INDICATOR A4

WHAT IS THE PROFILE OF 15-YEAR-OLD TOP PERFORMERS IN SCIENCE?

The rapidly growing demand for highly skilled workers has led to a global competition for talent. High-level skills are critical for the creation of new knowledge, technologies and innovation and therefore an important determinant of economic growth and social development. Drawing on data from the OECD's Programme for International Student Assessment (PISA), this indicator takes an in-depth look at top-performing students in science.

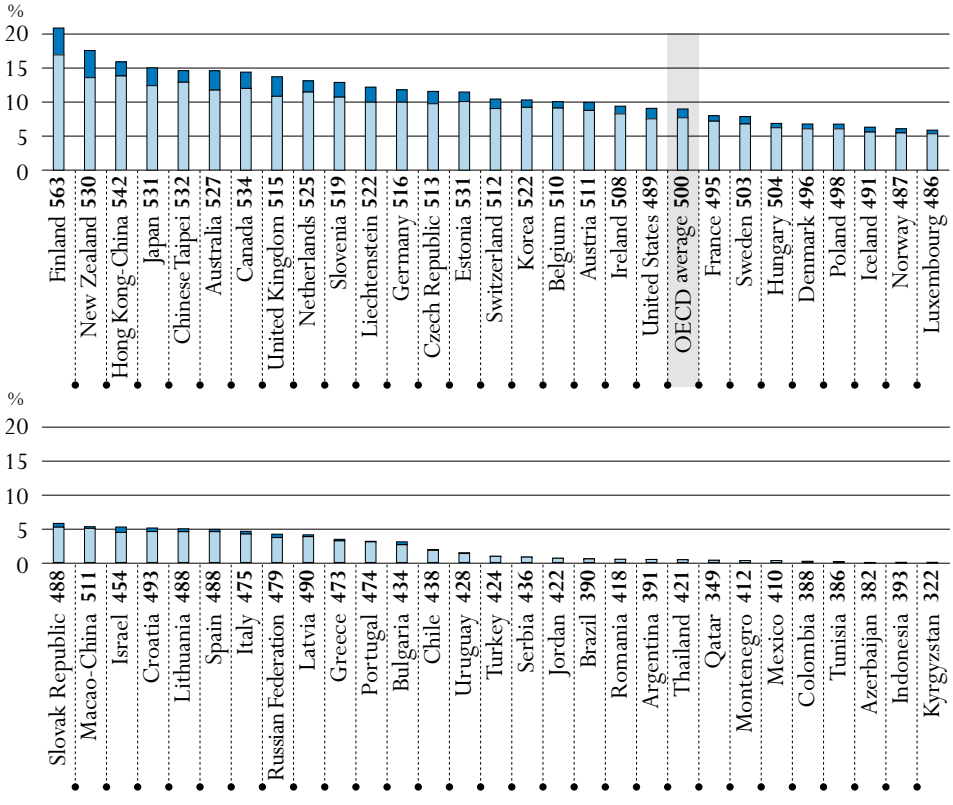
Key results

Chart A4.1. Percentage of top performers on the science scale in PISA 2006

The chart depicts the proportion of top performers in science defined as those 15-year-old students who are proficient at Levels 5 and 6 on the PISA 2006 science scale, and indicates in bold the score in science for each country.

Level 6 Level 5

Compared to the OECD average (9%) the proportion of top performers varies widely across countries. Some countries have more than 13% of top performers, such as Australia, Canada, Finland, Japan, the Netherlands, New Zealand, the United Kingdom, or the partner economies Chinese Taipei and Hong Kong – China, while in other countries it is less than 5% such as in Greece, Italy, Mexico, Portugal, Spain and Turkey, and the partner countries Argentina, Brazil, Bulgaria, Chile, Colombia, Jordan, Latvia, Montenegro, Qatar, Romania, the Russian Federation, Serbia, Thailand, Tunisia and Uruguay.



Source: OECD, *PISA 2006 Database,* Table A4.1a.

StatLink http://dx.doi.org/10.1787/664076271473

Other highlights of this indicator

- On average across OECD countries, 18% of students are top performers in at least one of the subject areas of science, mathematics or reading. However, only 4% are top performers in all three areas. This highlights that excellence is not simply a question of some students performing strongly in all subject areas, but that many students have different strengths in different subject areas.

- Across subject areas and countries, female students are as likely to be top performers as male students. On average across OECD countries, the proportion of top performers across subject areas is very similar between males and females: 4.1% of females and 3.9% of males are top performers in all three subject areas and 17.3% of females and 18.6% of males are top performers in at least one subject area. However, while the gender gap among students who are top performers is small only in science (1.1% of females and 1.5% of males), it is significant among top performers in reading only (3.7% of females and 0.8% of males) as well as in mathematics (3.7% of females and 6.8% of males).

- A socio-economically disadvantaged background is not an insurmountable barrier to achieving excellence in science performance. In the typical OECD country about a quarter of top performers in science come from a socio-economic background below the country's average. In some systems, students from relatively disadvantaged backgrounds have even greater chances to be top performers: in Austria, Finland, Japan, and the partner economies Hong Kong-China and Macao-China, a third or more of the top performers in science have a socio-economic background signalling greater disadvantage than is the case on average in the country.

- In some countries students with an immigrant background or linguistic minorities excel as well, though in other countries, most notably Germany, the Netherlands and the partner country Slovenia performance differences between students with and without an immigrant background are large.

Defining and comparing top performers in PISA

Definitions used in this indicator

Top performers in science – students proficient at Levels 5 and 6 in the PISA 2006 science assessment (*i.e.*, higher than 633.33 score points)

Top performers in reading – students proficient at Level 5 in the PISA 2006 reading assessment (*i.e.*, higher than 625.61 score points)

Top performers in mathematics – students proficient at Levels 5 and 6 in the PISA 2006 mathematics assessment (*i.e.*, higher than 606.99 score points)

Note that this indicator uses the term 'top performers' as shorthand for students proficient at Levels 5 and 6 in science in PISA 2006. Unless otherwise specified, 'top performers' does not necessarily comprise top performers in reading and mathematics. The cutoff points for each level varies by subject area and the levels of proficiency are not equivalent across subject areas. In other words, it is not the same to be proficient at Levels 5 and 6 in science, mathematics or reading. Because of the different nature and content of the three testing areas the cutoff points for Levels 5 and 6 for each subject area are different and can therefore result in different proportions of top performers.

Top performers can consistently identify, explain and apply scientific knowledge and knowledge about science in a variety of complex life situations. They can link different information sources and explanations and use evidence from those sources to justify decisions. They clearly and consistently demonstrate advanced scientific thinking and reasoning, and they demonstrate use of their scientific understanding in support of solutions to unfamiliar scientific and technological situations. Students at this level can use scientific knowledge and develop arguments in support of recommendations and decisions that centre on personal, social, or global situations.

Comparing top performers in science to strong performers

Another performance group has been used for this indicator to compare top performers in science with students performing just below them, the "strong performers". Strong performers are in the performance group from which the most likely future top performers might emerge.

Strong performers in science, reading and mathematics are students proficient at Level 4 of the PISA 2006 science, reading and mathematics assessment.

Policy context

While basic competencies are generally considered important for the absorption of new technologies, high-level competencies are critical for the creation of new knowledge, technologies and innovation. For countries near the technology frontier, this implies that the share of highly educated workers in the labour force is an important determinant of economic growth and social development. There is also mounting evidence that individuals with high level skills generate relatively large amounts of knowledge creation and ways of using it, which in turn suggests that investing in excellence may benefit all. This happens, for example, because highly skilled

individuals create innovations in various areas (for example, organisation, marketing, design) that benefit all or that boost technological progress at the frontier. Research has also shown that the effect of the skill level at one standard deviation above the mean in the International Adult Literacy Study on economic growth is about six times larger than the effect of the skill level at one standard deviation below the mean.

Evidence and explanations

Distribution of top performers in science among countries

As shown in Chart A4.1, the proportion of top performers in science varies widely across countries and, interestingly, scientific excellence is only weakly related to average performance in countries. Although on average across OECD countries, 9% of 15-year-olds reach Level 5 in science, and slightly more than 1% reach Level 6, these proportions vary substantially across countries. For example, among the OECD countries, seven have at least 13% of top performers in science, whereas there are six with 5% or less. Among the partner countries and economies, the overall proportions of these top performers also vary considerably from country to country with several countries almost absent from representation at Level 6 in science. Of the 57 participating countries, 25 have 5% or fewer of their 15-year-olds reaching Level 5 or Level 6, whereas four countries have at least 15%, *i.e.* three times as many. Twenty per cent and 18% of all students are top performers in science in Finland and New Zealand respectively.

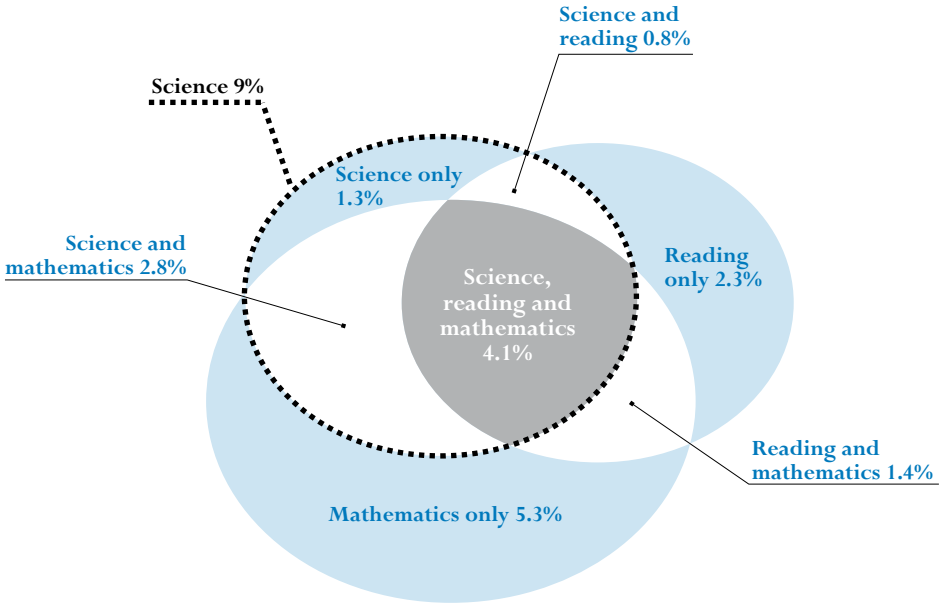
Among countries with similar mean scores in PISA there is a remarkable diversity in the percentage of top-performing students. For example, France has a mean score of 495 points in science in PISA 2006 and a proportion of 8% of students at high proficiency levels in science (both very close to the OECD average), and the partner country Latvia is also close to the OECD average in science with 490 points but has only 4% of top performers, which is less than half the OECD average of 9%. Although Latvia has a small percentage of students at the lowest levels, the result could signal the relative lack of a highly educated talent pool for the future. The variability of the proportion of students who are top performers across countries suggests a difference in countries' potential capacities to staff future knowledge-driven industries with home-grown talent. Similar variability is shown in reading and mathematics with only slight differences in the patterns of these results among countries (Table A4.1a).

Top performers in science, reading and mathematics

To what extent does the talent that top performers in science demonstrate extend to other subject areas? Chart A4.2 examines the proportion of top performers in science who are also top performers in reading and mathematics.

Chart A4.2 provides a picture of the top performers in the three subject areas across OECD countries. The parts in the diagram shaded in blue represent the percentage of 15-year-old students who are top performers in just one of the three assessment subject areas, that is, in either science, reading or mathematics. The parts in the diagram shaded in grey show the percentage of students who are top performers in two of the assessment subject areas. The white part in the middle of the diagram shows the percentage of the 15-year-old students who are top performers in all three assessment subject areas.

Chart A4.2. Overlapping of top performers in science, reading and mathematics on average in the OECD



Note: Non top performers in any of the three domains: 82.1%
Source: OECD, *PISA 2006 Database,* Table A4.2a.
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Across OECD countries, 4% of 15-year-old students are top performers in all three assessment subject areas: science, reading and mathematics. About 3% of students are top performers in both science and mathematics but not in reading, while just under 1% of students are top performers in both science and reading but not in mathematics and more than 1% are top performers in both reading and mathematics but not in science. The percentage of students who are top performers in both science and mathematics is greater than the percentages who are top performers in science and reading or in reading and mathematics.

It is noteworthy that not all countries show the same patterns (Table A4.2a). There was substantial variation among countries, for example, in the percentages of top performers in science who are also top performers in both reading and mathematics. Such students comprised 9.5% of 15-year-old students in Finland, 8.9% in New Zealand, 7.8% in Korea, 7.0% in Canada, 7.7% in the partner economy Hong Kong-China, and 7.2% in the partner country Liechtenstein, while in four OECD countries and 17 partner countries and economies, less than 1% of students are top performers in all three domains.

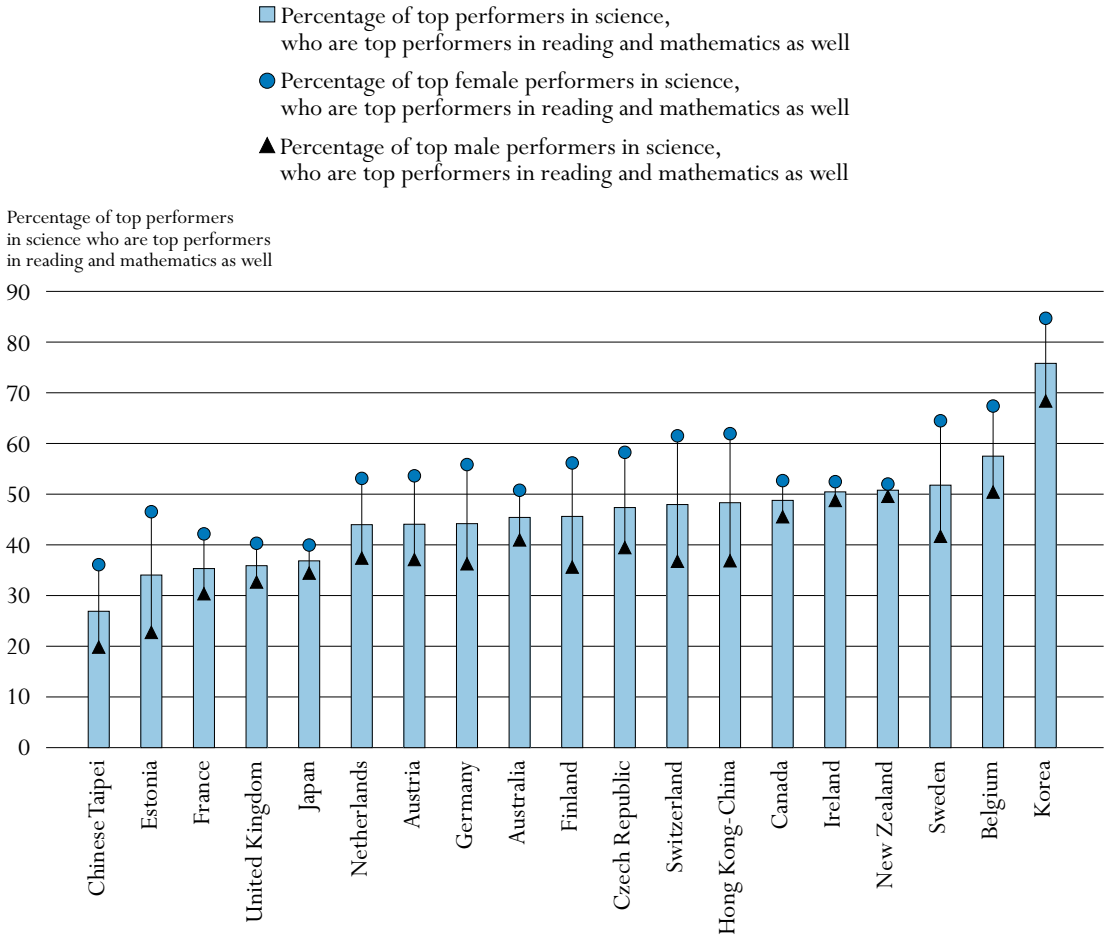
Male and female representation among top performers

Across three subject areas and countries, female students are as likely to be top performers as male students. On average across OECD countries, the proportion of top performers across subject areas is very similar between males and females: as shown in Table A4.2b, 4.1% of

females and 3.9% of males are top performers in all three subject areas and 17.3% of females and 18.6% of males are top performers in at least one subject area. These averages, however, hide significant cross country variation and some significant gender gaps across subject areas. While the gender gap among students who are top performers only in science is small (1.1% of females and 1.5% of males), the gender gap is significant among top performers in reading only (3.7% of females and 0.8% of males) as well as in mathematics only (3.7% of females and 6.8% of males).

While there is no difference in the average performance in science of males and females, males tend to show a marked advantage among the top performers. In eight of the 17 OECD countries with at least 3% of both males and females among the top performers in science, there are significantly higher proportions of males among the top performers in science (Table A4.2b).

Chart A4.3. Different strengths of males and females



Countries are ranked in ascending order of the percentage of top performers in science.
Source: OECD, *PISA 2006 Database,* Table A4.2b.
StatLink http://dx.doi.org/10.1787/664076271473

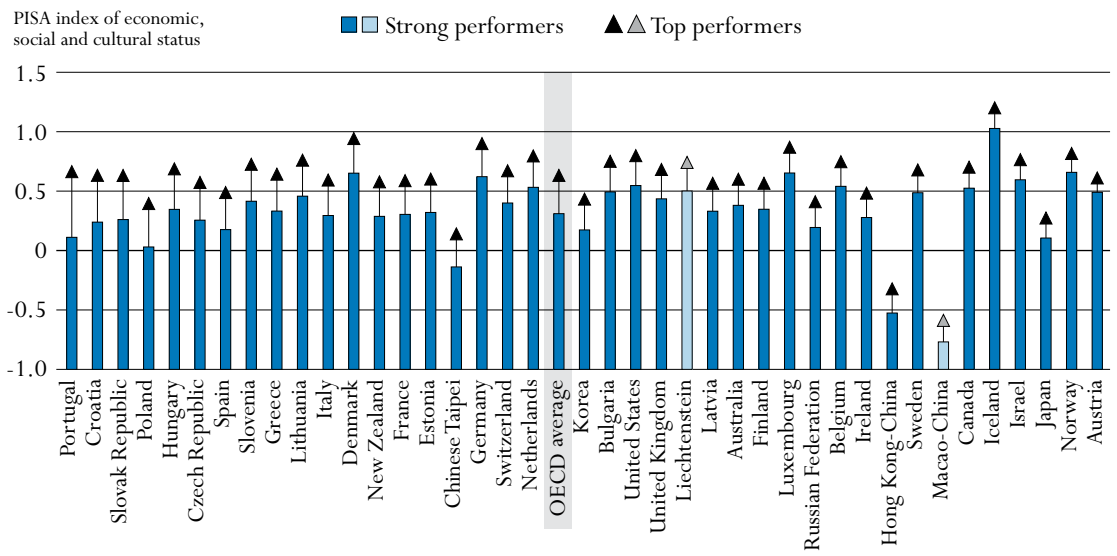
There are no countries where there are significantly higher proportions of females among the top performers in science. On average across OECD countries, almost half of the top performers in science (44%) were also top performers in reading and mathematics, but this was the case for 50% of females and 37% of males (Table A4.2a and Table A4.2b). Chart A4.3 shows the percentages of male and female top performers who are top performers in reading and mathematics as well, for countries with comparable data.

Socio-economic background of top performers

The PISA *index of economic, social and cultural status (ESCS)* provides a comprehensive measure of student socio-economic background. This index was derived from information comprising the highest educational level of parents, the highest occupational status of parents and possessions in the home. The average OECD student was given an index value of zero and about two-thirds of the OECD student population were given index values between -1 and 1 (*i.e.* the index has a standard deviation of 1). The PISA data from all three administrations to date have shown that socio-economic background and performance are closely related.

Socio-economic background is related to performance for at least two reasons. First, students from families with more educated parents, higher income and better material, educational and cultural resources are better placed to receive superior educational opportunities in the home environment as well as richer learning opportunities outside of the home relative to students from less-advantaged backgrounds. Second, such families often have much more choice over where they can enrol their children and choose schools where the student body is drawn from a more advantaged socio-economic background.

Chart A4.4. Difference in socio-economic background between top performers and strong performers



Countries are ranked in descending order of the difference in the PISA index of economic, social and cultural status (ESCS) between top and strong performers.

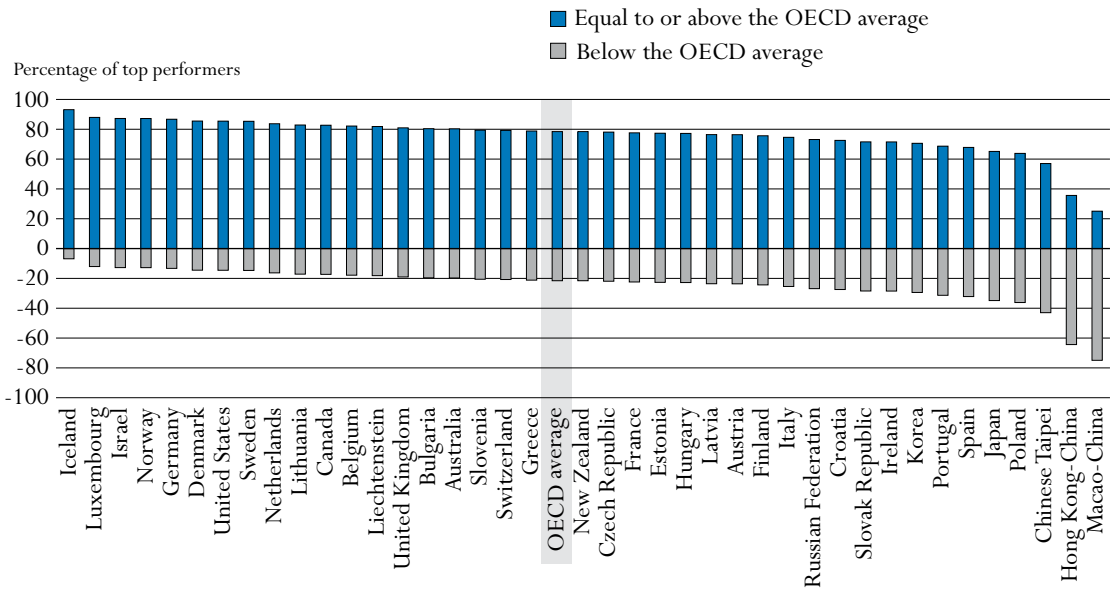
Note: Significant differences are highlighted with darker tone.

Source: OECD, *PISA 2006 Database,* Table A4.3.

StatLink http://dx.doi.org/10.1787/664076271473

Top performers tend to come from a relatively advantaged socio-economic background (Table A4.3). In virtually every country for which there are comparable data, students in the top performing category come from families with comparatively advantaged socio-economic backgrounds. Across the OECD, the average socio-economic background of top performers is around two thirds of a standard deviation above the average OECD socio-economic background. Chart A4.4 shows that even when comparing top performers to strong performers (the performance group from which the most likely future top performers might emerge), the differences in socio-economic background in favour of top performers are statistically significant in all OECD countries (on average across the OECD countries the difference is 0.26 standard deviations). For each country, on average, top performers tend to come from significantly more advantaged socio-economic backgrounds than students who are not among the top performers, but are closest to reaching those levels. In general, differences in the socio-economic background of different performance groups are marked - the more advantaged the socio-economic background, the higher the performance. These differences range from more than half of a standard deviation in Portugal to more than a tenth in Austria.

Chart A4.5. Percentage of top performers with socio-economic background (ESCS) "below" or "equal to or above" the OECD average of ESCS



Countries are ranked in ascending order of the percentage of top performers with socio-economic background below the OECD average.
Source: OECD, *PISA 2006 Database,* Table A4.3.

StatLink http://dx.doi.org/10.1787/664076271473

Yet, not all top performers come from an advantaged socio-economic background. Chart A4.5 shows that more than a fifth of top performers across the OECD countries come from a socio-economic background that is less advantaged than at the OECD on average. In Japan, Poland, Portugal or Spain, the proportion of top performers in science whose socio-economic background is more disadvantaged than at the OECD average level exceeds 30% and that proportion reaches 64% and 75% in partner economies Hong Kong-China and Macao-China.

While a disadvantaged background is not an insurmountable barrier to excellence, how much of an obstacle it becomes varies from country to country. Looking at a country's average socio-economic background in each country, in the typical OECD country about a quarter of top performers in science come from a socio-economic background below their country's average (Table A4.3). In some countries the chances for students from a relatively disadvantaged background to become top performers are even greater. For example, in Austria, Finland, Japan, and the partner economies Hong Kong-China and Macao-China, one-third or more of top performers come from a socio-economic background that is more disadvantaged than the average in their country. On the other hand, in France, Greece, Luxembourg, Portugal and the United States, as well as the partner countries Bulgaria, Israel and Lithuania, 80% or more of top performers come from a socio-economic background that is more advantaged than the average level in their country.

Immigrant background of top performers

In some countries, significant proportions of students (or their parents) were born outside of the country. Students who do not speak the language of instruction at home constitute another important minority. As the report *Where Immigrant Students Succeed: A Comparative Review of Performance and Engagement in PISA 2003* (OECD, 2005a) shows, an immigrant background can have a significant impact on student performance. While the proportion of students with an immigrant background does not seem to relate to the average performance of countries, from an equity perspective it is important to understand the effect of these background characteristics on the proportion of top performers.

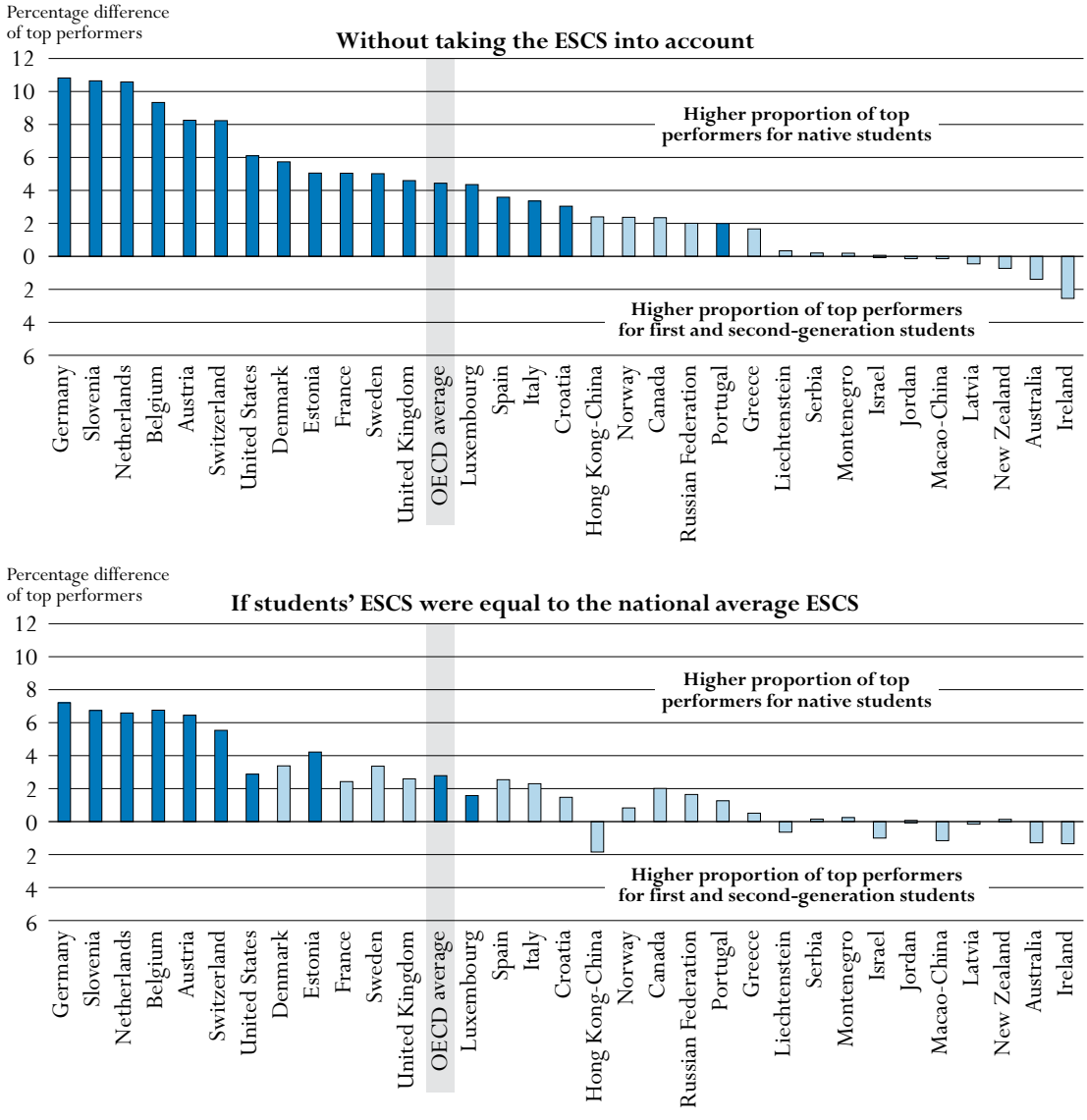
This section analyses the percentages of top performers by their immigrant status and the language they speak at home in the countries and economies where these groups of students represent more than 30 students or 3% of the student population. Native students are students who were born in the country of assessment and have at least one parent who was also born in the country of assessment. Students with an immigrant background are students whose parents were born in a foreign country.

As shown in Chart A4.6, there are more top performers in science among native students than among students with an immigrant background, but in part this just reflects differences in socio-economic backgrounds. Indeed, in half of the countries being compared, this difference is no longer significant after accounting for students' socio-economic background. A comparison of top performers between students with an immigrant background and native students shows different results across countries. In some countries, students with an immigrant background are as likely to be top performers as native students. For example, in Australia, Canada, Greece, Ireland, New Zealand, Norway and Portugal, as well as in the partner countries and economies Hong Kong-China, Israel, Jordan, Latvia, Liechtenstein, Macao-China, Montenegro, the Russian Federation and Serbia, there are no significant differences in the proportion of top performers among native students and students with an immigrant background.

The excellence gap between students from an immigrant background and native students reflects in part different immigration patterns and policies. Top performing immigrants are generally found in countries with relatively selective immigrant policies favouring more educated and resource-endowed families. For example, families moving to Australia, Canada and New Zealand

are often selected according to characteristics that are considered important for integration, such as educational qualifications and language skills (OECD, 2005a). Other countries however do not or cannot impose such restrictions. Another reason for the gap is differences in socio-economic backgrounds. In fact, in most countries the difference between native students and students with an immigrant background is not significant once students' socio-economic backgrounds are taken into account.

Chart A4.6. Percentage difference of top performers by immigrant status



Countries are ranked in descending order of the percentage difference of top performers among native students and among students with an immigrant background.

Note: Significant differences are highlighted with darker tone.

Source: OECD, *PISA 2006 Database,* Table A4.4.

StatLink http://dx.doi.org/10.1787/664076271473

In countries, speaking the national language or an official language recognised by schools is clearly an advantage in learning and testing. In these cases, the student's home language is aligned with the medium of instruction. Thus, it is no surprise that students in homes where a different language is spoken than the national or an official language face additional learning challenges and a smaller proportion of these students tend to be top performers. To a large extent, this pattern follows the distinctions between native students and students with an immigrant background. In most of the countries with available data there are significantly fewer students who do not speak the language of assessment at home represented among science top performers. The largest differences in favour of both native students and students who speak the language of assessment at home occur in Germany, the Netherlands and the partner country Slovenia (Table A4.4 and Table A4.5). In Australia, Canada, New Zealand, Norway, and the partner countries Israel and Tunisia there are similar proportions of students not speaking the language of assessment at home and students who do speak the language of assessment at home represented among the top performers.

Some countries succeed better than others in promoting excellence among linguistic and immigrant minorities. There are lessons to be learnt from these countries that may help improve excellence and equity in educational outcomes.

Definitions and methodologies

The achievement scores are based on assessments administered as part of the Programme for International Student Assessment (PISA) undertaken by the Organisation for Economic Co-operation and Development (OECD). The most recent and available PISA data were collected during the 2006 school year.

The target population studied for this indicator was 15-year-old students. Operationally, this referred to students who were from 15 years and 3 (completed) months to 16 years and 2 (completed) months at the beginning of the testing period and who were enrolled in an educational institution at the secondary level, irrespective of the grade levels or type of institutions in which they were enrolled, and irrespective of whether they participated in school full-time or part-time.

Further references

For further information about PISA 2006, see OECD (2007a) *PISA 2006: Science Competencies for Tomorrow's World*, OECD, Paris, and OECD (2009a) *Top of the Class: High Performing Learners in PISA 2006*, OECD, Paris. PISA data are also available on the PISA website: *www.pisa.oecd.org.*

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Table A4.1a.

Mean score and percentage of top performers in science, reading and mathematics

		Science						Reading				Mathematics					
		Mean score		Top performers				Mean score		Top performers		Mean score		Top performers			
				Level 5 (from 633.33 to 707.93 score points)		Level 6 (above 707.93 score points)				Level 5 (above 625.61 score points)				Level 5 (from 606.99 to 669.30 score points)		Level 6 (above 669.30 score points)	
		Mean	S.E.	%	S.E.	%	S.E.	Mean	S.E.	%	S.E.	Mean	S.E.	%	S.E.	%	S.E.
OECD countries	Australia	527	(2.3)	11.8	(0.5)	2.8	(0.3)	513	(2.1)	10.6	(0.6)	520	(2.2)	12.1	(0.5)	4.3	(0.5)
	Austria	511	(3.9)	8.8	(0.7)	1.2	(0.2)	490	(4.1)	9.0	(0.7)	505	(3.7)	12.3	(0.8)	3.5	(0.5)
	Belgium	510	(2.5)	9.1	(0.5)	1.0	(0.2)	501	(3.0)	11.3	(0.6)	520	(3.0)	16.0	(0.7)	6.4	(0.4)
	Canada	534	(2.0)	12.0	(0.5)	2.4	(0.2)	527	(2.4)	14.5	(0.7)	527	(2.0)	13.6	(0.6)	4.4	(0.4)
	Czech Republic	513	(3.5)	9.8	(0.9)	1.8	(0.3)	483	(4.2)	9.2	(0.8)	510	(3.6)	12.3	(0.8)	6.0	(0.7)
	Denmark	496	(3.1)	6.1	(0.7)	0.7	(0.2)	494	(3.2)	5.9	(0.6)	513	(2.6)	10.9	(0.6)	2.8	(0.4)
	Finland	563	(2.0)	17.0	(0.7)	3.9	(0.3)	547	(2.1)	16.7	(0.8)	548	(2.3)	18.1	(0.8)	6.3	(0.5)
	France	495	(3.4)	7.2	(0.6)	0.8	(0.2)	488	(4.1)	7.3	(0.7)	496	(3.2)	9.9	(0.7)	2.6	(0.5)
	Germany	516	(3.8)	10.0	(0.6)	1.8	(0.2)	495	(4.4)	9.9	(0.7)	504	(3.9)	11.0	(0.8)	4.5	(0.5)
	Greece	473	(3.2)	3.2	(0.3)	0.2	(0.1)	460	(4.0)	3.5	(0.4)	459	(3.0)	4.2	(0.5)	0.9	(0.2)
	Hungary	504	(2.7)	6.2	(0.6)	0.6	(0.2)	482	(3.3)	4.7	(0.6)	491	(2.9)	7.7	(0.7)	2.6	(0.5)
	Iceland	491	(1.6)	5.6	(0.5)	0.7	(0.2)	484	(1.9)	6.0	(0.5)	506	(1.8)	10.1	(0.7)	2.5	(0.3)
	Ireland	508	(3.2)	8.3	(0.6)	1.1	(0.2)	517	(3.5)	11.7	(0.8)	501	(2.8)	8.6	(0.7)	1.6	(0.2)
	Italy	475	(2.0)	4.2	(0.3)	0.4	(0.1)	469	(2.4)	5.2	(0.4)	462	(2.3)	5.0	(0.4)	1.3	(0.3)
	Japan	531	(3.4)	12.4	(0.6)	2.6	(0.3)	498	(3.6)	9.4	(0.7)	523	(3.3)	13.5	(0.8)	4.8	(0.5)
	Korea	522	(3.4)	9.2	(0.8)	1.1	(0.3)	556	(3.8)	21.7	(1.4)	547	(3.8)	18.0	(0.8)	9.1	(1.3)
	Luxembourg	486	(1.1)	5.4	(0.3)	0.5	(0.1)	479	(1.3)	5.6	(0.4)	490	(1.1)	8.2	(0.5)	2.3	(0.3)
	Mexico	410	(2.7)	0.3	(0.1)	0.0	a	410	(3.1)	0.6	(0.1)	406	(2.9)	0.8	(0.2)	0.1	(0.0)
	Netherlands	525	(2.7)	11.5	(0.8)	1.7	(0.2)	507	(2.9)	9.1	(0.6)	531	(2.6)	15.8	(0.8)	5.4	(0.6)
	New Zealand	530	(2.7)	13.6	(0.7)	4.0	(0.4)	521	(3.0)	15.9	(0.8)	522	(2.4)	13.2	(0.7)	5.7	(0.5)
	Norway	487	(3.1)	5.5	(0.4)	0.6	(0.1)	484	(3.2)	7.7	(0.6)	490	(2.6)	8.3	(0.7)	2.1	(0.3)
	Poland	498	(2.3)	6.1	(0.4)	0.7	(0.1)	508	(2.8)	11.6	(0.8)	495	(2.4)	8.6	(0.7)	2.0	(0.3)
	Portugal	474	(3.0)	3.0	(0.4)	0.1	(0.1)	472	(3.6)	4.6	(0.5)	466	(3.1)	4.9	(0.4)	0.8	(0.2)
	Slovak Republic	488	(2.6)	5.2	(0.5)	0.6	(0.1)	466	(3.1)	5.4	(0.5)	492	(2.8)	8.6	(0.7)	2.4	(0.4)
	Spain	488	(2.6)	4.5	(0.4)	0.3	(0.1)	461	(2.2)	1.8	(0.2)	480	(2.3)	6.1	(0.4)	1.2	(0.2)
	Sweden	503	(2.4)	6.8	(0.5)	1.1	(0.2)	507	(3.4)	10.6	(0.8)	502	(2.4)	9.7	(0.6)	2.9	(0.4)
	Switzerland	512	(3.2)	9.1	(0.8)	1.4	(0.3)	499	(3.1)	7.7	(0.7)	530	(3.2)	15.9	(0.7)	6.8	(0.6)
	Turkey	424	(3.8)	0.9	(0.3)	0.0	a	447	(4.2)	2.1	(0.6)	424	(4.9)	3.0	(0.8)	1.2	(0.5)
	United Kingdom	515	(2.3)	10.9	(0.5)	2.9	(0.3)	495	(2.3)	9.0	(0.6)	495	(2.1)	8.7	(0.5)	2.5	(0.3)
	United States	489	(4.2)	7.5	(0.6)	1.5	(0.2)	m	m	m	m	474	(4.0)	6.4	(0.7)	1.3	(0.2)
	OECD average	*500*	*(0.5)*	*7.7*	*(0.1)*	*1.3*	*(0.0)*	*492*	*(0.6)*	*8.6*	*(0.1)*	*498*	*(0.5)*	*10.0*	*(0.1)*	*3.3*	*(0.1)*
Partner countries and economies	Argentina	391	(6.1)	0.4	(0.1)	0.0	a	374	(7.2)	0.9	(0.2)	381	(6.2)	0.9	(0.3)	0.1	(0.1)
	Azerbaijan	382	(2.8)	0.0	a	a	a	353	(3.1)	0.1	(0.1)	476	(2.3)	0.6	(0.3)	0.2	(0.1)
	Brazil	390	(2.8)	0.5	(0.2)	0.0	(0.0)	393	(3.7)	1.1	(0.3)	370	(2.9)	0.8	(0.3)	0.2	(0.1)
	Bulgaria	434	(6.1)	2.6	(0.5)	0.4	(0.2)	402	(6.9)	2.1	(0.5)	413	(6.1)	2.5	(0.6)	0.6	(0.3)
	Chile	438	(4.3)	1.8	(0.3)	0.1	(0.1)	442	(5.0)	3.5	(0.6)	411	(4.6)	1.3	(0.3)	0.1	(0.1)
	Colombia	388	(3.4)	0.2	(0.1)	0.0	a	385	(5.1)	0.6	(0.2)	370	(3.8)	0.4	(0.2)	0.0	(0.0)
	Croatia	493	(2.4)	4.6	(0.4)	0.5	(0.1)	477	(2.8)	3.7	(0.4)	467	(2.4)	4.0	(0.5)	0.8	(0.2)
	Estonia	531	(2.5)	10.1	(0.7)	1.4	(0.3)	501	(2.9)	6.0	(0.6)	515	(2.7)	10.0	(0.6)	2.6	(0.4)
	Hong Kong-China	542	(2.5)	13.9	(0.8)	2.1	(0.3)	536	(2.4)	12.8	(0.8)	547	(2.7)	18.7	(0.8)	9.0	(0.8)
	Indonesia	393	(5.7)	0.0	a	a	a	393	(5.9)	0.1	(0.0)	391	(5.6)	0.4	(0.2)	0.0	a
	Israel	454	(3.7)	4.4	(0.5)	0.8	(0.2)	439	(4.6)	5.0	(0.5)	442	(4.3)	4.8	(0.5)	1.3	(0.2)
	Jordan	422	(2.8)	0.6	(0.2)	0.0	a	401	(3.3)	0.2	(0.1)	384	(3.3)	0.2	(0.1)	0.0	a
	Kyrgyzstan	322	(2.9)	0.0	a	a	a	285	(3.5)	0.1	(0.1)	311	(3.4)	0.0	(0.1)	0.0	a
	Latvia	490	(3.0)	3.8	(0.4)	0.3	(0.1)	479	(3.7)	4.5	(0.5)	486	(3.0)	5.5	(0.5)	1.1	(0.3)
	Liechtenstein	522	(4.1)	10.0	(1.8)	2.2	(0.8)	510	(3.9)	9.8	(1.8)	525	(4.2)	12.6	(2.1)	5.8	(1.2)
	Lithuania	488	(2.8)	4.5	(0.6)	0.4	(0.2)	470	(3.0)	4.4	(0.5)	486	(2.9)	7.3	(0.8)	1.8	(0.4)
	Macao-China	511	(1.1)	5.0	(0.3)	0.3	(0.1)	492	(1.1)	3.0	(0.3)	525	(1.3)	13.6	(0.6)	3.8	(0.4)
	Montenegro	412	(1.1)	0.3	(0.1)	0.0	a	392	(1.2)	0.4	(0.2)	399	(1.4)	0.8	(0.2)	0.1	(0.1)
	Qatar	349	(0.9)	0.3	(0.1)	0.0	(0.0)	312	(1.2)	0.6	(0.1)	318	(1.0)	0.5	(0.1)	0.1	(0.0)
	Romania	418	(4.2)	0.5	(0.1)	0.0	a	396	(4.7)	0.3	(0.1)	415	(4.2)	1.1	(0.3)	0.1	(0.1)
	Russian Federation	479	(3.7)	3.7	(0.5)	0.5	(0.1)	440	(4.3)	1.7	(0.3)	476	(3.9)	5.7	(0.6)	1.7	(0.3)
	Serbia	436	(3.0)	0.8	(0.2)	0.0	a	401	(3.5)	0.3	(0.1)	435	(3.5)	2.4	(0.4)	0.4	(0.1)
	Slovenia	519	(1.1)	10.7	(0.6)	2.2	(0.3)	494	(1.0)	5.3	(0.5)	504	(1.0)	10.3	(0.8)	3.4	(0.4)
	Chinese Taipei	532	(3.6)	12.9	(0.8)	1.7	(0.2)	496	(3.4)	4.7	(0.6)	549	(4.1)	20.1	(0.9)	11.8	(0.8)
	Thailand	421	(2.1)	0.4	(0.1)	0.0	a	417	(2.6)	0.3	(0.1)	417	(2.3)	1.1	(0.2)	0.2	(0.1)
	Tunisia	386	(3.0)	0.1	(0.1)	0.0	a	380	(4.0)	0.2	(0.1)	365	(4.0)	0.5	(0.2)	0.0	a
	Uruguay	428	(2.7)	1.3	(0.2)	0.1	(0.1)	413	(3.4)	3.1	(0.4)	427	(2.6)	2.6	(0.4)	0.6	(0.2)

Source: OECD, *PISA 2006 Database.*

Please refer to the Reader's Guide for information on the abbreviations used in this table.

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A4

Table A4.1b.

Percentage of top performers in science, reading and mathematics, by gender

		Science						Reading						Mathematics					
		Females		Males		Difference in the percentages of top performers between females and males		Females		Males		Difference in the percentages of top performers between females and males		Females		Males		Difference in the percentages of top performers between females and males	
		%	S.E.	%	S.E.	Dif.	S.E.	%	S.E.	%	S.E.	Dif.	S.E.	%	S.E.	%	S.E.	Dif.	S.E.
OECD countries	Australia	13.6	(0.8)	15.6	(1.0)	-2.1	(1.3)	13.4	(0.8)	7.9	(0.8)	**5.5**	(1.2)	13.2	(0.8)	19.5	(1.3)	**-6.3**	(1.4)
	Austria	8.6	(0.9)	11.3	(1.0)	**-2.6**	(1.2)	12.4	(1.2)	5.7	(0.6)	**6.7**	(1.2)	12.0	(0.9)	19.4	(1.4)	**-7.4**	(1.4)
	Belgium	8.9	(0.7)	11.2	(0.7)	**-2.3**	(0.9)	14.1	(1.0)	8.7	(0.6)	**5.4**	(1.2)	19.5	(1.1)	24.9	(1.1)	**-5.4**	(1.5)
	Canada	13.2	(0.7)	15.7	(0.7)	**-2.5**	(0.9)	17.7	(1.0)	11.3	(0.8)	**6.5**	(1.1)	14.8	(0.9)	21.0	(1.0)	**-6.2**	(1.1)
	Czech Republic	11.2	(1.3)	11.9	(1.1)	-0.7	(1.4)	12.9	(1.3)	6.3	(0.7)	**6.6**	(1.3)	17.1	(1.8)	19.2	(1.3)	-2.0	(2.0)
	Denmark	5.8	(0.6)	7.8	(1.0)	**-2.0**	(1.0)	7.6	(0.8)	4.1	(0.7)	**3.5**	(0.9)	12.3	(1.0)	15.1	(1.0)	**-2.8**	(1.2)
	Finland	20.2	(1.0)	21.6	(1.1)	-1.4	(1.4)	23.7	(1.3)	9.6	(0.8)	**14.1**	(1.4)	21.1	(1.1)	27.8	(1.4)	**-6.7**	(1.4)
	France	6.5	(0.9)	9.6	(0.9)	**-3.2**	(1.2)	8.9	(0.9)	5.5	(0.8)	**3.3**	(0.9)	10.7	(1.0)	14.5	(1.2)	**-3.8**	(1.5)
	Germany	9.8	(0.8)	13.7	(1.1)	**-3.8**	(1.3)	12.9	(1.0)	7.0	(0.8)	**6.0**	(1.1)	12.0	(0.9)	18.7	(1.4)	**-6.6**	(1.4)
	Greece	2.8	(0.5)	4.0	(0.5)	-1.2	(0.7)	4.7	(0.7)	2.3	(0.4)	**2.4**	(0.7)	3.6	(0.6)	6.4	(0.7)	**-2.8**	(0.8)
	Hungary	5.2	(0.8)	8.4	(1.0)	**-3.3**	(1.2)	6.5	(0.8)	3.1	(0.5)	**3.4**	(0.8)	7.9	(1.0)	12.6	(1.2)	**-4.6**	(1.3)
	Iceland	6.0	(0.7)	6.6	(0.7)	-0.6	(1.0)	8.3	(0.8)	3.6	(0.6)	**4.7**	(0.9)	11.9	(1.0)	13.4	(0.9)	-1.5	(1.3)
	Ireland	8.5	(0.8)	10.3	(1.0)	-1.8	(1.1)	14.6	(1.1)	8.7	(1.0)	**5.9**	(1.4)	8.3	(1.0)	12.3	(1.1)	**-4.0**	(1.4)
	Italy	3.8	(0.4)	5.4	(0.5)	**-1.6**	(0.6)	6.7	(0.6)	3.7	(0.4)	**3.0**	(0.7)	4.1	(0.5)	8.4	(0.7)	**-4.3**	(0.7)
	Japan	13.1	(1.0)	17.0	(1.1)	**-3.8**	(1.6)	10.7	(1.2)	8.1	(1.0)	2.5	(1.7)	13.9	(1.3)	22.7	(1.5)	**-8.8**	(2.0)
	Korea	9.5	(1.1)	11.1	(1.4)	-1.6	(1.3)	27.3	(2.0)	16.3	(1.3)	**11.0**	(2.3)	24.2	(2.0)	29.9	(2.1)	**-5.7**	(2.6)
	Luxembourg	4.4	(0.5)	7.3	(0.6)	**-2.9**	(0.9)	7.1	(0.7)	4.2	(0.5)	**2.9**	(0.8)	7.9	(0.7)	13.2	(0.8)	**-5.3**	(1.0)
	Mexico	0.2	(0.1)	0.3	(0.1)	-0.1	(0.1)	0.8	(0.2)	0.3	(0.2)	**0.4**	(0.2)	0.5	(0.2)	1.2	(0.3)	**-0.6**	(0.3)
	Netherlands	11.2	(0.8)	15.0	(1.1)	**-3.7**	(1.1)	11.1	(0.8)	7.2	(0.8)	**3.9**	(0.9)	18.6	(1.2)	23.6	(1.3)	**-5.0**	(1.3)
	New Zealand	16.9	(1.1)	18.4	(1.1)	-1.5	(1.6)	19.1	(1.2)	12.4	(0.9)	**6.7**	(1.5)	16.1	(1.3)	21.9	(1.3)	**-5.8**	(1.8)
	Norway	5.5	(0.7)	6.7	(0.7)	-1.2	(1.0)	10.4	(1.0)	5.2	(0.7)	**5.2**	(1.2)	8.6	(0.9)	12.1	(1.0)	**-3.4**	(1.2)
	Poland	5.4	(0.6)	8.1	(0.7)	**-2.7**	(0.8)	14.5	(1.1)	8.7	(0.8)	**5.8**	(1.1)	8.6	(0.7)	12.6	(1.1)	**-4.0**	(1.1)
	Portugal	2.3	(0.3)	4.0	(0.6)	**-1.8**	(0.6)	5.7	(0.7)	3.5	(0.6)	**2.1**	(0.8)	3.7	(0.5)	7.9	(0.8)	**-4.2**	(0.9)
	Slovak Republic	4.8	(0.5)	6.7	(0.8)	**-2.0**	(0.9)	7.3	(0.8)	3.6	(0.5)	**3.7**	(0.8)	8.9	(1.2)	13.0	(1.2)	**-4.1**	(1.4)
	Spain	4.1	(0.5)	5.6	(0.5)	**-1.5**	(0.6)	2.4	(0.4)	1.1	(0.3)	**1.3**	(0.5)	5.4	(0.6)	9.0	(0.7)	**-3.7**	(0.7)
	Sweden	7.2	(0.8)	8.6	(0.7)	-1.4	(1.1)	14.5	(1.1)	7.0	(0.8)	**7.5**	(1.0)	11.6	(0.9)	13.5	(1.0)	-1.9	(1.3)
	Switzerland	9.8	(1.0)	11.1	(0.9)	-1.3	(0.9)	10.4	(1.0)	5.1	(0.6)	**5.3**	(0.9)	20.3	(1.5)	24.8	(1.2)	**-4.5**	(1.3)
	Turkey	0.9	(0.4)	0.9	(0.4)	0.0	(0.4)	2.9	(0.8)	1.4	(0.5)	**1.5**	(0.6)	3.2	(1.0)	5.0	(1.4)	**-1.7**	(0.7)
	United Kingdom	11.5	(0.8)	16.0	(0.9)	**-4.5**	(1.1)	10.6	(0.8)	7.5	(0.6)	**3.1**	(0.8)	8.4	(0.7)	13.9	(0.8)	**-5.6**	(1.0)
	United States	8.2	(0.9)	10.0	(1.0)	-1.7	(1.1)	m	m	m	m	m	m	6.6	(0.9)	8.6	(1.0)	**-1.9**	(0.9)
	OECD average	8.0	(0.1)	10.0	(0.2)	**-2.0**	(0.2)	11.0	(0.2)	6.2	(0.1)	**4.8**	(0.2)	11.2	(0.2)	15.5	(0.2)	**-4.4**	(0.2)
Partner countries and economies	Argentina	0.5	(0.2)	0.4	(0.2)	0.0	(0.3)	1.3	(0.4)	0.6	(0.3)	0.7	(0.5)	1.1	(0.6)	1.0	(0.3)	0.1	(0.6)
	Azerbaijan	a	a	0.0	(0.0)	0.0	(0.0)	0.1	(0.0)	0.2	(0.1)	-0.2	(0.1)	0.9	(0.3)	0.9	(0.4)	0.0	(0.5)
	Brazil	0.4	(0.2)	0.8	(0.3)	-0.4	(0.3)	1.3	(0.4)	0.9	(0.3)	0.4	(0.4)	0.7	(0.3)	1.4	(0.5)	-0.7	(0.4)
	Bulgaria	2.8	(0.6)	3.3	(0.8)	-0.6	(0.6)	2.9	(0.7)	1.3	(0.4)	**1.6**	(0.6)	2.4	(0.7)	3.7	(1.0)	**-1.3**	(0.6)
	Chile	1.3	(0.5)	2.4	(0.6)	-1.1	(0.8)	3.7	(0.7)	3.4	(0.8)	0.3	(0.9)	0.5	(0.2)	2.3	(0.7)	**-1.7**	(0.8)
	Colombia	0.1	(0.1)	0.2	(0.1)	-0.1	(0.2)	0.8	(0.4)	0.4	(0.2)	0.4	(0.4)	0.3	(0.2)	0.6	(0.3)	-0.3	(0.2)
	Croatia	4.8	(0.6)	5.4	(0.5)	-0.7	(0.7)	5.6	(0.8)	1.9	(0.4)	**3.7**	(0.9)	3.0	(0.5)	6.4	(0.7)	**-3.4**	(0.7)
	Estonia	11.2	(1.0)	11.8	(1.0)	-0.6	(1.2)	9.2	(1.1)	3.0	(0.4)	**6.2**	(1.1)	11.1	(1.0)	13.9	(1.1)	**-2.9**	(1.2)
	Hong Kong-China	14.3	(1.2)	17.6	(1.3)	-3.2	(1.7)	16.8	(1.4)	8.8	(1.1)	**8.0**	(1.9)	24.6	(1.8)	30.9	(1.6)	**-6.4**	(2.5)
	Indonesia	0.0	(0.0)	0.1	(0.0)	0.0	(0.1)	0.1	(0.1)	0.0	(0.0)	0.1	(0.1)	0.2	(0.1)	0.6	(0.3)	-0.4	(0.3)
	Israel	3.9	(0.5)	6.6	(0.9)	**-2.8**	(0.9)	5.4	(0.7)	4.6	(0.7)	0.8	(0.9)	4.2	(0.6)	7.9	(0.8)	-3.7	(0.9)
	Jordan	0.7	(0.2)	0.6	(0.3)	0.1	(0.3)	0.3	(0.1)	0.1	(0.1)	0.2	(0.1)	0.1	(0.1)	0.3	(0.2)	-0.2	(0.3)
	Kyrgyzstan	0.0	(0.0)	0.0	(0.1)	0.0	(0.0)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	0.1	(0.0)	0.1	(0.1)	0.0	(0.1)
	Latvia	3.9	(0.5)	4.3	(0.6)	-0.5	(0.7)	6.5	(0.8)	2.5	(0.5)	**4.1**	(0.9)	5.6	(0.7)	7.6	(0.9)	-2.1	(1.1)
	Liechtenstein	12.3	(2.5)	12.2	(2.6)	0.1	(3.8)	14.4	(3.3)	4.6	(2.1)	**9.8**	(4.3)	19.2	(2.9)	17.7	(3.1)	1.5	(4.5)
	Lithuania	5.4	(0.8)	4.6	(0.7)	0.8	(0.7)	6.5	(0.8)	2.3	(0.4)	**4.2**	(0.8)	8.3	(1.0)	9.8	(1.0)	-1.5	(1.0)
	Macao-China	4.0	(0.5)	6.6	(0.6)	**-2.5**	(0.8)	3.7	(0.5)	2.4	(0.4)	1.3	(0.8)	14.2	(0.9)	20.6	(1.1)	**-6.4**	(1.5)
	Montenegro	0.2	(0.2)	0.3	(0.2)	-0.1	(0.2)	0.7	(0.3)	0.2	(0.1)	0.5	(0.3)	0.7	(0.3)	0.9	(0.3)	-0.2	(0.5)
	Qatar	0.2	(0.1)	0.4	(0.1)	-0.2	(0.2)	0.6	(0.1)	0.5	(0.2)	0.1	(0.2)	0.3	(0.1)	0.9	(0.2)	**-0.6**	(0.2)
	Romania	0.2	(0.1)	0.7	(0.3)	-0.5	(0.3)	0.5	(0.2)	0.1	(0.1)	0.3	(0.2)	0.7	(0.3)	1.8	(0.5)	**-1.1**	(0.5)
	Russian Federation	3.4	(0.5)	5.1	(0.7)	**-1.7**	(0.7)	2.3	(0.4)	1.1	(0.3)	**1.2**	(0.5)	6.3	(0.9)	8.6	(0.9)	**-2.3**	(0.8)
	Serbia	0.6	(0.2)	1.0	(0.3)	-0.5	(0.3)	0.4	(0.2)	0.2	(0.1)	0.2	(0.3)	2.0	(0.5)	3.7	(0.6)	**-1.7**	(0.7)
	Slovenia	13.1	(1.0)	12.7	(1.0)	0.5	(1.6)	7.8	(0.9)	2.7	(0.5)	**5.0**	(1.1)	12.5	(0.8)	14.8	(1.0)	-2.3	(1.3)
	Chinese Taipei	13.4	(1.3)	15.8	(1.3)	-2.4	(2.0)	6.1	(1.0)	3.5	(0.6)	**2.6**	(1.2)	28.8	(2.1)	34.7	(1.7)	**-5.9**	(2.6)
	Thailand	0.4	(0.1)	0.5	(0.2)	-0.1	(0.3)	0.4	(0.2)	0.1	(0.1)	0.3	(0.2)	1.1	(0.3)	1.6	(0.4)	-0.5	(0.5)
	Tunisia	0.1	(0.1)	0.1	(0.1)	0.0	(0.2)	0.2	(0.1)	0.1	(0.1)	0.0	(0.1)	0.3	(0.2)	0.7	(0.4)	-0.4	(0.4)
	Uruguay	1.0	(0.3)	1.9	(0.4)	-0.9	(0.5)	3.7	(0.5)	2.4	(0.5)	**1.3**	(0.6)	2.1	(0.5)	4.3	(0.6)	**-2.1**	(0.6)

Note: Values that are statistically significant are indicated in bold.
Source: OECD, *PISA 2006 Database.*
Please refer to the Reader's Guide for information on the abbreviations used in this table.
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A4

Table A4.2a.

Overlapping of top performers in science, reading and mathematics

		15-year-old students who are:																Percentage of top performers in science, who are top performers in reading and mathematics as well	
		not top performers in any of the three domains		top performers only in science		top performers only in reading		top performers only in mathematics		top performers in science and reading but not in mathematics		top performers in science and mathematics but not in reading		top performers in reading and mathematics but not in science		top performers in all three domains			
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD countries	Australia	78.0	(0.8)	2.8	(0.2)	1.6	(0.2)	4.5	(0.4)	1.2	(0.2)	4.0	(0.3)	1.2	(0.1)	6.6	(0.4)	45.4	(1.8)
	Austria	79.7	(1.2)	1.1	(0.3)	2.3	(0.3)	6.7	(0.6)	1.1	(0.3)	3.4	(0.4)	1.2	(0.3)	4.4	(0.4)	44.1	(3.2)
	Belgium	74.4	(0.8)	0.6	(0.2)	2.2	(0.2)	10.6	(0.6)	0.5	(0.1)	3.2	(0.3)	2.8	(0.3)	5.8	(0.4)	57.5	(2.4)
	Canada	74.3	(0.8)	2.5	(0.3)	3.6	(0.4)	5.6	(0.4)	1.7	(0.2)	3.2	(0.3)	2.1	(0.3)	7.0	(0.4)	48.8	(2.1)
	Czech Republic	78.2	(1.2)	1.2	(0.2)	1.6	(0.2)	7.1	(0.6)	0.6	(0.2)	4.2	(0.5)	1.4	(0.3)	5.5	(0.6)	47.4	(3.2)
	Denmark	84.0	(0.8)	0.6	(0.2)	1.2	(0.3)	6.7	(0.5)	0.4	(0.1)	2.8	(0.5)	1.3	(0.3)	3.0	(0.5)	43.7	(5.2)
	Finland	67.2	(1.0)	2.9	(0.3)	3.3	(0.4)	6.9	(0.6)	2.1	(0.3)	6.3	(0.5)	1.7	(0.3)	9.5	(0.5)	45.6	(2.0)
	France	82.7	(1.0)	1.3	(0.2)	2.7	(0.5)	5.6	(0.5)	0.8	(0.2)	3.1	(0.4)	0.9	(0.2)	2.8	(0.4)	35.3	(3.8)
	Germany	79.6	(1.1)	1.8	(0.2)	2.3	(0.4)	4.9	(0.6)	0.9	(0.2)	3.9	(0.4)	1.4	(0.3)	5.2	(0.5)	44.2	(3.1)
	Greece	91.8	(0.6)	1.0	(0.2)	1.6	(0.3)	2.8	(0.3)	0.5	(0.2)	1.0	(0.2)	0.4	(0.1)	0.9	(0.2)	25.9	(5.2)
	Hungary	86.9	(1.0)	1.1	(0.2)	1.1	(0.3)	4.3	(0.5)	0.4	(0.2)	2.9	(0.4)	0.7	(0.2)	2.4	(0.4)	35.2	(3.8)
	Iceland	84.6	(0.7)	0.9	(0.2)	1.5	(0.3)	6.3	(0.4)	0.4	(0.2)	2.3	(0.4)	1.3	(0.3)	2.8	(0.3)	44.4	(4.9)
	Ireland	82.7	(0.9)	1.5	(0.3)	3.9	(0.5)	2.7	(0.4)	1.7	(0.3)	1.5	(0.3)	1.3	(0.2)	4.8	(0.5)	50.5	(3.8)
	Italy	89.3	(0.6)	1.2	(0.1)	2.7	(0.3)	2.8	(0.3)	0.6	(0.1)	1.5	(0.2)	0.6	(0.1)	1.3	(0.2)	27.4	(2.7)
	Japan	76.0	(1.1)	3.0	(0.3)	1.5	(0.3)	6.3	(0.6)	1.2	(0.2)	5.3	(0.5)	1.1	(0.2)	5.5	(0.5)	36.8	(2.2)
	Korea	66.4	(1.5)	0.2	(0.1)	5.7	(0.6)	10.0	(0.8)	0.6	(0.2)	1.7	(0.4)	7.6	(0.7)	7.8	(0.8)	75.8	(3.2)
	Luxembourg	86.6	(0.6)	0.7	(0.1)	1.5	(0.2)	5.0	(0.4)	0.6	(0.1)	2.1	(0.3)	1.0	(0.2)	2.5	(0.3)	42.4	(4.0)
	Mexico	98.6	(0.2)	0.1	(0.1)	0.4	(0.1)	0.6	(0.2)	0.0	(0.0)	0.1	(0.0)	0.1	(0.0)	0.0	(0.0)	c	c
	Netherlands	75.8	(1.0)	1.3	(0.3)	1.2	(0.3)	8.3	(0.8)	0.5	(0.2)	5.5	(0.5)	1.6	(0.3)	5.8	(0.5)	44.0	(3.1)
	New Zealand	73.2	(1.0)	2.2	(0.3)	3.5	(0.4)	4.5	(0.4)	2.2	(0.3)	4.2	(0.5)	1.2	(0.3)	8.9	(0.6)	50.8	(2.7)
	Norway	85.1	(0.9)	0.8	(0.2)	2.9	(0.5)	4.5	(0.5)	0.7	(0.2)	1.8	(0.3)	1.3	(0.3)	2.7	(0.3)	45.1	(3.6)
	Poland	82.6	(0.9)	0.8	(0.2)	5.1	(0.4)	3.6	(0.4)	0.9	(0.2)	1.4	(0.3)	1.9	(0.3)	3.7	(0.4)	54.1	(4.3)
	Portugal	91.5	(0.6)	0.4	(0.1)	2.1	(0.3)	2.6	(0.3)	0.4	(0.1)	0.9	(0.2)	0.8	(0.2)	1.5	(0.2)	46.4	(4.8)
	Slovak Republic	86.2	(0.9)	0.8	(0.2)	1.6	(0.3)	5.4	(0.7)	0.5	(0.1)	2.2	(0.3)	1.0	(0.2)	2.3	(0.3)	40.6	(3.5)
	Spain	90.5	(0.6)	1.5	(0.2)	0.6	(0.1)	3.8	(0.3)	0.2	(0.1)	2.4	(0.3)	0.3	(0.1)	0.8	(0.2)	15.6	(2.8)
	Sweden	81.9	(1.0)	0.9	(0.3)	3.8	(0.5)	4.5	(0.6)	0.8	(0.2)	2.1	(0.4)	1.9	(0.4)	4.1	(0.3)	51.8	(3.4)
	Switzerland	75.5	(1.2)	0.7	(0.1)	0.9	(0.2)	11.7	(0.6)	0.3	(0.1)	4.4	(0.4)	1.5	(0.2)	5.0	(0.5)	48.0	(2.8)
	Turkey	94.6	(1.3)	0.1	(0.1)	1.1	(0.3)	2.8	(0.8)	0.1	(0.0)	0.4	(0.2)	0.6	(0.3)	0.4	(0.2)	c	c
	United Kingdom	81.8	(0.7)	3.5	(0.3)	1.7	(0.2)	2.2	(0.3)	1.9	(0.3)	3.4	(0.4)	0.5	(0.1)	4.9	(0.3)	35.9	(1.9)
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	*82.1*	*(0.2)*	*1.3*	*(0.0)*	*2.3*	*(0.1)*	*5.3*	*(0.1)*	*0.8*	*(0.0)*	*2.8*	*(0.1)*	*1.4*	*(0.1)*	*4.1*	*(0.1)*	*44.1*	*(0.7)*
Partner countries and economies	Argentina	98.1	(0.4)	0.2	(0.1)	0.7	(0.2)	0.7	(0.3)	0.1	(0.0)	0.2	(0.1)	0.1	(0.1)	0.1	(0.1)	c	c
	Azerbaijan	99.0	(0.3)	a	a	0.1	(0.1)	0.9	(0.3)	a	a	0.0	(0.0)	0.0	(0.0)	a	a	c	c
	Brazil	98.1	(0.4)	0.1	(0.1)	0.7	(0.2)	0.4	(0.1)	0.1	(0.0)	0.2	(0.1)	0.2	(0.1)	0.2	(0.1)	c	c
	Bulgaria	94.4	(1.0)	1.1	(0.3)	0.9	(0.3)	1.4	(0.4)	0.4	(0.2)	1.0	(0.3)	0.2	(0.1)	0.6	(0.2)	18.3	(5.7)
	Chile	94.9	(0.8)	0.8	(0.2)	2.4	(0.5)	0.5	(0.2)	0.4	(0.2)	0.3	(0.1)	0.3	(0.1)	0.4	(0.1)	c	c
	Colombia	99.0	(0.4)	0.1	(0.0)	0.5	(0.2)	0.3	(0.2)	0.0	(0.0)	0.1	(0.0)	0.0	(0.0)	0.0	(0.0)	c	c
	Croatia	91.7	(0.7)	1.4	(0.2)	1.4	(0.3)	1.6	(0.3)	0.8	(0.2)	1.6	(0.2)	0.2	(0.1)	1.3	(0.2)	26.4	(3.8)
	Estonia	83.3	(1.0)	2.5	(0.4)	1.0	(0.3)	3.8	(0.4)	0.7	(0.2)	4.4	(0.4)	0.4	(0.2)	3.9	(0.5)	34.0	(3.2)
	Hong Kong-China	68.5	(1.1)	1.1	(0.3)	2.2	(0.3)	10.9	(0.6)	0.5	(0.1)	6.6	(0.5)	2.5	(0.4)	7.7	(0.6)	48.3	(2.3)
	Indonesia	99.6	(0.2)	a	a	0.0	(0.0)	0.4	(0.2)	0.0	(0.0)	0.0	(0.0)	0.0	(0.0)	a	a	c	(0.0)
	Israel	89.6	(0.9)	1.6	(0.4)	1.8	(0.3)	2.7	(0.4)	0.9	(0.2)	1.1	(0.2)	0.6	(0.3)	1.7	(0.2)	31.7	(3.9)
	Jordan	99.1	(0.2)	0.5	(0.2)	0.2	(0.1)	0.1	(0.1)	0.1	(0.0)	0.1	(0.1)	0.0	(0.0)	0.0	(0.0)	c	c
	Kyrgyzstan	99.9	(0.1)	0.0	(0.0)	0.1	(0.1)	0.0	(0.0)	a	a	0.0	(0.0)	0.0	(0.0)	a	a	c	c
	Latvia	90.3	(0.8)	0.8	(0.2)	1.9	(0.3)	3.0	(0.3)	0.4	(0.2)	1.4	(0.3)	0.8	(0.2)	1.5	(0.2)	35.8	(5.6)
	Liechtenstein	79.2	(2.1)	1.0	(0.6)	1.1	(0.8)	6.5	(1.6)	0.5	(0.5)	3.7	(1.3)	1.1	(0.7)	7.2	(1.4)	59.4	(11.2)
	Lithuania	88.5	(0.9)	0.7	(0.2)	1.4	(0.3)	4.5	(0.5)	0.3	(0.1)	2.0	(0.4)	0.6	(0.2)	2.0	(0.3)	40.8	(4.9)
	Macao-China	81.2	(0.7)	0.5	(0.2)	0.8	(0.2)	11.9	(0.8)	0.1	(0.0)	3.4	(0.4)	0.8	(0.2)	1.3	(0.2)	24.2	(3.6)
	Montenegro	98.8	(0.2)	0.0	(0.0)	0.2	(0.1)	0.6	(0.2)	0.1	(0.1)	0.1	(0.0)	0.1	(0.1)	0.1	(0.1)	c	c
	Qatar	99.0	(0.1)	0.1	(0.0)	0.3	(0.1)	0.3	(0.1)	0.1	(0.1)	0.1	(0.0)	0.1	(0.1)	0.1	(0.1)	c	c
	Romania	98.3	(0.4)	0.1	(0.1)	0.2	(0.1)	0.9	(0.2)	0.0	(0.0)	0.3	(0.1)	0.0	(0.0)	0.0	(0.0)	c	c
	Russian Federation	90.6	(0.9)	1.2	(0.3)	0.6	(0.1)	4.4	(0.6)	0.2	(0.1)	2.2	(0.3)	0.3	(0.1)	0.6	(0.1)	15.3	(3.4)
	Serbia	96.8	(0.4)	0.2	(0.1)	0.1	(0.1)	2.2	(0.4)	0.0	(0.0)	0.5	(0.2)	0.1	(0.0)	0.1	(0.0)	c	c
	Slovenia	81.9	(0.6)	2.8	(0.3)	0.6	(0.2)	4.3	(0.5)	1.0	(0.2)	5.8	(0.5)	0.3	(0.1)	3.3	(0.4)	25.7	(2.8)
	Chinese Taipei	67.0	(1.4)	0.8	(0.2)	0.2	(0.1)	17.7	(0.9)	0.1	(0.1)	9.8	(0.6)	0.5	(0.1)	3.9	(0.5)	26.9	(2.4)
	Thailand	98.4	(0.3)	0.1	(0.1)	0.2	(0.1)	1.0	(0.2)	0.0	(0.0)	0.2	(0.1)	0.0	(0.0)	0.1	(0.1)	c	c
	Tunisia	99.3	(0.3)	0.1	(0.0)	0.1	(0.1)	0.4	(0.2)	0.0	(0.0)	0.1	(0.0)	0.0	(0.0)	0.0	(0.0)	c	c
	Uruguay	94.2	(0.5)	0.4	(0.1)	2.0	(0.4)	2.0	(0.3)	0.3	(0.1)	0.4	(0.1)	0.4	(0.1)	0.4	(0.1)	c	c

Source: OECD, *PISA 2006 Database.*

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Table A4.2b.
Overlapping of top performers in science, reading and mathematics, by gender

		Females who are:														Percentage of female top performers in science, who are top performers in reading and mathematics as well	
		not top performers in any of the three domains		top performers only in science		top performers only in reading		top performers only in mathematics		top performers in science and reading but not in mathematics		top performers in science and mathematics but not in reading		top performers in reading and mathematics but not in science		top performers in all three domains			
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD countries	Australia	79.1	(0.9)	2.7	(0.4)	3.0	(0.4)	2.7	(0.4)	2.0	(0.3)	2.0	(0.3)	1.6	(0.2)	6.9	(0.5)	50.8	(2.9)
	Austria	81.0	(1.4)	0.9	(0.4)	4.3	(0.7)	4.2	(0.6)	1.7	(0.4)	1.4	(0.3)	1.8	(0.4)	4.6	(0.4)	53.6	(4.8)
	Belgium	75.6	(1.2)	0.5	(0.2)	3.7	(0.5)	8.1	(0.7)	0.7	(0.2)	1.7	(0.3)	3.7	(0.4)	6.0	(0.6)	67.4	(3.5)
	Canada	74.9	(1.0)	2.0	(0.4)	5.8	(0.8)	3.6	(0.4)	2.5	(0.4)	1.7	(0.2)	2.6	(0.3)	6.9	(0.5)	52.7	(2.9)
	Czech Republic	77.6	(1.8)	1.1	(0.3)	3.1	(0.5)	5.9	(0.9)	1.0	(0.3)	2.5	(0.5)	2.2	(0.5)	6.5	(0.9)	58.3	(3.7)
	Denmark	84.8	(1.0)	0.4	(0.2)	2.0	(0.4)	5.5	(0.8)	0.5	(0.2)	1.6	(0.4)	1.8	(0.5)	3.3	(0.5)	57.3	(6.2)
	Finland	66.7	(1.3)	2.5	(0.4)	6.1	(0.8)	4.4	(0.7)	3.6	(0.5)	2.8	(0.4)	2.6	(0.4)	11.4	(0.8)	56.2	(2.8)
	France	83.4	(1.2)	0.9	(0.2)	4.2	(0.8)	4.7	(0.6)	0.8	(0.4)	2.1	(0.4)	1.1	(0.3)	2.7	(0.6)	42.2	(6.5)
	Germany	81.2	(1.1)	1.3	(0.4)	4.2	(0.6)	2.8	(0.5)	1.3	(0.3)	1.7	(0.3)	1.9	(0.6)	5.5	(0.6)	55.8	(4.6)
	Greece	92.2	(0.8)	0.8	(0.3)	2.6	(0.4)	1.8	(0.4)	0.7	(0.3)	0.5	(0.2)	0.5	(0.2)	0.8	(0.2)	28.8	(7.8)
	Hungary	88.6	(1.2)	0.7	(0.3)	2.1	(0.4)	2.9	(0.4)	0.7	(0.3)	1.2	(0.4)	1.1	(0.3)	2.6	(0.5)	50.4	(7.1)
	Iceland	84.2	(1.1)	1.2	(0.4)	2.5	(0.5)	5.3	(0.6)	0.6	(0.3)	1.4	(0.5)	2.0	(0.6)	1.2	(0.3)	53.4	(9.0)
	Ireland	82.2	(1.2)	0.8	(0.4)	6.2	(0.8)	1.4	(0.5)	2.3	(0.5)	0.7	(0.3)	1.7	(0.4)	3.2	(0.5)	52.5	(6.2)
	Italy	90.0	(0.7)	0.5	(0.2)	4.0	(0.4)	1.6	(0.3)	0.9	(0.2)	0.7	(0.2)	0.6	(0.1)	0.1	(0.1)	30.0	(4.8)
	Japan	79.0	(1.6)	2.9	(0.4)	2.5	(0.5)	4.2	(0.7)	1.8	(0.3)	3.2	(0.5)	1.2	(0.3)	5.3	(0.7)	40.0	(3.4)
	Korea	65.8	(2.1)	0.1	(0.1)	9.1	(1.1)	6.2	(0.8)	0.8	(0.3)	0.5	(0.2)	9.4	(1.1)	8.1	(1.1)	84.7	(4.4)
	Luxembourg	88.1	(0.7)	0.6	(0.2)	2.7	(0.4)	3.4	(0.6)	0.7	(0.2)	0.8	(0.2)	1.4	(0.3)	2.3	(0.4)	52.2	(5.9)
	Mexico	98.7	(0.3)	0.1	(0.1)	0.6	(0.1)	0.4	(0.1)	0.0	(0.0)	0.1	(0.1)	0.1	(0.0)	0.0	(0.0)	17.3	(16.2)
	Netherlands	77.3	(1.1)	1.2	(0.4)	2.2	(0.5)	7.1	(0.9)	0.7	(0.2)	3.3	(0.6)	2.2	(0.4)	6.0	(0.6)	53.1	(4.2)
	New Zealand	72.9	(1.5)	2.2	(0.5)	5.5	(0.6)	3.2	(0.6)	3.3	(0.5)	2.6	(0.6)	1.6	(0.4)	8.8	(0.7)	52.0	(3.2)
	Norway	84.9	(1.0)	0.6	(0.2)	4.8	(0.9)	3.0	(0.6)	1.0	(0.3)	1.1	(0.4)	1.8	(0.6)	2.8	(0.6)	50.6	(6.8)
	Poland	82.1	(1.2)	0.4	(0.2)	7.7	(0.7)	2.4	(0.4)	1.2	(0.4)	0.6	(0.2)	2.3	(0.4)	3.3	(0.4)	60.1	(5.5)
	Portugal	92.3	(0.8)	0.3	(0.1)	3.2	(0.5)	1.4	(0.4)	0.5	(0.2)	0.3	(0.2)	0.8	(0.3)	1.2	(0.2)	51.8	(8.4)
	Slovak Republic	87.3	(1.1)	0.5	(0.2)	2.7	(0.6)	3.9	(0.8)	0.7	(0.2)	1.1	(0.2)	1.4	(0.4)	2.5	(0.4)	52.8	(5.6)
	Spain	92.0	(0.7)	1.4	(0.3)	0.9	(0.2)	2.6	(0.3)	0.3	(0.1)	1.6	(0.3)	0.3	(0.1)	0.8	(0.2)	20.5	(4.8)
	Sweden	80.6	(1.3)	0.6	(0.3)	6.1	(0.8)	3.4	(0.8)	1.1	(0.3)	0.9	(0.3)	2.7	(0.6)	4.6	(0.5)	64.5	(5.3)
	Switzerland	77.0	(1.5)	0.6	(0.2)	1.6	(0.3)	9.3	(0.7)	0.5	(0.2)	2.7	(0.4)	2.4	(0.4)	6.0	(0.7)	61.5	(4.4)
	Turkey	94.9	(1.3)	0.1	(0.1)	1.7	(0.6)	1.7	(0.6)	0.1	(0.1)	0.4	(0.2)	0.8	(0.4)	0.4	(0.2)	42.8	(14.3)
	United Kingdom	83.8	(0.9)	2.6	(0.4)	2.6	(0.3)	1.4	(0.3)	2.7	(0.4)	1.6	(0.3)	0.7	(0.2)	4.6	(0.5)	40.3	(3.5)
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	*82.7*	*(0.2)*	*1.1*	*(0.1)*	*3.7*	*(0.1)*	*3.7*	*(0.1)*	*1.2*	*(0.1)*	*1.5*	*(0.1)*	*1.9*	*(0.1)*	*4.1*	*(0.1)*	*50.1*	*(1.2)*
Partner countries and economies	Argentina	97.7	(0.7)	0.1	(0.1)	1.0	(0.3)	0.7	(0.5)	0.0	(0.0)	0.2	(0.2)	0.1	(0.2)	0.1	(0.1)	17.1	(21.0)
	Azerbaijan	99.1	(0.3)	a	a	0.0	(0.0)	0.8	(0.3)	a	a	a	a	0.1	(0.0)	a	a	a	a
	Brazil	98.2	(0.4)	0.1	(0.1)	1.0	(0.3)	0.3	(0.1)	0.1	(0.1)	0.1	(0.1)	0.2	(0.1)	0.2	(0.1)	41.3	(18.0)
	Bulgaria	94.5	(1.1)	1.0	(0.4)	1.6	(0.5)	1.0	(0.4)	0.5	(0.3)	0.7	(0.3)	0.2	(0.1)	0.5	(0.2)	19.4	(5.2)
	Chile	95.5	(0.9)	0.6	(0.3)	2.9	(0.6)	0.1	(0.1)	0.5	(0.3)	0.1	(0.1)	0.2	(0.1)	0.2	(0.1)	13.7	(7.8)
	Colombia	99.0	(0.5)	0.1	(0.1)	0.7	(0.4)	0.2	(0.1)	0.0	(0.0)	0.0	(0.0)	0.1	(0.1)	0.0	(0.0)	29.9	(46.6)
	Croatia	91.8	(0.9)	1.3	(0.3)	2.5	(0.5)	0.7	(0.3)	1.4	(0.4)	0.6	(0.3)	0.3	(0.2)	1.4	(0.3)	30.2	(6.8)
	Estonia	83.4	(1.3)	2.3	(0.4)	2.0	(0.5)	2.6	(0.4)	1.2	(0.3)	2.4	(0.5)	0.8	(0.4)	5.2	(0.8)	46.5	(4.9)
	Hong Kong-China	70.1	(1.9)	1.0	(0.4)	3.6	(0.5)	8.4	(1.1)	0.7	(0.3)	3.7	(0.5)	3.6	(0.8)	8.9	(0.9)	61.9	(3.7)
	Indonesia	99.7	(0.2)	1.1	(0.3)	0.1	(0.1)	0.2	(0.1)	0.0	(0.0)	a	a	0.0	(0.0)	4.5	(0.7)	0.0	(0.0)
	Israel	91.0	(1.1)	1.0	(0.2)	2.5	(0.6)	1.9	(0.4)	1.0	(0.2)	0.5	(0.2)	0.7	(0.3)	1.1	(0.2)	30.7	(6.7)
	Jordan	99.0	(0.2)	a	a	0.2	(0.1)	0.0	(0.0)	0.1	(0.1)	0.1	(0.1)	0.0	(0.0)	a	a	4.6	(9.5)
	Kyrgyzstan	99.9	(0.1)	a	a	0.1	(0.1)	0.0	(0.0)	a	a	0.0	(0.0)	0.0	(0.0)	a	a	0.0	(0.0)
	Latvia	90.0	(1.0)	0.8	(0.3)	3.0	(0.5)	2.0	(0.5)	0.6	(0.2)	0.7	(0.2)	1.2	(0.3)	1.7	(0.4)	43.5	(7.1)
	Liechtenstein	77.5	(3.2)	0.8	(0.7)	2.0	(1.5)	6.3	(2.0)	0.8	(0.8)	1.2	(0.9)	2.0	(1.4)	9.7	(2.4)	78.8	(11.7)
	Lithuania	88.0	(1.1)	0.8	(0.3)	2.4	(0.6)	3.2	(0.7)	0.4	(0.2)	1.5	(0.4)	1.0	(0.4)	2.7	(0.5)	49.9	(5.1)
	Macao-China	83.8	(0.9)	0.6	(0.3)	1.3	(0.3)	9.8	(1.1)	0.1	(0.1)	2.2	(0.4)	1.1	(0.2)	1.1	(0.3)	28.2	(6.6)
	Montenegro	98.7	(0.3)	0.0	(0.0)	0.4	(0.2)	0.5	(0.2)	0.2	(0.2)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	40.4	(35.8)
	Qatar	99.1	(0.2)	0.1	(0.1)	0.4	(0.1)	0.2	(0.1)	0.1	(0.1)	0.0	(0.0)	0.1	(0.1)	0.1	(0.1)	35.0	(20.8)
	Romania	98.8	(0.4)	0.1	(0.1)	0.4	(0.2)	0.6	(0.3)	0.1	(0.0)	0.1	(0.1)	0.1	(0.1)	0.0	(0.0)	3.4	(10.2)
	Russian Federation	91.5	(0.9)	0.9	(0.2)	1.0	(0.2)	3.8	(0.6)	0.2	(0.1)	1.5	(0.4)	0.3	(0.1)	0.7	(0.2)	21.5	(5.5)
	Serbia	97.5	(0.5)	0.2	(0.1)	0.2	(0.1)	1.6	(0.5)	0.1	(0.1)	0.2	(0.1)	0.1	(0.1)	0.1	(0.1)	9.2	(11.2)
	Slovenia	81.7	(1.0)	2.8	(0.4)	1.1	(0.4)	3.5	(0.7)	1.9	(0.4)	4.2	(0.6)	0.5	(0.2)	4.3	(0.6)	32.5	(3.9)
	Chinese Taipei	70.0	(2.1)	0.8	(0.2)	0.3	(0.1)	15.6	(1.2)	0.2	(0.1)	7.6	(0.8)	0.8	(0.3)	4.8	(0.8)	36.1	(4.0)
	Thailand	98.5	(0.3)	0.1	(0.1)	0.2	(0.1)	0.9	(0.3)	0.0	(0.0)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	19.8	(14.6)
	Tunisia	99.5	(0.3)	0.1	(0.1)	0.1	(0.1)	0.2	(0.2)	0.0	(0.0)	0.1	(0.1)	0.0	(0.0)	a	a	0.0	(0.0)
	Uruguay	94.6	(0.6)	0.3	(0.3)	2.7	(0.5)	1.2	(0.4)	0.3	(0.2)	0.1	(0.1)	0.5	(0.2)	0.3	(0.1)	28.2	(15.0)

Source: OECD, *PISA 2006 Database.*
StatLink http://dx.doi.org/10.1787/664076271473

A4

Table A4.2b. *(continued)*

Overlapping of top performers in science, reading and mathematics, by gender

		Males who are:																Percentage of male top performers in science, who are top performers in reading and mathematics as well	
		not top performers in any of the three domains		top performers only in science		top performers only in reading		top performers only in mathematics		top performers in science and reading but not in mathematics		top performers in science and mathematics but not in reading		top performers in reading and mathematics but not in science		top performers in all three domains)			
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD countries	Australia	76.9	(1.3)	2.8	(0.3)	0.3	(0.1)	6.3	(0.6)	0.4	(0.1)	6.0	(0.4)	0.8	(0.2)	6.4	(0.7)	41.0	(2.7)
	Austria	78.5	(1.5)	1.3	(0.3)	0.4	(0.1)	9.2	(0.9)	0.4	(0.2)	5.3	(0.8)	0.7	(0.3)	4.2	(0.5)	37.1	(4.1)
	Belgium	73.3	(1.1)	0.6	(0.2)	0.9	(0.2)	12.8	(0.8)	0.3	(0.1)	4.6	(0.4)	1.9	(0.3)	5.6	(0.4)	50.4	(3.3)
	Canada	73.7	(1.0)	2.9	(0.4)	1.5	(0.2)	7.5	(0.6)	1.0	(0.3)	4.7	(0.5)	1.7	(0.4)	7.1	(0.5)	45.5	(2.5)
	Czech Republic	78.7	(1.4)	1.3	(0.4)	0.5	(0.3)	8.1	(0.7)	0.3	(0.2)	5.6	(0.7)	0.8	(0.3)	4.7	(0.6)	39.5	(3.7)
	Denmark	83.2	(1.1)	0.8	(0.4)	0.5	(0.3)	7.9	(0.7)	0.4	(0.2)	4.0	(0.8)	0.7	(0.3)	2.6	(0.7)	33.4	(7.2)
	Finland	67.7	(1.4)	3.4	(0.5)	0.5	(0.3)	9.4	(0.8)	0.6	(0.2)	9.9	(0.9)	0.8	(0.3)	7.7	(0.7)	35.6	(3.0)
	France	81.9	(1.3)	1.7	(0.3)	1.2	(0.4)	6.5	(0.9)	0.7	(0.3)	4.3	(0.6)	0.8	(0.3)	2.9	(0.5)	30.4	(4.0)
	Germany	78.0	(1.5)	2.2	(0.4)	0.6	(0.2)	6.8	(0.9)	0.5	(0.3)	6.0	(0.7)	0.9	(0.3)	5.0	(0.7)	36.3	(3.6)
	Greece	91.3	(0.9)	1.2	(0.3)	0.7	(0.4)	3.8	(0.5)	0.4	(0.1)	1.4	(0.3)	0.3	(0.2)	1.0	(0.3)	23.9	(5.7)
	Hungary	85.4	(1.2)	1.5	(0.3)	0.3	(0.2)	5.6	(0.8)	0.3	(0.1)	4.4	(0.8)	0.3	(0.2)	2.3	(0.4)	26.8	(4.3)
	Iceland	85.0	(1.0)	1.0	(0.2)	0.5	(0.2)	7.2	(0.8)	0.2	(0.1)	3.1	(0.5)	0.6	(0.3)	2.4	(0.4)	36.5	(4.8)
	Ireland	83.2	(1.4)	1.9	(0.4)	1.6	(0.5)	3.9	(0.7)	1.1	(0.4)	2.3	(0.4)	1.0	(0.3)	5.0	(0.7)	48.8	(3.7)
	Italy	88.6	(0.8)	1.3	(0.2)	1.4	(0.2)	4.1	(0.5)	0.4	(0.1)	2.4	(0.3)	0.6	(0.1)	1.4	(0.3)	25.5	(4.1)
	Japan	73.0	(1.6)	3.1	(0.5)	0.6	(0.3)	8.4	(0.9)	0.6	(0.2)	7.4	(0.7)	1.1	(0.3)	5.8	(0.7)	34.4	(3.7)
	Korea	67.0	(2.1)	0.3	(0.2)	2.4	(0.4)	13.7	(1.2)	0.5	(0.2)	2.8	(0.8)	5.9	(0.8)	7.6	(0.9)	68.4	(4.8)
	Luxembourg	85.1	(0.9)	0.9	(0.2)	0.4	(0.2)	6.5	(0.7)	0.4	(0.2)	3.3	(0.5)	0.7	(0.2)	2.7	(0.4)	36.6	(5.7)
	Mexico	98.5	(0.3)	0.1	(0.1)	0.2	(0.1)	0.9	(0.3)	0.0	(0.0)	0.2	(0.1)	0.1	(0.0)	0.0	(0.0)	9.4	(5.8)
	Netherlands	74.3	(1.3)	1.4	(0.3)	0.3	(0.1)	9.4	(1.0)	0.3	(0.2)	7.6	(0.9)	1.0	(0.3)	5.6	(0.7)	37.4	(3.9)
	New Zealand	73.5	(1.3)	2.2	(0.4)	1.3	(0.4)	5.9	(0.7)	1.1	(0.4)	6.0	(0.7)	0.9	(0.4)	9.1	(0.9)	49.6	(3.8)
	Norway	85.4	(1.2)	1.0	(0.2)	1.2	(0.3)	5.9	(0.7)	0.4	(0.2)	2.6	(0.5)	0.8	(0.2)	2.7	(0.4)	40.8	(4.7)
	Poland	83.1	(1.2)	1.2	(0.3)	2.4	(0.4)	4.8	(0.6)	0.6	(0.2)	2.2	(0.4)	1.6	(0.3)	4.1	(0.5)	50.1	(4.8)
	Portugal	90.6	(0.9)	0.5	(0.2)	0.8	(0.2)	3.8	(0.4)	0.2	(0.2)	1.5	(0.4)	0.7	(0.3)	1.7	(0.4)	43.1	(7.1)
	Slovak Republic	85.2	(1.2)	1.0	(0.4)	0.5	(0.2)	6.9	(0.9)	0.3	(0.1)	3.3	(0.5)	0.6	(0.2)	2.2	(0.4)	32.3	(4.3)
	Spain	89.1	(0.8)	1.6	(0.3)	0.2	(0.1)	4.9	(0.5)	0.1	(0.1)	3.3	(0.3)	0.2	(0.1)	0.7	(0.2)	12.1	(2.8)
	Sweden	83.1	(1.2)	1.2	(0.3)	1.6	(0.4)	5.6	(0.8)	0.6	(0.2)	3.2	(0.6)	1.2	(0.3)	3.6	(0.5)	41.7	(4.8)
	Switzerland	74.1	(1.3)	0.8	(0.2)	0.2	(0.1)	13.9	(1.0)	0.2	(0.1)	6.1	(0.6)	0.7	(0.2)	4.1	(0.5)	36.8	(3.3)
	Turkey	94.3	(1.5)	0.1	(0.1)	0.5	(0.3)	3.7	(1.0)	0.1	(0.0)	0.4	(0.2)	0.5	(0.2)	0.3	(0.3)	34.3	(21.4)
	United Kingdom	79.8	(0.9)	4.4	(0.5)	0.7	(0.2)	3.1	(0.5)	1.2	(0.3)	5.3	(0.6)	0.4	(0.2)	5.2	(0.4)	32.7	(2.2)
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average	*81.4*	*(0.2)*	*1.5*	*(0.1)*	*0.8*	*(0.1)*	*6.8*	*(0.1)*	*0.5*	*(0.0)*	*4.1*	*(0.1)*	*1.0*	*(0.1)*	*3.9*	*(0.1)*	*36.9*	*(1.1)*
Partner countries and economies	Argentina	98.4	(0.5)	0.2	(0.1)	0.3	(0.3)	0.7	(0.3)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	13.3	(11.2)
	Azerbaijan	98.9	(0.5)	a	a	0.2	(0.1)	0.9	(0.4)	a	a	0.0	(0.0)	0.0	(0.0)	a	a	a	a
	Brazil	98.0	(0.6)	0.2	(0.1)	0.4	(0.1)	0.6	(0.2)	0.1	(0.1)	0.3	(0.2)	0.2	(0.1)	0.3	(0.2)	33.4	(18.7)
	Bulgaria	94.4	(1.1)	1.3	(0.4)	0.4	(0.2)	1.8	(0.5)	0.3	(0.2)	1.2	(0.4)	0.1	(0.1)	0.6	(0.3)	17.2	(8.4)
	Chile	94.4	(1.1)	0.9	(0.3)	2.0	(0.6)	0.8	(0.3)	0.4	(0.2)	0.5	(0.2)	0.4	(0.2)	0.6	(0.3)	24.3	(8.8)
	Colombia	99.0	(0.3)	0.1	(0.1)	0.3	(0.2)	0.4	(0.3)	0.0	(0.0)	0.1	(0.1)	0.0	(0.0)	0.1	(0.1)	13.3	(21.8)
	Croatia	91.6	(0.8)	1.5	(0.3)	0.3	(0.1)	2.5	(0.5)	0.2	(0.2)	2.5	(0.4)	0.1	(0.1)	1.3	(0.3)	23.0	(4.4)
	Estonia	83.2	(1.1)	2.7	(0.5)	0.1	(0.1)	4.9	(0.6)	0.2	(0.2)	6.3	(0.7)	0.1	(0.1)	2.7	(0.4)	22.7	(3.0)
	Hong Kong-China	66.9	(1.7)	1.2	(0.3)	0.7	(0.2)	13.5	(1.3)	0.3	(0.1)	9.6	(0.9)	1.3	(0.4)	6.5	(0.9)	36.9	(3.4)
	Indonesia	99.4	(0.3)	a	a	0.0	(0.0)	0.5	(0.3)	a	a	0.1	(0.0)	0.1	(0.0)	a	a	0.0	(0.0)
	Israel	88.2	(1.2)	2.0	(0.5)	1.1	(0.3)	3.5	(0.7)	0.8	(0.2)	1.7	(0.4)	0.6	(0.3)	2.1	(0.4)	32.2	(4.9)
	Jordan	99.1	(0.3)	0.4	(0.2)	0.1	(0.1)	0.2	(0.2)	0.0	(0.0)	0.1	(0.1)	0.0	(0.0)	0.0	(0.0)	2.8	(5.2)
	Kyrgyzstan	99.9	(0.1)	0.0	(0.1)	0.0	(0.0)	0.1	(0.1)	a	a	0.0	(0.0)	0.0	(0.0)	a	a	0.0	(0.0)
	Latvia	90.6	(1.1)	0.8	(0.2)	0.7	(0.4)	4.0	(0.6)	0.2	(0.1)	2.1	(0.5)	0.3	(0.1)	1.2	(0.3)	28.6	(7.5)
	Liechtenstein	81.1	(3.1)	a	a	1.1	(1.0)	6.7	(2.6)	0.6	(0.6)	6.7	(2.6)	a	a	4.3	(2.1)	36.6	(18.6)
	Lithuania	89.0	(1.1)	0.5	(0.2)	0.5	(0.2)	5.7	(0.7)	0.2	(0.1)	2.5	(0.5)	0.2	(0.2)	1.4	(0.4)	30.6	(7.2)
	Macao-China	78.6	(1.1)	0.5	(0.2)	0.3	(0.2)	14.0	(1.2)	0.1	(0.1)	4.6	(0.6)	0.6	(0.3)	1.4	(0.3)	21.8	(5.1)
	Montenegro	98.9	(0.3)	0.1	(0.1)	a	a	0.7	(0.3)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	47.1	(29.6)
	Qatar	98.8	(0.2)	0.1	(0.1)	0.1	(0.1)	0.5	(0.2)	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	0.2	(0.1)	42.1	(21.7)
	Romania	97.9	(0.5)	0.2	(0.1)	0.1	(0.1)	1.3	(0.3)	0.0	(0.0)	0.5	(0.2)	a	a	0.0	(0.0)	5.1	(6.0)
	Russian Federation	89.5	(1.1)	1.6	(0.5)	0.2	(0.1)	5.0	(0.7)	0.1	(0.1)	2.9	(0.4)	0.2	(0.1)	0.6	(0.2)	11.0	(4.1)
	Serbia	96.0	(0.6)	0.3	(0.2)	0.0	(0.0)	2.8	(0.6)	a	a	0.7	(0.3)	0.1	(0.1)	0.1	(0.0)	5.4	(5.5)
	Slovenia	82.1	(0.9)	2.7	(0.6)	0.1	(0.1)	5.0	(0.8)	0.2	(0.2)	7.4	(0.7)	0.1	(0.1)	2.4	(0.5)	18.6	(3.6)
	Chinese Taipei	64.3	(1.8)	0.9	(0.2)	0.0	(0.0)	19.6	(1.0)	0.1	(0.0)	11.7	(0.9)	0.3	(0.1)	3.1	(0.6)	19.8	(2.6)
	Thailand	98.2	(0.4)	0.1	(0.1)	0.1	(0.1)	1.3	(0.4)	a	a	0.3	(0.2)	0.0	(0.0)	0.1	(0.1)	12.2	(16.1)
	Tunisia	99.1	(0.4)	0.1	(0.1)	0.1	(0.1)	0.6	(0.4)	a	a	0.1	(0.1)	0.1	(0.1)	0.1	(0.1)	10.4	(29.9)
	Uruguay	93.7	(0.7)	0.5	(0.2)	1.2	(0.4)	2.8	(0.4)	0.2	(0.1)	0.6	(0.2)	0.4	(0.1)	0.6	(0.2)	28.9	(8.6)

Source: OECD, *PISA 2006 Database.*

StatLink http://dx.doi.org/10.1787/664076271473

A4

Table A4.3.

Students' socio-economic background, by performance group

	PISA index of economic, social and cultural status (ESCS)						Percentage of students in each performance group with the PISA index of economic, social and cultural status (ESCS) lower than the national average ESCS						Percentage of students in each performance group with the PISA index of economic, social and cultural status (ESCS) lower than the OECD average ESCS					
	Strong performers		Top performers		Difference in the mean index between strong performers and top performers		Strong performers		Top performers		Difference in the percentages between strong performers and top performers		Strong performers		Top performers		Difference in the percentages between strong performers and top performers	
	Mean index	S.E.	Mean index	S.E.	Dif.	S.E.	%	S.E.	%	S.E.	Dif.	S.E.	%	S.E.	%	S.E.	Dif.	S.E.
OECD countries																		
Australia	0.38	(0.02)	0.60	(0.02)	**-0.22**	(0.03)	39.4	(1.2)	28.3	(1.4)	**11.0**	(1.9)	30.3	(1.2)	19.7	(1.3)	**10.6**	(1.8)
Austria	0.49	(0.04)	0.61	(0.05)	**-0.12**	(0.06)	37.6	(2.1)	32.6	(3.3)	5.0	(3.7)	28.7	(1.8)	23.6	(2.6)	5.1	(3.0)
Belgium	0.54	(0.03)	0.75	(0.04)	**-0.21**	(0.04)	33.8	(1.5)	23.4	(1.8)	**10.4**	(2.2)	26.2	(1.4)	17.8	(1.6)	**8.4**	(1.9)
Canada	0.52	(0.02)	0.70	(0.02)	**-0.18**	(0.03)	40.7	(1.4)	30.5	(1.5)	**10.2**	(1.8)	26.3	(1.3)	17.3	(1.4)	**9.0**	(1.7)
Czech Republic	0.26	(0.03)	0.57	(0.04)	**-0.32**	(0.04)	38.6	(2.0)	23.0	(1.8)	**15.6**	(2.3)	37.5	(1.9)	21.9	(1.8)	**15.6**	(2.3)
Denmark	0.65	(0.04)	0.94	(0.06)	**-0.29**	(0.07)	33.6	(2.0)	23.0	(2.9)	**10.6**	(3.1)	23.4	(1.8)	14.5	(2.7)	**8.9**	(3.2)
Finland	0.35	(0.03)	0.57	(0.03)	**-0.22**	(0.04)	43.7	(1.6)	33.5	(2.0)	**10.2**	(2.4)	32.6	(1.5)	24.4	(1.5)	**8.2**	(2.0)
France	0.30	(0.04)	0.59	(0.06)	**-0.28**	(0.06)	30.2	(2.2)	18.6	(3.3)	**11.5**	(4.1)	35.9	(2.2)	22.4	(2.9)	**13.5**	(3.4)
Germany	0.62	(0.03)	0.90	(0.04)	**-0.28**	(0.05)	37.6	(2.1)	25.8	(2.4)	**11.8**	(3.7)	25.6	(1.5)	13.3	(1.9)	**12.3**	(2.8)
Greece	0.33	(0.05)	0.64	(0.10)	**-0.31**	(0.11)	32.3	(2.5)	18.2	(3.5)	**14.1**	(3.7)	37.5	(2.7)	21.2	(3.9)	**16.3**	(4.5)
Hungary	0.35	(0.04)	0.69	(0.06)	**-0.34**	(0.06)	34.6	(2.0)	20.3	(2.8)	**14.3**	(3.2)	38.6	(2.2)	22.8	(2.8)	**15.8**	(3.4)
Iceland	1.03	(0.04)	1.20	(0.07)	**-0.17**	(0.09)	35.3	(2.2)	25.6	(3.3)	**9.7**	(4.3)	11.5	(1.6)	6.9	(1.9)	4.7	(2.7)
Ireland	0.28	(0.04)	0.48	(0.05)	**-0.21**	(0.05)	38.3	(2.5)	27.7	(2.7)	**10.6**	(2.9)	39.4	(2.4)	28.5	(2.7)	**10.9**	(2.9)
Italy	0.29	(0.03)	0.59	(0.06)	**-0.30**	(0.06)	34.2	(1.9)	22.4	(2.7)	**11.9**	(3.4)	36.9	(1.9)	25.4	(2.9)	**11.5**	(3.5)
Japan	0.11	(0.03)	0.27	(0.03)	**-0.17**	(0.04)	44.3	(1.7)	33.7	(2.2)	**10.6**	(2.8)	45.5	(1.8)	34.9	(2.2)	**10.6**	(3.0)
Korea	0.17	(0.03)	0.43	(0.07)	**-0.26**	(0.06)	41.8	(2.0)	28.7	(3.4)	**13.1**	(3.3)	43.0	(2.0)	29.4	(3.5)	**13.6**	(3.3)
Luxembourg	0.65	(0.03)	0.87	(0.06)	**-0.22**	(0.07)	23.0	(2.1)	15.0	(3.0)	8.0	(4.2)	21.4	(1.9)	12.1	(2.7)	**9.3**	(3.9)
Mexico	0.30	(0.08)	c	c	c	c	16.5	(3.1)	c	c	c	c	35.1	(3.3)	c	c	c	c
Netherlands	0.53	(0.04)	0.80	(0.03)	**-0.26**	(0.05)	35.1	(2.0)	24.2	(1.9)	**10.9**	(3.1)	26.1	(2.0)	16.3	(1.9)	**9.8**	(2.9)
New Zealand	0.29	(0.03)	0.58	(0.03)	**-0.29**	(0.04)	40.0	(1.8)	25.1	(1.8)	**14.9**	(2.5)	34.4	(2.0)	21.6	(1.7)	**12.8**	(2.5)
Norway	0.66	(0.04)	0.82	(0.06)	**-0.16**	(0.08)	37.4	(2.7)	26.6	(3.1)	**10.8**	(4.5)	17.8	(1.9)	12.8	(2.9)	5.0	(3.6)
Poland	0.03	(0.04)	0.40	(0.05)	**-0.37**	(0.06)	39.4	(2.5)	25.2	(3.0)	**14.3**	(4.5)	54.5	(2.0)	36.2	(3.0)	**18.4**	(3.8)
Portugal	0.11	(0.07)	0.66	(0.11)	**-0.55**	(0.12)	29.1	(2.2)	18.0	(3.9)	**11.1**	(4.7)	46.1	(2.6)	31.3	(4.3)	**14.7**	(4.7)
Slovak Republic	0.26	(0.04)	0.63	(0.06)	**-0.37**	(0.07)	39.4	(2.5)	23.3	(3.3)	**16.0**	(4.2)	45.8	(2.4)	28.4	(3.9)	**17.4**	(4.7)
Spain	0.18	(0.05)	0.49	(0.08)	**-0.31**	(0.07)	33.3	(2.0)	22.5	(2.6)	**10.8**	(2.4)	43.9	(2.3)	32.2	(3.3)	**11.7**	(3.1)
Sweden	0.49	(0.03)	0.68	(0.05)	**-0.19**	(0.06)	36.6	(2.0)	24.9	(3.2)	**11.8**	(4.3)	25.2	(2.0)	14.7	(2.5)	**10.5**	(3.4)
Switzerland	0.40	(0.03)	0.67	(0.04)	**-0.27**	(0.05)	35.3	(1.4)	23.5	(2.3)	**11.9**	(3.0)	32.2	(1.4)	20.7	(2.1)	**11.4**	(2.8)
Turkey	-0.07	(0.13)	c	c	c	c	17.0	(3.4)	c	c	c	c	47.4	(5.9)	c	c	c	c
United Kingdom	0.44	(0.02)	0.68	(0.03)	**-0.25**	(0.03)	36.9	(1.5)	24.9	(1.8)	**11.9**	(2.1)	29.0	(1.4)	19.0	(1.6)	**10.0**	(1.9)
United States	0.55	(0.05)	0.80	(0.06)	**-0.25**	(0.06)	29.4	(2.4)	19.2	(3.0)	**10.1**	(3.6)	25.1	(2.2)	14.6	(2.7)	**10.5**	(3.1)
OECD average	0.40	(0.01)	0.66	(0.01)	**-0.26**	(0.01)	36.1	(0.4)	24.6	(0.5)	**11.5**	(0.6)	32.9	(0.4)	21.6	(0.5)	**11.3**	(0.6)
Partner countries and economies																		
Argentina	0.46	(0.11)	c	c	c	c	14.9	(3.4)	c	c	c	c	27.1	(4.7)	c	c	c	c
Azerbaijan	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Brazil	0.30	(0.12)	c	c	c	c	9.0	(2.6)	c	c	c	c	29.3	(4.5)	c	c	c	c
Bulgaria	0.49	(0.07)	0.75	(0.10)	**-0.26**	(0.11)	24.1	(3.3)	15.8	(4.2)	8.3	(4.9)	30.6	(3.6)	19.6	(4.4)	**11.0**	(4.9)
Chile	0.37	(0.08)	c	c	c	c	16.0	(2.5)	c	c	c	c	34.7	(3.5)	c	c	c	c
Colombia	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Croatia	0.24	(0.04)	0.63	(0.05)	**-0.39**	(0.07)	39.4	(2.0)	21.3	(3.2)	**18.1**	(4.2)	45.0	(2.1)	27.5	(3.6)	**17.6**	(4.2)
Estonia	0.32	(0.04)	0.60	(0.05)	**-0.28**	(0.06)	41.5	(2.0)	27.1	(3.0)	**14.4**	(3.6)	36.1	(2.1)	22.6	(2.5)	**13.5**	(3.3)
Hong Kong-China	-0.53	(0.05)	-0.32	(0.06)	**-0.20**	(0.06)	45.0	(2.2)	37.6	(3.1)	**7.4**	(3.3)	73.3	(2.2)	64.4	(3.3)	**8.9**	(2.8)
Indonesia	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Israel	0.60	(0.04)	0.76	(0.05)	**-0.17**	(0.07)	26.6	(2.7)	17.0	(3.1)	9.6	(4.7)	20.3	(2.4)	12.8	(2.5)	**7.5**	(3.7)
Jordan	0.20	(0.08)	c	c	c	c	19.1	(3.2)	c	c	c	c	34.0	(3.9)	c	c	c	c
Kyrgyzstan	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Latvia	0.33	(0.04)	0.57	(0.08)	**-0.23**	(0.09)	35.4	(2.3)	23.1	(4.0)	12.3	(4.5)	36.4	(2.3)	23.6	(4.0)	**12.9**	(4.5)
Liechtenstein	0.50	(0.10)	0.74	(0.14)	-0.24	(0.17)	37.2	(5.8)	30.2	(7.8)	7.0	(9.6)	34.4	(6.0)	18.2	(7.3)	16.2	(10.1)
Lithuania	0.46	(0.05)	0.76	(0.07)	**-0.30**	(0.07)	33.0	(2.4)	17.8	(3.5)	**15.2**	(4.2)	31.6	(2.2)	17.2	(3.6)	**14.5**	(4.3)
Macao-China	-0.77	(0.04)	-0.59	(0.08)	-0.18	(0.09)	44.9	(2.1)	40.6	(4.4)	4.3	(5.3)	83.4	(1.5)	74.9	(3.3)	**8.5**	(4.0)
Montenegro	0.61	(0.12)	c	c	c	c	23.8	(5.9)	c	c	c	c	23.8	(5.9)	c	c	c	c
Qatar	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Romania	0.54	(0.09)	c	c	c	c	16.4	(4.9)	c	c	c	c	27.8	(4.7)	c	c	c	c
Russian Federation	0.19	(0.04)	0.41	(0.07)	**-0.22**	(0.07)	36.0	(2.6)	22.7	(4.0)	**13.4**	(4.4)	39.5	(2.8)	26.9	(4.1)	**12.6**	(4.6)
Serbia	0.50	(0.07)	c	c	c	c	28.2	(3.4)	c	c	c	c	33.0	(3.9)	c	c	c	c
Slovenia	0.41	(0.03)	0.73	(0.05)	**-0.31**	(0.07)	38.4	(1.7)	24.4	(2.7)	**13.9**	(3.5)	32.9	(1.9)	20.6	(2.9)	**12.3**	(4.0)
ChineseTaipei	-0.14	(0.03)	0.14	(0.03)	**-0.28**	(0.04)	40.4	(1.6)	28.5	(1.5)	**11.8**	(2.2)	57.2	(1.4)	43.0	(1.9)	14.2	(2.3)
Thailand	-0.14	(0.11)	c	c	c	c	16.3	(2.9)	c	c	c	c	48.1	(4.5)	c	c	c	c
Tunisia	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Uruguay	0.45	(0.06)	c	c	c	c	16.6	(2.9)	c	c	c	c	31.9	(2.9)	c	c	c	c

Note: Values that are statistically significant are indicated in bold.
Source: OECD, *PISA 2006 Database.*
StatLink http://dx.doi.org/10.1787/664076271473

A4

Table A4.4.

Percentage of students by performance group, according to the immigrant status

		Native students (born in the country of assessment with at least one of their parents born in the same country)		Students with an immigrant background				Native students				Difference in the percentages of top performers between native students and students with an immigrant background		If students' ESCS were equal to the national average ESCS			
				Strong performers		Top performers		Strong performers		Top performers				Difference in the percentages of top performers between native students and students with an immigrant background		Increase in the logit of being top performers associated with students being native	
		%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	Dif.	S.E.	Dif. in %		Logistic regression coefficient	S.E.
OECD countries	Australia	78.1	(1.2)	23.8	(1.3)	16.0	(1.8)	25.1	(0.6)	14.6	(0.6)	-1.4	(1.7)	-1.3		-0.11	(0.13)
	Austria	86.8	(1.2)	10.4	(1.7)	2.9	(0.8)	25.8	(1.2)	11.1	(0.8)	**8.3**	(1.0)	**6.5**		**1.14**	(0.26)
	Belgium	86.7	(1.0)	8.3	(1.2)	2.1	(0.5)	27.2	(0.9)	11.4	(0.6)	**9.3**	(0.7)	**6.8**		**1.41**	(0.25)
	Canada	78.9	(1.2)	26.2	(1.6)	13.1	(1.3)	28.7	(0.8)	15.4	(0.6)	2.3	(1.4)	2.0		0.18	(0.12)
	Czech Republic	98.1	(0.2)	c	c	c	c	22.0	(0.9)	11.8	(1.0)	c	c	c		c	c
	Denmark	92.4	(0.8)	5.4	(1.6)	1.5	(0.8)	20.8	(1.0)	7.3	(0.7)	**5.7**	(1.0)	3.4		1.01	(0.63)
	Finland	98.5	(0.3)	c	c	c	c	32.7	(0.9)	21.3	(0.8)	c	c	c		c	c
	France	87.0	(1.0)	12.6	(2.3)	3.8	(1.6)	22.5	(1.1)	8.9	(0.7)	**5.0**	(1.6)	2.4		0.54	(0.45)
	Germany	85.8	(1.0)	11.3	(1.8)	3.1	(0.9)	26.5	(1.0)	13.9	(0.8)	**10.8**	(1.1)	**7.2**		**1.13**	(0.32)
	Greece	92.4	(0.7)	7.3	(2.6)	1.9	(1.1)	14.9	(0.9)	3.6	(0.4)	1.7	(1.2)	0.5		0.24	(0.66)
	Hungary	98.3	(0.3)	c	c	c	c	21.1	(0.9)	7.0	(0.6)	c	c	c		c	c
	Iceland	98.2	(0.2)	c	c	c	c	19.5	(0.8)	6.5	(0.5)	c	c	c		c	c
	Ireland	94.4	(0.5)	20.8	(3.5)	12.0	(2.8)	21.8	(0.9)	9.5	(0.7)	-2.6	(2.8)	-1.3		-0.17	(0.27)
	Italy	96.2	(0.3)	6.7	(1.9)	1.4	(0.8)	15.7	(0.6)	4.8	(0.4)	**3.4**	(0.8)	2.3		0.94	(0.62)
	Japan	99.6	(0.1)	c	c	c	c	27.0	(1.1)	15.1	(0.8)	c	c	c		c	c
	Korea	100.0	(0.0)	c	c	c	c	25.7	(0.9)	10.4	(1.1)	c	c	c		c	c
	Luxembourg	63.9	(0.6)	10.5	(0.8)	3.2	(0.4)	22.6	(1.0)	7.5	(0.5)	**4.4**	(0.6)	**1.6**		**0.40**	(0.16)
	Mexico	97.6	(0.3)	c	c	c	c	3.4	(0.4)	0.3	(0.1)	c	c	c		c	c
	Netherlands	88.7	(1.1)	11.3	(2.2)	3.9	(1.2)	28.0	(1.0)	14.5	(0.9)	**10.6**	(1.3)	**6.6**		**0.91**	(0.30)
	New Zealand	78.7	(1.0)	22.5	(1.7)	18.5	(1.4)	24.6	(0.8)	17.8	(0.8)	-0.7	(1.5)	0.1		0.01	(0.10)
	Norway	93.9	(0.7)	8.1	(2.8)	4.0	(1.6)	18.1	(0.7)	6.4	(0.5)	2.4	(1.6)	0.8		0.17	(0.41)
	Poland	99.8	(0.1)	c	c	c	c	19.6	(0.8)	6.9	(0.5)	c	c	c		c	c
	Portugal	94.1	(0.8)	7.2	(2.4)	1.3	(0.9)	15.3	(0.9)	3.3	(0.4)	**2.0**	(0.9)	1.3		0.99	(0.75)
	Slovak Republic	99.5	(0.1)	c	c	c	c	18.1	(1.0)	5.8	(0.5)	c	c	c		c	c
	Spain	93.1	(0.7)	10.2	(2.1)	1.6	(0.8)	18.7	(0.7)	5.2	(0.4)	**3.6**	(1.0)	2.5		1.06	(0.57)
	Sweden	89.2	(0.9)	9.7	(1.5)	3.5	(1.2)	22.8	(1.0)	8.5	(0.6)	**5.0**	(1.2)	3.4		0.67	(0.36)
	Switzerland	77.6	(0.7)	11.5	(1.2)	4.2	(0.8)	27.2	(1.1)	12.4	(0.9)	**8.2**	(0.9)	**5.5**		**0.91**	(0.18)
	Turkey	98.5	(0.4)	c	c	c	c	6.3	(1.2)	0.9	(0.3)	c	c	c		c	c
	United Kingdom	91.4	(0.9)	17.3	(2.3)	9.8	(1.8)	22.6	(0.6)	14.4	(0.6)	**4.6**	(1.8)	2.6		0.27	(0.20)
	United States	84.8	(1.2)	10.1	(1.6)	4.2	(0.9)	20.2	(1.0)	10.3	(0.8)	**6.1**	(1.0)	**2.9**		**0.53**	(0.20)
	OECD average	90.7	(0.1)	12.6	(0.4)	5.6	(0.3)	22.5	(0.2)	10.0	(0.1)	**4.4**	(0.3)	**2.8**		**0.61**	(0.09)
Partner countries and economies	Argentina	97.3	(0.3)	c	c	c	c	4.2	(0.7)	0.5	(0.1)	c	c	c		c	c
	Azerbaijan	97.6	(0.5)	c	c	c	c	0.4	(0.2)	0.0	(0.0)	c	c	c		c	c
	Brazil	97.6	(0.2)	c	c	c	c	3.5	(0.4)	0.6	(0.2)	c	c	c		c	c
	Bulgaria	99.8	(0.1)	c	c	c	c	10.5	(1.1)	3.1	(0.6)	c	c	c		c	c
	Chile	99.4	(0.1)	c	c	c	c	8.6	(1.0)	2.0	(0.3)	c	c	c		c	c
	Colombia	99.6	(0.1)	c	c	c	c	2.0	(0.4)	0.2	(0.1)	c	c	c		c	c
	Croatia	88.0	(0.7)	13.7	(1.8)	2.5	(0.8)	18.4	(0.9)	5.5	(0.5)	**3.0**	(0.9)	1.5		0.50	(0.33)
	Estonia	88.4	(0.6)	17.8	(2.0)	7.3	(1.4)	27.7	(1.1)	12.3	(0.8)	**5.1**	(1.5)	**4.2**		**0.56**	(0.22)
	Hong Kong-China	56.2	(1.4)	28.8	(1.5)	14.7	(1.2)	30.5	(1.4)	17.1	(1.2)	2.4	(1.5)	-1.8		-0.14	(0.12)
	Indonesia	99.8	(0.1)	c	c	c	c	1.4	(0.5)	0.0	(0.0)	c	c	c		c	c
	Israel	77.0	(1.2)	14.2	(1.4)	5.6	(1.0)	14.6	(0.9)	5.7	(0.7)	0.1	(1.1)	-1.0		-0.23	(0.21)
	Jordan	83.2	(0.9)	7.5	(1.4)	0.7	(0.3)	5.4	(0.7)	0.6	(0.2)	0.0	(0.4)	0.1		0.23	(0.61)
	Kyrgyzstan	97.4	(0.4)	c	c	c	c	0.7	(0.2)	0.0	(0.0)	c	c	c		c	c
	Latvia	92.9	(0.6)	16.4	(2.8)	4.6	(1.6)	17.0	(1.0)	4.2	(0.4)	-0.5	(1.6)	-0.1		-0.04	(0.39)
	Liechtenstein	63.2	(2.7)	16.1	(4.0)	12.2	(2.5)	30.6	(3.3)	12.5	(2.3)	0.3	(3.3)	-0.6		-0.07	(0.33)
	Lithuania	97.9	(0.4)	c	c	c	c	17.7	(0.9)	5.0	(0.7)	c	c	c		c	c
	Macao-China	26.4	(0.6)	23.9	(1.0)	5.4	(0.4)	20.7	(1.5)	5.3	(0.8)	-0.1	(0.9)	-1.2		-0.26	(0.20)
	Montenegro	92.8	(0.5)	6.7	(2.3)	0.6	(0.6)	3.5	(0.4)	0.3	(0.1)	0.2	(0.4)	0.2		11.71	(7.53)
	Qatar	59.5	(0.5)	4.1	(0.4)	0.9	(0.2)	0.2	(0.1)	0.0	(0.0)	**-0.8**	(0.2)	m		m	m
	Romania	99.9	(0.0)	c	c	c	c	4.2	(0.8)	0.5	(0.1)	c	c	c		c	c
	Russian Federation	91.3	(0.5)	13.2	(2.7)	2.4	(1.1)	15.3	(1.1)	4.4	(0.5)	2.0	(1.2)	1.6		0.64	(0.52)
	Serbia	91.0	(0.5)	5.8	(1.5)	0.6	(0.4)	6.7	(0.6)	0.8	(0.2)	0.2	(0.4)	0.2		0.30	(0.87)
	Slovenia	89.7	(0.5)	13.4	(2.3)	3.5	(1.1)	23.7	(1.2)	14.1	(0.7)	**10.6**	(1.3)	**6.7**		**1.01**	(0.35)
	Chinese Taipei	99.4	(0.1)	c	c	c	c	28.3	(1.0)	14.9	(0.9)	c	c	c		c	c
	Thailand	99.7	(0.1)	c	c	c	c	4.1	(0.4)	0.4	(0.1)	c	c	c		c	c
	Tunisia	99.2	(0.1)	c	c	c	c	2.0	(0.5)	0.1	(0.1)	c	c	c		c	c
	Uruguay	99.6	(0.1)	c	c	c	c	7.1	(0.6)	1.5	(0.2)	c	c	c		c	c

Note: Values that are statistically significant are indicated in bold.
Source: OECD, *PISA 2006 Database.*
StatLink http://dx.doi.org/10.1787/664076271473

A4

Table A4.5.

Percentage of students by performance group, according to the language spoken at home

		Language spoken at home most of the time is DIFFERENT from the language of assessment, from other official languages or from other national dialects		Language spoken at home most of the time is the SAME as the language of assessment, other official languages or another national dialects		Language spoken at home most of the time is DIFFERENT from the language of assessment, from other official languages or from other national dialects				Language spoken at home most of the time is the SAME as the language of assessment, other official languages or another national dialect			
						Strong performers		Top performers		Strong performers		Top performers	
		% of students	S.E.	% of students	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
OECD countries	Australia	8.0	(0.7)	92.0	(0.7)	21.9	(2.5)	13.7	(2.5)	25.1	(0.6)	15.0	(0.7)
	Austria	10.0	(1.1)	90.0	(1.1)	9.8	(2.3)	2.2	(0.7)	25.7	(1.2)	11.1	(0.8)
	Belgium	5.7	(0.5)	94.3	(0.5)	7.6	(1.6)	2.1	(0.9)	26.9	(0.8)	11.4	(0.6)
	Canada	10.6	(0.7)	89.4	(0.7)	24.0	(2.3)	12.4	(1.7)	28.7	(0.7)	15.2	(0.6)
	Czech Republic	0.8	(0.2)	99.2	(0.2)	c	c	c	c	22.0	(0.9)	11.8	(1.0)
	Denmark	4.5	(0.5)	95.5	(0.5)	4.2	(1.8)	1.3	(1.1)	20.6	(1.0)	7.3	(0.7)
	Finland	1.3	(0.2)	98.7	(0.2)	c	c	c	c	32.5	(0.9)	21.3	(0.8)
	France	5.4	(0.5)	94.6	(0.5)	13.5	(2.6)	4.8	(1.7)	21.7	(1.1)	8.5	(0.7)
	Germany	9.0	(0.7)	91.0	(0.7)	9.7	(2.1)	1.5	(0.8)	26.5	(1.0)	14.0	(0.8)
	Greece	3.9	(0.5)	96.1	(0.5)	4.5	(2.5)	0.7	(0.6)	14.6	(0.9)	3.7	(0.4)
	Hungary	0.8	(0.2)	99.2	(0.2)	c	c	c	c	21.2	(0.9)	7.0	(0.7)
	Iceland	2.2	(0.3)	97.8	(0.3)	c	c	c	c	19.5	(0.8)	6.5	(0.5)
	Ireland	2.0	(0.3)	98.0	(0.3)	c	c	c	c	21.8	(0.9)	9.6	(0.7)
	Italy	2.9	(0.3)	97.1	(0.3)	c	c	c	c	16.9	(0.7)	5.2	(0.4)
	Japan	0.3	c	99.7	(0.1)	c	c	c	c	27.4	(1.1)	15.5	(0.8)
	Korea	0.1	c	99.9	(0.0)	c	c	c	c	25.6	(0.9)	10.4	(1.1)
	Luxembourg	23.7	(0.6)	76.3	(0.6)	7.4	(0.9)	1.5	(0.5)	23.4	(1.0)	8.0	(0.5)
	Mexico	0.2	(0.1)	99.8	(0.1)	c	c	c	c	3.2	(0.3)	0.3	(0.1)
	Netherlands	5.9	(0.7)	94.1	(0.7)	11.6	(3.2)	3.4	(1.4)	27.1	(1.0)	13.9	(0.9)
	New Zealand	8.7	(0.6)	91.3	(0.6)	19.6	(2.3)	15.1	(2.0)	25.1	(0.8)	18.5	(0.8)
	Norway	4.7	(0.5)	95.3	(0.5)	10.0	(2.3)	3.8	(1.6)	17.9	(0.7)	6.4	(0.5)
	Poland	0.4	c	99.6	(0.2)	c	c	c	c	19.4	(0.8)	6.8	(0.5)
	Portugal	2.3	(0.4)	97.7	(0.4)	c	c	c	c	15.3	(0.9)	3.3	(0.4)
	Slovak Republic	0.4	c	99.6	(0.1)	c	c	c	c	18.1	(1.0)	5.8	(0.5)
	Spain	2.6	(0.3)	97.4	(0.3)	c	c	c	c	18.3	(0.8)	5.0	(0.4)
	Sweden	7.8	(0.7)	92.2	(0.7)	9.5	(2.5)	2.9	(1.1)	22.5	(1.0)	8.5	(0.6)
	Switzerland	12.9	(0.6)	87.1	(0.6)	9.5	(1.5)	3.1	(0.9)	26.8	(1.1)	12.2	(0.9)
	Turkey	2.4	(0.4)	97.6	(0.4)	c	c	c	c	6.3	(1.2)	0.9	(0.3)
	United Kingdom	3.8	(0.6)	96.2	(0.6)	15.2	(2.8)	7.1	(2.0)	22.4	(0.6)	14.3	(0.6)
	United States	10.7	(1.0)	89.3	(1.0)	6.7	(1.3)	2.8	(0.9)	20.0	(1.1)	10.1	(0.8)
	OECD average	*5.1*	*(0.1)*	*94.9*	*(0.1)*	*11.5*	*(0.6)*	*4.9*	*(0.3)*	*21.4*	*(0.2)*	*9.6*	*(0.1)*
Partner countries and economies	Argentina	0.5	c	99.5	(0.2)	c	c	c	c	4.2	(0.6)	0.5	(0.1)
	Azerbaijan	2.2	(0.7)	97.8	(0.7)	c	c	c	c	0.4	(0.2)	0.0	(0.0)
	Brazil	0.3	(0.1)	99.7	(0.1)	c	c	c	c	3.4	(0.4)	0.6	(0.2)
	Bulgaria	4.7	(0.9)	95.3	(0.9)	0.9	(0.8)	0.3	(0.4)	11.0	(1.2)	3.2	(0.6)
	Chile	0.2	c	99.8	(0.1)	c	c	c	c	8.4	(1.1)	1.9	(0.4)
	Colombia	0.5	c	99.5	(0.2)	c	c	c	c	1.9	(0.4)	0.2	(0.1)
	Croatia	0.4	c	99.6	(0.1)	c	c	c	c	17.8	(0.9)	5.1	(0.5)
	Estonia	0.5	c	99.5	(0.1)	c	c	c	c	26.4	(0.9)	11.6	(0.8)
	Hong Kong-China	2.7	(0.7)	97.3	(0.7)	c	c	c	c	30.4	(1.0)	16.4	(1.0)
	Indonesia	1.5	(0.3)	98.5	(0.3)	c	c	c	c	1.4	(0.6)	0.0	(0.0)
	Israel	11.4	(1.1)	88.6	(1.1)	15.3	(2.4)	6.2	(1.5)	14.4	(0.9)	5.5	(0.7)
	Jordan	2.9	(0.3)	97.1	(0.3)	c	c	c	c	5.7	(0.7)	0.6	(0.2)
	Kyrgyzstan	1.2	(0.3)	98.8	(0.3)	c	c	c	c	0.7	(0.2)	0.0	(0.0)
	Latvia	0.5	c	99.5	(0.1)	c	c	c	c	16.8	(1.0)	4.1	(0.4)
	Liechtenstein	12.2	(1.6)	87.8	(1.6)	10.2	(5.4)	3.6	(3.4)	28.2	(2.9)	12.9	(2.0)
	Lithuania	0.1	c	99.9	(0.0)	c	c	c	c	17.6	(0.9)	5.1	(0.7)
	Macao-China	3.9	(0.3)	96.1	(0.3)	16.3	(3.9)	2.0	(1.4)	23.2	(0.8)	5.5	(0.4)
	Montenegro	2.4	(0.2)	97.6	(0.2)	c	c	c	c	3.6	(0.4)	0.3	(0.1)
	Qatar	4.1	(0.2)	95.9	(0.2)	10.1	(2.1)	3.1	(1.2)	1.3	(0.1)	0.2	(0.1)
	Romania	0.6	c	99.4	(0.2)	c	c	c	c	4.3	(0.8)	0.5	(0.1)
	Russian Federation	9.5	(2.0)	90.5	(2.0)	4.8	(1.8)	0.4	(0.5)	16.2	(1.1)	4.6	(0.5)
	Serbia	0.5	c	99.5	(0.1)	c	c	c	c	6.6	(0.6)	0.8	(0.2)
	Slovenia	5.6	(0.4)	94.4	(0.4)	9.7	(2.9)	2.2	(1.1)	23.6	(1.2)	13.8	(0.6)
	Chinese Taipei	0.6	(0.1)	99.4	(0.1)	c	c	c	c	28.5	(1.0)	15.2	(0.9)
	Thailand	1.6	(0.2)	98.4	(0.2)	c	c	c	c	4.1	(0.4)	0.4	(0.1)
	Tunisia	4.7	(0.5)	95.3	(0.5)	3.1	(1.9)	0.6	(0.6)	1.9	(0.5)	0.1	(0.1)
	Uruguay	1.4	(0.3)	98.6	(0.3)	c	c	c	c	7.1	(0.6)	1.5	(0.2)

Note: Values that are statistically significant are indicated in bold.
Source: OECD, *PISA 2006 Database.*
StatLink http://dx.doi.org/10.1787/664076271473

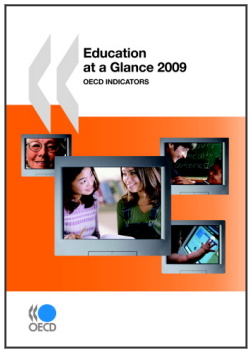
A4

Table A4.5. *(continued)*

Percentage of students by performance group, according to the language spoken at home

		Difference in the percentages of top performers between students who do not speak the language of assessment at home and students who speak the language of assessment at home		If students' ESCS were equal to the national average ESCS		
				Difference in the percentages of top performers between students who do not speak the language of assessment at home and students who speak the language of assessment at home	Increase in the logit of being top performers associated with students speaking the language of assessment at home	
		Dif.	S.E.	Dif. in %	Logistic regression coefficient	S.E.
OECD countries	Australia	1.2	(2.3)	-0.5	-0.05	(0.20)
	Austria	**8.9**	(1.0)	**7.2**	**1.39**	(0.34)
	Belgium	**9.3**	(1.1)	**6.6**	**1.33**	(0.47)
	Canada	2.9	(1.8)	1.8	0.16	(0.17)
	Czech Republic	c	c	c	c	c
	Denmark	**6.0**	(1.2)	4.1	1.44	(1.10)
	Finland	c	c	c	c	c
	France	**3.7**	(1.8)	1.5	0.30	(0.42)
	Germany	**12.4**	(1.0)	**9.6**	**1.97**	(0.54)
	Greece	**3.5**	(0.6)	2.5	11.72	(6.41)
	Hungary	c	c	c	c	c
	Iceland	c	c	c	c	c
	Ireland	c	c	c	c	c
	Italy	c	c	c	c	c
	Japan	c	c	c	c	c
	Korea	c	c	c	c	c
	Luxembourg	**6.5**	(0.7)	**3.3**	0.97	(0.32)
	Mexico	c	c	c	c	c
	Netherlands	**10.6**	(1.4)	**7.1**	**1.07**	(0.42)
	New Zealand	3.5	(2.0)	1.7	0.14	(0.17)
	Norway	2.6	(1.6)	1.6	0.35	(0.47)
	Poland	c	c	c	c	c
	Portugal	c	c	c	c	c
	Slovak Republic	c	c	c	c	c
	Spain	c	c	c	c	c
	Sweden	**5.6**	(1.3)	**4.1**	**0.90**	(0.43)
	Switzerland	**9.1**	(1.0)	**6.0**	**1.05**	(0.27)
	Turkey	c	c	c	c	c
	United Kingdom	**7.2**	(2.1)	4.4	0.50	(0.31)
	United States	**7.3**	(1.0)	**3.7**	**0.75**	(0.34)
	OECD average	**6.3**	(0.4)	**4.0**	**1.50**	(0.42)
Partner countries and economies	Argentina	c	c	c	c	c
	Azerbaijan	c	c	c	c	c
	Brazil	c	c	c	c	c
	Bulgaria	**3.1**	(0.7)	1.9	6.41	(7.54)
	Chile	c	c	c	c	c
	Colombia	c	c	c	c	c
	Croatia	c	c	c	c	c
	Estonia	c	c	c	c	c
	Hong Kong-China	c	c	c	c	c
	Indonesia	c	c	c	c	c
	Israel	-0.7	(1.7)	-1.9	-0.41	(0.31)
	Jordan	c	c	c	c	c
	Kyrgyzstan	c	c	c	c	c
	Latvia	c	c	c	c	c
	Liechtenstein	**9.3**	(3.8)	3.4	0.64	(1.12)
	Lithuania	c	c	c	c	c
	Macao-China	**3.5**	(1.5)	3.6	1.05	(0.81)
	Montenegro	c	c	c	c	c
	Qatar	-2.9	(1.2)	m	m	m
	Romania	c	c	c	c	c
	Russian Federation	**4.3**	(0.7)	0.2	7.29	(7.54)
	Serbia	c	c	c	c	c
	Slovenia	**11.6**	(1.3)	**0.5**	**1.39**	(0.53)
	Chinese Taipei	c	c	c	c	c
	Thailand	c	c	c	c	c
	Tunisia	-0.1	(0.5)	0.0	9.11	(9.58)
	Uruguay	c	c	c	c	c

Note: Values that are statistically significant are indicated in bold.
Source: OECD, *PISA 2006 Database.*
StatLink http://dx.doi.org/10.1787/664076271473



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