



PISA for Development Brief **21**

The PISA for Development out-of-school assessment sampling frame

- Through the out-of-school component of PISA for Development (PISA-D), the OECD is currently piloting an approach and methodology to include youth not enrolled in school in the PISA assessment. Designed as a contribution towards the Sustainable Development Goal (SDG) for universal quality education, this approach will support policies of inclusion and help ensure that PISA covers as many of the world's youth populations as possible.
- The PISA-D out-of-school sample consists of 14- to 16-year-olds who are not enrolled in school, as well as those who are in school but at grades which are not covered by the PISA sampling frame (grades 6 and lower). In order to reach this target population, PISA-D has developed mechanisms to sample, identify and contact these out-of-school youth.
- The goal for the project is to test a minimum sample size of 1,600 14- to 16- year-olds in each participating country who are not currently in school, with at least 1,200 from a representative sample, and 400 from a limited representativeness sample. The sampling plan for out-of-school youth was established using the results of a field trial that was carried out in 2017 in six countries.

The out-of-school target population, as defined by PISA-D, are the 14- to 16-year-olds in school at grades 6 and lower, and 14- to 16-year-olds who are out of school. The sample range for the out-of-school youth was expanded to 14- to 16-year-olds – as opposed to the usual PISA age bracket of 15-years-old – due to the challenge of locating a single-year age group in a survey conducted outside of the formal year-group system in schools. Further challenges are presented by the fact that schooling experience in this out-of-school population is likely to vary substantially, from children with no experience in formal education whatsoever, to those who have recently left school or who are still in school but in Grade 6 or below.

The field trial included both probability- and non-probability-based samples. In the probability sample, which is more expensive, each unit has a known probability of belonging to the sample, whereas in the second case, there is no specific probability of an individual being selected. In the non-probability sample techniques are used for purposive selection of low-cost samples. These techniques include: a) link-tracing through households, for example by being referred to a household with out-of-school youth by another household, or by recruiting respondents via the distribution of coupons at places where out-of-school youth are known to visit; b) referrals to out-of-school youth from school teachers and students; c) use of school administrative records of students at or below grade 6; and d) special operations, for example used for reaching street children. The use of these sampling methods in the countries is indicated in the table below.



Sampling methods used in the Field Trial

Country	Probability	Non-probability			
		Link tracing through households	School frame approach for OOS	School frame approach for <7 th grade	Special operation for street children
Guatemala	✓			✓	
Honduras	✓	✓	✓	✓	
Panama	✓	✓	✓	✓	
Paraguay	✓	✓		✓	✓
Senegal	✓	✓			
Zambia	✓	✓			✓

General features of the out-of-school sample design

A key challenge in selecting a representative sample of out-of-school 14- to 16-year-olds is that a substantial amount of screening is required to locate this small subgroup of the general population. The general sampling plan serves as the basis for creating national samples and follows the two main objectives for the out-of-school sample: (i) to yield a sample size large enough to (a) evaluate the psychometric characteristics of items and linking to PISA through the PISA-D Strand A, and (b) provide a meaningful report to the countries; and (ii) to explore various approaches and evaluate various options in order to arrive at a recommendation for identifying and assessing a nationally representative sample of out-of-school 15-year-olds in future cycles of PISA, beginning with the PISA 2021 assessment cycle.

PISA-D out-of-school sampling plan for the main study

The goal of the main study, planned for the second half of 2018, is to achieve a minimum sample size of 1,600 in each participating country, with at least 1,300 youth completing the main assessment items. This should result in an average of 650 responses per main assessment item. The 1,600 is split into at least 1,200 from a representative sample, and at most 400 from a limited representativeness sample. The representative sample will adequately represent the target population, and will consist of at least 600 cases from probability-selected households. The remaining cases may come from referrals to out-of-school youth in the neighbourhood from the probability-selected households.

A key aim is to maximize the sample size that comes from the probability sampled households, but at the same time allow additional cases to be completed through less expensive means to guarantee the achievement of sample sizes for the main study. Some countries – particularly those with larger populations of out-of-school youth – have less difficulty in obtaining a representative sample and may not use the limited representative sample, or use less of it. Countries with small populations of out-of-school youth, or where these are located in locations difficult to access, will likely use all the limited representative sample that is permitted.

For more information

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Visit www.oecd.org/pisa/pisa-for-development	Coming next month <i>Findings from the PISA-D field trial of the out-of-school assessment</i>
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