

The EDI in Australia: a developmental process

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AEDI Partnership

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An Australian Government Initiative



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Overview

- EDI: from pilot to national rollout
- The status of early childhood development in Australia: results of the 2009 AEDI census
Sally Brinkman, Senior Epidemiologist, AEDI
- Adapting the EDI for indigenous children
Sven Silburn,



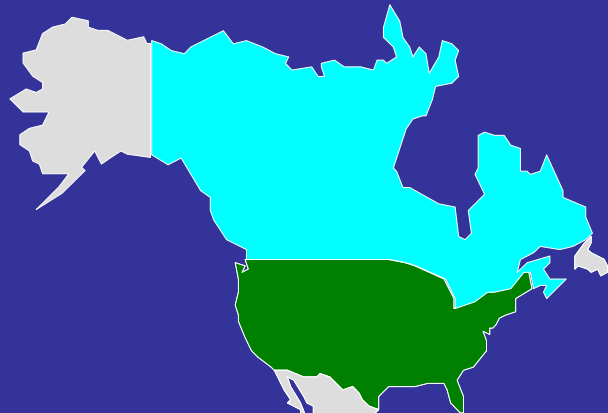
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Australia in context



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Canada Population:
34 million
0-4 years: 1.9 million



USA
Population:
309.5 million
0 – 4 years:
21 million



Australia
Population: 22.4 million
0 – 4 years: 1.3 million



Early childhood development



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What happens in the early years matters!!

“A society that is good to children is one with the smallest possible inequalities for children, with the vast majority of them having the same opportunities from birth for health, education, inclusion and participation”

Stanley, Richardson & Prior, 2005

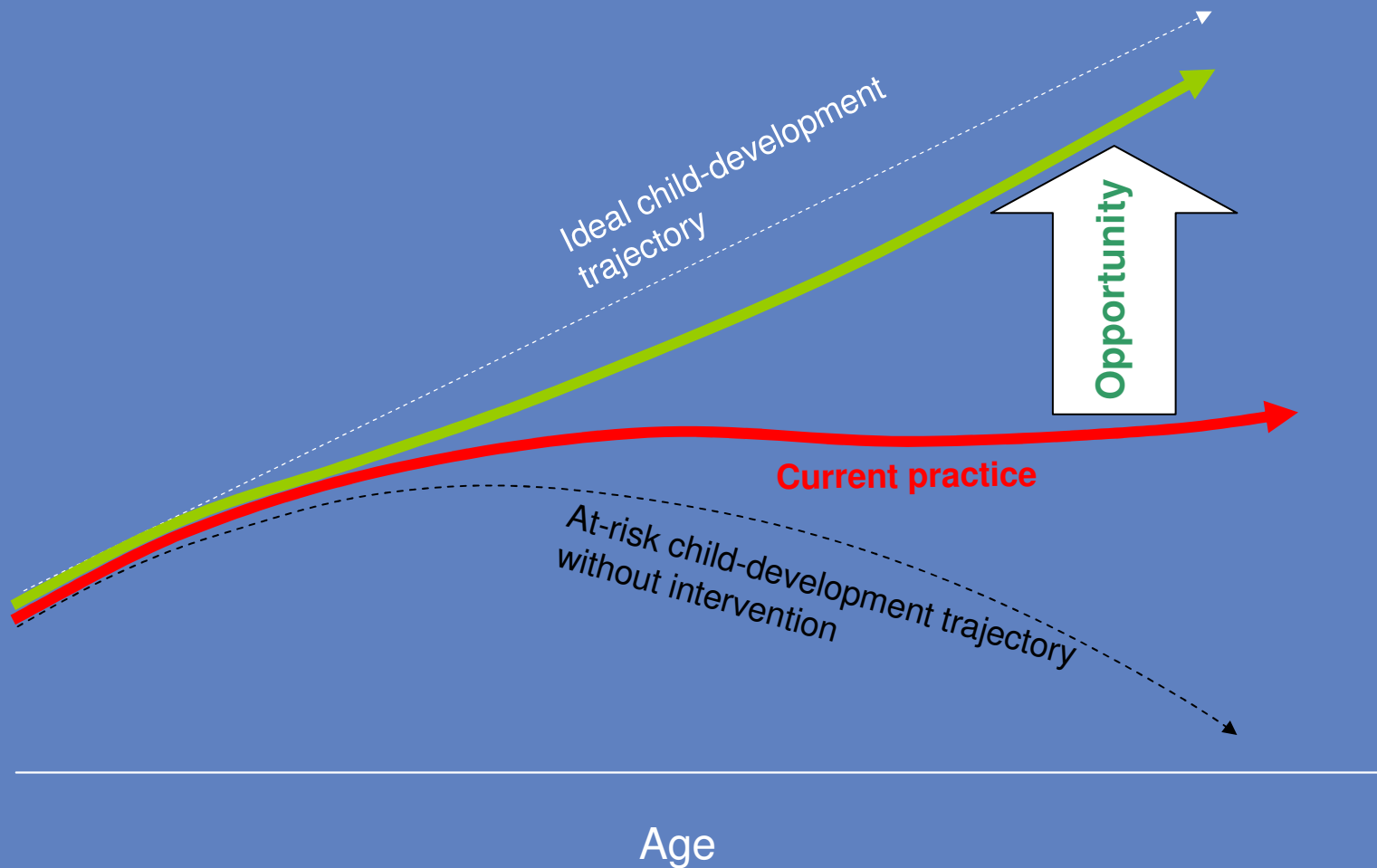


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Four converging strands of research...

- Brain development
 - Extreme sensitivity of developing brain to effects of caretaking environment
- Life course
 - What happens in early years impacts on outcomes later in life
- Ecology of early childhood
 - Families and environments matter
- Economics of human capital formation
 - Cost effectiveness of early childhood programs

Developmental health - opportunity



Data and policy context



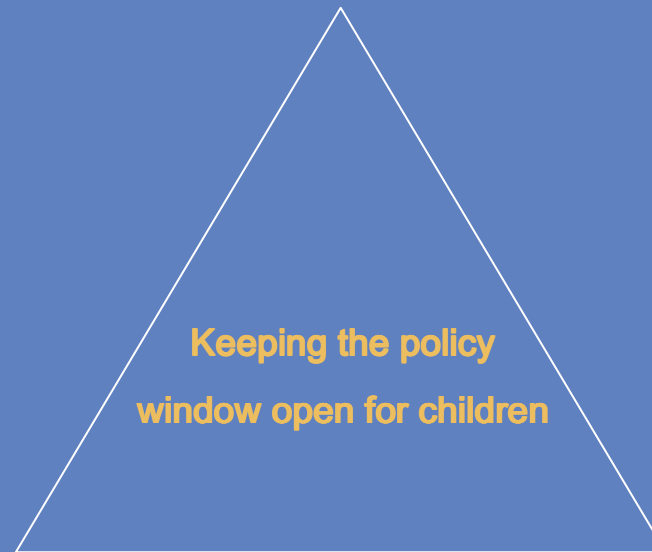
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Creating sustainable policy

Recognition of the
problem

DATA

Identification of the
solution through
policy



Political imperative

National policy context: data

- Council Of Australian Governments (COAG):
 - Human Capital Reform agenda (2006)¹
 - The AEDI is a national progress measure of early childhood development
- Headline Indicators for Australia's Children (2008)²:
 1. Smoking in Pregnancy
 2. Infant Mortality
 3. Birth Weight
 4. Breastfeeding
 5. Immunisation
 6. Overweight and Obesity
 7. Dental Health
 8. Social and Emotional Well-Being
 9. Injuries
 10. Attending Early Childhood Education Programs
 11. Transition to Primary School
 12. Attendance at Primary School
 13. Literacy
 14. Numeracy
 15. Teenage Births
 16. Family Economic Situation
 17. Shelter
 18. Child Abuse and Neglect
 19. Family Social Network

1. www.coag.gov.au

2. <http://www.aihw.gov.au/chi/index.cfm>

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National policy context: data

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 - Human Capital Reform agenda (2006)
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 - Headline Indicators for Australia's Children:
 - Proportion of children entering school with the basic skills for life and learning (AEDI)
1. Smoking in Pregnancy
 2. Infant Mortality
 3. Birth Weight
 4. Breastfeeding
 5. Immunisation
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The EDI in Australia: Putting ECD on the map



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Timeline of the EDI in Australia

- 2002-2003 North Metro Perth EDI Study (2002 n=200, 2003 n=4500)
- 2003 National meeting of experts to consider whether Australia needed an individual measure or a population measure of ECD. Resounding endorsement for a population measure
- 2004-2008 Development and piloting of the AEDI, overwhelming success for communities (n> 50,000)
- 2007-2008 Agreement by COAG for the AEDI as a national progress measure of ECD for Australia
- 2009 National AEDI Census in recognition of the need for all communities to have local ECD information to improve outcomes for children



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Completed (2004-2008)

- Development of an Australian adaptation of Canadian EDI
- Development of AEDI web-based data entry system
- Successful trial in 60 communities across Australia
- Evaluation of community implementation
- AEDI Validity Study

In progress (2009-2010)

- Re-run of AEDI in 60 communities to develop progress over time methodologies
- Indigenous AEDI Adaptation Study
- Predictive AEDI Validity Study
- Cultural diversity Study
- National rollout of the AEDI



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Maintaining the science: reliability and validation studies

- Repeat testing intra rater reliability
- Construct and concurrent validity
- Predictive validity
- Rasch psychometric property analyses
- Indigenous and minority culture adaptation studies
 - inter rater studies



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AEDI Advice and Support

- Technical Advisory Group
- Mapping Advisory Group
- Strategic Policy Committee
- State Coordinators Group
- IT Support Committee
- Communication Committee
- AEDI in Schools Study Advisory Group
- AEDI Indigenous Reference Group
- LBOTE Advisory Group



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National implementation:

- National data collection from 1 May to 31 July 2009
- Data collected by teachers through a secure web based data entry system
- Schools provided with funding of 1 hour for teacher training and 30 minutes per completed checklist
- Data analysed and reported based on where children live
- AEDI being re-run in small communities in 2010.



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2009 snapshot of Australia's children: a developmental census of five year-olds

Northern Territory: 3,255



Total = 261,203 children (97.5% of estimated population)



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National Numbers

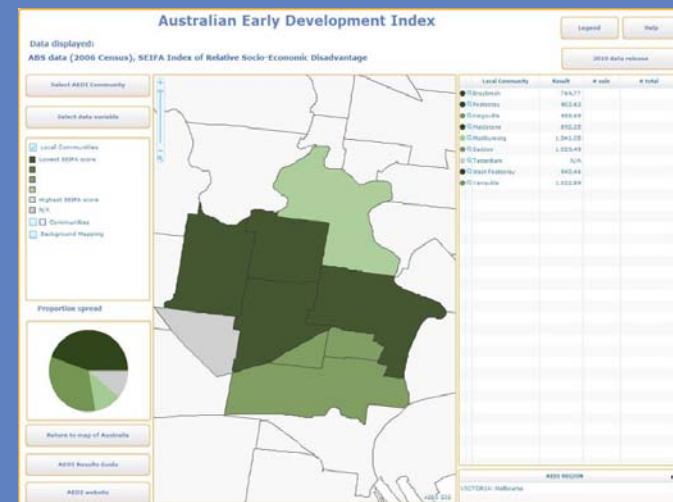
- Data collected on 261, 203 children (97.5%).
- 15,528 teachers from 7,423 schools (95.6% of all schools) participated.
- Teacher feedback (86.4% of all teachers, n=13,815):
 - 90.1% found AEDI easy to complete
 - 63.9% thought AEDI will be beneficial to their work
 - 74.8% felt the AEDI will assist their community to better understand the health and development of children in their area



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Reporting the AEDI results

- **National results:**
A Snapshot of Early Childhood Development in Australia (Dec 2009)
- **Community results:**
AEDI Community Maps (Dec 2009)
AEDI Community Profiles (May 2010)
- **School results:**
AEDI School Profiles (Dec 2009)



Supporting the AEDI Implementation and Results

The screenshot shows the AEDI Results Guide website. At the top left is the AEDI logo and the text "Australian Early Development Index". A navigation menu includes "Go to AEDI Results", "Key Questions", "Resources", "Glossary", and "Feedback". A dropdown menu under "Key Questions" lists: "Question to go here", "Another one to go here", "When one is highlighted it looks like", "Then there is one here", and "And just one more". A prominent orange banner reads "Results Guide". Below this, a welcome message states: "Welcome to the AEDI Results Guide. The Australian Early Development Index (AEDI) is a population measure of children's development. The three parts of the AEDI Results Guide will explain how to understand and then use the AEDI results in your community. Click the circle '1: Understanding' to learn about the AEDI and how to understand your community's results." Three large circular buttons represent the guide's sections: "2 Engaging" (blue), "1 Understanding" (orange), and "3 Planning" (blue). The "Engaging" button lists "Engaging your community" and "Coming in March 2010". The "Understanding" button lists "About the AEDI", "What influences children's development", and "How to understand the AEDI results". The "Planning" button lists "Planning actions in your community" and "Coming in March 2010". Images of three children and a toddler are shown. A "START" button with a right arrow is at the bottom right. The footer contains logos for "An Australian Government Initiative", "Child Health Research", "Murdoch Childrens Research Institute" (with the tagline "Smarter Kids. Smarter Future."), and "The Royal Children's Hospital Melbourne Centre for Community Child Health".

AEDI
Australian Early Development Index

Go to AEDI Results | Key Questions | Resources | Glossary | Feedback

Question to go here
Another one to go here
When one is highlighted it looks like
Then there is one here
And just one more

Results Guide

Welcome to the AEDI Results Guide. The Australian Early Development Index (AEDI) is a population measure of children's development. The three parts of the AEDI Results Guide will explain how to understand and then use the AEDI results in your community. Click the circle '1: Understanding' to learn about the AEDI and how to understand your community's results.

2 Engaging
> Engaging your community
Coming in March 2010

1 Understanding
> About the AEDI
> What influences children's development
> How to understand the AEDI results

3 Planning
> Planning actions in your community
Coming in March 2010

START ➔

An Australian Government Initiative | Child Health Research | Murdoch Childrens Research Institute | The Royal Children's Hospital Melbourne Centre for Community Child Health

Changing the social discourse on early childhood development

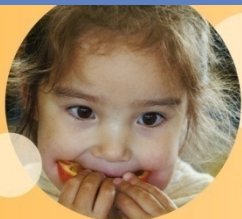


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National policy thinking

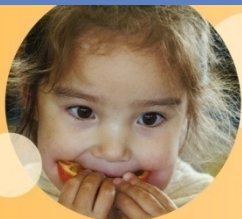
➤ COAG:

- Early childhood development: National ECD Strategy
- Education: addressing disadvantage, inequality and performance
- Health: disease prevention-healthy living



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ECEC: participation



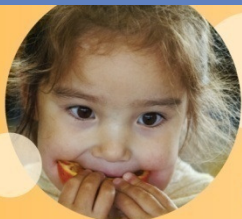
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Figure 2.3: Proportion of children enrolled in a preschool program (2008 and 2009 data)*



Source: Bilateral agreements between the Commonwealth and each State and Territory on achieving universal access to early childhood education. These agreements are made as part of the National Partnership Agreement on Early Childhood Information. The National Partnership Agreement on Early Childhood Education and the Bilateral Agreements on Achieving Universal Access to Early Childhood Education can be accessed from http://www.deewr.gov.au/EarlyChildhood/Policy_Agenda/ECUA/Pages/home.aspx

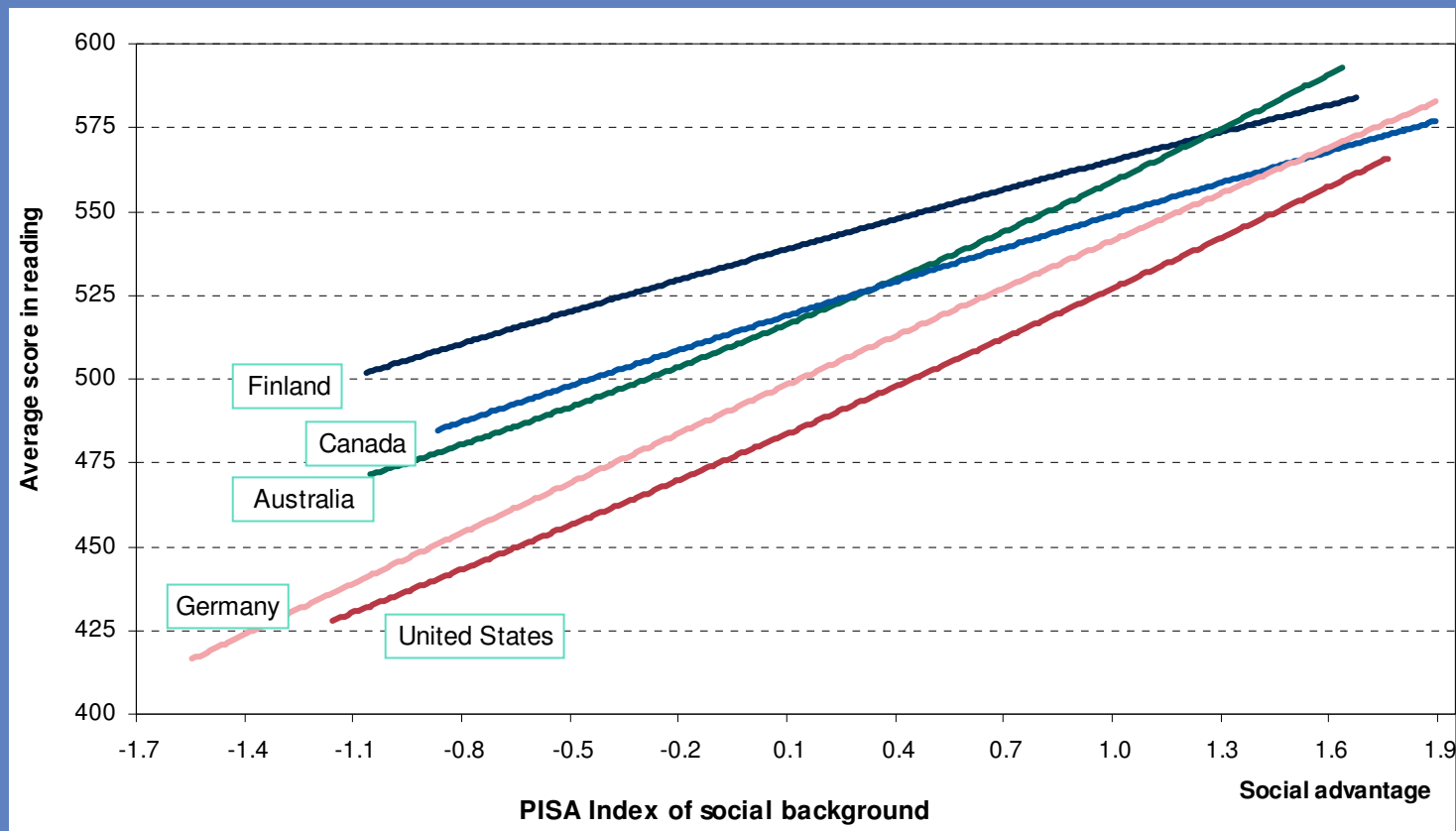
Education: inequality and performance



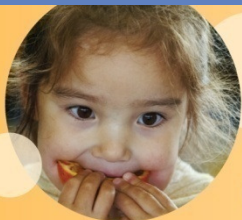
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Social Background and Literacy: International Comparisons

Relationship between social background and achievement in PISA 2003 reading



Healthy living



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Table 22.1: Australian children aged 2–12 years by BMI category, 2007 (per cent)

	Age group	Underweight	Normal	Overweight (but not obese)	Obese	Overweight or obese
Boys	2–4 years	4.8	76.0	16.2	3.1	19.3
	5–9 years	5.2	76.0	13.1	5.8	18.8
	10–12 years	5.4	68.3	18.8	7.5	26.2
	2–12 years	5.2	73.8	15.6	5.5	21.1
Girls	2–4 years	4.2	76.1	16.2	3.6	19.8
	5–9 years	3.6	74.5	15.7	6.3	21.9
	10–12 years	6.0	63.3	22.9	7.8	30.7
	2–12 years	4.4	71.9	17.8	6.0	23.7
Children	2–12 years	4.8	72.8	16.7	5.7	22.4

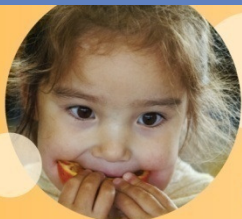
Source: 2007 Australian National Children's Nutrition and Physical Activity Survey, unpublished data.

A Picture of Australia's Children 2009



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Local community thinking



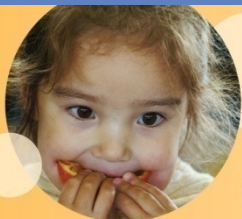
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Not everything that is faced
Can be changed
But nothing can be changed
Until it is faced

James Baldwin 1924-87



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www.aedi.org.au



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