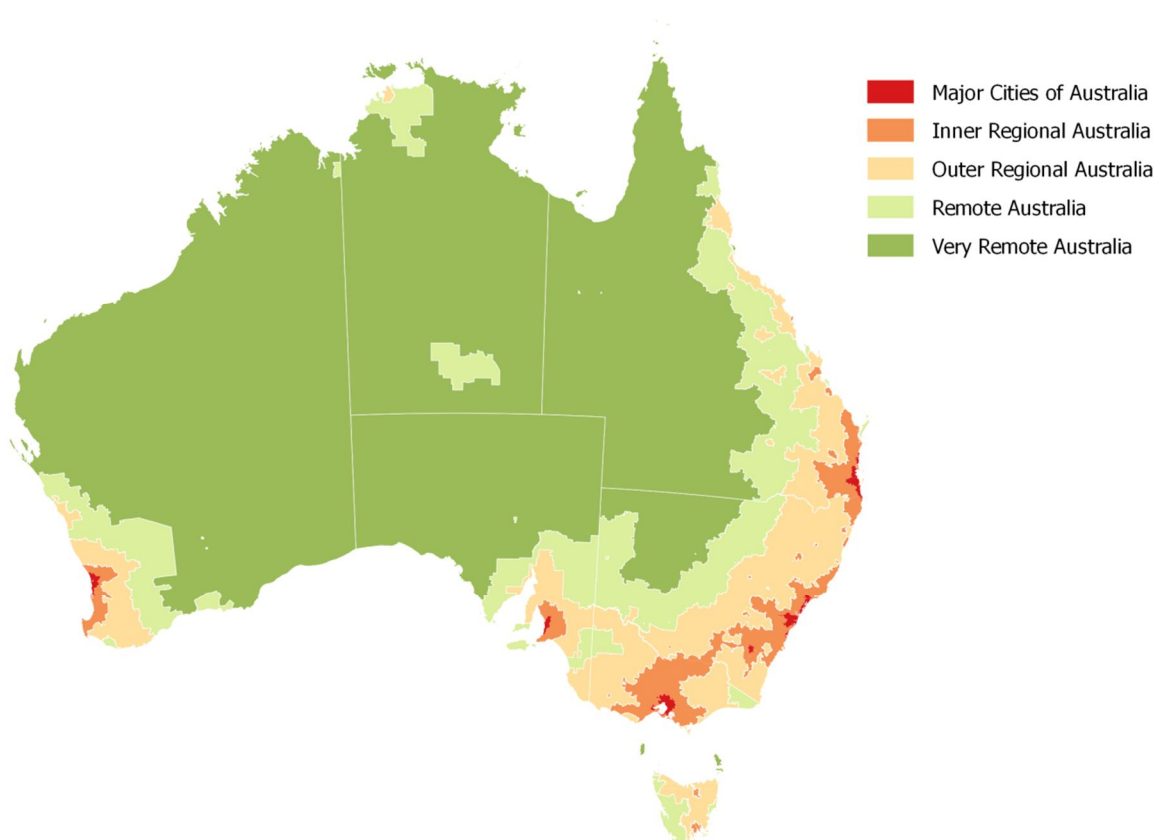
* See relevant definition of terms

4.1 Demographics

Geography

The AEDI uses the Australian Standard Geographical Standard (ASGS) Remoteness Areas* to classify the communities (which range from remote rural areas to city centres) where children live. The following map (Figure 4.1) and table (4.1) show the five Remoteness Areas across Australia and the number of communities within each area. Table 4.2 shows the distribution of children surveyed for the AEDI according to the ASGS Remoteness Areas.

Figure 4.1: ASGS Remoteness Areas* of Australia



Source: Australian Bureau of Statistics, Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure, July 2011

* See relevant definition of terms.

Table 4.1: Local Communities within ASGS Remoteness Areas*

	Australia	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Major Cities of Australia	2,254	808	369	416	297	264	0	100	0
Inner Regional Australia	1,241	447	231	329	91	47	94	2	0

Outer Regional Australia	1,046	324	57	322	122	60	95	0	66
Remote Australia	287	42	3	91	83	13	11	0	44
Very Remote Australia	271	19	0	110	77	13	3	0	49

* See relevant definition of terms.

Table 4.2: Distribution of children for the AEDI according to the ASGS Remoteness Areas*

	Australia	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Major Cities of Australia	199,823	69,588	50,787	37,019	23,907	13,636	0	4,886	0
Inner Regional Australia	54,468	18,427	14,085	12,706	3,054	1,931	4,253	12	0
Outer Regional Australia	27,835	5,947	3,027	9,664	2,728	2,549	2,074	0	1,846
Remote Australia	4,705	448	32	1,258	1,623	567	81	0	696
Very Remote Australia	3,142	162	0	946	846	238	22	0	928

* See relevant definition of terms.

Age

The mean age of the children at the time AEDI Checklists were completed is 5 years and 7 months, however this varied in different states and territories, reflecting the different starting ages for children in their first year of formal full-time schooling.

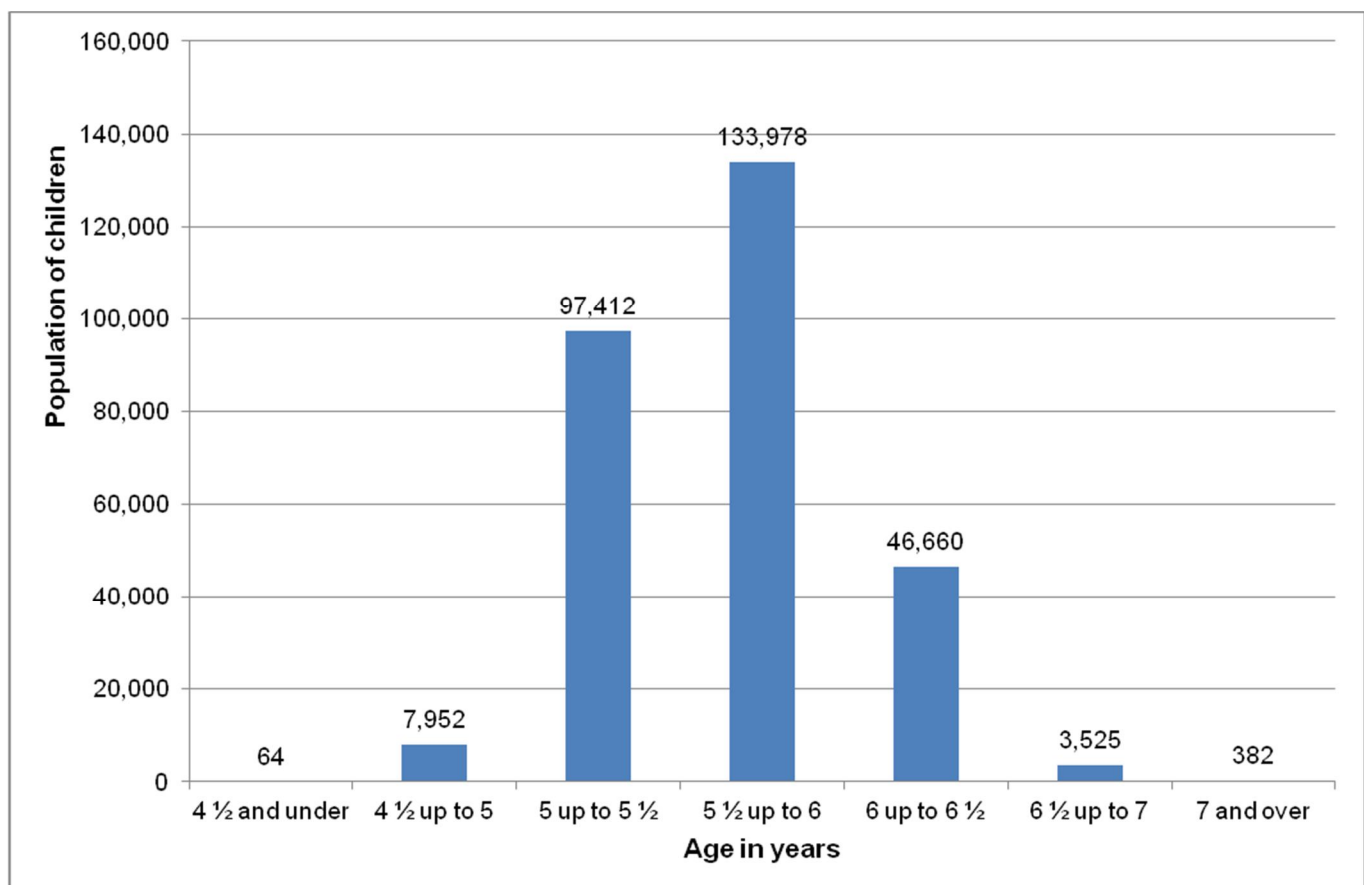
A breakdown of the mean age of children surveyed by state and territory is provided in Table 4.3.

The age spread of children surveyed is provided in Figure 4.2.

Table 4.3: Age by state/territory 2012

State/Territory	Mean age
NSW	5 years 7 months
VIC	5 years 9 months
QLD	5 years 6 months
WA	5 years 5 months
SA	5 years 8 months
TAS	5 years 11 months
ACT	5 years 8 months
NT	5 years 5 months
Australia	5 years 7 months

Figure 4.2: Age spread of children surveyed for the AEDI (2012)



Note: Age-based cut-offs are used for all AEDI analyses and therefore age is controlled for in the AEDI results.

Indigenous and Language Background Other Than English children

The Australian population is one of the most culturally and linguistically diverse in the world and this is represented in the children surveyed for the AEDI. The number of Indigenous and children with a language background other than English (LBOTE*) by state and territory is provided in Table 4.4. These groups are not mutually exclusive as shown in Table 4.4. For example, it is possible for children to be both Indigenous and have LBOTE status.

Table 4.4: Indigenous and Language Background Other Than English (LBOTE*) children by state/territory (2012)

	Australia	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Indigenous	15,490 (5.3%)	4,988 (5.3%)	946 (1.4%)	4,513 (7.3%)	2,207 (6.9%)	827 (4.4%)	472 (7.3%)	117 (2.4%)	1,420 (40.9%)
LBOTE*	3,070	230	32	950	591	258	4	12	993
Non-LBOTE	12,420	4,758	914	3,563	1,616	569	468	105	427
Non-indigenous	274,483 (94.7%)	89,584 (94.7%)	66,985 (98.6%)	57,080 (92.7%)	29,951 (93.1%)	18,094 (95.6%)	5,958 (92.7%)	4,781 (97.6%)	2,050 (59.1%)
LBOTE*	52,419	23,758	14,278	5,599	4,422	2,750	258	950	404
Non-LBOTE	222,064	65,826	52,707	51,481	25,529	15,344	5,700	3,831	1,646
Total LBOTE	55,489 (19.1%)	23,988 (25.4%)	14,310 (21.1%)	6,549 (10.6%)	5,013 (15.6%)	3,008 (15.9%)	262 (4.1%)	962 (19.6%)	1,397 (40.3%)
Total Non-LBOTE	234,484 (80.9%)	70,584 (74.6%)	53,621 (78.9%)	55,044 (89.4%)	27,145 (84.4%)	15,913 (84.1%)	6,168 (95.9%)	3,936 (80.4%)	2,073 (59.7%)
Total	298,973	94,572	67,931	61,593	32,158	18,921	6,430	4,898	3,470

* See relevant definition of terms.

4.2 Language diversity of Australia's children

Indigenous children

Across Australia, teachers reported a total of 15,490 Indigenous children, which represents 5.3 per cent of all children surveyed. Indigenous Cultural Consultants completed the AEDI Checklist collaboratively with the child's classroom teacher for 5,466 children (35.3 per cent of all Indigenous children surveyed).

Indigenous Cultural Consultants were recruited from various professions including Aboriginal and Islander education workers, Aboriginal early years liaison officers, Aboriginal education officers, Aboriginal education workers, Aboriginal and Islander education officers, Aboriginal teachers' aides, assistant teachers, home liaison officers, inclusion support officers and literacy support officers.

Teachers reported that 3,070 Indigenous children (19.8 per cent of all Indigenous children) speak languages other than English in the home. There is diversity in the languages spoken by Indigenous children, with 109 different traditional languages to English reported. Of these 83 traditional languages were reported as being the main language other than English spoken at home. An overview of the main languages other than English spoken by Indigenous children is provided in Table 4.5. The complete list of languages can be found at www.aedi.org.au.

Table 4.5: Main languages other than English spoken by Indigenous children (2012) ^

Main languages other than English spoken by Indigenous children Top 15	Number of children	Total=3,070 (Per cent)
Aboriginal English	817	26.6
Creole/Kriol	559	18.2
Djambarrpuyngu	112	3.6
Pitjantjatjara	92	3.0
Murrinh Patha	82	2.7
Arrernte, nec	78	2.5
Warlpiri	68	2.2
Yumplatok (Torres Strait Creole)	57	1.9
Alyawarr	48	1.6
Tiwi	37	1.2
Anindilyakwa	30	1.0
Wik Mungkan	26	0.8
Guugu Yimidhirr	25	0.8
Martu Wangka	25	0.8
Luritja	24	0.8

^ These are the main Indigenous languages other than English spoken in the home and do not include additional languages that may be spoken by Indigenous children.

All Australian children

Teachers reported 41,506 children speak English as a second language (ESL) and, while not reported as ESL, an additional 13,983 children speak languages other than English in the home, making the full cohort of children with language backgrounds other than English (LBOTE)* 55,489 (19.1 per cent of all children).

Teachers were asked to report the child' s main home languages other than English (see Table 4.6) and country of birth (see Table 4.7). Overall teachers reported there are 305 main languages other than English spoken in the home. There are 21,698 children (7.5 per cent of all children) born outside Australia in 187 different countries#. The complete list of languages and countries of birth can be found at www.aedi.org.au.

* See relevant definition of terms.

Based on Australian Bureau of Statistics (ABS) Standard Australian Classification of Countries.

Table 4.6: Main languages other than English spoken in the home (2012)

Main languages other than English spoken in the home^ Top 15	Number of children#	Total=55,489ⁱ (Per cent)
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Arabic	7,081	12.8
Vietnamese	3,791	6.8
Mandarin	3,313	6.0
Hindi	2,682	4.8
Greek	2,036	3.7
Cantonese	1,985	3.6
Spanish	1,459	2.6
Tagalog	1,304	2.4
Italian	1,092	2.0
Korean	1,075	1.9
Samoan	942	1.7
Japanese	887	1.6
Urdu	844	1.5
Turkish	819	1.5
Aboriginal English	817	1.5

^ This is the main home language other than English spoken in the home and does not include additional languages that may be spoken by LBOTE children.

These numbers are based on teacher report only.

† There are 3,795 children who are reported as ESL but were not reported to speak another language in the home.

Table 4.7: Country of birth (2012)

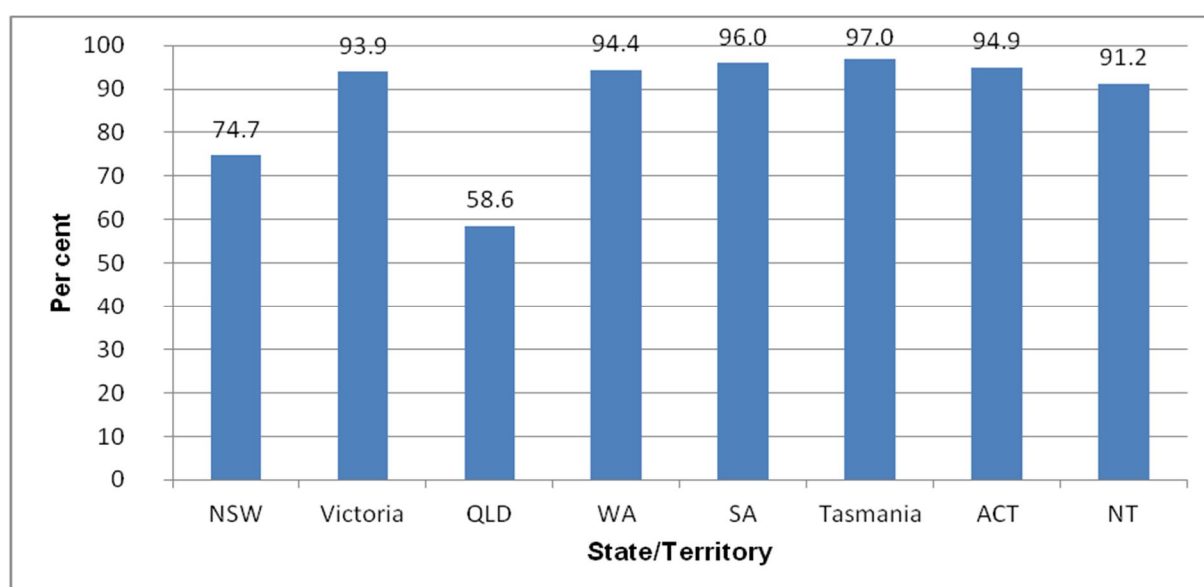
Country of birth Top 15	Number of children	Total=289,973 (Per cent)
Australia	268,255	92.5
New Zealand	3,646	1.3
England	3,084	1.1
India	2,123	0.7
Philippines	999	0.3
South Africa	987	0.3
United States of America	865	0.3
China (excludes Hong Kong, Macau, Taiwan)	827	0.3
Sri Lanka	471	0.2
Pakistan	414	0.1
Korea, Republic of (South)	409	0.1
Ireland	381	0.1
Malaysia	352	0.1
Vietnam	322	0.1
Thailand	320	0.1

4.3 Non-parental early childhood education and/or care experiences in the year before entering formal full-time school/school transitions

A range of factors have an impact on the AEDI results including parental and family circumstances and the availability and take-up of services such as health, allied health, early childhood education, child care and parenting support. Across jurisdictions, the availability and take-up of these types of services varies.

Participation rates in a preschool program in the year before formal full-time school are provided in Figure 4.3.

Figure 4.3: Proportion of children reported to be enrolled in a preschool program (AEDI, 2012)[^] #

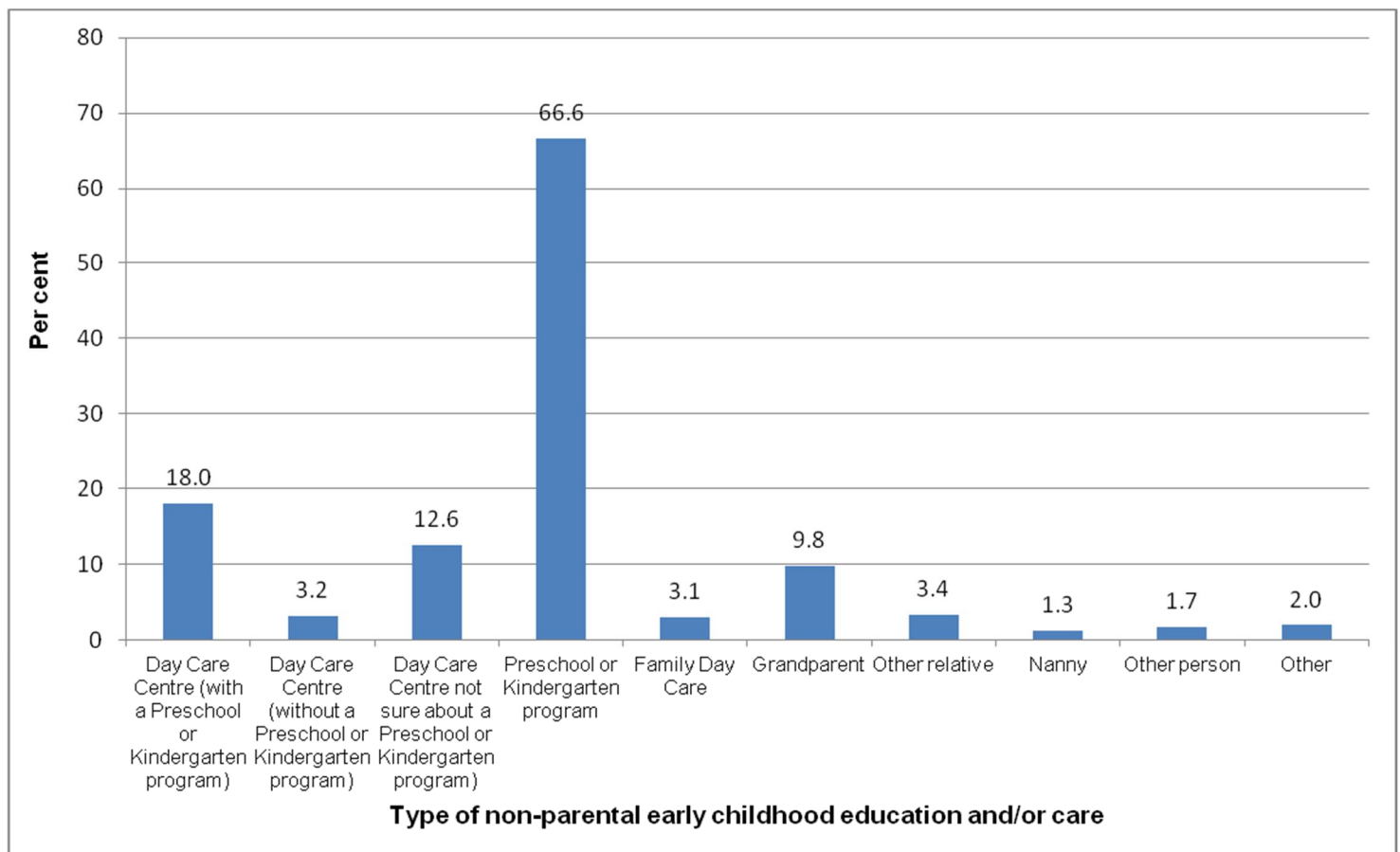


[^] Preschool program includes structured, play-based early childhood education. Alternative terms currently used for preschool in some jurisdictions include ' kindergarten' , ' pre-prep' and ' reception' . Preschool programs occur in different settings, for example, stand-alone services, as part of some schools and in some child care services.

[#] Includes only children where teachers knew if they had a non-parental early childhood education and/or care experience or not, in the year before entering formal full-time school (Total = 262,848).

As part of the AEDI Checklists, teachers were asked to record children's experiences in the year before entering formal full-time school. Overall 249,273 (94.8 per cent) children are reported to have experienced some form of regular non-parental early childhood education and/or care in the year before entering formal full-time school (such as family day care, preschool or kindergarten, or care by a grandparent). There are 13,575 (5.2 per cent) children reported as having been in parental care only.

Figure 4.4: Non-parental early childhood education and/or care experiences before first year of formal full-time schooling[^] (2012)



[^] For 27,125 children, the form of early education or care before entering formal full-time school was not known or not reported by the teacher.

[#] The total across categories exceeds 100 per cent as teachers may have nominated more than one form of non-parental early childhood education and/or care type for a child.

Questions asked of teachers about how children were settling into the school environment are provided in Table 4.8.

Table 4.8: School transitions (2012)

School transition indicators	Often or very true	Sometimes or somewhat true	Never or not true	Don' t know
Total=194,351[#]	(Per cent)	(Per cent)	(Per cent)	(Per cent)
Child is making good progress in adapting to the structure and learning environment of the school	75.3	21.5	2.8	0.4
Child has parent(s)/caregiver(s) who are actively engaged with the school in supporting their child' s learning	72.4	20.1	6.7	0.8
Child is regularly read to/encouraged in their reading at home	73.0	17.4	6.0	3.6

[#] The denominator is 194,351 because teachers only completed these questions for children they had known for more than one month and children from New South Wales are not included.

4.4 Support information

The additional or special needs status of children was recorded by teachers completing the AEDI Checklists (see Table 4.9). Overall there were 14,173 children (4.9 per cent of all children) with chronic physical, intellectual and medical needs, and a further 29,628 children (10.3 per cent of all children) identified by teachers as requiring further assessment.

Table 4.9: Additional or special needs of children (2012)

Conditions/Impairments	Number of children	(Per cent)
Number children with chronic physical, intellectual and medical needs (special needs status) [^]	14,173	4.9 [#]
Number of children identified by teachers as requiring further assessment	29,628	10.3 [†]

[^] Children with special needs are those who have chronic medical, physical or intellectual disabilities that require special assistance. Teachers were asked to base their response on medical diagnosis.

[#] Teachers completed this question for children they had knowledge of more than one month, therefore the denominator is 289,973.

[†]Teachers completed this question for children they had knowledge of more than one month, therefore the denominator is 288,587.

References

1. Siraj-Blatchford I, Mayo A, Melhuish E, Taggart B, Sammons P, Sylva K. *Performing against the odds: developmental trajectories of children in the EPPSE 3-16 study. Research Report DFE-RR128*. London, UK: Department of Education;2011.
2. Janus M, Brinkman S, Duku E, et al. *The Early Development Instrument: A Population-based Measure for Communities*. Hamilton, Ontario: Offord Centre for Child Studies;2007.
3. Hart B, Brinkman S, Blackmore S. *How Well are we Raising Our Children in the North Metropolitan Area? Results of the Early Development Instrument*. Perth, Australia: North Metropolitan Health Service (WA);2003.
4. Goldfeld S, Sayers M, Brinkman S, Silburn S, Oberklaid F. The process and policy challenges of adapting and implementing the Early Development Instrument in Australia. *Early Education and Development*. 2009;20(6):978-991.
5. Brinkman S, Silburn S, Lawrence D, Goldfeld S, Sayers M, Oberklaid F. Investigating the validity of the Australian Early Development Index. *Early Education & Development*. 2007;18(3):427-451.
6. Sayers M, Coutts M, Goldfeld S, Oberklaid F, Brinkman S, Silburn S. Building better communities for children: Community implementation and evaluation of the Australian Early Development Index. *Early Education & Development*. 2007;18(3):519-534.
7. Brinkman S, Gialamas A, Rahman A, et al. Jurisdictional, socioeconomic and gender inequalities in child health and development: Analysis of a national census of 5-year-olds in Australia. *BMJ Open 2012*. 2012;2:e001075.
8. Silburn S, Brinkman S, Ferguson-Hill S, Styles I, Walker R, Shepherd C. *The Australian Early Development Index (AEDI) Indigenous Adaptation Study*. Perth, Australia: Curtin University of Technology and Telethon Institute for Child Health Research;2009.

9. Cunha F, Heckman J. *Investing in our young people*. Chicago, Illinois: University of Chicago;2006.
10. Cunha F, Heckman J. *Investing in our young people*. Cambridge, Massachusetts: National Bureau of Economic Research;2010.
11. Brinkman S, Zubrick S, Silburn S. Predictive validity of a school readiness assessment on later cognitive and behavioral outcomes. Australian Early Development Index National Policy Conference; November, 2010; Melbourne.
12. Centre for Community Child Health. *Early years care and education. Policy brief no. 8*. Parkville, Victoria: Centre for Community Child Health, The Royal Children's Hospital;2007.
13. Centre for Community Child Health. *Rethinking school readiness. Policy brief no. 10*. Parkville, Victoria: Centre for Community Child Health, The Royal Children's Hospital;2008a.
14. Centre for Community Child Health. *Rethinking the transition to school: Linking schools and early years. Policy brief no. 11*. Parkville, Victoria: Centre for Community Child Health, The Royal Children' s Hospital;2008b.
15. Goldfeld S, Mithen J, Barber L, O' Connor M, Sayers M, Brinkman S. *The AEDI Language Diversity Study report*. Melbourne: Centre for Community Child Health, Royal Children' s Hospital, Murdoch Childrens Research Institute;2011.
16. Goldfeld S, O'Connor M, Sayers M, Moore T, Oberklaid F. Prevalence and correlates of special health care needs in a population cohort of Australian children at school entry. *Journal of Developmental & Behavioral Pediatrics*. 2012;33(4):319-327
17. Andrich D, Styles I. *Final report on the psychometric analysis of the Early Development Instrument (EDI) using the Rasch Model: A technical paper commissioned for the development of the Australian Early Development Instrument (AEDI)*. Australia: Royal Children's Hospital;2004.

Definition of terms

Additional or special needs	The child required special assistance because of chronic medical, physical, or intellectually disabling conditions (e.g. Autism, Cerebral palsy, Down syndrome), based on a medical diagnosis.
Australian Early Development Index (AEDI)	A population measure of young children's development based on a teacher-completed checklist (the AEDI Checklist) across five developmental domains (AEDI domains).
AEDI Checklist	A teacher-completed checklist that consists of approximately 100 questions measuring the five developmental domains. Teachers received online training prior to completing the AEDI checklists to ensure teacher judgement is moderated across Australia.
AEDI Community Profile, Community Results Table and maps	All AEDI data collected in a geographic area is collated and analysed at the suburb or small area locality (local community) where the child lives. This is reported to the community through AEDI Community Profiles, Community Results Table and AEDI maps.
AEDI cut-offs	<p>National AEDI cut-offs were established during the first national data collection in 2009 to determine whether an individual domain score was classified as on track, developmentally at risk or developmentally vulnerable. These cut-offs will remain the same for future AEDI collections.</p> <p>To create the national AEDI cut-offs in 2009, all the children's AEDI domain scores were ranked from the lowest to highest score.</p> <ul style="list-style-type: none"> – Scores ranked in the lowest 10 per cent were classified as developmentally vulnerable. – Scores ranked between 10 per cent and 25 per cent were classified as developmentally at risk. – Scores ranked in the highest 75 per cent were classified as developmentally on track.

AEDI domains

The AEDI measures five areas, or domains of early childhood development that are linked to predictors of good health, education and social outcomes.¹¹

- Physical health and wellbeing
- Social competence
- Emotional maturity
- Language and cognitive skills (school-based)
- Communication skills and general knowledge.

For the physical health and wellbeing domain only, patterns of vulnerability vary across the domain. As such, sub-domains have been created for more detailed analysis of physical health and wellbeing domain results. The *AEDI Domains* fact sheet is available at www.aedi.org.au.

AEDI score

An AEDI score will be calculated for each domain on completion of every AEDI Checklist. The AEDI scores range from 0 to 10 (0 is the lowest score; 10 is the highest score).

The AEDI maps, Community Profiles and School Profiles report the median (middle) AEDI score for each developmental domain and the proportion of children on track, developmentally at risk and developmentally vulnerable.

ASGS Remoteness Areas	<p>The Australian Standard Geographical Standard (ASGS) Remoteness Areas were developed by the Australian Bureau of Statistics (ABS) to classify places of remoteness. Geographical areas are given a score based on the road distance to service towns of different sizes. Scores for regions are derived by averaging scores from a one square kilometer grid.</p> <p>The five Remoteness Areas are:</p> <ol style="list-style-type: none"> 1. Major Cities – relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction. 2. Inner Regional – some restrictions to accessibility of some goods, services and opportunities for social interaction. 3. Outer Regional – significantly restricted accessibility of goods, services and opportunities for social interaction. 4. Remote – very restricted accessibility of goods, services and opportunities for social interaction. 5. Very Remote – very little accessibility of goods, services and opportunities for social interaction. <p>For the AEDI, the location of children is classified according to the ASGS. The ASGS Remoteness Areas classification is an all of Australia view. As such, remote parts of Tasmania are remote because of their location in the context of Australia, not their location in Tasmania.</p>
Comparative result	<p>The difference between the proportion vulnerable in 2009 and 2012 is statistically significant if it exceeds the critical difference. See <i>Comparative Results</i> fact sheet for further information at www.aedi.org.au.</p>

Control for age variability at school entry	The ages of children in their first year of formal full-time school vary. As age is likely to have an impact on children's development, the AEDI results have controlled for age.
Critical difference	The critical difference is the minimum level of change required between the 2009 and 2012 AEDI results for the comparative result to be significant.
Developmentally 'at risk'	The cut-off for an AEDI score to represent at risk uses the baseline cut-offs from the 2009 AEDI data collection. In 2009 children who scored between the 10th and the 25th percentile of the national population were classified as at risk.
Developmentally 'on track'	The cut-off for an AEDI score to represent on track uses the baseline cut-offs from the 2009 AEDI data collection. In 2009 children who scored above the 25th percentile (in the top 75 per cent) of the national population were classified as on track.
Developmentally 'vulnerable'	The cut-off for an AEDI score to represent 'vulnerable' is based on the results from the 2009 AEDI data collection. In 2009 children who scored below the 10th percentile (in the lowest 10 per cent) of the national population were classified as vulnerable.
Developmentally vulnerable on one or more domain/s	The percentage of children in the community who have at least one or more AEDI domain score/s below the 10th percentile.
Developmentally vulnerable on two or more domains	The percentage of children in the community who have at least two or more AEDI domain scores below the 10th percentile.
EDI	The Canadian Early Development Instrument, on which the AEDI is based.

English as a second language (ESL)	Children are considered to have ESL status where English is not their first language and they need additional instruction in English; or, where English is not their first language, they have conversational English, but are not yet proficient in English.
Language Background Other Than English (LBOTE)	For the AEDI, children are considered LBOTE if they speak a language other than English at home and/or have English as a Second Language (ESL) status.
Median score	To calculate the median score, all individual AEDI scores are ranked from highest to lowest. The median score is the middle value.
Percentile	<p>The AEDI reports on the number of children scoring in the following percentile ranges:</p> <ul style="list-style-type: none"> • 0 to 10th percentile (developmentally vulnerable) • 10th to 25th percentile (developmentally at risk) • 25th to 50th percentile and above the 50th percentile (developmentally on track).
Population of children enrolled to begin school	<p>The population of Australian children enrolled to begin their first year of formal full-time school is data provided by the 2012 School Census, inclusive of government, Catholic and independent schools across Australia.</p> <p>This number is used to determine the extent to which AEDI is reflective of the entire population of Australian children starting school in 2012.</p>

Proficient in English	<p>Proficient in English refers to what is expected of the average monolingual English speaker in a similar phase of development. For the AEDI, children are considered proficient in English if teachers answered 'average' or 'good/very good' to the AEDI Checklist question: 'How would you rate this child's ability to use language effectively in English?'</p> <p>This question refers to the child's effective use of appropriate words and expressions at appropriate times, and the child's contribution to conversations. Effective use can be defined as using language that is sufficient to convey the desired message. Only basic grammatical concepts need to be adhered to, so long as the meaning is clear. Teachers were asked specifically to consider English language skills.</p>
Quintile	<p>Quintiles are used for the AEDI comparisons to SEIFA (see definition for SEIFA). The lowest quintile (Quintile 1) represents the most disadvantaged; the highest quintile (Quintile 5) represents the least disadvantaged.</p>
SEIFA	<p>Socio-Economic Indexes for Areas (SEIFA) were developed by the Australian Bureau of Statistics (ABS). They are a set of measures, derived from Census information, that summarise different aspects of socioeconomic conditions in an area. The Index for Relative Socio-Economic Disadvantage, which is used in AEDI results, looks at Census information that reflects disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations. Every geographical area in Australia is given a SEIFA score that ranks the 'disadvantage' of an area, compared with other areas in Australia.</p>

