PISA IN FOCUS 2

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Improving Performance: Leading from the Bottom

- Among the 13 countries that showed improvements in average reading performance since 2000, most can attribute those gains to large improvements among their lowest-performing students.
- In most of these countries, the gap in reading scores between the highest- and lowest-performing students narrowed; and in some countries the impact of socio-economic background on performance weakened between 2000 and 2009.
- In almost all of these countries, girls' reading performance improved, while boys' reading performance improved in only five countries.

All countries can improve their students' reading performance.

Since the PISA 2000 and 2009 surveys both focused on reading, one can track in detail how student reading performance has changed over that period. Among the 26 OECD countries with comparable results in both assessments, Chile, Germany, Hungary, Israel, Korea, Poland, Portugal, and the partner countries Albania, Brazil, Indonesia, Latvia, Liechtenstein and Peru all show overall improvements in reading performance. The fact that such a diverse group of countries succeeded in raising the level of their students' performance in reading indicates that improvement is possible regardless of a country's cultural context or where it starts out from. For example, Korea was already among the best-performing countries in 2000 and it improved further by 2009, Poland moved from below the OECD average to above it, and Chile rose from a relatively low performance rank to one that is much closer to that of other OECD countries.

In nearly all the countries that showed improved performance during the period, the percentage of low performers dropped, meaning that the number of students who scored below the PISA baseline reading proficiency Level 2 was significantly smaller in 2009 than in 2000. In many countries this meant that progress was made towards achieving greater equality in learning outcomes during the period. While the percentage of low performers changed only slightly, on average across OECD countries, it dropped from nearly half (48%) of all 15-year-old students to below one-third (31%) in Chile, from 26% to less than 18% in Portugal, and from 23% to 15% in Poland, below the OECD average. Korea's proportion of low performers did not change, but that share was already one of the lowest in 2000, with nearly all Korean students demonstrating reading proficiency above the baseline level.

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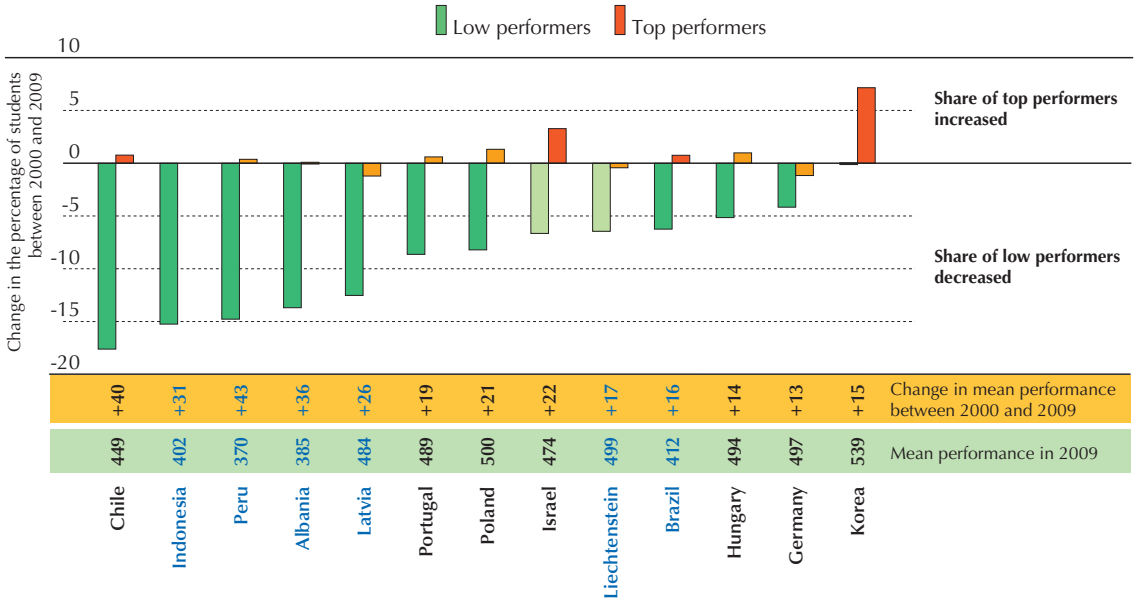
Improvements among the lowest-performing students do not have to be realised at the expense of the highest-performing students…

In none of the countries where the lowest-performing students improved did the highest-performing students show a decline in their performance. Indeed, in Israel and the partner countries Albania and Peru, students at all levels improved. In Chile and Indonesia, the highest-performing students improved by a slightly lesser degree than the lowest-performing students; while in Germany, Poland, Portugal and the partner country Latvia, reading performance among the highest performers remained largely the same during the period, while that of the lowest performers improved.

Korea and, to some extent, the partner country Brazil, bucked the general trend. Their highest-performing students improved while their lowest-performing students maintained their level of performance. In fact, Korea more than doubled the percentage of its students who attained PISA reading proficiency Level 5 or higher. This increase was mainly due to improvements among girls. Few students in Korea perform below the baseline proficiency Level 2 in reading, and differences in student performance remained narrow.

Change in the percentage of low and top performers in reading since 2000

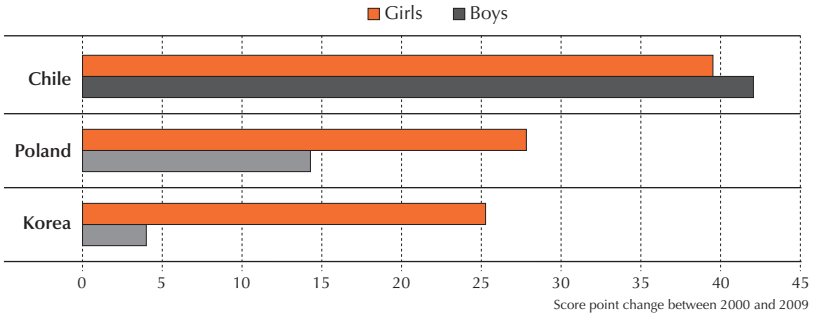


Note: Values that are statistically significant are marked in a darker tone.
Source: OECD, *PISA 2009 Database*, Tables V.2.1 and V.2.2.

…and improvements among low achievers usually help to make learning outcomes more equitable.

In Chile, Germany, Hungary, Poland, Portugal, and the partner countries Indonesia, Latvia and Liechtenstein, overall performance improved while the gap between the highest- and lowest-performing students narrowed. In all of these countries, that gap is now below or close to the OECD average. In addition, PISA 2009 results show that the impact of a student's socio-economic background on his or her performance weakened significantly in Chile and Germany, and in the partner countries Albania and Latvia. Although the impact of socio-economic background on performance strengthened in Korea, it remains weaker there than in other OECD countries.

Reading performance improvement among boys and girls



Note: Score point changes that is statistically significant are marked in a darker tone.
Source: OECD, *PISA 2009 Database*, Tables V.2.4.

The gender gap in reading performance became even more firmly entrenched between 2000 and 2009…

Girls outperform boys in reading in all countries, and have done so since the first PISA survey in 2000. The widening of the gender gap in reading performance over the years results from either greater improvements among girls or larger declines among boys. For example, in Korea, girls' scores in the PISA reading assessment improved over the period while boys' scores remained largely unchanged. In Poland, girls' reading scores improved almost twice as much as boys' scores. Chile is one of the rare countries where both boys *and* girls improved over the period; and Chile also has one of the narrowest gender gaps in reading performance among all the countries and economies that participate in PISA.

In general, girls' reading performance improved substantially in 13 countries, while boys' performance improved in only five countries. Girls' performance declined in only two countries, while boys' performance declined in eight countries. The increase in the share of boys who do not attain the PISA baseline reading proficiency Level 2 was accompanied by a drop in the proportion of boys – particularly those from disadvantaged families – who read for pleasure. These results signal the need for parents, teachers and policy makers to find creative ways to entice boys to read more, both at home and at school.

Low performers are those students who do not attain the PISA baseline proficiency Level 2 in reading. At Level 2, a student is asked to determine the main idea in a text, understand relationships or infer meaning when the information is not prominent. **High performers** are those students who attain proficiency Level 5 or above. At Level 5, students must have a full and detailed understanding of a text whose content or form is unfamiliar.

A country's **lowest-performing students** are those whose scores are lower than the scores of 90% of their peers. A country's **highest-performing students** are those whose scores are higher than the scores of 90% of their peers.

…and disadvantaged boys remain particularly vulnerable.

In most countries, students who are poor performers are primarily boys from socio-economically disadvantaged backgrounds. Results from PISA indicate that this group is far from equipped with the skills and competencies needed to participate fully in society. Indeed, disadvantaged boys barely benefited from the substantial improvements in average reading performance among low performers that is seen in several countries. Even in Korea, a country with a strong overall performance and which improved significantly between 2000 and 2009, socio-economically disadvantaged boys show an average performance of 483 score points; in Chile, Portugal, Poland, Israel and Hungary – all countries where the percentage of low perfomers decreased between 2000 and 2009 – socio-economically disadvantaged boys perform well below other groups. And, on average across OECD countries, the gender gap is wider among socio-economically disadvantaged students than among advantaged students.

There is no one-size-fits-all policy to boost performance among low achievers.

A variety of policy changes (Chile, Portugal), policies targeted at disadvantaged, mainly immigrant, students (Germany) and sweeping education reform (Poland) all helped in their own ways, in their specific contexts, to raise performance levels among low achievers. PISA results suggest that the countries that improved the most, or that are among the top performers, are those that establish clear, ambitious policy goals, monitor student performance, grant greater autonomy to individual schools, offer the same curriculum to all 15-year-olds, invest in teacher preparation and development, and support low-performing schools and students.

The bottom line: Improving reading performance among low achievers is not only possible in every country, it is essential for reducing inequalities in learning outcomes and improving a country's overall performance in reading.

For more information

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See *PISA 2009 Results, Learning Trends: Changes in Student Performance Since 2000 (Volume V)*

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