

## PISA FAQ

### Background and basics

#### *What is the OECD?*

The Organisation for Economic Co-operation and Development, or OECD, comprises 30 member countries sharing a commitment to democratic government and the market economy. With active relationships with some 70 other countries and economies, NGOs and civil society, it has a global reach. Best known for its publications and its statistics, its work covers a range of economic and social issues from macroeconomics to trade, education, development and science and innovation. For more information on the OECD, visit [www.oecd.org](http://www.oecd.org). For more information on the OECD's work on education, visit [www.oecd.org/edu](http://www.oecd.org/edu).

#### *What does the term "PISA" mean?*

PISA is an acronym taken from the name **P**rogramme for **I**nternational **S**tudent **A**ssessment.

#### *What is the history of PISA?*

Responding to member countries' demands for regular and reliable data on the knowledge and skills of their students and the performance of their education systems, the OECD began work on PISA in the mid-1990s. PISA was officially launched in 1997, with the first survey taking place in 2000, the second in 2003 and the third in 2006. Future surveys are planned in 2009, 2012, 2015 and beyond...

The PISA 2006 results will be released on 4 December 2007.

#### *What makes PISA unique?*

PISA benefits from its global span and its regularity. More than 60 countries have taken part in PISA so far and the surveys, which are given every three years, allow countries to track their progress in meeting key learning goals. PISA is the only international education survey to measure the knowledge and skills of 15-year-olds, an age at which students in most countries are nearing the end of their compulsory time in school.

PISA is also unique in the way it looks at:

- *Public policy issues* Governments, principals, teachers and parents all want answers to questions such as "Are our schools adequately preparing young people for the challenges of adult life?", "Are some kinds of teaching and schools more effective than others?" and "Can schools contribute to improving the futures of students from immigrant or disadvantaged backgrounds?"
- *Literacy* Rather than examine mastery of specific school curricula, PISA looks at students' ability to apply knowledge and skills in key subject areas and to analyse, reason and communicate effectively as they examine, interpret and solve problems.
- *Lifelong learning* Students cannot learn everything they need to know in school. In order to be effective lifelong learners, young people need not only knowledge and skills, but also an awareness of why and how they learn. PISA both measures student performance in reading, mathematics and science literacy and also asks students about their motivations, beliefs about themselves and learning strategies.

#### *Which countries participate in PISA?*

All OECD member countries participated in the first three PISA surveys, along with certain partner countries. In total, 43 countries took part in PISA 2000, 41 in PISA 2003 and 58 in PISA 2006. Click [here](#) to obtain the full list of PISA participants to date and information on each country's contacts, website, national report and more.

### ***How are countries chosen to participate in PISA?***

Countries who are interested in participating in PISA contact the OECD Secretariat. The PISA Governing Board then approves membership according to certain criteria. Participating countries must have the technical expertise necessary to administer an international assessment and must be able to meet the full costs of participation. To take part in a cycle of PISA, countries must join two years before the survey takes place. For example, all countries participating in PISA 2009 will have joined before March 2007.

### ***Who are the people behind PISA?***

#### *Education ministries in the participating countries*

PISA would not be possible without the support and guidance of the education ministries in the participating countries. Click [here](#) for links to education ministries in OECD countries.

#### *The OECD Secretariat*

The OECD Secretariat is responsible for the day-to-day management of PISA. This means that the PISA team monitors the survey's implementation, manages administrative matters for the PISA Governing Board, builds consensus among countries and serves as a go-between for the PISA Governing Board and the PISA Consortium. Click [here](#) to see the OECD Secretariat contact list for PISA.

#### *The PISA Governing Board*

Each OECD country participating in PISA has a representative on the PISA Governing Board, appointed by the country's education ministry. Each partner country participating in PISA has an observer on the board, appointed by the country's education ministry. The chair of the PISA Governing Board is chosen by the Board itself.

Guided by the OECD's education objectives, the Board determines the policy priorities for PISA and makes sure that these are respected during the implementation of each PISA survey. Click [here](#) for the names and contact details of the current PISA Governing Board.

#### *The international contractor (the "PISA Consortium")*

For each PISA survey, an international contractor (usually made up of testing and assessment agencies) has been responsible for the design and implementation of the surveys. The contractor is chosen by the PISA Governing Board through an international call for tender. This contractor was called the "PISA Consortium" for the PISA 2000 and PISA 2003 surveys.

#### *The PISA National Project Managers*

Working with the OECD Secretariat, the PISA Governing Board and the international contractor, the PISA National Project Managers oversee the implementation of PISA in each participating country. The PISA National Project Managers are appointed by their countries' governments.

#### *The PISA Subject Matter Expert Groups*

PISA has Subject Matter Expert Groups for its three key areas of testing – reading, mathematics and science literacy – as well as for other subjects when appropriate (problem solving in PISA 2003, for example). These groups are made up of world experts in each area. They design the theoretical framework for each PISA survey.

### *The PISA Questionnaire Expert Group*

The Questionnaire Expert Group provides leadership and guidance in the construction of the PISA context questionnaires. The members of the Questionnaire Expert Group are selected by the PISA Governing Board.

### ***Who pays for PISA?***

PISA is financed exclusively through direct contributions from participating countries, made through each country's education ministry.

### ***Does PISA tell countries how to run their schools?***

No. The data collected by PISA shows the successes of some countries' schools and the challenges being faced in other countries. It allows countries to compare best practices and to further develop their own improvements, ones appropriate for their school systems.

## **The test and the questionnaires**

### ***Who takes the PISA tests?***

Schools in each country are randomly selected by the international contractor for participation in PISA. At these schools, the test is given to students who are between age 15 years 3 months and age 16 years 2 months at the time of the test, rather than to students in a specific year of school. This average age of 15 was chosen because at this age young people in most OECD countries are nearing the end of compulsory education. The selection of schools and students is kept as inclusive as possible, so that the sample of students comes from a broad range of backgrounds and abilities.

### ***What does PISA test?***

Every PISA survey tests reading, mathematical and scientific literacy in terms of general competencies, that is, how well students can apply the knowledge and skills they have learned at school to real-life challenges. PISA does *not* test how well a student has mastered a school's specific curriculum.

### ***How does PISA test this?***

To date, PISA has used pencil-and-paper tests. Assessments using computers are under consideration for future surveys. The tests are made up of both multiple-choice questions and questions requiring students to construct their own responses. The material is organised around texts and sometimes includes pictures, graphs or tables setting out real-life situations. Each PISA survey includes about seven hours of test material. From this, each student takes a two-hour test, with the actual combination of test materials different for every student.

### ***Who creates the test questions?***

All PISA countries are invited to submit questions to the international contractor; in addition, the international contractor also writes some questions. The questions are reviewed by the international contractor and by participating countries and are carefully checked for cultural bias. Only those questions that are unanimously approved are used in PISA. Further, before the real test there is a trial run in all participating countries. If any test questions prove to have been too easy or difficult in certain countries, they are dropped from the real test in all countries.

### ***What are the PISA context questionnaires? What are they used for?***

Students answer a background questionnaire, providing information about themselves, their attitudes to learning and their homes. It takes 20-30 minutes to complete. In addition, school principals are given a 20-minute questionnaire about their schools. Countries can also choose to

administer several optional PISA questionnaires: the *computer familiarity questionnaire*, the *educational career questionnaire* and the *parent background questionnaire*. In addition, many countries choose to gather further information through national questionnaires.

The information collected from these questionnaires helps countries to explore connections between how students perform in PISA and factors such as migration, gender and students' socio-economic background, as well as students' attitudes about school and their approaches to learning.

### ***Are the PISA tests and questionnaires available to the general public?***

A selection of PISA test materials is available in *Sample Tasks from the PISA 2000 Assessment* (OECD 2002). Click [here](#) for a free PDF of this publication. Click [here](#) for additional test materials on line. The PISA questionnaires are available [here](#).

### ***Why aren't all the PISA test materials available?***

In order to allow countries to follow their performance over time, many questions are used in more than one PISA survey. These questions cannot be made public as long as they are in use.

### **Understanding the results**

#### ***How are the tests corrected?***

Each country has its own group of test correctors, overseen by the country's National Project Manager. They mark the PISA tests using a guide developed by the international contractor and the PISA Subject Experts (with input from all participating countries). The corrections are cross-checked by other experts. The final results are then sent to the international contractor, who in turn transmits the final data to the OECD Secretariat.

#### ***What do the test scores mean?***

PISA scores can be located along specific scales developed for each subject area, designed to show the general competencies tested by PISA. These scales are divided into levels that represent groups of PISA test questions, beginning at Level 1 with questions that require only the most basic skills to complete and increasing in difficulty with each level.

Once a student's test has been corrected, his or her score in reading, mathematics and science (plus problem solving in PISA 2003) can be located on the appropriate scale. For example, a student who is likely to lack the skills need to correctly complete easiest questions on a PISA test would be classified as below Level 1, while a student who is likely to have many of these skills need to correctly complete the test questions would be at a higher level.

In each test subject, the score for each participating country is the average of all student scores in that country. The average score among OECD countries is 500 points and the standard deviation is 100 points. About two-thirds of students across OECD countries score between 400 and 600 points.

#### ***Where can I find more information on the PISA scales?***

These are described in detail in the PISA assessment framework publications and the PISA technical reports. For free PDFs of these books consult

- *Assessing Scientific, Reading and Mathematical Literacy: A Framework for PISA 2006* (Available in English, French and Spanish)
- *PISA 2003 Technical Report* (Available in English only)

- *The PISA 2003 Assessment Framework: Mathematics, Reading, Science and Problem Solving Knowledge and Skills* (Available in English, French, Spanish and Japanese)
- *Programme for International Student Assessment (PISA): PISA 2000 Technical Report* (Available in English only)
- *Measuring Student Knowledge and Skills: The PISA 2000 Assessment of Reading, Mathematical and Scientific Literacy* (Available in English and French)
- For free PDFs of these books, please visit the PISA website: [www.pisa.oecd.org](http://www.pisa.oecd.org). Click on "What

### ***How are countries ranked in PISA?***

PISA ranks countries according to their performance in reading, mathematics and science, as well as problem solving in PISA 2003. PISA does not give a collective score for all subjects combined; rather it gives a score for each subject area and countries are ranked by their mean score in each area.

However, it is not possible to assign a single exact rank in each subject to each country. This is because PISA tests only a sample of students from each country and this result is then adjusted to reflect the whole population of 15-year-old students in that country. The scores thus reflect a small measure of statistical uncertainty and it is therefore only possible to report the *range* of positions (upper rank and lower rank) within which a country can be placed. For example, in PISA 2003 Finland and Korea were widely reported as ranking 1<sup>st</sup> and 2<sup>nd</sup> in PISA, when in fact we can only say that, among OECD countries, Finland's rank was between 1<sup>st</sup> and 3<sup>rd</sup> and Korea's was between 1<sup>st</sup> and 4<sup>th</sup>.

### ***Can results from PISA be compared across the surveys or does each survey stand alone?***

Yes, student performance can be compared across the surveys, as can some of the background questionnaire items.

### ***Are the results of every country's performance in PISA published?***

Generally, yes – the PISA reports published after each survey include data from all participating countries as long as the data and the amount of students tested (the sample size) meet certain standards. If the standards are not attained, depending on the reason, the data are either not published at all or published but set apart from data of other countries with an explanatory note. See below.

#### ***Anomalies in PISA data***

The following lists cases in which the OECD, on the basis of technical advice from the PISA Consortium, removed or annotated national data in the report because of technical anomalies or because the data did not meet the OECD technical standards for PISA.

#### ***Austria***

As noted in the PISA 2000 Technical Report (OECD, 2002), the Austrian sample for the PISA 2000 assessment did not adequately cover students enrolled in combined school and work-based vocational programmes as required by the technical standards for PISA. The published PISA 2000 estimates for Austria were therefore biased (OECD, 2001). This non-conformity was corrected in the PISA 2003 assessment. To allow reliable comparisons, adjustments and modified student weights were developed which make the PISA 2000 estimates comparable to those obtained in PISA 2003 (OECD Working Paper No. 5 "PISA 2000: Sample Weight Problems in Austria" available at <http://www.oecd.org/edu/workingpapers>, presents further details on this issue).

### ***The Netherlands***

As noted in the PISA 2000 Technical Report (OECD, 2002), the response rate of schools for the Netherlands for PISA 2000 was insufficient to warrant inclusion in the PISA 2000 database. Therefore, the Netherlands is excluded from trend analysis relating to PISA 2000.

### ***Luxembourg***

For Luxembourg changes were implemented in the assessment conditions between PISA 2000 and PISA 2003 with regard to organisational and linguistic aspects in order to improve compliance with OECD standards and to better reflect the national characteristics of the school system. In PISA 2000, students in Luxembourg had been given one assessment booklet, with the languages of testing chosen by each student one week prior to the assessment. In practice, however, familiarity with the language of assessment became an important barrier for a significant proportion of students in Luxembourg in PISA 2000. In PISA 2003 and PISA 2006, therefore, students were each given two assessment booklets – one in each of the two languages of instruction – and could choose their preferred language immediately prior to the assessment. This provided for assessment conditions that are more comparable with those in countries that have only one language of instruction and resulted in a fairer assessment of the performance of students in mathematics, science, reading and problem solving. As a result of this change in procedures, the assessment conditions and hence the assessment results for Luxembourg cannot be compared between PISA 2000 and PISA 2003. Assessment conditions between PISA 2003 and PISA 2006 have not been changed and therefore results can be compared.

### ***United Kingdom***

In PISA 2000, the initial response rate for the United Kingdom fell 3.7% short of the minimum requirement. At that time, the United Kingdom provided evidence to the PISA Consortium that permitted an assessment of the expected performance of the non-participating schools and on the basis of which the PISA Consortium concluded that the response-bias was likely negligible and the results were therefore nevertheless included in the international report. In PISA 2003, the United Kingdom's response rate was such that required sampling standards were not met and further investigation by the PISA Consortium did not confirm that the resulting response bias was negligible. Therefore, these data were not deemed internationally comparable and were not included in most types of comparisons. For PISA 2006, the more stringent standards are being applied and PISA 2000 and PISA 2003 data for the United Kingdom are therefore not included in the comparisons of this chapter.

### ***United States***

In PISA 2006, in the United States an error in printing the test booklets, in which the pagination was changed and instructions for some reading items directed students to the wrong page, may have affected student performance. The potential impact of the printing error on student performance was estimated by examining the relative performance of students in the United States on the item set that was common between PISA 2006 and PISA 2003, after controlling for performance on the items that were not likely to be affected by the printing error. The predicted effect of the printing error and the wrong directions on student mean performance on the reading test was up to 6 score points, and thus exceeds one standard error of sampling. Reading performance data for the United States are therefore excluded from this publication and the PISA database. The predicted effect of the printing error on student mean performance on the mathematics and science tests was one score point. Mathematics and science performance data for the United States, therefore, have been retained.

## **Further questions**

### ***How can I learn more about PISA?***

Visit PISA on line at [www.pisa.oecd.org](http://www.pisa.oecd.org) for information, free PDFs of PISA publications, innovative interactive features and much more. Visit the OECD's Directorate for Education at [www.oecd.org/edu](http://www.oecd.org/edu) for internationally comparable education statistics and indicators, as well as qualitative analysis on a wide range of education topics.

### ***I have a question about PISA and I haven't found the information I need in this FAQ***

We welcome questions and suggestions for areas that need further explanation. Please send us your comments and queries at [pisa.contact@oecd.org](mailto:pisa.contact@oecd.org). We cannot promise to answer all individual messages, but this site will be regularly updated to reflect your input.