

3. LEARNING TO LEARN

What learning strategies help students perform better?

- Students who know how best to summarise information that they read can perform much harder reading tasks, on average, than those who do not.
- Students also perform better when they know which strategies help them to understand and remember information, and by adopting strategies to guide their own learning.
- Having a deep understanding of reading strategies, and using those strategies, are even stronger predictors of reading performance than whether students read widely for pleasure.

What it means

PISA measures the extent to which students adopt certain strategies for reading and learning, and how aware they are of which strategies work best. The results support research showing that by consciously adopting effective learning strategies, students will learn more effectively than if they just follow teachers' instructions. This underlines the importance for parents, teachers and schools to provide students with the tools to become effective readers and learners.

Findings

PISA results show that students perform better in reading, on average, if they understand and use certain strategies for learning. In the order of the strength of this link, reading performance tends to be higher among:

- Students who know what strategies to adopt to summarise what they read. On average across OECD countries, the quarter of students who could most accurately identify which of these strategies work best scored 107 points (one-and-a-half proficiency levels) higher than the quarter with the least awareness of effective strategies.
- Students who know what strategies to adopt to understand and remember information. In this case, the performance gap between the top and bottom quarters of students is 90 score points.
- Students who use strategies to control their own learning, based on their reports of their own behaviour. The performance gap between students who use these kinds of strategies and those who do not is 68 points.
- Students who reported using strategies to “elaborate” what they read, by relating it to what they already know. The average gap was just 14 points, and significant in 40 of the 65 countries that participated in PISA.

When measured by the awareness of strategies to summarise information, the top quarter of students read at least one proficiency level (72 score points)

higher, on average, than the bottom quarter in all OECD countries and in all but six partner countries. The gap is much greater in some countries, exceeding 120 score points in Austria, Belgium, the Czech Republic, Japan, Luxembourg, New Zealand and Switzerland.

Students who show the greatest awareness of strategies to summarise, understand and remember information are classified as “deep” readers and learners in the PISA analysis. Students who read a variety of material for enjoyment are classified as “wide” readers. The analysis shows that students who read deeply and widely perform particularly well. However, students who are wide readers but are unaware of effective learning strategies tend to perform below average. On the other hand, deep readers show around average performance even when they rarely read for enjoyment.

Definitions

Students were rated on their awareness of effective reading and learning strategies according to how well they could rank the value of various practices in the “correct” order, as assessed by reading experts. Examples of such statements for summarising strategies are: “I carefully check whether the most important facts in the text are represented in the summary” (most effective); and “I try to copy out accurately as many sentences as possible” (least effective). This testing of students’ awareness of strategies was separate from questions about their actual practices in using them. For example, students were rated on their use of control strategies based on whether they reported doing such things as figuring out in advance what they need to learn.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

Going further

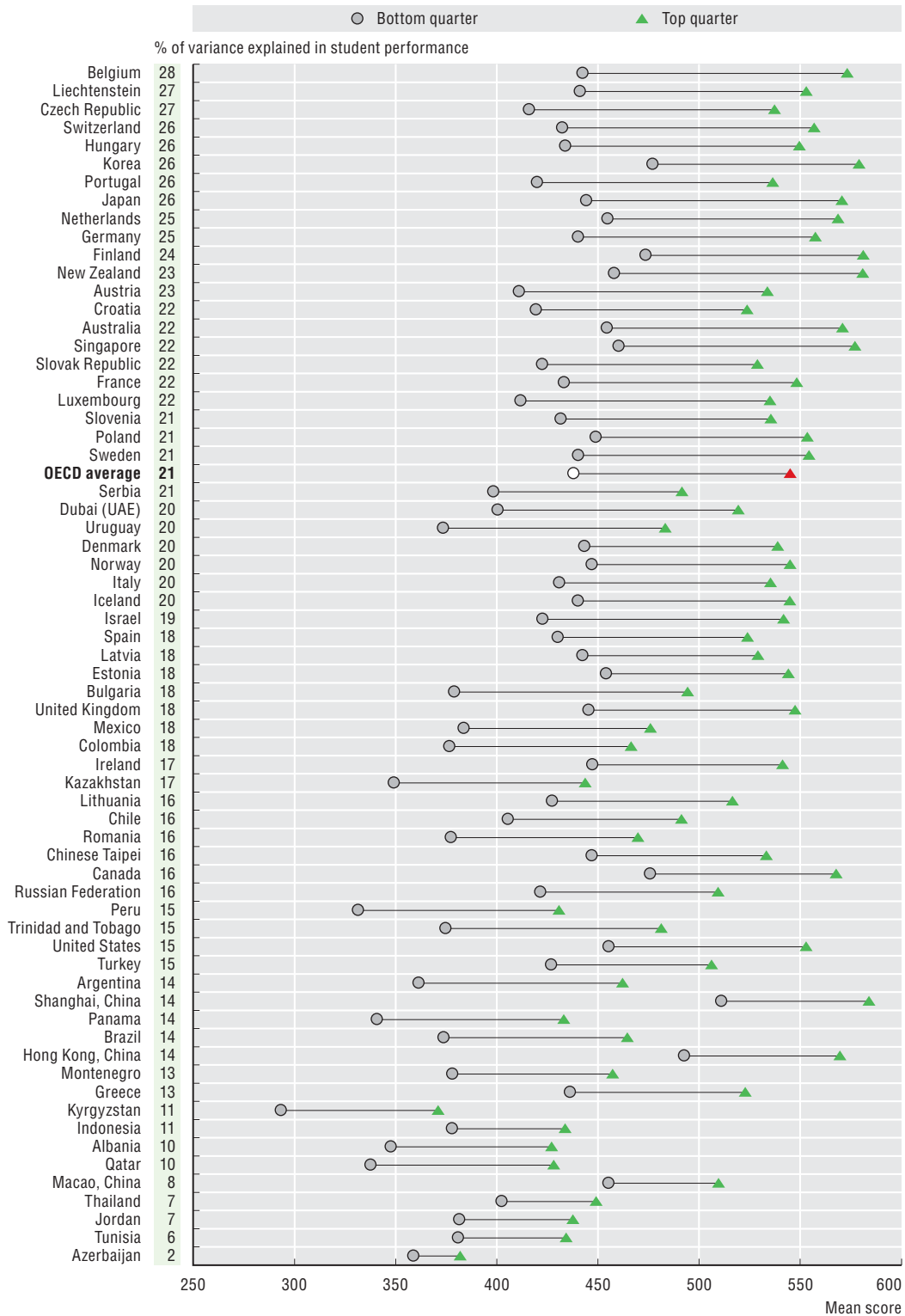
Further analysis is presented in Chapter 1 in *PISA 2009 Results Volume III, Learning to Learn: Student Engagement, Strategies and Practices*. Full data on student learning strategies are shown in Tables III.1.14–III.1.23 at the back of that volume.

Further reading from the OECD

Learners for Life: Student Approaches to Learning (2003).

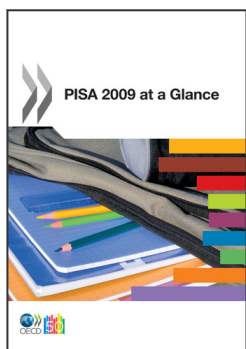
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Figure 3.5. How students' awareness of effective strategies to summarise information relates to their reading performance



Note: Countries are ranked in descending order of the percentage of explained variance in student performance.

Source: OECD (2010), PISA 2009 Results, Volume III, Learning to Learn: Student Engagement, Strategies and Practices, Figure III.1.14, available at <http://dx.doi.org/10.1787/888932360176>.



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