

Does Australia have a World-Class Education System? Evidence from PISA 2006

What is PISA?

The Programme for International Student Assessment (PISA) is an international assessment of the Reading Literacy, Mathematical Literacy and Scientific Literacy skills of 15 year olds conducted by the Organisation for Economic Cooperation and Development (OECD). The assessment is conducted every three years to provide regular and reliable information on educational outcomes in participating countries, and to monitor trends over time.

Who participates?

All OECD countries and a number of non-OECD countries participate in PISA. In the first three cycles of PISA, the numbers of participating countries were: 2000 (32), 2003 (41), 2006 (57). In 2006, almost 400,000 students were tested worldwide.

In Australia, 356 schools and 14,170 students participated in 2006. A representative sample of 15 year olds was drawn to include all states and territories and government, Catholic and independent schools. Students were tested between late-July and early September 2006.

What is tested?

In each cycle, PISA tests students in a 'major domain' and also in the minor domains. The major domains in the first three cycles were: 2000 (Reading Literacy), 2003 (Mathematical Literacy), 2006 (Scientific Literacy). The main focus of the reports being released in December 2006 is thus on Scientific Literacy, with a minor focus on Reading Literacy and Mathematical Literacy.

The goal of PISA is to measure competencies that will equip students to participate productively and adaptively in life beyond school. The emphasis is on students' abilities to apply their knowledge and skills to real-life situations and problems. The word 'literacy' is used to reflect this focus on the application of reading, mathematical and scientific knowledge and skills. Students are expected to analyse problems, apply relevant concepts and principles, and effectively communicate what they have done.

What is reported?

PISA compares average performances across all participating countries. It also compares the distributions of students' results (for example, the percentages of students achieving very high scores). PISA sets a 'baseline' proficiency level and reports the percentage of students in each country achieving this baseline. It also reports the percentages of students achieving higher proficiency levels.

In Australia, these results are reported for each state and territory separately.

Results are reported for different sub-groups of the student population: boys, girls, Indigenous students, non-Indigenous students, students living in metropolitan, provincial and remote locations, students whose families have been in Australia for different lengths of time, and students from different socioeconomic backgrounds.

PISA compares students' performances from one cycle to the next, enabling changes and trends within a country to be monitored over time.

Questionnaires are used to collect background information, including information about students' attitudes, engagement and motivations.

PISA also compares the strength of the relationship between student achievement and socioeconomic background in the participating countries.