

MEDIA RELEASE

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Latest PISA results ‘cause for concern’, says ACER

- **Australian mathematics and reading achievement in decline**
- **Significant gaps in student achievement by gender, Indigenous status, location and wealth**

3 December 2013: A report released today by the Australian Council for Educational Research (ACER) reveals the mathematics and reading skills of Australian 15-year-olds have slipped backwards over the past decade.

Releasing the report, *PISA 2012: How Australia measures up*, ACER’s Director of Educational Monitoring and Research, Dr Sue Thomson said, “Despite still performing above the OECD average, Australia’s backwards slide in achievement shows that there is some cause for concern.”

The 2012 Programme for International Student Assessment (PISA) – managed by ACER for the Organisation for Economic Cooperation and Development (OECD) – measured how well 15-year-olds from across the globe are prepared to use their knowledge and skills in mathematics, reading and science to meet real-life challenges.

A combined total of more than half a million students from 65 countries and economies took part in PISA 2012, including a nationally representative sample of around 14 500 Australian students from 775 schools. Australia has now participated in all five cycles of PISA since its inception in 2000.

Comparing results internationally, Dr Thomson said that Australia performed equal 17th in mathematics, equal 8th in science and equal 10th in reading, after accounting for insignificant differences between countries and economies.

Table 1: Number of countries/economies

	Mathematics	Science	Reading
Significantly higher than Australia	16	7	9
At a similar level to Australia	7	11	11
Significantly lower than Australia	41	46	44

Australia’s mean mathematical literacy performance declined significantly between PISA 2003 and PISA 2012, by the equivalent of more than half a year of schooling. Twelve other countries, all OECD countries, have also seen a significant decline in their mathematical literacy performance between PISA 2003 and PISA 2012. The largest decline occurred in Sweden, followed by Finland, New Zealand, Iceland then Australia.

Dr Thomson said Australia’s falling achievement can partly be attributed to a decline in the proportion of high performing students in mathematical literacy and an increase in the proportion of low performing students.

“Australia must get the lowest achievers up to an acceptable standard for a wealthy first-world country and extend the higher achievers to lead the country in terms of innovation and development,” Dr Thomson said.

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“While the maths and reading skills of Australian students have been declining, countries such as Poland and Ireland have improved their performance, enabling them to leapfrog over Australia. Poland has been steadily improving since 2000 and is now ahead of Australia in maths, while Ireland has successfully reversed its own downward trend and now outperforms Australia in reading,” she said.

According to Dr Thomson, PISA 2012 shows that Australia is not achieving its goal of providing all students with similar opportunities to benefit from education. Significant gaps in achievement remain between Australian students by gender, Indigenous status, location and wealth.

In terms of wealth, a difference equivalent to around two-and-a-half years of schooling separates the mathematical, reading and scientific literacy scores of students in the highest socioeconomic quartile and students in the lowest socioeconomic quartile.

In terms of gender, between PISA 2003 and PISA 2012 Australia’s mathematical literacy performance declined more for girls than it did for boys. While the overall PISA mathematics score for Australia is still higher than the OECD average, the score for girls has dropped so it is equal to the OECD average. Further, student questionnaire responses collected as part of PISA reveal that Australian girls hold much more negative beliefs than Australian boys about mathematics and learning mathematics.

“Australia has slipped backwards to the type of gender disparity that was seen decades ago, and the performance scores of girls coupled with a number of particularly negative motivational attitudes puts Australia further away from providing all students with the same educational opportunities,” Dr Thomson said.

“Improving quality and equity requires a long-term view and a broad perspective,” Dr Thomson said. “PISA has alerted the Australian school system to a decline in reading literacy achievement and now a significant decline in mathematical literacy achievement – we must act to stop the slide.”

PISA has measured trends in mathematics, reading and science achievement every three years since 2000. PISA 2012 marked Australia’s fifth assessment cycle, following participation in 2000, 2003, 2006 and 2009.

ACER conducts PISA in Australia on behalf of the OECD with funding from the Commonwealth and state and territory governments.

The Australian national report, *PISA 2012: How Australia measures up*, by Sue Thomson, Lisa DeBortoli, and Sarah Buckley, and further information about the PISA assessment is available from the Australian PISA website < www.acer.edu.au/ozpisa >.

The Australian report was released to coincide with the launch of the international PISA study by the OECD in Paris.

Full report

[PISA 2012: How Australia measures up](#) (PDF: 386 pages, 16.5 MB)

Sue Thomson, Lisa De Bortoli, Sarah Buckley

PISA in Brief

[Highlights from the full Australian report: PISA 2012: How Australia measures up](#) (PDF: 28 pages, 1.22 MB)

Sue Thomson, Lisa De Bortoli, Sarah Buckley

Video and audio grabs

Broadcast-quality video and audio grabs of Dr Sue Thomson are available from

< www.acer.edu.au/ozpisa/pisa2012 >

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