

## **A. Frequently Asked Questions PISA 2015**

### **1. What is PISA?**

Issued by the Organisation for Economic Co-operation and Development (OECD), PISA tests the skills and knowledge of fifteen-year-old students in mathematics, reading, and science. Seventy-two economies took part in the 2015 assessment, which focused on science, and data from it will be released by the OECD on **December 6, 2016**.

### **2. How are schools selected in countries for participation in PISA?**

PISA applies strict technical standards including for the sampling of schools and students within schools. The sampling procedures are quality assured and the achieved samples and corresponding response rates are subject to an adjudication process that verifies that they have complied with the standards set or not. If any country's response rate falls below the specified threshold this is reported. (Further information of response rates for PISA can be found on the OECD's PISA website, and specific information on participation rates for individual countries can be found in Volume 1 and Volume 2 of the PISA 2015 reports).

### **3. How have the 'lessons from PISA' helped countries improve their education systems?**

In an OECD 2012 survey of PISA-participating countries for example, the large majority of respondents said that the policies of high-performing countries or improving systems had been influential in their own policy-making processes. The same number of countries also indicated that PISA had influenced the development of new elements of a national or federal assessment strategy. In relation to curriculum setting and standards, many countries cited the influence of the PISA frameworks on: comparisons of national curricula with PISA frameworks and assessments; formation of common standards nationally; impact on their reading frameworks; the incorporation of PISA-like competencies in their curricula: and for setting national proficiency standards.

### **4. What does PISA assess and why?**

PISA focuses firstly on the assessment of student performance in reading, mathematics and science because they are foundational to a student's ongoing education. However, PISA also collects valuable information on student attitudes and motivations, and formally assesses skills such as collaborative problem solving and is investigating opportunities to assess other important competencies related for example to: global competence; creativity or entrepreneurship.

PISA draws on content that can be found in curricula across the world and looks at students' ability to apply knowledge and skills and to analyze, reason and communicate effectively as they examine, interpret and solve problems. PISA does not prescribe or promote any one curriculum nor is it constrained by the need to find common denominators. For 2015 the goal of PISA was to assess science knowledge and skills that experts in the participating countries consider to be most important for the future success of students in an increasingly science-based world.

## **5. How do PISA results support education system improvement?**

The OECD strives to identify what policies and practices appear to be 'working' in countries that are recording high performance or show evidence of significant improvement over time on PISA. It then reports those findings and supports countries who wish to investigate and explore the extent to which they would benefit from similar programs. The OECD is very aware of the different circumstances in different countries (with over 80 countries participating in PISA 2018). There is no 'one size fits all' education model for countries. It is not possible or appropriate to 'cut and paste' one country's education system into another country.

## **6. What types of test items are used in PISA and why?**

PISA uses multiple-choice testing as a primary feature of its assessments because it is reliable, efficient, and supports robust and scientific analyses. It is also important to note that multiple-choice questions in PISA have a variety of formats, including highlighting of a word within a text, connecting pieces of information, and making multiple selections from drop-down menus. In addition, typically up to one third of questions in a PISA assessment are open-ended.

## **7. How do I find out more about the PISA assessment and who develops it?**

The OECD through its website and publications makes available to both the public and specialists all the key information on the methods and processes associated with the PISA surveys. These include: the assessment frameworks that explain what is to be assessed, why and how; examples of the test and questionnaire items; a comprehensive technical report for every cycle that includes detailed technical information on every aspect of assessment and analysis; the data from the assessment; the data analysis manuals that enable researchers to further analyze and interrogate the data; the technical manuals for administration and language quality assurance and a detailed set of FAQs providing key facts and information. In addition to OECD staff and contractors, hundreds of experts, academics and researchers in PISA participating countries are involved in PISA's development, analysis and reporting and details of these participants are provided both within the PISA reports and on the OECD PISA website.

## **8. PISA 2015 was delivered as a computer-based test, what is the significance of this?**

Computers and computer technology are part of our everyday lives and it is entirely appropriate and inevitable that PISA has progressed to a computer-based delivery mode. The overwhelming majority of countries for PISA 2015 had students complete the test on screen. For the small number of countries who were not ready for computer-based delivery it was possible for them to take the tests on paper. It is certainly possible to compare student performance on both computer-based and paper-based tests within the PISA 2015 survey and between the 2015 and previous cycles of PISA that were also paper-based. (More information on the comparability of computer and paper-based tests can be found on the OECD's PISA website).

## **9. How was the analysis of the PISA data improved for 2015?**

A number of enhancements were made to the approach and process for analysing the data for the results of the PISA 2015 survey. These improvements were based on the experience of previous cycles and an understanding of how new techniques would increase the precision of measurement,

the validity and reliability of the PISA data, and the stability of data between cycles. (More information on these enhancements can be found on the OECD's PISA website).

#### **10. What are the main differences between PISA and TIMSS?**

The key differences relate to sampling and focus. PISA's sample is age-based (15 year olds) while TIMSS is grade-based (Grade 8, or 8 years of schooling). And TIMSS is based on curriculum, while PISA is not. Another important difference concerns purpose.. PISA has a policy orientation while TIMSS has a research orientation. TIMSS is keen to learn about the impact of instructional practices in the classroom, while PISA is more concerned in the first instance with measuring the outcomes of schooling in order to provide advice to governments to shape educational policies. Nonetheless, TIMSS does influence policy formulation and PISA explores classroom practice and resource usage. *It is the relative emphases of the two studies that are different.*

#### **11. Why is PISA assessed every three years and why does it test 15 year olds?**

A key objective of PISA is to inform and support education policy decision making within countries. A three-year cycle provides countries with timely information that includes data and analyses to consider the impact of policy decisions and related programs. If it were more frequent it would not allow sufficient time for changes and innovations to show improvement or decline, and if it were less frequent it would mean declines in performance could not be promptly addressed.

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 as inclusive as possible, so that the sample of students comes from a broad range of backgrounds and abilities.

## **B. Debunking PISA Myths**

*[As explained by Andreas Schleicher recently on the webinar at the Alliance for Excellent Education.  
Refer: <http://all4ed.org/debunking-seven-myths-about-pisa/> ]*

**PISA Myth 1: Top performing countries on PISA do well because they don't include all of their students.**

**Reality:** All samples in PISA are fully representative of the fifteen-year-olds that are enrolled in school, and are selected on a scientific basis to ensure that all students are represented equally. The share of fifteen- year-olds covered by PISA is 89 percent internationally.

**PISA Myth 2: It's all about culture.**

**Reality:** PISA results over the years demonstrate that a number of countries and economies were able to improve educational performance without changing their culture. Between 2000 and 2012, a

number of education systems improved student performance by more than a school year. These systems changed education policies and practices and saw significant gains in learning outcomes.

**PISA Myth 3: The world is divided between rich and well-educated nations and poor and badly educated ones.**

**Reality:** Less than a quarter of the performance variation among OECD countries is explained by GDP per capita. In other words, there are some countries that are not rich that provide really excellent education and countries that are very well developed but are not competitive in PISA rankings. The lesson here: money only gets you so far when it comes to achieving excellence in education, there are many other critical factors as well.

**PISA Myth 4: Deprivation is destiny.**

**Reality:** PISA shows very clearly that poverty is not destiny, and that education and public policy can make a great difference for students that are disadvantaged. In the last PISA in 2012, the 10 percent most disadvantaged students in Shanghai reached similar math scores to the 10 percent most privileged American fifteen-year-olds.

PISA results indicate that it is possible even in the most difficult conditions to provide excellent education, to attract the most talented teachers to the most challenging classrooms and to ensure that every student benefits from excellent learning.

**PISA Myth 5: Excellence is not compatible with equity.**

**Reality:** PISA results demonstrate that quality and equity are compatible policy objectives. In the 2012 PISA results, there were education systems in Asia, Europe, and North America with high and equitable learning outcomes.

**PISA Myth 6: Excellence requires selection.**

**Reality:** The highest-performing education systems are actually non-selective, providing similar opportunities for the entire student population.

**PISA Myth 7: Educational quality and personalization is all about class size.**

**Reality:** The highest-performing education systems prioritize the quality of teachers over the size of classes. In these systems, when they have to make a choice between a better teacher and a smaller class, they are choosing quality teaching