



## Findings from the PISA for Development field trial of the school-based assessment

- The results of the field trial of the PISA for Development (PISA-D) school-based component confirm that the initiative is on track to deliver an assessment that is more relevant to middle- and low-income countries.
- PISA-D instruments work: they capture a wider range of student performance and the diverse contexts found in middle- and low-income countries while ensuring that results are comparable to those of the main PISA test.
- Lessons from the field trial are used to inform preparations for the main data collection, which will take place from August to December 2017.

The PISA-D project aims to make PISA more accessible and relevant to middle- and low-income countries by introducing new features to the assessment, including tests that are specially designed to measure lower levels of performance, contextual questionnaires that better reflect the situations of 15-year-olds across a diverse group of countries, and approaches to include out-of-school youth.

The PISA-D school-based tests and contextual questionnaires are being piloted in eight countries: Bhutan, Cambodia, Ecuador, Guatemala, Honduras, Paraguay, Senegal and Zambia. The field trial of the school-based assessment instruments took place from August to December 2016 in seven countries. Based on results of the field trial, the instruments and survey operations were modified as necessary for the main study.

### *The PISA-D school-based assessment field trial reveals that the instruments work as intended.*

Findings from the analysis of the PISA-D cognitive test field trial data are organised around three major goals and are summarised in the table below. The test covers reading, mathematics and science.

Cognitive test field-trial goals	Findings
Provide information about the data yield and survey operations	All countries met the field-trial sample size requirements. They submitted data to the PISA-D contractors to evaluate data quality and whether the intended goals regarding the functioning of the items were met. Analysis of five countries' data showed good quality and that the cognitive items worked well.
Assess the quality of the items that are either borrowed or adapted from PISA or other international assessments	PISA-D items behaved as expected. A wide range of item difficulty is covered, suggesting an adequate distribution of items: easy (56% of the total), medium (33%) and difficult (11%). No systematic differences in the behaviour of test items were observed across countries, suggesting that the assessment worked in a similar way in all participating countries.
Evaluate field-trial data with item-response theory models to establish reliable, valid and comparable scales.	PISA-D cognitive test field-trial data is comparable with PISA. A strong linkage of the PISA-D scales could be established across countries and to PISA 2015.



Findings from the analysis of the PISA-D contextual questionnaire field trial are organised around four major goals related to the selection of items for the main study and are summarised in the table below. The school-based assessment includes questionnaires for students, teachers and schools.

Contextual questionnaire field-trial goals	Findings
Select items that provide reliable measures of the core indicators (achievement, attainment, health/well-being, student engagement, inclusive environments, quality instruction, learning time, material resources, family/ community support, gender, disability, immigrant background, socio-economic status/poverty, language spoken at home/school)	The first priority for selecting content was to identify the questions relevant to the core indicators. The analysis showed reliable measures for these. Analyses at the question level were conducted in tandem with analyses of items within scales. Items were chosen based on their psychometric properties, including their role in the factor structure, contribution to reliability of the scale, their item-response theory parameters (difficulty and discrimination), and their consistency across cultures (e.g. differential item functioning).
Include measures that can be used to link to PISA 2015	The second priority was to select linking measures that were included in PISA 2015. Around 40% of the PISA-D student questions link to PISA, as do 20% of the teacher questions and 40% of the school questions.
Provide the constituent components to measure socio-economic status and poverty	Analyses of data from seven countries showed that the selected items provide a reliable measure for the extended measure of home possessions and a new measure of poverty.
Include a number of measures of supporting content (teacher, school and system-level background variables that help explain student outcomes)	A number of questions were included in the questionnaires that were intended to provide supporting content for the core indicators. The results of the field trial facilitated decisions on which of these supporting questions should be retained or deleted to satisfy space limitations in the main study.

### *PISA technical standards were met by countries conducting the PISA-D field trial.*

The results of the field trial confirm that the participating countries carried out their survey operations in accordance with PISA's technical standards. The field trial data was collected by all the countries in a consistent, reliable and valid fashion using test materials that met PISA's high quality standards – these materials had been translated, adapted and verified from the original sources. The countries each submitted a single database to the OECD's international contractors for processing and this data is internationally comparable. All findings from the PISA-D field trial, including lessons learnt, are documented for reference in preparing for the main data collection. While the results of the field trial were positive and its goals were accomplished, each country faced its own challenges in conducting the school-based assessment, such as completing all field-trial tasks on time. The field trial helps countries better plan for the main study and anticipate challenges. The OECD and its contractors are providing countries with tailored support to reinforce their capacity and create the conditions in each country that are needed to successfully implement the assessment.

#### For more information

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