TRENDS IN READING

Since the PISA surveys have now been conducted for a decade, it is not only possible to see not just where countries stand in terms of student performance but also how learning outcomes have changed since the assessments were first administered. Every three years, PISA measures student knowledge and skills in reading, mathematics and science, covering each of these areas once as a major focus and twice as a minor area across a nine-year cycle. The 2009 round marks the first time that reading has been re-assessed in detail.

Definition

Only 29 countries with comparable results in both the 2000 and 2009 PISA reading assessments, and 31 countries with comparable results in both the 2003 and 2009 PISA mathematics assessments are discussed below. For reading, the reference point is the OECD average for the 26 OECD countries that participated in both PISA 2000 and PISA 2009. For mathematics, the main reference point is the OECD average for the 28 OECD countries that participated in both PISA 2003 and PISA 2009.

Level 2 is considered the baseline level of proficiency in reading, at which students begin to demonstrate the competencies that will enable them to participate effectively and productively in life. PISA tasks at this level may involve comparisons or contrasts based on a single feature in a text. They may also require students to make a comparison or several connections between the text and outside knowledge by drawing on personal experience and attitudes. Top performers are those students who attain proficiency Level 5 or above, the highest levels of performance.

Comparability

Leading experts in countries participating in PISA advise on the scope and nature of the assessments, with final decisions taken by OECD governments. Substantial efforts and resources are devoted to achieving cultural and linguistic breadth and balance in the assessment materials. Stringent quality assurance mechanisms are applied in translation, sampling and data collection.

Over 520 000 15-year-old students in 75 participating countries were assessed in PISA 2009. Because the results are based on probability samples, standard errors are shown in the tables.

Overview

Between PISA 2000 and PISA 2009, reading performance improved in 9 countries, deteriorated in 4 and was unchanged in 16. Among the countries that performed above the OECD average in 2000, Korea's reading scores improved, while those of Australia, the Czech Republic, Ireland and Sweden declined; both Ireland and Australia had been among the top five performers in PISA 2000. Chile and Indonesia show the greatest improvement in reading scores; both performed far below the OECD average in 2000.

In most countries where reading performance improved overall, girls' performance improved more than boys' did. In addition, improvements in mean country scores were more often driven by a reduction in the proportion of low-performing students than by an increase in the proportion of top performers. The percentage of students who did not reach the baseline proficiency Level 2 fell in 10 countries. However, only six countries showed a rise in the number of students reaching Level 5 or above; and in only Israel, Japan and Korea was this rise greater than one percentage point.

The graph shows changes in both reading and mathematics performance. Between PISA 2003 and PISA 2009, mathematics performance improved in 7 countries, deteriorated in 9, and was unchanged in 15. All countries that showed better performance in mathematics were well below the OECD average in both 2003 and 2009, except Germany, which was below the OECD average in 2000 but above it in 2009. All of the declines in mathematics performance occurred in countries that had scored at or above the OECD average in 2003. Despite a slight drop, the Netherlands remains among the highest-scoring countries in the PISA mathematics survey. In Australia, Belgium, Denmark and Iceland, mean scores also remained above the OECD average in 2009. However, in the Czech Republic, France and Sweden, mean performance in mathematics declined from above-average levels in 2003 to around the OECD average in 2009. In Ireland, performance declined from around the OECD average to below average.

Sources

- OECD (2010), *PISA 2009 Results: Learning Trends: Changes in Student Performance Since 2000 (Volume V)*, PISA, OECD Publishing.
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- OECD (2007), *PISA 2006: Science Competencies for Tomorrow's World: Volume 1: Analysis*, PISA, OECD Publishing.

Further information

Statistical publications

- OECD (2010), *PISA 2009 at a Glance*, OECD Publishing.

Methodological publications

- OECD (2009), *PISA 2009 Assessment Framework: Key Competencies in Reading, Mathematics and Science*, PISA, OECD Publishing.

Online databases

- *OECD PISA Database*.

Websites

- Programme for International Student Assessment (PISA), *www.pisa.oecd.org*.

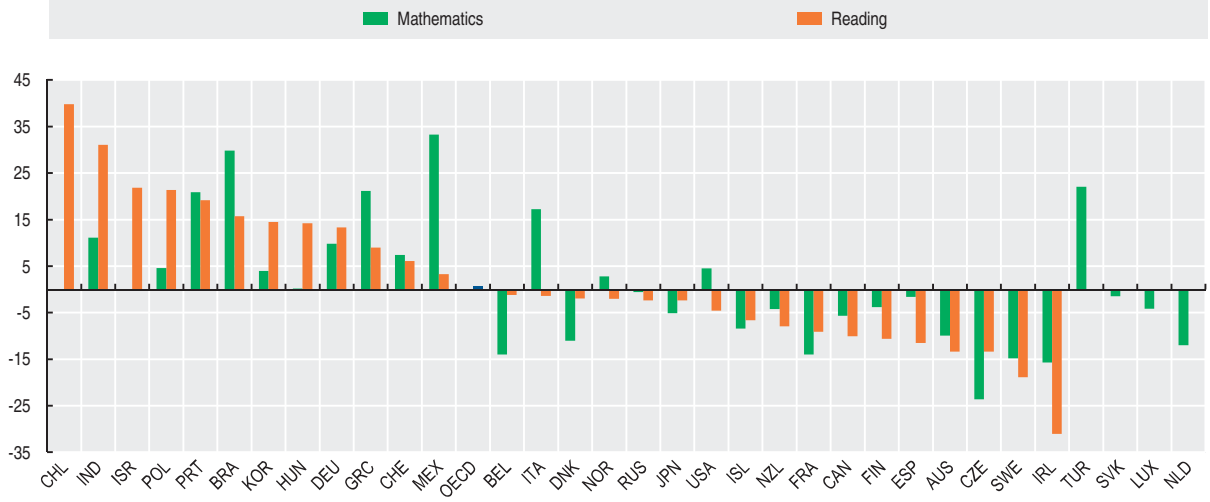
Changes in reading performance

	Mean score in reading	All students	Males	Females	Share of students below proficiency Level 2	Share of students at proficiency Level 5 or above
	2009	Changes over the period 2000-09				
Australia	515	-13.4	-16.5	-13.4	1.8	-4.9
Belgium	506	-1.2	0.3	-5.4	-1.2	-0.8
Canada	524	-10.1	-11.7	-9.6	0.7	-4.0
Chile	449	39.8	42.1	39.5	-17.6	0.8
Czech Republic	478	-13.4	-17.1	-6.1	5.6	-1.9
Denmark	495	-2.0	-5.1	-1.1	-2.7	-3.4
Finland	536	-10.6	-11.7	-7.9	1.2	-4.0
France	496	-9.1	-15.3	-3.9	4.6	1.1
Germany	497	13.3	10.3	15.4	-4.2	-1.2
Greece	483	9.0	3.1	13.2	-3.1	0.6
Hungary	494	14.2	10.9	17.1	-5.1	1.0
Iceland	500	-6.6	-10.4	-5.9	2.3	-0.5
Ireland	496	-31.0	-36.5	-26.0	6.2	-7.3
Israel	474	21.8	8.6	35.3	-6.7	3.3
Italy	486	-1.4	-5.4	2.2	2.1	0.5
Japan	520	-2.4	-6.2	3.0	3.5	3.6
Korea	539	14.5	4.0	25.3	0.0	7.2
Mexico	425	3.3	1.2	5.8	-4.0	-0.5
New Zealand	521	-7.9	-8.3	-8.4	0.6	-3.0
Norway	503	-2.1	-5.5	-1.4	-2.5	-2.8
Poland	500	21.4	14.3	27.8	-8.2	1.3
Portugal	489	19.2	12.2	25.6	-8.6	0.6
Spain	481	-11.5	-14.4	-9.6	3.3	-0.9
Sweden	497	-18.9	-23.6	-15.0	4.9	-2.2
Switzerland	501	6.1	1.4	10.2	-3.6	-1.1
United States	500	-4.6	-1.9	-5.7	-0.3	-2.4
Brazil	412	15.7	8.9	20.9	-6.2	0.8
Indonesia	402	31.1	23.0	39.3	-15.2	..
Russian Federation	459	-2.4	-6.0	0.5	-0.1	0.0

StatLink http://dx.doi.org/10.1787/888932506495

Performance on the reading and mathematics scales

Changes over the period 2000-09 for reading scale and 2003-09 for mathematics scale



StatLink http://dx.doi.org/10.1787/888932506514