

PISA for Development Brief

PISA for Development: Enhancement of the contextual questionnaires

- PISA contextual questionnaires highlight the variation that exists among students and schools in a country and how this relates to performance. Current PISA questionnaires may not always capture the relevant variation for middle- and low-income countries – as indicated, for instance, by the fact that questions about school infrastructure and teaching and learning materials are strongly related to student performance in high-income countries, but are often *unrelated* to differences in performance in middle-income countries.
- PISA for Development (PISA-D) enhances the contextual questionnaires to better measure factors that *are* more strongly related to student performance in middle- and low-income countries while maintaining comparability with PISA on a set of core indicators.
- The PISA-D questionnaires increase the quantity of relevant information collected on students, teachers and schools in middle- and low-income contexts, emphasising inclusive environments, quality instruction, learning time and family and community support while also extending the PISA measure of students' socioeconomic status.

In PISA, students answer a background questionnaire providing information about themselves, their learning environment, their homes and their attitudes to learning. In addition, principals and teachers included in the PISA sample complete questionnaires about their schools. The information collected from these questionnaires helps countries to explore connections between how students perform in PISA and factors such as learning opportunities in classrooms, leadership and school policies for professional development, migration, gender, and students' economic, social and cultural status.

OECD analyses reveal that some of the educational inputs as currently measured by PISA are unrelated to differences in performance across schools in the majority of the middle-income countries that participated in PISA 2012.

Education inputs	Measure	Countries with positive correlation with performance	Countries with negative correlation with performance
Physical infrastructure	Index of quality of physical infrastructure	No country	Jordan, Romania, Turkey
Educational resources	Index of quality of educational resources	Costa Rica, Romania	No country
Teacher quality	Proportion of teachers with ISCED 5A	No country	Peru, Romania
In-service training	Proportion of teachers having attended professional development	Argentina, Malaysia	No country
Instructional time	School average of students' learning time per week	Mexico, Turkey, Argentina, Kazakhstan, Malaysia	Brazil

School inputs and mathematics performance in 18 middle-income countries, PISA 2012

Note: Results from multi-level analyses, controlling for student and school demographics and socio-economic status; only statistically significant results are reported.

Source: OECD (2013), PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en (Table IV.1.12c.).



In addition, the measure of economic, social and cultural status currently used by PISA does not adequately capture lower levels of parental education, income and risk factors of poverty that are more frequent in low-income countries.

PISA-D aims to measure a wider range of school contexts and home environments.

The PISA-D questionnaires have been designed to capture the school contexts and home environments that are common in middle- and low-income countries and target factors that are known to relate strongly to student performance in these contexts. For example, the questionnaires collect more detailed data on students' language at school and at home and their socio-economic status, as measured by home possessions and parents' education, literacy skills and participation in the labour force. The questionnaires also identify additional indicators of educational success beyond performance on the PISA test. These indicators are measured, for example, through questions about educational attainment, health, satisfaction with life and student engagement in learning.

More specifically, the PISA-D student questionnaire collects information on five elements that are considered essential for students' learning and well-being: i) inclusive environments, ii) quality instruction, iii) learning time, iv) material resources, and v) family and community support. The enhanced questionnaires will make it possible to assess both equality and equity issues that are related to learning outcomes: equality refers to differences between groups of children in the distribution of their educational outcomes and equity refers to differences between groups of children in their access to the resources and schooling processes that affect schooling outcomes. The distinction is visualised in the following diagram.



Source: Modified from Willms, J.D., L. Tramonte, J. Duarte and M. Bos (2012), "Assessing Educational Equality and Equity with Large-Scale Assessment Data: Brazil as a case study", Technical Notes No. IDB-TN-389, Inter-American Development Bank.

References

Lockheed, M., T. Prokic-Bruer and A. Shadrova (2015), *The Experience of Middle-Income Countries Participating in PISA 2000-2015,* PISA, World Bank, Washington, D.C./OECD Publishing, Paris. <u>http://dx.doi.org/10.1787/9789264246195-en</u>

Willms, J. and L. Tramonte (2015), "Towards the development of contextual questionnaires for the PISA for development study", OECD Education Working Papers, No. 118, OECD Publishing, Paris. DOI: <u>http://dx.doi.org/10.1787/5js1kv8crsif-en</u>.

For more information

Contact Michael.Ward@oecd.org, Catalina.Covacevich@oecd.org or Kelly.Makowiecki@oecd.org

Visit	Coming next month
www.oecd.org/pisa/aboutpisa/pisafordevelopment.htm	Incorporating out-of-school youth into the assessment

Photo credits: © Curt Carnemark/World Bank © epicurean / iStockphoto

This paper is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and the arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.