



Reader's Guide

Data underlying the figures

The data tables are listed in Annex A and available on line at www.oecd.org/pisa.

Four symbols are used to denote missing data:

- a The category does not apply in the country concerned. Data are therefore missing.
- c There are too few observations or no observation to provide reliable estimates (i.e. there are fewer than 30 students or less than five schools with valid data).
- m Data are not available. These data were not submitted by the country or were collected but subsequently removed from the publication for technical reasons.
- w Data have been withdrawn or have not been collected at the request of the country concerned.

Country coverage

This publication features data on 64 countries and economies: 34 OECD countries (indicated in black in the figures) and 30 partner countries and economies (indicated in blue in the figures).

Calculating international averages

An OECD average was calculated for most indicators presented in this report. In most tables, the OECD average corresponds to the arithmetic mean of the respective country estimates. In cases where the OECD average is computed so as to be consistent across different categories within a table, this is indicated in a note at the bottom of the table.

Rounding figures

Because of rounding, some figures in tables may not exactly add up to the totals. Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation. All standard errors in this publication have been rounded to one or two decimal places (i.e. the value 0.00 does not imply that the standard error is zero, but that it is smaller than 0.005).

Bolding of estimates

This report discusses only statistically significant differences or changes (statistical significance at the 5% level). These are denoted in darker colours in figures and in bold in tables.



Reporting student data

The report uses “15-year-olds” as shorthand for the PISA target population. PISA covers students who are aged between 15 years 3 months and 16 years 2 months at the time of assessment and who have completed at least 6 years of formal schooling, regardless of: the type of institution in which they are enrolled; whether they are in full-time or part-time education; whether they attend academic or vocational programmes; and whether they attend public, private or foreign schools within the country.

Reporting school data

The principals of the schools in which students were assessed provided information on their schools’ characteristics by completing a school questionnaire. Where responses from school principals are presented in this publication, they are weighted so that they are proportionate to the number of 15-year-olds enrolled in the school.

Indices used in this report

Some analyses in this report are based on synthetic indices. Indices from student and school questionnaires summarise information from several related questionnaire responses into a single global measure. The construction of the following indices is detailed in the *PISA 2012 Technical Report* (OECD, 2014):

- *Index of exposure to applied mathematics*
- *Index of exposure to pure mathematics*
- *Index of familiarity with mathematics*
- *Index of instrumental motivation*
- *Index of intrinsic motivation*
- *Index of mathematics anxiety*
- *Index of mathematics self-concept*
- *Index of disciplinary climate*
- *PISA index of economic, social and cultural status (ESCS)*

Categorising student performance

This report uses a shorthand to describe students’ levels of proficiency in the subjects assessed by PISA:

- **Top performers** are those students proficient at Level 5 or 6 of the assessment.
- **Low performers** are those students proficient at or below Level 1 of the assessment.
- **Highest achievers** are those students who perform at or above the 90th percentile in their own country/economy.
- **Lowest achievers** are those students who perform below the 10th percentile in their own country/economy.



Categorising students and schools according to their socio-economic profile

- **Socio-economically advantaged students** are those students whose value of the *PISA index of economic, social and cultural status* (ESCS) is at or above the 75th percentile in their own country/economy.
- **Socio-economically disadvantaged students** are those students whose value of the *PISA index of economic, social and cultural status* (ESCS) is below the 25th percentile in their own country/economy.
- **Socio-economically advantaged schools** are those schools whose average value of the *PISA index of economic, social and cultural status* (ESCS) is significantly higher than the average in their own country/economy.
- **Socio-economically disadvantaged schools** are those schools whose average value of the *PISA index of economic, social and cultural status* (ESCS) is significantly lower than the average in their own country/economy.

Categorising students and schools according to their familiarity with mathematics

- **Students who are more familiar with mathematics** are those students whose value of the *index of familiarity with mathematics* is at or above the 75th percentile in their own country/economy.
- **Students who are less familiar with mathematics** are those students whose value of the *index of familiarity with mathematics* is below the 25th percentile in their own country/economy.
- **Schools where students are more familiar with mathematics** are those schools whose average value of the *index of familiarity with mathematics* is significantly higher than the average in their own country/economy.
- **Schools where students are less familiar with mathematics** are those schools whose average value of the *index of familiarity with mathematics* is significantly lower than the average in their own country/economy.

Abbreviations used in this report

% dif.	Percentage-point difference	S.E.	Standard error
Dif.	Difference	OTL	Opportunity to Learn
ESCS	PISA index of economic, social and cultural status		
ISCED	International Standard Classification of Education		

**Further documentation**

For further information on the PISA assessment instruments and the methods used in PISA, see the *PISA 2012 Technical Report* (OECD, 2014).

StatLinks

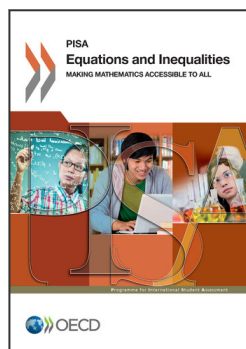
This report uses the OECD StatLinks service. Below each table and chart is a url leading to a corresponding Excel™ workbook containing the underlying data. These urls are stable and will remain unchanged over time. In addition, readers of the e-books will be able to click directly on these links and the workbook will open in a separate window, if their Internet browser is open and running.

Note regarding Israel

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Reference

OECD (2014), *PISA 2012 Technical Report*, PISA, OECD, Paris, www.oecd.org/pisa/pisaproducts/PISA-2012-technical-report-final.pdf.



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