

## SPAIN

## Key findings

- Spain's performance in mathematics, reading and science remains anchored just below the OECD average, despite a $35 \%$ increase in spending on education since 2003 and numerous reform efforts at national and regional levels.
- Equity in education outcomes, in contrast, deteriorated over the same period. In 2012, socioeconomically advantaged students outperformed less-advantaged students by 34 score points in mathematics - a 6-point larger gap in performance between the two groups than was observed in 2003. In 2012, boys outperformed girls by 16 score points - a 7 -point larger gender gap in performance than seen in 2003; and students who had repeated a grade underperformed by 102 score points in 2012 - an 10-point increase, since 2003, in the performance gap between those who had repeated a grade and those who had not.
- In Spain, schools have less autonomy over the content of what is taught and how it is assessed than other OECD countries. For example, 58\% of students attend schools that play some role in determining which courses they offer, compared with $82 \%$ of such schools across OECD countries.
- High performers in PISA combine school autonomy with more collaboration, evaluation and effective appraisal mechanisms among teachers and schools. In Spain, 26\% of students attend schools that use teacher-mentoring programmes ( $72 \%$ across OECD countries). Some $44 \%$ of students ( $62 \%$ across OECD countries) attend schools that benchmark their performance nationally or regionally; and $46 \%$ of students ( $73 \%$ across OECD countries) attend schools where teacher appraisals lead to professional development opportunities.
- Some 55 score points - the equivalent of nearly a year-and-a-half of formal schooling separate the highest- and lowest-performing regions in Spain. More than $85 \%$ of the performance differences in mathematics across regions are accounted for by socio-economic disparities, compared with $47 \%$ of performance differences across regions in Italy, $16 \%$ in Canada and $26 \%$ in Australia.


## Mean performance is below average and not improving.

- Spain performs below the OECD average in mathematics, with a mean performance of 484 score points, and ranks between 31 and 36 among the 65 countries and economies that participated in the 2012 PISA assessment. Mathematics performance remained stable between 2003 and 2012 (decreasing from 485 to 484 points, which does not constitute a significant change). Poland performed lower than Spain in 2003 and higher than Spain in 2012. Italy, Portugal and the Russian Federation performed lower than Spain in 2003, but as well as Spain in 2012.
- Spain also performs below average in reading: 488 score points, ranking between 27 and 35 . Mean reading performance remains unchanged since 2000 (it decreased from 493 to 488 points, not a significant change). Germany, Liechtenstein, Poland and Switzerland performed lower than Spain in 2000 and higher in 2012. Israel, Latvia and Portugal performed lower than Spain in 2000 and as well as Spain in 2012.
- Spain performs just below average in science: 496 points, ranking between 26 and 33 . Science performance remained stable since 2006, improving slightly, but not significantly, from 488 to 496 points.
- Had 15-year-olds in 2003 had the same social and demographic characteristics of those in 2012, they would likely have scored higher than their counterparts in 2012. Thus, after accounting for demographic changes during the period, particularly the improvements in students' socioeconomic status, the country shows a negative trend in mathematics performance.


## Below-average share of top-performing students and average share of low-performing students.

- Some $8 \%$ of students are top performers in mathematics, meaning that they can develop and work with models for complex situations, and work strategically using broad, well-developed thinking and reasoning skills. This proportion is below the OECD average (12.6\%) and remains stable since 2003 (7.9\%).
- Some $24 \%$ of students in Spain are low performers in mathematics, meaning that, at best, they can extract relevant information from a single source and can use basic algorithms, formulae, procedures or conventions to solve problems involving whole numbers. This proportion is at the OECD average (23\%) and remains stable since 2003 (23\%).


## Boys outperform girls in mathematics by a larger margin than they did in PISA 2003.

- In 2003, Spanish boys scored 9 points higher in mathematics than girls, on average; in 2012, they scored 16 points higher than girls - one of the largest increases in the gender gap in mathematics performance observed among all countries with data for both 2003 and 2012.
- Girls outperform boys in reading by an average of 29 score points, a smaller-than-average gender gap (the OECD average gap is 38 score points). The gender gap in reading has remained stable since 2000.
- In 2012, Spanish boys outperformed girls in science, albeit by small margin (7 score points), whereas in 2006 the genders performed equally well. The proportion of boys below the baseline
level of performance (Level 2) decreased by more than 4 percentage points, from 19.6\% in 2006 to $15.9 \%$ in 2012 -while the proportion of girls with low performance remained stable.


## Students have different strengths in the various areas of mathematics assessed.

- Across the three mathematical processes measured in PISA 2012, Spanish students perform better in interpreting, applying and evaluating mathematical outcomes (11 score points higher than the overall mathematics score) and lower in employing mathematical concepts, facts, procedures and reasoning (3 score points lower) and in formulating situations mathematically (8 score points lower).
- Comparing the four areas of mathematics content measured in PISA 2012, Spanish students perform better in quantity ( 7 score points higher than their overall score in mathematics), about the same in uncertainty and data (2 score points higher) and change and relationships (3 score points lower), and lower in space and shape ( 7 score points lower).


## Equity in education outcomes and opportunities deteriorated since 2003.

Of the 39 countries and economies that participated in both PISA 2003 and 2012, Germany, Mexico and Turkey improved both their mathematics performance and their levels of equity in education during the period.

- In Spain, mathematics performance remained stable while equity deteriorated, as observed in a 3 percentage-point increase (from $12.6 \%$ in 2003 ) in the proportion of the variation in student performance in mathematics that is explained by socio-economic status.
- Performance differences between more and less advantaged schools in Spain were relatively small in 2012: 26 score points compared with the OECD average of 71 score points. However, performance differences among students who attend the same school are significant, particularly between more-advantaged and less-advantaged students. These differences increased from 18 to 27 score points between 2003 and 2012, compared with an OECD average difference of 19 score points in 2012.


## The percentage of disadvantaged students who perform well decreased.

Across OECD countries, $6 \%$ of the entire student population are "resilient", meaning that they beat the socio-economic odds against them and exceed expectations in performance. In Hong Kong-China, Korea, Macao-China, Singapore and Viet Nam, 13\% of students are considered resilient.

- In Spain, 6\% of students are resilient - a decrease of 2 percentage points since 2003.


## The size of the immigrant population increased, and performance differences persist.

The share of immigrant students in OECD countries increased from 9\% in 2003 to $11 \%$ in 2012 while the difference in mathematics performance between immigrant and non-immigrant students shrank by 11 score points during the same period.

- In Spain, the proportion of students with an immigrant background increased from 3\% in 2003 to $10 \%$ in 2012 . The difference in mathematics performance between immigrant and non-immigrant students - 36 score points, after accounting for socio-economic status in 2012 - remained stable during this period.


## Large regional differences are mostly linked to socio-economic disparities, not education policies.

- In Spain, the difference between the highest- and lowest-performing regions that participated in PISA is more than 55 score points - the equivalent of 16 months of schooling. Variations in mathematics performance across regions are small when compared to the total variation in performance across students in OECD countries, only $2 \%$ of the performance variation observed in OECD countries). Variations among regions are larger in Italy (8\%) but smaller in Canada (2\%) and Australia (1\%).
- More than $85 \%$ of the differences across regions in Spain are accounted for by socioeconomic disparities, far more than in any other OECD country with available data ( $47 \%$ in Italy, $16 \%$ in Canada and $26 \%$ in Australia).


## Spending has increased and is now close to the OECD average.

- Spain spends close to EUR 60000 per student between the ages of 6 and 15 , a third more than in 2003 - an increase similar to those observed in other countries.
- In Spain, the time spent in mathematics classes increased by more than 30 minutes per week, on average, between 2003 and 2012, but the total time spent in mathematics class remains at the OECD average (around three-and-a-half hours per week, on average). The time spent doing homework decreased by almost one hour per week, but remained well above the OECD average (six-and-a-half hours per week in Spain, compared with about 5 hours, on average across OECD countries).
- Fewer than $7 \%$ of students attend schools whose principals reported teacher shortages (compared with up to $21 \%$ of students across OECD countries). Teachers' salaries, relative to salaries in other professions, are above average in Spain. Student-teacher ratios in Spain are average as well.
- Between 2003 and 2012, participation in pre-primary education remained high, and the difference in performance between those who had attended pre-primary school for more than one year and those who had not increased by more than 30 score points.


## Grade repetition continues to be widespread and costly.

- One in three students in Spain reported that he or she had repeated at least one grade by the age of 15 - an increase of 4 percentage points since 2003. Socio-economically disadvantaged students are more likely to repeat a grade, even when comparing students who perform similarly in mathematics.
- In Spain, the total annual cost per student who repeated a grade is estimated at more than EUR 20000 - grade repetition represents almost $8 \%$ of the total expenditure in primary and secondary education, the third highest cost observed after the Netherlands and Belgium.


## Schools enjoy a positive learning environment, but teacher morale is low.

A positive learning climate is generally considered a pre-condition for better student performance. Therefore, it is important to attract the most talented teachers into the most challenging classrooms, and to ensure that children from all socio-economic backgrounds benefit from such a positive learning climate.

- In Spain, school principals' views of how student behaviour affects learning are generally more positive than across OECD countries. For example, 20\% of students attend schools whose principal reported that bullying hinders learning, compared with $32 \%$, on average across OECD countries.
- In contrast, about one in four students in Spain attends a school where the principal reports low teacher morale, compared with one in 10 students across OECD countries. In Spain, 29\% of students attend schools where the principals' reported that teachers resisting change hinders learning, compared with an OECD average of $19 \%$.


## Spanish schools have less autonomy on curricula, which, if coupled with more evaluation, collaboration and effective appraisal mechanisms, is associated with higher performance across countries.

Greater school autonomy in designing the curriculum and assessments could lead to improvements in performance, provided that the school system, as a whole, has accountability arrangements in place and that principals and teachers collaborate in school management.

- In Spain, $42 \%$ of students attend schools whose principal reported only regional or national educational authorities have responsibility for determining which courses are offered (compared with the OECD average of $18 \%$ ); some $43 \%$ of students attend schools whose principal reported that only regional or national educational authorities have responsibility for determining course content (the OECD average is $24 \%$ ); and some $24 \%$ of students attend schools whose principal reported that only regional or national educational authorities have responsibility for establishing student-assessment policies (the OECD average is $13 \%$ ).
- A larger proportion of Spanish schools are using student assessments to compare school performance against regional or national benchmarks. In 2003, some $18 \%$ of students attended schools whose principal reported that school performance is compared against regional or national benchmarks; by 2012, 44\% of students attended such schools. However, this proportion is still below the OECD average of $62 \%$.
- Other forms of external evaluations are also relatively rare in Spain. The percentage of students in schools that post achievement data publicly is well below the OECD average: 13\% in Spain versus 45\% across OECD countries. While across OECD countries, 43\% of students attend schools whose principal reported that they have regular consultations with one or more experts over a period of at least six months with the aim of improving the school, in Spain, only $27 \%$ of students attend such schools. Across OECD countries, $62 \%$ of students attend schools whose principal reported that they implement a standardised policy for mathematics (i.e. a school curriculum with shared instructional materials accompanied by staff development and training); in Spain only $38 \%$ of students attend such a school.
- Collaboration among teacher is less frequent in Spain than in other countries. In Spain, 10\% of students attend schools where principals reported that senior staff observe lessons (69\% of students across OECD countries attend such schools). Some $22 \%$ of students attend schools where principals reported that teachers peer-review lesson plans, assessment instruments, and actual lessons, while $60 \%$ of students across OECD countries attend such schools; and $26 \%$ of students attend schools whose principal reported using teacher mentoring to improve the quality of teaching, while $72 \%$ of students across OECD countries, on average, attend such schools.
- In Spain, teacher appraisals rarely lead to a change in salary, a monetary reward, new professional development opportunities, a promotion, public recognition or a new role in school improvement. Some $33 \%$ of Spanish students (compared to $52 \%$ of students across OECD countries) attend schools whose principal reported that appraisals of and/or feedback to teachers lead directly to a (small, moderate or large) change in the likelihood of career advancement. Some 46\% of students in Spain (73\% across OECD countries) attend schools where teacher appraisals lead to professional development opportunities.


## Engagement with and at school is relatively high in Spain, but many students are often truant.

Students' engagement with school, the belief that they can achieve at high levels, and their ability and willingness to do what it takes to reach their goals not only play a central role shaping students' ability to master academic subjects, they are also valuable attributes that will enable students to lead full lives, meeting challenges and making the most of available opportunities along the way. In other words, much more is required of students - and adults - than just cognitive proficiency.

For the first time, PISA 2012 asked students to evaluate their happiness at, and satisfaction with, school and to reflect on whether their school environment approaches their idea of an ideal situation. As schools are a, if not the, primary social environment for 15 -year-olds, these subjective evaluations provide a good indication of whether education systems are able to foster or hinder overall student well-being.

- Some $87 \%$ of students in Spain reported that they feel happy at school, compared with the OECD average of about $80 \%$ of students. In general, Spanish students report a stronger sense of belonging at school than students across OECD countries. For example 76\% agreed or strongly agreed that conditions in their school are ideal (the OECD average is 61\%), and 93\% reported that they feel they belong at school (the OECD average is $81 \%$ ).
- In 2003, a larger-than-average proportion of students in Spain expressed a strong sense of belonging at school; by 2012 that proportion increased by 8 percentage points (from 85 to 93\%).
Students who arrive late or play truant miss learning opportunities. They also disrupt class, creating a disciplinary climate that is not conducive to learning for their fellow students. On average across OECD countries, $35 \%$ of students reported that they arrived late for school in the two weeks before the PISA test, $18 \%$ of students reported that they had skipped at least one class, and $15 \%$ of students reported that they had skipped an entire day of school or more over the same period.
- Some 35\% of students in Spain reported that they had arrived late for school in the two weeks before the PISA test (a significant decrease from $41 \%$ in 2003); $32 \%$ of students reported that they had skipped at least one class, and $28 \%$ reported that they had skipped a day of school or more over the same period (above the OECD average).
Lack of punctuality and truancy are negatively associated with student performance. On average across OECD countries, arriving late for school is associated with a 27-point lower score in mathematics, while skipping classes or days of school is associated with a 37-point lower score in mathematics - the equivalent of almost one full year of formal schooling.
- In Spain, students who reported that they had arrived late for school score 27 points lower in mathematics, on average, while those who reported skipping classes or days of school score 35 points lower, on average (similar to the gap across OECD countries).


## Student's drive to learn mathematics is average, but interest in and enjoyment of the subject is low.

Intrinsic motivation refers to the drive to perform an activity because of the pleasure and interest in the activity itself. Across OECD countries, large proportions of students reported low levels of enjoyment of mathematics.

- Spanish students reported enjoying mathematics as much as the average OECD student. For example, $53 \%$ of students in OECD countries agreed or strongly agreed that they are interested in the things they learn in mathematics. In Spain, $60 \%$ of students agreed or strongly agreed with this statement. However, while across OECD countries, $31 \%$ of students agreed or strongly agreed that they enjoy reading about mathematics, in Spain 19\% did.
- Girls tend to have significantly lower levels of enjoyment of mathematics and intrinsic motivation to learn mathematics. In Spain, $14 \%$ of girls enjoy reading about mathematics, compared with the OECD average of $36 \%$.


## Learning is hindered by anxiety towards mathematics and beliefs, particularly among girls.

Across OECD countries, $61 \%$ of students reported that they worry about getting poor grades in mathematics, and $30 \%$ that they get very nervous doing mathematics problems.

- In Spain $78 \%$ of students (and $84 \%$ of girls) worry about poor grades in mathematics and $41 \%$ of students ( $47 \%$ of girls) reported getting nervous doing mathematics problems. These proportions have not changed significantly since 2003.
Across OECD countries, $42 \%$ of students ( $64 \%$ of girls), think that when they fail in mathematics it is because they are not good at mathematics.
- In Spain, $74 \%$ of students ( $80 \%$ of girls) think they are not good at mathematics.


## Snapshot of performance in mathematics, reading and science

|  | Countries/economies with a mean periomance/share of top-performers above the OE CD average Countries/economies with a share of low-achievers below the $O E C D$ average |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Countries/economies with a mean perfrmance/share of low-achievers/share of top-perbrmers not statistically signifcantly different from the OECD average |  |  |  |  |  |  |  |
|  | Countries/economies with a mean perimance/share of top-performers belowthe OE CD average Countries/economies with a share of low-achievers above the OECD average |  |  |  |  |  |  |  |
|  | Countries/economies in which the annualised change in perbrmance is statistically significant are marked in bold. |  |  |  |  |  |  |  |
|  | Mathematics |  |  |  | Reading |  | Science |  |
|  | Mean score in PISA 2012 | Share of lowachievers (Below Level 2) | Share of topperformers in mathematics (Level 5 or 6) | Annualised change | Mean score in PISA 2012 | Annualised change | Mean score in PISA 2012 | Annualised change |
| OECD average | 494 | 23.1 | 12.6 | -0.3 | 496 | 0.3 | 501 | 0.5 |
| Shanghai-C hina | 613 | 3.8 | 55.4 | 4.2 | 570 | 4.6 | 580 | 1.8 |
| Singapore | 573 | 8.3 | 40.0 | 3.8 | 542 | 5.4 | 551 | 3.3 |
| Hong Kong-China | 561 | 8.5 | 33.7 | 1.3 | 545 | 2.3 | 555 | 2.1 |
| Chinese Taipei | 560 | 12.8 | 37.2 | 1.7 | 523 | 4.5 | 523 | -1.5 |
| Korea | 554 | 9.1 | 30.9 | 1.1 | 536 | 0.9 | 538 | 2.6 |
| Macao-China | 538 | 10.8 | 24.3 | 1.0 | 509 | 0.8 | 521 | 1.6 |
| Japan | 536 | 11.1 | 23.7 | 0.4 | 538 | 1.5 | 547 | 2.6 |
| Liechtenstein | 535 | 14.1 | 24.8 | 0.3 | 516 | 1.3 | 525 | 0.4 |
| Switzerland | 531 | 12.4 | 21.4 | 0.6 | 509 | 1.0 | 515 | 0.6 |
| Netheriands | 523 | 14.8 | 19.3 | -1.6 | 511 | -0.1 | 522 | -0.5 |
| Estonia | 521 | 10.5 | 14.6 | 0.9 | 516 | 2.4 | 541 | 1.5 |
| Finland | 519 | 12.3 | 15.3 | -2.8 | 524 | -1.7 | 545 | -3.0 |
| Canada | 518 | 13.8 | 16.4 | -1.4 | 523 | -0.9 | 525 | -1.5 |
| Poland | 518 | 14.4 | 16.7 | 2.6 | 518 | 2.8 | 526 | 4.6 |
| Belgium | 515 | 18.9 | 19.4 | -1.6 | 509 | 0.1 | 505 | -0.8 |
| Germany | 514 | 17.7 | 17.5 | 1.4 | 508 | 1.8 | 524 | 1.4 |
| Viet Nam | 511 | 14.2 | 13.3 | m | 508 | m | 528 | m |
| Austria | 506 | 18.7 | 14.3 | 0.0 | 490 | -0.2 | 506 | -0.8 |
| Australia | 504 | 19.7 | 14.8 | -2.2 | 512 | -1.4 | 521 | -0.9 |
| Ireland | 501 | 16.9 | 10.7 | -0.6 | 523 | -0.9 | 522 | 2.3 |
| Slovenia | 501 | 20.1 | 13.7 | -0.6 | 481 | -2.2 | 514 | -0.8 |
| Denmark | 500 | 16.8 | 10.0 | -1.8 | 496 | 0.1 | 498 | 0.4 |
| NewZealand | 500 | 22.6 | 15.0 | -2.5 | 512 | -1.1 | 516 | -2.5 |
| Czech Republic | 499 | 21.0 | 12.9 | -2.5 | 493 | -0.5 | 508 | -1.0 |
| France | 495 | 22.4 | 12.9 | -1.5 | 505 | 0.0 | 499 | 0.6 |
| United Kingdom | 494 | 21.8 | 11.8 | -0.3 | 499 | 0.7 | 514 | -0.1 |
| Iceland | 493 | 21.5 | 11.2 | -2.2 | 483 | -1.3 | 478 | -2.0 |
| Latvia | 491 | 19.9 | 8.0 | 0.5 | 489 | 1.9 | 502 | 2.0 |
| Luxembourg | 490 | 24.3 | 11.2 | -0.3 | 488 | 0.7 | 491 | 0.9 |
| Norvay | 489 | 22.3 | 9.4 | -0.3 | 504 | 0.1 | 495 | 1.3 |
| Portugal | 487 | 24.9 | 10.6 | 2.8 | 488 | 1.6 | 489 | 2.5 |
| Italy | 485 | 24.7 | 9.9 | 2.7 | 490 | 0.5 | 494 | 3.0 |
| Spain | 484 | 23.6 | 8.0 | 0.1 | 488 | -0.3 | 496 | 1.3 |
| Russian Federation | 482 | 24.0 | 7.8 | 1.1 | 475 | 1.1 | 486 | 1.0 |
| Slovak Republic | 482 | 27.5 | 11.0 | -1.4 | 463 | -0.1 | 471 | -2.7 |
| United States | 481 | 25.8 | 8.8 | 0.3 | 498 | -0.3 | 497 | 1.4 |
| Lithuania | 479 | 26.0 | 8.1 | -1.4 | 477 | 1.1 | 496 | 1.3 |
| Sveden | 478 | 27.1 | 8.0 | 3.3 | 483 | -2.8 | 485 | -3.1 |
| Hungary | 477 | 28.1 | 9.3 | -1.3 | 488 | 1.0 | 494 | -1.6 |
| Croatia | 471 | 29.9 | 7.0 | 0.6 | 485 | 1.2 | 491 | -0.3 |
| Israel | 466 | 33.5 | 9.4 | 4.2 | 486 | 3.7 | 470 | 2.8 |
| Greece | 453 | 35.7 | 3.9 | 1.1 | 477 | 0.5 | 467 | -1.1 |
| Serbia | 449 | 38.9 | 4.6 | 2.2 | 446 | 7.6 | 445 | 1.5 |
| Turkey | 448 | 42.0 | 5.9 | 3.2 | 475 | 4.1 | 463 | 6.4 |
| Romania | 445 | 40.8 | 3.2 | 4.9 | 438 | 1.1 | 439 | 3.4 |
| Cyprus ${ }^{12}$ | 440 | 42.0 | 3.7 | m | 449 | m | 438 | m |
| Bulgaria | 439 | 43.8 | 4.1 | 4.2 | 436 | 0.4 | 446 | 2.0 |
| United Arab Emirates | 434 | 46.3 | 3.5 | m | 442 | m | 448 | m |
| Kazakhstan | 432 | 45.2 | 0.9 | 9.0 | 393 | 0.8 | 425 | 8.1 |
| Thailand | 427 | 49.7 | 26 | 1.0 | 441 | 1.1 | 444 | 3.9 |
| Chile | 423 | 51.5 | 1.6 | 1.9 | 441 | 3.1 | 445 | 1.1 |
| Malaysia | 421 | 51.8 | 1.3 | 8.1 | 398 | -7.8 | 420 | -1.4 |
| M exico | 413 | 54.7 | 0.6 | 3.1 | 424 | 1.1 | 415 | 0.9 |
| Montenegro | 410 | 56.6 | 1.0 | 1.7 | 422 | 5.0 | 410 | -0.3 |
| Uruguay | 409 | 55.8 | 1.4 | -1.4 | 411 | -1.8 | 416 | -2.1 |
| Costa Rica | 407 | 59.9 | 0.6 | -1.2 | 441 | -1.0 | 429 | -0.6 |
| Albania | 394 | 60.7 | 0.8 | 5.6 | 394 | 4.1 | 397 | 2.2 |
| Brazil | 391 | 67.1 | 0.8 | 4.1 | 410 | 1.2 | 405 | 2.3 |
| Argentina | 388 | 66.5 | 0.3 | 1.2 | 396 | -1.6 | 406 | 2.4 |
| Tunisia | 388 | 67.7 | 0.8 | 3.1 | 404 | 3.8 | 398 | 2.2 |
| Jordan | 386 | 68.6 | 0.6 | 0.2 | 399 | -0.3 | 409 | -2.1 |
| Colombia | 376 | 73.8 | 0.3 | 1.1 | 403 | 3.0 | 399 | 1.8 |
| Qatar | 376 | 69.6 | 20 | 9.2 | 388 | 12.0 | 384 | 5.4 |
| Indonesia | 375 | 75.7 | 0.3 | 0.7 | 396 | 2.3 | 382 | -1.9 |
| Peru | 368 | 74.6 | 0.6 | 1.0 | 384 | 5.2 | 373 | 1.3 |

[^0]1. Footnote by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
2. Footnote by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

## What is PISA?

The Programme for International Student Assessment (PISA) is an ongoing triennial survey that assesses the extent to which 15 -year-olds students near the end of compulsory education have acquired key knowledge and skills that are essential for full participation in modern societies. The assessment does not just ascertain whether students can reproduce knowledge; it also examines how well students can extrapolate from what they have learned and apply that knowledge in unfamiliar settings, both in and outside of school. This approach reflects the fact that modern economies reward individuals not for what they know, but for what they can do with what they know.

PISA offers insights for education policy and practice, and helps monitor trends in students' acquisition of knowledge and skills across countries and in different demographic subgroups within each country. The findings allow policy makers around the world to gauge the knowledge and skills of students in their own countries in comparison with those in other countries, set policy targets against measurable goals achieved by other education systems, and learn from policies and practices applied elsewhere.

## Key features of PISA 2012

## The content

- The PISA 2012 survey focused on mathematics, with reading, science and problem-solving minor areas of assessment. For the first time, PISA 2012 also included an assessment of the financial literacy of young people, which was optional for countries.


## The students

- Around 510000 students completed the assessment in 2012, representing about 28 million 15-year-olds in the schools of the 65 participating countries and economies.


## The assessment

- Paper-based tests were used, with assessments lasting a total of two hours for each student. In a range of countries and economies, an additional 40 minutes were devoted to the computer-based assessment of mathematics, reading and problem solving.
- Test items were a mixture of multiple-choice items and questions requiring students to construct their own responses. The items were organised in groups based on a passage setting out a reallife situation. A total of about 390 minutes of test items were covered, with different students taking different combinations of test items.
- Students answered a background questionnaire, which took 30 minutes to complete, that sought information about themselves, their homes and their school and learning experiences. School principals were given a questionnaire, to complete in 30 minutes, that covered the school system and the learning environment. In some countries and economies, optional questionnaires were distributed to parents, who were asked to provide information on their perceptions of and involvement in their child's school, their support for learning in the home, and their child's career expectations, particularly in mathematics. Countries could choose two other optional questionnaires for students: one asked students about their familiarity with and use of information and communication technologies, and the second sought information about their education to date, including any interruptions in their schooling and whether and how they are preparing for a future career.

Map of PISA 2012 countries and economies


## OECD countries

Australia
Austria
Belgium
Canada
Chile
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy

Japan
Korea
Luxembourg
Mexico
Netherlands
New Zealand
Norway
Poland
Portugal
Slovak Republic
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States

Partner countries and economies in PISA 2012
Albania Malaysia
Argentina Montenegro

Brazil Peru
Bulgaria Qatar
Colombia Romania
Costa Rica Russian Federation
Croatia Serbia
Cyprus ${ }^{1,2}$ Shanghai-China
Hong Kong-China Singapore
Indonesia Chinese Taipei
Jordan Thailand
Kazakhstan Tunisia
Latvia United Arab Emirates
Liechtenstein Uruguay
Lithuania Vietnam

[^1]
## Contacts:

Andreas Schleicher
Advisor to the Secretary-General on Education Policy,
Deputy Director for Education and Skills
Email: Andreas.SCHLEICHER@oecd.org
Telephone: +33 607385464
Pablo Zoido
Analyst
Programme for International Student Assessment (PISA)
Directorate for Education and Skills
Email: Pablo.Zoido@oecd.org
Telephone: +33 625313393

For more information on the Programme for International Student Assessment and to access the full set of PISA 2012 results visit:
www.oecd.org/pisa


BETTER POLICIES FOR BETTER LIVES


[^0]:    Countries and economies are ranked in descending order of the mathematics mean score in PISA 2012
    Source: OE CD PISA 2012 database, Tables 1.2 1a, $1.2 .1 \mathrm{~b}, 1.2 .3 \mathrm{a}, 1.2 .3 \mathrm{~b}, 1.4 .3 \mathrm{a}, 1.4 .3 \mathrm{~b}, 1.5 .3 \mathrm{a}$ and 1.5 .3 b .

[^1]:    1. Footnote by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
    2. Footnote by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.
