OECD

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Can the performance gap between immigrant and non-immigrant students be closed?

- The share of students with an immigrant background increased between 2003 and 2012, both in traditional and new destination countries.
- The performance difference in mathematics between immigrant and non-immigrant students decreased, on average, between 2003 and 2012.
- Differences in socio-economic background explain less than half of the performance difference in mathematics between immigrant and non-immigrant students.

Many children with an immigrant background face enormous challenges at school: they need to quickly adjust to different academic expectations, learn in a new language, forge a social identity that incorporates both their background and their adopted country of residence – all while often under conflicting pressures from family and peers. These difficulties in integrating into a new society are magnified when immigrants are segregated in poor neighbourhoods with disadvantaged schools. It should thus come as no surprise that PISA data have consistently shown a performance gap between students with an immigrant background and non-immigrant students. However, PISA also shows that immigrant students can overcome these considerable obstacles and excel academically. The large variation in performance differences between immigrant and non-immigrant students across countries suggests that policy can play an important role in eliminating those disparities.

In 2012, 11% of 15-year-old students had an immigrant background, on average across OECD countries: 6% were second-generation migrants (meaning that they were born in the country where they sat the PISA test to foreign-born parents), and 5% were first-generation migrants (both they and their parents were born abroad). While in Macao-China, Qatar and the United Arab Emirates more than half of the student population had an immigrant background, in 19 countries and economies immigrants accounted for less than 1% of all 15-year-old students. The percentage of students who were raised in immigrant families grew by around 3 percentage points across OECD countries between 2003 and 2012. Canada and Luxembourg saw the highest growth in the share of students with an immigrant background, while Ireland, Italy, New Zealand and Spain had the largest increases in the percentage of first-generation immigrant students.

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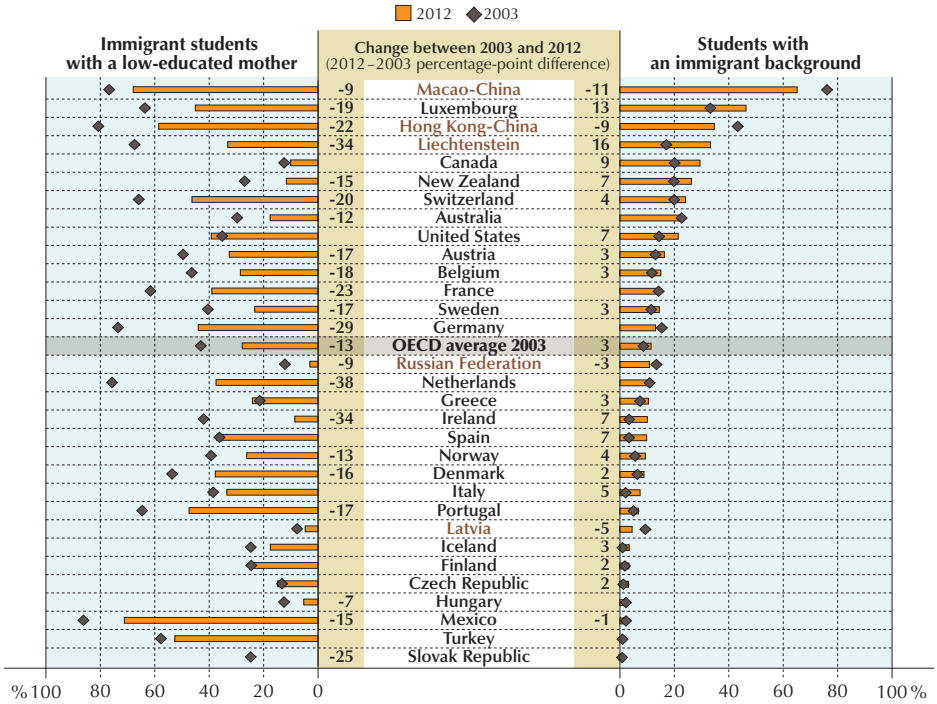
The race for skilled immigrants is on…

Education outcomes have improved rapidly in many countries of origin, and migration policies have become increasingly skill-selective. As a result, the education background of immigrant students has improved markedly since 2003, and with it, immigrant students' potential to do well in school in their new country of residence. However, changes in the composition of immigrant populations have not been uniform across all PISA-participating countries and economies. For example, in Ireland in 2003, more than 40% of immigrant students were raised by a mother who had not attained upper secondary education; by 2012, this percentage had fallen to 9%. Among the countries using points-tests to screen entry into their territories in favour of better-qualified migrants, Australia and New Zealand further reduced their traditionally small share of immigrant students from low-educated families.

Changes in immigrant populations between 2003 and 2012



Notes: Only countries/economies with comparable data from PISA 2003 and PISA 2012 are shown.
Low-educated mothers' highest level of education is lower secondary (ISCED 2) or less.
Only statistically significant percentage-point differences between PISA 2012 and PISA 2003 in the share of students with an immigrant background and in the percentage of students with an immigrant background who have a low-educated mother are shown to the right and left, respectively, of the country's/economy's name.
OECD average 2003 compares only countries with comparable data since PISA 2003.
Countries/economies are ranked in descending order of the percentage of students with an immigrant background in 2012.
Source: OECD, PISA 2012 Database, Table II.3.4b.

…and some countries are clear frontrunners.

Across OECD countries, the performance gap in mathematics between students with and without an immigrant background was equal to 47 score points in 2003, and decreased by around 10 score points by 2012. On average, second-generation immigrant students outscored first-generation immigrant students by 16 score points. But the average change in the performance difference between immigrant and non-immigrant students doesn't reflect some significantly different patterns in specific countries. For example, in Finland, mathematics performance among immigrant students deteriorated between 2003 and 2012, but the performance gap between immigrant and non-immigrant students didn't widen because mathematics performance among non-immigrant students also deteriorated during the period. By contrast, the gap widened in Italy, as an increasing number of disadvantaged immigrant students did not improve their mathematics performance while their non-immigrant schoolmates did.

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In Canada, Ireland and New Zealand, immigrant and non-immigrant students scored equally well in mathematics in 2012. In Australia, Hungary and Macao-China, immigrants outscored non-immigrants. In Germany, the performance gap approached the OECD average, as the share of immigrant students performing below the baseline level of proficiency in mathematics shrank by 11 percentage points.

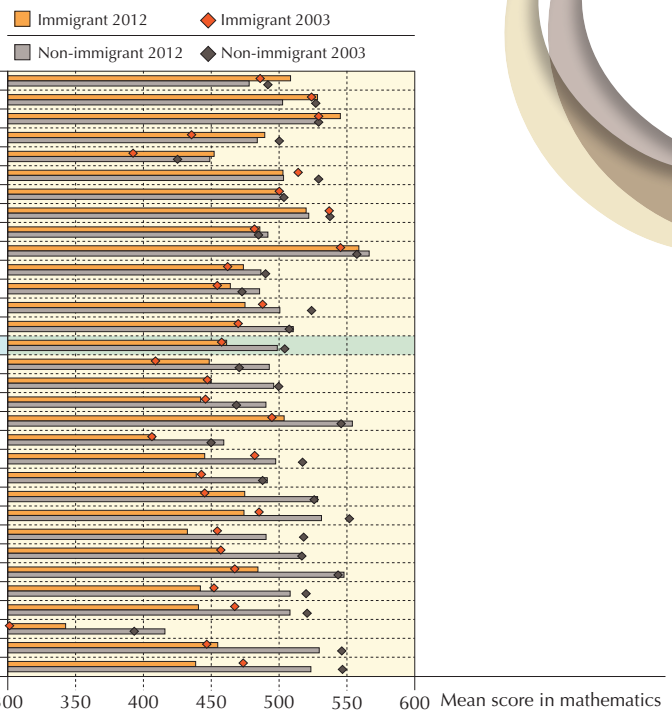
Rapid changes in the origin and skills of immigrants are an important part of the story behind recent trends. For example, China and India have recently become, along with New Zealand, the largest contributors of immigrants to Australia; and first- or second-generation Indian or Chinese immigrant students in Australia score 61 and 94 points higher in mathematics, respectively, than non-immigrant Australian students.

But selection at the border is no substitute for effective integration policies.

The high mathematics scores of immigrants in countries with stringent skills-based migration policies might suggest that strategic selection at entry offers the fastest way to close the performance gap. However, migration laws are no substitute for social and education policies that assist immigrants in integrating into their host countries. While the link between the level of skills acquired before migration and performance in the destination country is strong, it is not unbreakable, and supporting disadvantaged immigrants can yield large payoffs. For example, PISA data show that in Australia, Israel and the United States, the share of socio-economically disadvantaged students performing in the top quarter of all PISA students is larger among immigrants than among non-immigrants. These highly motivated students, who managed to overcome the double disadvantage of poverty and an immigrant background, have the potential to make exceptional contributions to their host countries.

Performance differences between immigrant and non-immigrant students

Performance gap between immigrant and non-immigrant students in 2012 (Score-point difference)	Change between 2003 and 2012 in the performance gap between immigrant and non-immigrant students (2012–2003 score-point difference)	
-31	-35	Hungary
-26	-29	Australia
-16		Macao-China
	-70	Slovak Republic
		Turkey
	-14	New Zealand
		Ireland
		Canada
		Latvia
		Hong Kong-China
13		United States
22		Russian Federation
26		Czech Republic
40		Luxembourg
37	-10	**OECD average 2003**
44		Portugal
46		Norway
48	26	Italy
50		Liechtenstein
51		Greece
52		Iceland
52		Spain
54	-27	Germany
57		Netherlands
58		Sweden
59		Austria
63	-12	Switzerland
66		Denmark
67		France
73		Mexico
75	-25	Belgium
85		Finland



Notes: Values are calculated considering only students with data on the *PISA index of economic, social and cultural status*.
The score-point difference in 2012 and the change in score-point differences between students with and without an immigrant background are shown only if statistically significant.
OECD average 2003 compares only countries with comparable mathematics scores in 2003 and 2012 and with data on immigrant students.
Countries/economies are ranked in ascending order of the difference between the performance of immigrant and non-immigrant students (the gap) in 2012.
Source: OECD, PISA 2012 Database, Table II.3.4b.
StatLink http://dx.doi.org/10.1787/888932964927

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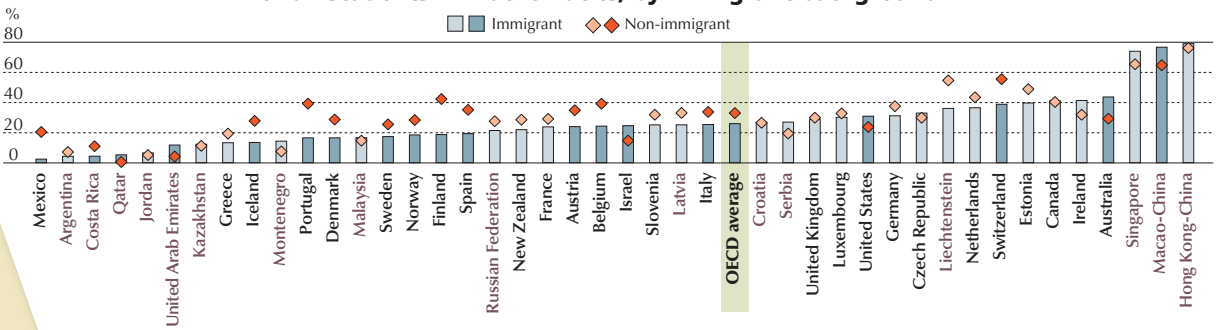
The performance gap in mathematics related to immigrant background shrinks by less than half after accounting for differences in socio-economic status (from 37 to 23 score points across OECD countries with data for 2003 and 2012) and remains significant in most countries. This suggests that countries need to do more than fine-tune their immigrant selection mechanisms; they need to strengthen the capacity of their education systems to unleash the potential of all immigrant students. Subsidies for all-day schools or structured language instruction for immigrant students would help them and their families reap the full benefits of education and ensure that immigrant students can contribute to their host country's economic and social well-being.

Percentage of disadvantaged students performing among the top quarter of all students in mathematics, by immigrant background



Notes: The figure shows the percentage of students with and without an immigrant background who are in the bottom quarter of the *PISA index of economic, social and cultural status* in the country of assessment and who perform in the top quarter of students in all countries, after accounting for socio-economic status.

Statistically significant differences between immigrant and non-immigrant students are marked in a darker tone.

Countries/economies are ranked in ascending order of the percentage of disadvantaged students with an immigrant background performing in the top quarter of all students in mathematics.

Source: OECD, PISA 2012 Database.

The bottom line: Immigrant students have the potential to perform as well as non-immigrant students, despite the dual challenges of integration and socio-economic disadvantage. Education systems have a role to play in ensuring that immigrant students make the most of the opportunities schools offer. Those that are seeing large migration inflows or changes in the demographic profile of immigrants can learn from systems that offer programmes tailored to immigrant students, such as language classes with clearly defined goals and standards.

For more information

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See OECD (2013), *PISA 2012 Results: Excellence through Equity (Vol. II): Giving Every Student the Chance to Succeed*, PISA, OECD Publishing, Paris.

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