# Where immigrant students succeed A comparative review of performance and engagement in PISA 

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## Introduction

In most OECD countries, policy makers and the general public are paying increasing attention to issues surrounding international migration. In part, this is a consequence of the growth of immigrant inflows that many OECD countries have experienced since the 1980s, whether from globalising economic activities and family reunions in the aftermath of labour migration movements during the 1960s and 1970s, the dissolution of the Eastern Bloc or political instability in several world regions. In the year 2000, roughly 175 million people lived outside their country of birth worldwide, an increase of $46 \%$ since 1990 .

Although many countries have implemented measures to manage and contain migration inflows [Slide 2], international migration movements remain a topic of global significance. The issues [Slide 3] go well beyond how migration flows can be channelled and managed, and relate increasingly to how the challenges of integration can be addressed effectively - for both the immigrants themselves and the populations in the countries receiving them.

Schools have a central role to play in this. Given the pivotal role of education for success in working life, education and training set the stage for the integration of immigrants into labour markets. They can also contribute to overcoming language barriers and facilitate the transmission of the norms and values that provide a basis for social cohesion.

A lot has been said about the policies and practices that countries have put in place to facilitate the integration of immigrant children. This report adds a crucial new perspective to this by assessing the success of 15 -year-old immigrant students in school, both in comparison to their native counterparts and in comparison to immigrant student populations in other countries 【Slide 4]. The report thus allows countries to review policies relating to the integration of immigrant children in the light of the results achieved in their own and other countries. PISA suggests that equality in schooling inputs is no longer enough to assess equity in education but that the success of countries in providing equitable learning opportunities needs to be judged by the extent to which learning outcomes are free from the socio-economic influences.

The goal of modern democracies is to provide immigrant students with the same chances for success as native students. However, among the 17 countries studied in this report, foreign-born students lag 48 score points behind their native counterparts on the PISA mathematics scale, equivalent to more than an average school year's progress ${ }^{1}$ TTable 3.3]. Even after accounting for socio-economic factors such as the occupation and education of their parents, an average disadvantage of 30 score points remains [Table 3.5]. This suggests that schools and societies face major challenges in bringing the human potential that immigrants bring with them fully to fruition. At the same time, the report shows that the performance disadvantage of immigrant students varies widely across countries, from insignificant amounts in Australia, Canada, New Zealand and Macao-China to more than 90 PISA score points in Belgium and Germany even for second-generation immigrant children 【Slide 6] (The performance disadvantage for firstgeneration immigrant children in Germany is 71 score points). Last but not least, the report shows considerable differences in the absolute performance levels of immigrants, with secondgeneration 15 -year-old immigrants in Canada outperforming their German counterparts by 111 score points, a gap that is almost equivalent to three school years [Slide 6, Table 2.1a]. Some of these differences can be explained by socio-economic contextual factors but the residual performance gap that remains after taking such factors into account is sufficiently large to make cross-national analyses a rich source for the search of effective policies for the integration of immigrant students.

The analyses also suggest that immigrant status accounts for a sizeable part of the performance variation between schools, particularly in the highly tracked education systems where students with a migration background tend to be directed to schools with lower performance expectations Table 3.6]. More generally, in many countries immigrant students tend to be clustered in schools: In half of the countries studied in this report, second-generation immigrant students attend schools with more than a third of immigrants [Table 3.7a] (Germany 36\%), while less than $5 \%$ of native students do so (Germany 3\%). Last but not least, the data show that immigrant students tend to attend schools with a socio-economically more disadvantaged student intake and in some, though by no means all countries, poorer learning conditions, including larger student/teacher ratios or a learning environment where school principals raise concerns about the quality of resources or student and teacher-related factors negatively affecting the school climate [Table 3.9].

Without longitudinal data, it is not possible to directly assess to what extent the observed disadvantages of immigrant students are alleviated over successive generations. However, comparing the performance of students who were born in a different country, with students who were themselves born in the country but have foreign-born parents, and where countries thus had some opportunity to shape schooling opportunities right from the start shows important differences [Table 2.1b]. In some of the countries studied, second-generation students show far better results than their first-generation counterparts, suggesting that time can make a difference for the integration process. In other countries, however, the children of immigrants still display the same performance disadvantage as today's foreign-born student population, or even fare worse.

[^0]Last but not least, the report seeks to look beyond performance in key school subjects and examines how students assess themselves as learners and what their general attitudes are towards learning and school, on the premise that students who leave school with the autonomy to set their own learning goals, with a sense that learning is a worthwhile endeavour and with the confidence that they can reach those goals are better equipped to learn throughout their lives.

The report lays out major challenges for education systems, and these are unlikely to dissolve by themselves. On the contrary, given the anticipated effects of population ageing and ongoing needs for skilled labour as well as the extent of family reunification, it is likely that migration to OECD countries will remain high on national policy agendas. Education systems, particularly in Europe, will need to deal more effectively with increasing socio-economic and cultural diversity in their student populations and find ways to ensure that immigrant children enter the labour market with strong foundation skills as well as the capacity and motivation to continue learning throughout life. The mere fact that, in most of the countries with available data, unemployment rates among foreign born persons remain between two and three times as high as among native born individuals (Germany $15.7 \%$ for foreign-born individuals, $9.1 \%$ for native-born individuals), suggests that the cost of inaction may be far greater than the cost of action 【Table 1.4, Slide 71.

Not all of the 41 countries that participated in the PISA 2003 assessment have significant immigrant populations, the analysis in this report is therefore focussed on the 17 countries that do have sizeable immigrant student populations. These are the OECD countries Australia, Austria, Belgium (with separate data for the Flemish and French Communities), Canada, Denmark, France, Germany, Luxembourg, the Netherlands, New Zealand, Norway, Sweden, Switzerland and the United States as well as the partner countries Hong Kong-China, Macao-China and the Russian Federation. This being said, the policy lessons that can be learned from these countries provide a rich resource for reflection also for countries that are still at the beginning of an immigration history, as they can learn from the successes of countries whose immigrants succeed in school and avoid the costly mistakes of countries that now face large performance gaps.

Unless noted otherwise, the performance results quoted in this note refer to mathematics, the subject area on which PISA 2003 was focussed. However, the results tend to be very similar in reading, science and problem-solving, the three other domains assessed by PISA 2003.

The following highlights some of the key findings of the report in greater detail.

## Key findings on the performance of immigrant students

## Larger immigrant populations do not imply a larger performance disadvantage of immigrants or lower overall performance.

All too often, the diversity originating from students with an immigrant background is viewed solely as a problem for schools, rather than as an opportunity for schools and society. The popular assumption is then often made that high levels of immigration will generally impair integration processes and ultimately lead to lowered performance standards for all. The PISA results provide no evidence for this: Figure 3.8 TTables 1.5 and 2.1a, Slide 8] examines the relationship between the proportion of immigrant students within each of the 17 countries studied and the extent to which these students perform less well in mathematics compared to their native peers. It shows that, in many of the countries with large immigrant populations the performance
gap between immigrant and native students is comparatively small ${ }^{2}$ (For Germany, the percentage of first-generation and second-generation students in the population of 15-yearold students is, at 7.8\% and 6.3\% around the corresponding averages of 7.7\% and 7.4\%, but the performance disadvantages are significantly larger than at the average level among the 17 countries studied). This pattern may be due to a number of factors, including betweencountry differences in the composition of immigrant populations. In addition, some of the countries with high levels of immigration have extensive support measures for immigrant students in place (see Chapter 5 of the report) which may contribute to the relative success of this group.

It is also noteworthy that there is no negative relationship between the size of immigrant populations and overall performance [Tables 1.5 and 2.1a, Slide 9]. In fact, many of the countries with large immigrant populations tend to perform well overall ${ }^{3}$.

## The performance disadvantage of immigrants varies widely across countries.

As noted above, immigrant students often perform at levels significantly lower than their native peers. It is noteworthy that the mathematics achievement of the highest performers among immigrant students varies much less across countries than the achievement of the lowest performing immigrants [Figure 2.3a]. The PISA proficiency Level 2 represents the baseline level of mathematics proficiency on the PISA scale at which students begin to demonstrate the kind of skills that enable them to actively use mathematics; for example they are able to use basic algorithms, formulae and procedures, to make literal interpretations and to apply direct reasoning. Students who are classified below Level 2 may thus face considerable challenges in terms of their labour market and earnings prospects, as well as their capacity to participate fully in society. Slide 10 compares the distribution across the PISA proficiency levels in mathematics between first-generation and native students. The findings indicate that among native students, only a small percentage fail to reach Level 2, whereas the situation is very different for immigrant students. More than $40 \%$ of first-generation students in Belgium, France, Norway and Sweden and more than $30 \%$ of first-generation students in Austria, Denmark, Germany, Luxembourg, Switzerland, the United States and the Russian Federation perform below Level 2 Tables 2.4a, b and cl . In conclusion, in 12 of the 17 countries, a substantial proportion of first-generation students perform at very low levels of mathematical literacy.

A very different picture emerges for Australia, Canada, Hong Kong-China and Macao-China. In these countries, the percentage of students performing below Level 2 is comparatively low in all groups with less than $16 \%$ of first-generation, second-generation or native students failing to reach Level 2. The comparatively positive situation of immigrant students in Australia and Canada may, in part, be a result of selective immigration policies resulting in immigrant populations with greater wealth and education. In Hong Kong-China and Macao-China the ethnic background and language between immigrant and native students is often similar, even if large socio-economic differences exist. However, the bottom line is that these countries succeed in providing a mathematical education where only relatively small proportions of students remain at low levels of mathematical literacy.

[^1]The trends in reading are similar to those in mathematics. With the exception of the Russian Federation, the percentage of native students who fail to reach Level 2 in reading is less than 20\% across all of the countries included in this study. Among immigrant students, however, it is considerably higher [Tables 2.4d, e and fl. In 11 countries - Austria, Belgium, Denmark, France, Germany, Luxembourg, Norway, Sweden, Switzerland, the United States and the Russian Federation - more than $25 \%$ of first-generation students fail to reach Level 2. As in mathematics, countries with high percentages of immigrant students below Level 2 in reading may consider introducing support measures particularly geared to the needs of these student groups.

## Generally, second-generation immigrant students perform better than new arrivals, but not everywhere.

In the OECD area as a whole, second-generation students tend to perform better than their firstgeneration counterparts, as one would expect as these students have been born in the country of assessment and thus benefited from the education system right from the start. However, these gains vary widely across countries 【Table 2.1a, Slide 6]. In Canada, Luxembourg, Sweden, Switzerland and Hong Kong-China, second-generation students perform significantly better than first-generation students, with the performance gap reduced by 31 score points in Switzerland and 58 score points in Sweden (for comparison, the average performance gain associated with a school year is 41 score points). In other countries the performance advantage of secondgeneration students over first-generation students is much smaller and not statistically significant. Germany and New Zealand even show the opposite pattern, with second-generation immigrant students born in these countries performing worse than foreign-born students (in Germany, the performance disadvantage of second-generation immigrant students over first-generation immigrant students is 22 score points). These findings suggest that education and social systems in these countries have not fully capitalised on their opportunity to mitigate achievement differences over time and generations, though in part these patterns may also be influenced by differences in the composition of the first and second-generation student populations.

It is also noteworthy that in over half of the OECD countries studied in this report, still more than a quarter of second-generation students have not acquired the skills to be considered able to actively use mathematics according to the PISA definition: In Germany, $47 \%$ of secondgeneration students perform below Level 2 and in Austria, Belgium, Denmark, France, Luxembourg, Norway, Switzerland and the United States still more than $25 \%$ of secondgeneration students score below Level 2 . TTable 2.4b, Slide 11].

## Immigrant students are motivated learners and display positive attitudes to

 school.Earlier findings from PISA suggest that students are most likely to initiate high quality learning, using various strategies, if they are well motivated, not anxious about their learning and believe in their own capacities. How well do schools and families foster and strengthen positive predispositions to learning among immigrant students and thus contribute to laying a foundation for them to leave school with the motivation and capacity to continue learning throughout life?

First of all, immigrant students report no signs of a lack of engagement in learning. Despite performing less well on the whole than native students and generally coming from less advantaged families, students who experience immigration first-hand tend to report, throughout the OECD area, higher levels of interest and motivation in mathematics and a more positive
attitude to school in general than their native and second generation peers. In fact, in none of the countries do immigrant students report lower levels of these learning prerequisites. The consistency of this finding is striking, given the substantial differences between countries in terms of immigration histories, immigrant populations, immigration and integration policies and immigrant student performance in PISA.

More specifically:
Immigrant students generally report higher levels of interest and motivation in mathematics and more positive attitudes towards schooling [Table 4.1, Slide 12]. The picture is similar though less pronounced for instrumental motivation [Table 4.2, Slide 13]. (On the PISA index of interest in and enjoyment of mathematics German immigrant students score significantly higher than native students. This also holds for the PISA index of instrumental motivation).

First-generation and second-generation students tend to be much more likely than native students to report that they expect to complete a university programme, especially after accounting for student background and performance [Table 4.4, Slide 14]. (Germany's second-generation immigrant students are only slightly more than half as likely than native 15-year-olds to report expecting to complete a university-level programme, the lowest odds ratio among the 17. countries. However, once their social background and mathematics performance is taken into account, second-generation students are three times as likely than native students to report expecting to complete a university-level programme).

Relative to their native peers, immigrant students in many countries report to believe in their ability in mathematics, but when it comes to completing specific and potentially challenging tasks, they tend to lack confidence and show higher levels of anxiety with mathematics [Tables 4.5, 4.6 and 4.7, Slide 15]. In general, second-generation students report the lowest levels of selfefficacy and the highest levels of anxiety. More negative outcomes for lower levels of selfefficacy and higher levels of anxiety tend to occur in countries with relatively large performance gaps between immigrant and non-immigrant students. (On the PISA index of self-concept in mathematics, German first-generation students score significantly better than native students. Germany's second-generation students show also significantly higher levels of anxiety with mathematics than native students).

- Immigrant students tend to report more positive attitudes towards school, but this is not generally true for their sense of belonging at school [Tables 4.8 and 4.9, Slide 16]. For Germany, immigrant students report more positive attitudes towards school than native students).
- First-generation students report the strongest learning characteristics which may reflect optimism associated with immigration. Second-generation students appear to have assimilated to some extent, but still often report more positive learning characteristics than their native peers.
The findings point to areas where schools and policy makers could develop additional programmes to seek to reduce achievement gaps by making use of immigrant students' enthusiasm to learn. In some countries where first-generation and second-generation students' self-reports are comparatively less favourable for specific characteristics, such as lower levels of self-efficacy in mathematics, weaker sense of belonging at school or higher levels of anxiety in mathematics, schools and teachers may need to pay additional attention to reducing differences in these essential non-achievement outcomes. This could prove beneficial not only for immigrant students' potential to learn throughout life, but also for helping to increase their level of achievement.


## Socio-economic factors only partially explain the performance disadvantage of immigrant students.

The report summarises the literature on various factors that may explain the lower performance observed among immigrant students. Some of these focus on the immigration histories of the students and their families. Others emphasise the role of language skills, arguing that a lack of proficiency in the receiving country's official language can be a major hurdle for integration in the school system and labour market. While such explanations mainly refer to students' immigration and cultural experiences, others stress the role of immigrant families' educational and social status. In addition, institutional factors may play a role, including grade retention, tracking decisions, referral to special education programmes or the extent to which textbooks reflect the diversity of students' cultural and language backgrounds. Last but not least, community effects may influence the likelihood that immigrant students will succeed in school, leading to segregation or self-segregation tendencies that can cause immigrant populations to become isolated and therefore hinder integration.

PISA offers some possibilities for taking the socio-economic characteristics of immigrant populations into account, but it also has limitations: The data do not include information on the background of immigrant students' families at the time they entered the country. When the PISA data were collected, the immigrant students assessed by PISA had already lived in the receiving country for some time, and in many cases since their birth. Therefore, their families' educational attainment, socio-economic status and other background characteristics reflect not just their situation at the time of immigration but also the extent to which they were able to adapt to their new environment. In countries with effective approaches to educational, social and labour-market integration, the situation of immigrant families may thus not only develop more favourably in terms of their children's school performance but also in terms of their economic, social and cultural status.

What PISA does show, however, is that in most European countries as well as in the United States and Hong-Kong China immigrant students come from lower level socio-economic backgrounds and their parents often are less educated than native students' parents Tables 1.3 3.1 and 3.2]. (In Germany, parents of first-generation students have on average only 8.7 years of schooling while this is 13.9 years for native students). In contrast, the background characteristics of immigrant and native students are similar in Australia, Canada and New Zealand, the Russian Federation and Macao-China. At the country level, there is a relationship between the relative mathematics performance of immigrant students and their relative educational and socio-economic background, but again there are important differences. Denmark and Hong Kong-China show the same gap in the socio-economic background between the parents of first-generation and native students, but the performance gap between first-generation and native students is 65 score points in Denmark but only 13 score points in Hong-Kong-China [Table 3.4].

It is also evident that significant performance differences remain between immigrant and native students in many countries after accounting for these background characteristics. In particular, in Austria, Belgium, Denmark, France, Germany, Luxembourg, the Netherlands, New Zealand, Norway and Switzerland there are still large performance differences between native and secondgeneration students [Table 3.5, Slides 17 and 18]. This suggests that the relative performance levels of immigrant students cannot solely be attributed to the composition of immigrant populations in terms of their educational and socio-economic background. Moreover, disadvantaged background characteristics of immigrant students may, at least in part, themselves be outcomes of past public policies, such as when a low usage of the language of assessment at
home is due to insufficient language support of immigrant families or when difficulties in the access to labour-markets lower the occupational status of the parents of immigrant students.

Countries also differ with respect to the proportion of immigrant students whose language used at home differs from the language of instruction and this tends to be closely associated with performance differences as well. Even after accounting for parents' educational and occupational status, the performance gap associated with speaking another language than the official language at home remains significant in Belgium, Canada, Germany, the United States, Hong KongChina, Macao-China and the Russian Federation Table 3.5】. Countries with a strong relationship between the language students speak at home and their performance in mathematics may want to consider strengthening language support measures in schools. Nevertheless, these patterns do not necessarily imply that immigrant families should be encouraged to abandon their native languages. In fact, the report refers to literature that suggests that it is possible for children to reach high levels of proficiency in more than one language and immigrant students in some countries perform at similar levels as native students when they do not speak the language of instruction at home. Large disadvantages associated with the language spoken at home may suggest that students do not have sufficient opportunities to learn the language of instruction.

Even after adjusting for all of these background factors substantial performance gaps remain, most notably in Belgium and Denmark where even second-generation immigrant students remain more than a school year behind (and in Germany this is just under one school year) [Table 3.5].

## The composition of migrant populations also plays a role, but the relative success of immigrants from different countries varies greatly across countries.

Differences in the performance of immigrant students across countries have sometimes been attributed to differences in composition of migrant populations. To what extent are such hypotheses supported by the data? Immigrants living in the different countries come from a heterogeneous set of sending countries, and there tends to be substantial variation among immigrant groups in terms of their academic and economic success. Figure 2.7 shows the mathematics performance of native students and immigrant students from the three most common countries of origin for each of the 17 countries where such information is available [Table 2.8]. The mother's country of origin was used for the analysis. Shading in darker tones indicates that the difference between native students and the particular group is significant. The findings show that, within each of the countries, the results for different immigrant groups vary considerably. For example, in New Zealand, immigrant students from Samoa demonstrate significantly lower scores than their native peers (by 81 score points), while there are no significant performance disadvantages for immigrant students from the United Kingdom or China. In Australia, immigrant students from England and New Zealand do not exhibit significant differences compared to native students, while students from China even outscore their native counterparts on average by 49 points.

In the other countries, all immigrant student groups included in the analyses have significantly lower achievement scores than native students, but the difference varies by country of origin. For example, in Belgium, immigrant students with a Dutch background score 24 points less than the native students whereas immigrant students with a French or Turkish background have substantially lower scores: 133 and 125 points, respectively [Table 2.8]. Performance differences of over 40 points can also be seen among the most common immigrant groups in Austria, Denmark, Germany, Luxembourg and Switzerland. In the United States, information collected on immigrant students from households where Spanish is predominantly spoken indicates that
these students have significantly lower scores than native students ( 66 points). These results indicate that there may be a need for additional programmes or policies aimed at different immigrant groups with particularly low performance levels.

Two immigrant student groups are sufficiently represented in several countries to allow for comparative analyses. These include students whose families came from Turkey and from the former Yugoslavia. Figure 2.8 [Slide 19] compares mathematics performance of these two groups with that of native students. Both groups have significantly lower scores than their native counterparts. In addition, both groups perform consistently below the OECD average of 500, and their mean scores are fairly similar across countries.

The composition of migrant population is thus one aspect that needs to be taken into account when interpreting the observed performance variation across countries. However, it would be inappropriate to attribute the observed performance differences solely or even mainly to the composition of migrant populations. For example, while 15 -year-old students with a Turkish background only perform at 405 mathematics score points in Germany, the country with the lowest performance of Turkish immigrants, Turkish immigrants perform at 436 score points in the neighbouring country Switzerland [Table 2.9].

## In some countries, most notably highly tracked systems, immigrant students are clustered in socio-economically disadvantaged and lower-performing

 schools.Catering for the needs of a diverse student body and narrowing the gaps in student performance represent formidable challenges for all countries. The approaches that countries have chosen to address these demands vary. Some countries have comprehensive school systems with no, or only limited institutional differentiation. They seek to provide all students, including those with an immigrant background, with similar opportunities for learning by requiring each school and teacher to provide for the full range of student abilities, interests and backgrounds. Other countries respond to diversity by grouping students through tracking or streaming, whether between schools or between classes within schools, with the aim of serving students according to their academic potential and/or interests in specific programmes. And in many countries, combinations of the two approaches occur. Even in comprehensive school systems, there may be significant variation in performance levels between schools, due to the socio-economic and cultural characteristics of the communities that are served, or due to geographical differences.

The extent to which immigrant status explains performance differences among schools varies widely. Among the countries with particularly large performance differences between schools, the between-school variation that is accounted for by students' immigrant background tends to be particularly high in the tracked education systems, including Switzerland (17\%), Germany (11\%) and Belgium (10\%) [Table 3.6]. This is likely a result of immigrant students in these countries tending to be directed to school tracks with lower performance expectations, and because of their lower performance overall.

Slides 20, 21 and 22 provide information on the degree to which immigrant students are grouped together within schools. For each figure in these slides, the length of the bars below the horizontal line represents the percentage of students attending schools where less than half of the student population has an immigrant status. The length of the bar above the horizontal line shows the percentage of students in schools where at least half of the student population has an immigrant status [Tables $3.7 \mathrm{a}, 3.7 \mathrm{~b}$ and 3.7 c ].

The findings indicate that, in several countries, many immigrant students attend schools with high proportions of first-generation or second-generation students. In Australia, Austria, Canada, Germany, the Netherlands, New Zealand, the United States more than a third of secondgeneration students are in schools where at least half of the students are immigrants while less than $5 \%$ of native students are in schools with such a high concentration of immigrants [Table 3.7al. It is, of course, not just the allocation of immigrant students to schools that matters, but also differences in the characteristics of schools attended by immigrant students and native students. Figure 3.9 shows the mean index of economic, social and cultural status (ESCS) of students within schools Table 3.9]. Clearly immigrant students in most countries attend schools with less socio-economically advantaged student populations. The differences between the two student groups are significant in all countries except Australia, New Zealand, Norway, Sweden and the Russian Federation. In several European countries, such as Belgium, Denmark, France, Germany and the Netherlands, the segregation of immigrants across socio-economic lines in schools are large. In some of these countries (Belgium, Germany and the Netherlands), the pattern likely reflects tracking effects within the education system, with the highly tracked education systems having a tendency to sort students by their socio-economic status. In Canada, the difference between the two student groups is also significant, but in the opposite direction. Therefore, immigrant students in Canada seem to attend schools with relatively advantaged student populations. Finally, $\underline{\text { Slides } 23}$ and 24 show the relationship between the concentration of immigrants in schools and their performance disadvantage.

## In some countries, immigrant students also attend schools with poorer learning conditions.

In terms of human, physical and educational resources, the differences between schools attended by immigrant and native students are smaller and vary across countries [Table 3.9, Slide 25]. For the student-teacher ratio, for example, there are only a few countries with significant differences. In three of the five countries where there are differences, immigrant students are in a less favourable position than native students. Compared to their native peers, immigrant students in Luxembourg, New Zealand and the United States tend to be in schools with higher numbers of students per teacher. In contrast, the student-teacher ratio in Belgium and (to a lesser extent) in Macao-China tends to be more favourable for immigrant students. This may reflect an attempt to improve performance by providing schools with high proportions of immigrant students with additional teachers. At the same time, however, immigrant students in Belgium are more likely than native students to attend schools where the principals perceive shortages of qualified and experienced teachers to be a problem.

Differences in the quality of physical infrastructure and educational resources between schools attended by immigrant and native students tend to be small [Table 3.9]. Similarly, Table 3.9 shows that there are only a few differences in the various aspects of teacher behaviour (students' perceptions of teacher support and principals' perceptions of teacher-related factors affecting school climate and teacher morale). In Luxembourg and Macao-China, immigrant students tend to experience more favourable conditions in terms of teacher support in their mathematics lessons. In addition, teacher morale in Luxembourg is relatively high in schools attended by immigrant students. In Belgium, however, the opposite is true. Here, immigrant students tend to attend schools with lower teacher morale and with less positive teacher-related factors affecting school climate [Table 3.9].

With regard to student-perceived disciplinary climate in mathematics classes and principalperceived student behaviour affecting school climate, a different picture emerges [see Table 3.9]. In several countries, immigrant students experience less favourable school environments
compared to native students. The differences are significant for both disciplinary climate and student behaviour in Austria, Belgium and Luxembourg; for student behaviour in the Netherlands, Sweden and Macao-China; and for disciplinary climate in Germany.

## Policies and practices to help immigrant students attain proficiency in the language of instruction

Providing a strong foundation in language competencies is one of the things that can be done to compensate for limited exposure of children and immigrants to the host-country language at home and to assist children of low-educated parents with limited knowledge of the host-country language with school-work. This is all the more so as immigrant children seem to be highly motivated.

An examination of language proficiency policies in Australia, Austria, Belgium, Canada, Denmark, Germany, Luxembourg, the Netherlands, Norway, Sweden, Switzerland, Hong KongChina and Macao-China, as well as in England, Finland and Spain, shows that national policies designed to help immigrant students attain proficiency in the language of instruction have some key characteristics in common [Slide 26].

- Very few countries provide systematic language support based on an explicit curriculum in pre-primary education (ISCED 0). The countries that have an explicit curriculum in place include the Canadian province of British Columbia and the Netherlands.
- In primary (ISCED 1) and lower secondary (ISCED 2) education, the most common approach is immersion with systematic language support, that is, immigrant students attend regular classes to learn all standard academic programmes, but also receive targeted instruction to develop their skills in the language of instruction.
- In addition, several countries offer immersion programmes with a preparatory phase in the language of instruction for newly immigrated students, that is, immigrant students attend programmes to develop their language skills before they make the transition to regular classes. This approach occurs more frequently in lower secondary education (ISCED 2) than in primary education (ISCED 1).
- Bilingual language support programmes given in both students' native language and the language of instruction are relatively uncommon. In England, Finland and Norway immersion with systematic language support may include some bilingual components. Transitional bilingual programmes with initial instruction in students' native language and a gradual shift toward instruction in their second language, however, do not play a substantial role in any of the countries presented in this report other than the United States.
- Similarly, very few countries generally offer supplementary classes in their schools to improve students' native languages. In Sweden, students have a legal right to native language tuition, and schools typically provide such classes if at least five students with the same native language live in the municipality. Schools in the Swiss Canton of Geneva also offer native language classes for the most common minority languages. In eleven countries or sub-national entities, the provision of native language tuition
depends on the municipality or the individual school while in nine others native language instruction is left to families or community groups to arrange.

Despite these similarities in general approaches to supporting immigrant students in learning the language of instruction, the specific measures countries or sub-national entities implement vary considerably across a range of characteristics, such as the existence of explicit curricula and standards, the focus of the support (e.g. general curriculum vs. language development) and the organisation of the support (e.g. within mainstream instruction vs. in separate classes or language support as a specific school subject). Several countries or sub-national entities have explicit curricula or curriculum framework documents in place for second language support. These include Australia - New South Wales and Victoria and Denmark for both immersion with systematic language support and immersion with a preparatory phase; Canada - Ontario, some German Länder, Norway, Sweden and Macao-China for immersion with systematic language support; and Canada - British Columbia and Luxembourg for immersion with a preparatory phase. The curricula vary considerably, however, in terms of content, level of specificity and scope.

It would, of course, be of considerable interest to determine the extent to which the different language support programmes contribute to relative achievement levels of immigrant students. This, however, is not possible on the basis of the available information. Nevertheless, it appears that in some countries with relatively small achievement gaps between immigrant and native students, or smaller gaps for second-generation students compared to first-generation students, long-standing language support programmes exist with relatively clearly defined goals and standards. These countries include Australia, Canada and Sweden. In a few countries where immigrant students perform at significantly lower levels, language support tends to be less systematic. Yet, several of these countries have recently introduced programmes that aim to support the learning of immigrant students. These developments may help to reduce the achievement gap between immigrant students and their native peers.

Where immigrant students succeed is available to journalists on the OECD's passwordprotected website. For further information, journalists are invited to contact the OECD's Media Relations Division (tel. [33] 1452497 00). Subscribers and readers at subscribing institutions can access the report via SourceOECD, our online library. Non-subscribers can purchase the report via our Online Bookshop.


[^0]:    1 For the 26 OECD countries in which a sizeable number of 15 -year-olds in the PISA samples were enrolled in at least two different grades, the difference between students in the two grades implies that one school year corresponds to an average of 41 score points on the PISA mathematics scale (for details on the methodology used for this calculation, see Annex A1 of the report Learning for Tomorrow's World. For the underlying data see Table 4.2 f in the same report).

[^1]:    2 The correlation between the proportion of immigrant students within each country and the performance gap to native students is, at the country level, equal to $-0.48(p=.086)$.
    3 The correlation between the proportion of immigrant students within each country and mean country performance is, at the country level, equal to 0.24 ( $\mathfrak{p}=.075$ ).

