PISA for Development Brief 15

Sampling and survey operations for the PISA for Development out-of-school assessment field trial

- Through its PISA for Development (PISA-D) project, the OECD is establishing methods and approaches to include out-of-school youth in the PISA assessment.
- The PISA-D out-of-school sample includes 14-16 year-olds who are not in school and those who are in school but enrolled below the PISA target grades (i.e. in Grade 6 or below).
- The out-of-school assessment will be delivered via tablet computer in the homes of eligible youth and will include reading and mathematics tests for the youth, and background questionnaires for the youth, their parent/guardian and the interviewer conducting the survey.

Across many of the middle- and low-income countries that have participated in PISA or are potential new participants, significant proportions of 15-year-olds are not enrolled in school or are in school but in grades below PISA's target sample (Grade 7 and above) and thus not eligible to sit the PISA test. To help ensure universal coverage of populations in these contexts, in future cycles of PISA and as a contribution to global monitoring of the Sustainable Development Goal (SDG) for education, the OECD is piloting a methodology to include out-of-school youth in the assessment. The pilot is being implemented in Guatemala, Honduras, Panama, Paraguay, Senegal and Zambia.

PISA-D's definition of "out-of-school" builds on the work of UNICEF and UIS that has defined those children and young people that are excluded from education opportunities. Based on this definition, youth aged 14 to 16 are included in the PISA-D out-of-school sample if they have never attended school, have attended but dropped out during primary school, have completed primary school but did not continue to secondary school, entered secondary school but dropped out, or are currently enrolled in school but are in Grade 6 or below. The sample was expanded from 15-year-olds to 14-16 year-olds on the recommendation of a PISA-D study that highlighted the challenge of locating a single year age group in a household survey in middle- and low-income countries.

Information about the PISA-D out-of-school target population, based on country responses to an overview questionnaire

Question		Guatemala	Honduras	Panama	Paraguay	Senegal	Zambia
14-16 years old	Count	1 097 289	569 543	215 101	407 424	953 150	1 066 270
14-16 years old, <7 th grade	Percent	13%	5%**	4%	9%	21%	8%
14-16 years old, out-of-school	Percent	33%	43%	13%	17%	32%	21%
	Female	unknown*	49%	48%	46%	43%	54%
	Rural	unknown*	68%	67%	62%	unknown	60%
Overall percentage of 14- 16 year-old out-of-school youth in target population		46%	49%	17%***	26%	53%	30-40%***
Areas with relatively higher rates of out-of-school youth		Poorest, rural or no school nearby	Rural areas	Rural areas (because of accessibility problems and non- availability of all school grades)	Occidental region (low density, indigenous population, low coverage of public services) and some departments in the oriental region with a higher rural population	Unknown	Slums in urban areas, trading places in urban areas, rural areas, and streets in urban areas

Note: *Guatemala instead provided the percentage of out-of-school boys (38%) and girls (29%). **Honduras reported 9%, but this is conditional on being enrolled, so it has been adjusted to 5%. ***Percent enrolled >=7th grade, percent enrolled <7th grade, and percent out-of-school do not add up to 100%.



The PISA-D out-of-school assessment has two main objectives with regard to sampling:

- To yield a large enough sample to test the validity of the cognitive test, youth questionnaire and other instruments, including linking to PISA and the PISA-D schoolbased assessment (reporting in the same scale).
- To explore various approaches and evaluate options to arrive at a recommendation for selecting and assessing a nationally representative sample of non-institutionalised 14-16 year-olds who are out of school (as defined above) in future cycles of PISA, for countries choosing this option.

PISA-D has developed a range of sampling procedures to identify and reach out-of-school youth, all of which are implemented in each of the participating countries by a national sampling manager responsible for all sampling-related activities, including design, selection and sample monitoring. This position has been created specifically for the PISA-D out-of-school assessment and is filled by a specialist with household-survey experience and knowledge of sampling hard-to-reach populations. The approach relies mostly on a probability sample, where all sample units have a non-zero probability of selection. PISA-D randomly selects households, and trained interviewers go to each household to apply a screener questionnaire to confirm if there are any eligible youth. The interviewer then contacts the youth to set up an appointment to conduct the assessment. This procedure can be complemented with a non-probability sample with referrals from schools or interviewed youth.

Survey operations for conducting the out-of-school youth assessment

The PISA-D out-of-school youth assessment is conducted on tablet computers and takes place at the youth's home. Participating countries test the assessment software that has been developed for the pilot and then train interviewers in the use of this software. The interviewer poses a 30-minute series of background questions to the young person covering topics such as their school and learning experiences, well-being and home life. The youth then uses the tablet to complete a self-administered 50-minute test composed of about 38 reading and mathematics questions. Parents (or the most knowledgeable person about the youth) also answer a questionnaire about the youth's background and childhood experiences, and the interviewer completes a questionnaire about the location and characteristics of the youth's household.

A field trial is underway in the six participating countries and will be completed by August 2017. The results of the field trail will be analysed by the OECD, its contractors and the participating countries and will inform the main data collection in 2018. Results from the main study will be published in December 2019. The methods and approaches for reaching out-of-school youth will be available to interested countries participating in PISA from the 2021 cycle onwards.

References

UNICEF and UNESCO Institute for Statistics (2010), All in School: Global Initiative in Out-of-School Children, http://allinschool.org/http://www.uis.unesco.org/Education/Documents/oosci-global-report-en.pdf. Carr-Hill, R. (2015), "PISA for Development Technical Strand C: Incorporating out-of-school 15- year-olds in the assessment", *OECD Education Working Papers*, No. 120, OECD Publishing, Paris, http://dx.doi.org/10.1787/5js0bsln9mg2-en.

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Coming next month

Findings from the PISA-D field trial of the school-based assessment

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