



## Executive Summary

PISA results show that mastering strategies that assist learning, such as methods to remember and understand or summarise texts and reading widely, are essential if students are to become proficient readers. Practicing reading by reading for enjoyment is most closely associated with better outcomes when it is accompanied by high levels of critical thinking and strategic learning. Across OECD countries, students who have low levels of awareness about which strategies are most effective for understanding, remembering and summarising information are less proficient readers than those who have high levels of awareness about these strategies, regardless of their reading habits.

***In all countries, students who enjoy reading the most perform significantly better than students who enjoy reading the least.***

There has been considerable debate as to what type of reading may be most effective in fostering reading skills and improving reading performance. The results from PISA suggest that, although students who read fiction are more likely to achieve high scores, it is students who read a wide variety of material who perform particularly well in reading. Compared with not reading for enjoyment at all, reading fiction for enjoyment appears to be positively associated with higher scores in the PISA 2009 reading assessment, while reading comic books is associated with little improvement in reading proficiency in some countries, and with lower overall reading performance in other countries. Also, students who are extensively engaged in online reading activities, such as reading e-mails, chatting on line, reading news online, using an on line dictionary or encyclopaedia, participating in online group discussions and searching for information online, are generally more proficient readers than students who do little online reading.

***On average across OECD countries, 37% of students – and 45% or more in Austria, the Netherlands, and Luxembourg – report that they do not read for enjoyment at all.***

In all but a few countries, students who use appropriate strategies to understand and remember what they read, such as underlining important parts of the texts or discussing what they read with other people, perform at least 73 points higher in the PISA assessment – that is, one full proficiency level or nearly two full school years – than students who use these strategies the least. In Belgium, Switzerland and Austria, the quarter of students who use these strategies the most score an average of 110 points higher than the quarter of students who use them the least. That translates into a difference of roughly one-and-a-half proficiency levels or nearly three years of formal schooling.

***In all countries, boys are not only less likely than girls to say that they read for enjoyment, they also have different reading habits when they do read for pleasure.***

Most boys and girls in the countries that took part in PISA 2009 sit side by side in the same classrooms and work with similar teachers. Yet, PISA reveals that in OECD countries, boys are on average 39 points behind girls in reading, the equivalent of an average year of schooling. PISA suggests that differences in how boys and girls approach learning and how engaged they are in reading account for most of the gap in reading performance between boys and girls, so much so that this gap could be predicted to shrink by 14 points if boys approached learning as positively as girls, and by over 20 points if they were as engaged in reading as girls. This does not mean that if boys' engagement and awareness of learning strategies rose by this amount, the increase would automatically translate into respective performance gains, since PISA does not measure causation. But the fact that most of the gender gap can be explained by boys being less engaged, and less engaged students having lower performance, is a good reason to look hard for more effective ways of increasing boys' interest in reading at school or at home.

PISA reveals that, although girls have higher mean reading performance, enjoy reading more and are more aware of effective strategies to summarise information than boys, the differences within genders are far greater than those between the genders. Moreover, the size of the gender gap varies considerably across countries, suggesting that boys and girls do not have inherently different interests and academic strengths, but that these are mostly acquired and socially induced. The large gender gap in reading is not a mystery: it can be attributed to differences that have been identified in the attitudes and behaviours of boys and girls.

Girls are more likely than boys to be frequent readers of fiction, and are also more likely than boys to read magazines. However, over 65% of boys regularly read newspapers for enjoyment and only 59% of girls do so. Although relatively few students say that they read comic books regularly, on average across OECD countries, 27% of boys read comic books several times a month or several times a week, while only 18% of girls do so.

***High-performing countries are also those whose students generally know how to summarise information.***

Across OECD countries, the difference in reading performance between those students who know the most about which strategies are best for summarising information and those who know the least is 107 score points. And students who say that they begin the learning process by figuring out what they need to learn, then ensure that they understand what they read, figure out which concepts they have not fully grasped, try to remember the most important points in a text and look for additional clarifying information when they do not understand something they have read, tend to perform better on the PISA reading scale than those who do not.

***While factors such as predisposition, temperament, peer pressure and socialisation may contribute to boys having less interest in reading than girls, boys could be encouraged to enjoy reading more and to read more for enjoyment.***

PISA results suggest that boys would be predicted to catch up with girls in reading performance if they had higher levels of motivation to read and used effective learning strategies. In Finland, for example, if boys were equally aware as girls of the most effective ways of summarising complex information in their reading, their scores in the PISA assessment would be predicted to be 23 points higher. Similarly, in most of the countries that participated in PISA 2009, if the most socio-economically disadvantaged students had the same levels of awareness about these strategies as their most advantaged peers, their reading performance would be predicted to be at least 15 points higher.

Across OECD countries, if socio-economically disadvantaged students were as aware of effective strategies to summarise information as advantaged students, the performance gap between the two groups of students could be 20% narrower. The poor reading proficiency seen among socio-economically disadvantaged boys is of particular concern because, without the ability to read well enough to participate fully in society, these students and their future families will have fewer opportunities to escape a cycle of poverty and deprivation. On average in the OECD area, socio-economically disadvantaged boys would be predicted to perform 28 points higher in reading if they had the same level of awareness of effective summarising strategies as socio-economically advantaged girls and 35 points higher if they enjoyed reading as much as socio-economically advantaged girls.

***In recent years, the gender gap in reading engagement has widened, as well as the gender gap in reading performance.***

Changing students' attitudes and behaviours may be inherently more difficult than providing equal access to high quality teachers and schools, two of the factors that explain the low performance of socio-economically disadvantaged students – an area where PISA shows that over the past decade, some countries have achieved significant progress.

The following table provides selected results from the volume.

- The first column shows students' mean reading scores.
- The second column shows the percentage of students who reported high levels of awareness about effective learning strategies and who regularly read a wide range of materials, including fiction and non-fiction books or at least magazines and newspapers, for enjoyment (considered 'wide and deep' or 'narrow and deep' readers).
- The third column shows the score point differences in reading between boys and girls, with negative numbers indicating an advantage for boys and positive numbers indicating an advantage for girls.
- The fourth column shows gender differences in the percentage of 'wide and deep' or 'narrow and deep' readers.
- The fifth column shows the portion of the gender gap that would be predicted to be closed if boys had the same level of enjoyment of reading as girls.
- The sixth column shows the score point difference between the top and bottom quarters of the socio-economic distribution of students.



- The seventh column shows the differences in the share of students who are ‘wide and deep’ or ‘narrow and deep’ readers between the top and bottom quarters of the socio-economic distribution of students. Larger numbers indicate a higher share of ‘wide and deep’ or ‘narrow and deep’ readers among socio-economically advantaged students.
- The last column shows the portion of the socio-economic gap in reading performance that would be predicted to be closed if socio-economically disadvantaged students had the same level of awareness of effective reading strategies (here, summarising strategies) as socio-economically advantaged students.

Values that are larger than the OECD average are shown in light blue; while values that are smaller than the OECD average are shown in medium blue and values that are not statistically different from the OECD average are shown in dark blue.



■ Table III.A ■


## COMPARING THE CONTRIBUTION OF STUDENTS' ENGAGEMENT IN READING AND APPROACHES TO LEARNING TO READING PERFORMANCE AND EQUITY

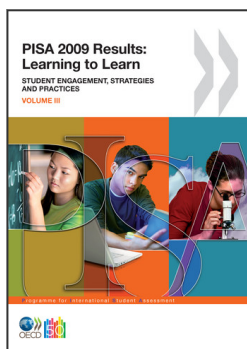
	Statistically significantly <b>above</b> the OECD average
	Not statistically significantly different from the OECD average
	Statistically significantly <b>below</b> the OECD average

	Mean Reading Score	Percentage of "wide and deep" and "narrow and deep readers"	Difference in reading performance (G – B)	Difference in the percentage of girls and boys that can be considered "wide and deep" and "narrow and deep" readers (G – B)	Proportion of the overall gender gap that could be closed if boys enjoyed reading as much as girls	Socio-economic differences in reading performance (top – bottom quarter of ESCS)	Socio-economic differences in the percentage of students that are "wide and deep" and "narrow and deep" (top – bottom quarter of ESCS)	Proportion of the socio-economic gap that could be closed if socio-economically disadvantaged students had values on the index of summarising as socio-economically advantaged students
	Mean Score	%	Dif.	Dif.	%	Dif.	Dif.	%
OECD average	493	45	39	11	61	89	17	20
<b>OECD</b>								
Korea	539	35	35	5	30	70	32	27
Finland	536	60	55	20	64	62	17	27
Canada	524	37	34	14	86	68	15	13
New Zealand	521	37	46	11	63	102	14	20
Japan	520	54	39	6	33	73	18	25
Australia	515	35	37	9	76	91	16	22
Netherlands	508	34	24	9	102	83	23	23
Belgium	506	46	27	3	81	116	23	27
Norway	503	56	47	14	52	70	17	22
Estonia	501	61	44	14	65	60	12	17
Switzerland	501	54	39	11	76	94	22	24
Poland	500	50	50	20	49	88	17	20
Iceland	500	49	44	20	58	62	12	18
United States	500	30	25	7	95	105	12	14
Sweden	497	43	46	16	68	91	19	18
Germany	497	41	40	0	80	105	21	23
Ireland	496	45	39	14	48	86	5	15
France	496	46	40	1	54	110	20	21
Denmark	495	48	29	8	75	80	21	20
United Kingdom	494	40	25	10	90	91	11	19
Hungary	494	52	38	15	65	118	20	20
Portugal	489	43	38	9	61	87	17	24
Italy	486	39	46	7	56	85	15	20
Slovenia	483	45	55	16	42	87	15	20
Greece	483	34	47	1	54	90	18	13
Spain	481	38	29	6	73	83	22	15
Czech Republic	478	47	48	14	59	84	12	23
Slovak Republic	477	52	51	16	35	87	13	18
Israel	474	36	42	17	44	102	14	19
Luxembourg	472	50	39	8	70	114	16	19
Austria	470	50	41	10	70	102	20	23
Turkey	464	38	43	12	25	92	16	11
Chile	449	37	22	17	57	91	19	15
Mexico	425	36	25	6	27	82	16	17
<b>Partners</b>								
Shanghai-China	556	59	40	5	31	74	21	11
Hong Kong-China	533	41	33	7	44	46	15	14
Singapore	526	59	31	11	81	98	19	17
Liechtenstein	499	49	32	14	76	62	25	34
Chinese Taipei	495	44	37	6	53	76	24	17
Macao-China	487	44	34	11	38	25	18	23
Latvia	484	45	47	20	52	63	16	19
Croatia	476	53	51	19	40	74	17	19
Lithuania	468	53	59	21	47	83	20	17
Dubai (UAE)	459	56	51	10	38	102	15	19
Russian Federation	459	46	45	16	43	78	9	16
Serbia	442	43	39	16	37	67	18	24
Bulgaria	429	42	61	20	27	132	22	16
Uruguay	426	35	42	15	30	116	15	20
Romania	424	44	43	13	23	85	16	17
Thailand	421	40	38	12	22	63	15	8
Trinidad and Tobago	416	49	58	19	26	92	10	19
Colombia	413	46	9	10	41	89	12	19
Brazil	412	37	29	14	34	83	13	16
Montenegro	408	42	53	8	30	80	18	15
Jordan	405	34	57	14	12	66	12	9
Tunisia	404	45	31	11	0	63	12	4
Indonesia	402	43	37	11	8	45	18	13
Argentina	398	40	37	14	24	122	15	15
Kazakhstan	390	46	43	13	-1	84	12	12
Albania	385	50	62	17	38	77	15	10
Qatar	372	42	50	8	23	56	9	14
Panama	371	37	33	13	10	108	10	13
Peru	370	50	22	9	19	129	20	14
Azerbaijan	362	32	24	6	21	50	12	4
Kyrgyzstan	314	34	53	7	10	94	18	14

Countries are ranked by their mean reading score.

Source: OECD, PISA 2009 Database.

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