

Chapter 1: OVERVIEW

INTRODUCTION

The OECD Programme for International Student Assessment (PISA) is a collaborative effort among OECD member countries to measure how well 15-year-old students approaching the end of compulsory schooling are prepared to meet the challenges of today's knowledge societies. PISA surveys take place every three years, with the first survey having taken place in 2000. Since the inaugural survey year, some 80 countries and economies have participated in this international assessment.

As additional countries and economies have joined PISA, the OECD and a number of partners recognised a need to reflect on the design and implementation of the assessment to cater to a larger and more diverse group of low-and-middle-income-countries (LMIC). In response, the PISA for Development (PISA-D) initiative was launched in 2013 to further develop the PISA data collection instruments that would produce results to support evidence-based policies and offer a rich set of data for monitoring progress toward the Education Sustainable Development Goal in a wide range of countries. PISA-D has two main components: PISA-D Strands A and B, and PISA-D Strand C. Strands A and B covered the in-school population of 15-year-olds enrolled in grade 7 or above, whereas Strand C covered the out-of-school population, or more specifically 14- to 16-year olds who are out of school, or enrolled in school at grade 6 or below. Strand C aims to understand the knowledge, skills and contextual factors of this population. The design relies mainly on a household administration of a Youth Interview and a tablet-based assessment.

PARTICIPATION

Five countries – Guatemala, Honduras, Panama, Paraguay and Senegal – participated in the PISA-D Strand C component.

FEATURES OF PISA-D STRAND C

As mentioned above, PISA-D Strand C differed from Strands A and B with respect to the target population and design of the assessment. PISA-D Strands A and B aimed to enhance the understanding of knowledge, skills, and contextual factors for a school population of 15-year-old students in grades 7 or above. Strand C aimed to understand knowledge, skills and contextual factors for 14- to 16-year-old youth who were either enrolled in school in grade 6 or below or who are outside of the school system. In particular, the survey design relied on the household administration of both a Youth Interview and tablet-based assessment materials for the selected respondents. The survey design relied on the household administration of computer-based assessment materials for the selected respondents. The assessment included a contextual questionnaire for the respondent, a separate contextual questionnaire for his/her parents, caregivers or guardians, and a cognitive assessment of Reading and Mathematical Literacy.

The PISA-D out-of-school survey relied on many technical procedures and considerations, including the following:

- A stratified sampling design to identify areas with high concentrations of out-of-school youth.
- The targeted design of the cognitive assessment and contextual questionnaires.
- Guidelines and procedures to help guarantee the equivalence of different languages used within and between the participating countries.
- Analysis and scaling of the data and their subsequent reporting.
- Quality assurance procedures to help ensure that PISA provides high-quality data to support evidence-based policy formation and decision making.

This report describes the procedures and methodologies as they have been implemented in PISA-D Strand C according to the central design elements of the project.

Content

PISA assesses not only whether students can reproduce knowledge, but also whether they can extrapolate from what they have learnt and apply their knowledge to new situations. It emphasises the mastery of processes, the understanding of concepts and the ability to function in various types of situations. PISA-D Strand C focused on the assessment of two cognitive domains: Reading and Mathematics. In addition to the cognitive assessment, context questionnaires focused on gathering information regarding the student's home and family background, educational attainment and education provision in school, and employment.

Respondents

Approximately 7 700 youth from 5 participating countries completed the assessment in 2018.

Assessment

PISA-D Strand C was administered as an in-house survey. The survey began with a Youth Interview, which was conducted by a trained interviewer. The cognitive assessment was then administered as a computer-based assessment on a tablet computer that assessed Reading and Mathematics literacy. The items were a subset of the items included in the PISA-D school-based assessment, a majority of which were selected from previous cycles of PISA. The Youth Interview was designed to take approximately 35 minutes to complete. The cognitive test was designed to take a respondent about 45 minutes to complete.

MANAGING AND IMPLEMENTING PISA-D

PISA-D was implemented within a framework established by the PISA Governing Board (PGB), which includes representation from all participating countries and economies at senior policy levels. The PGB establishes policy priorities and standards for developing indicators, for establishing assessment instruments and for reporting results.

An International Advisory Group (IAG) composed of government officials from participating countries, representatives of active development partners, institutional partners on methods and technical approaches, invited experts and representatives of the OECD was established. This group provided advice on priorities to be considered regarding analytical, methodological and policy frameworks, and ensured that the outputs of the PISA-D project were relevant to a wider audience in the international educational community.

The OECD Secretariat was responsible for the overall management of PISA-D. It monitored its implementation on a day-to-day basis, served as the secretariat for the PGB and the PISA-D IAG, fostered consensus building between the countries and economies involved, and acted as the interlocutor between the PGB and the international contractors. The OECD Secretariat also liaised with the PISA Technical Advisory Group (TAG), which met several times during the course of the project as the PISA-D TAG to advise the OECD and its international contractors on technical issues.

Experts from the participating countries participated in working groups linking the programme policy objectives with the best internationally available technical expertise in the assessment areas and in the areas that were included in the contextual questionnaires. These expert groups were referred to as the Subject Matter Expert Groups (SMEGs) and the Questionnaire Expert Group (QEG). By participating in these expert groups and regularly reviewing outcomes of the groups' meetings, participating countries and economies ensured that the instruments were internationally valid, that they took the cultural and educational contexts of participating countries and economies into account, that the assessment materials had strong measurement potential, and that the instruments emphasised authenticity and educational validity.

Each of the participating countries and economies appointed a National Project Manager (NPM) to implement PISA nationally. The NPMs ensured that internationally agreed common technical and administrative procedures were implemented within their country. These managers played a vital role in developing and validating the international assessment instruments and ensured that PISA implementation was of high quality. The NPMs also contributed to the verification and evaluation of the survey results, analyses and reports.

The design and implementation of the surveys, within the framework established by the PGB, was the responsibility of external contractors. For PISA-D, the overall management of contractors and implementation was carried out by the Educational Testing Service (ETS) in the United States. The OECD Secretariat worked closely with the International Project Director, Ann Kennedy of ETS, to co-ordinate all aspects of implementation. In addition, ETS led the instrument development, scaling and analysis of results.

Additional tasks related to the implementation of PISA-D were carried out by ETS as well as the following five contractors:

- Pearson (United Kingdom) developed the assessment frameworks.
- cApStAn Linguistic Quality Control (Belgium) was responsible for linguistic quality control.

- HallStat SPRL (Belgium) served as the translation referee.
- Westat (United States) implemented survey operations and sampling.
- The Learning Bar (Canada) carried out the development of the questionnaire frameworks and the questionnaires themselves.

PISA-D PUBLICATIONS

This Technical Report describes the technical aspects of the project at a level of detail that enables the review and, potentially, the replication of certain implemented procedures and technical solutions to challenges faced.

The results of the PISA-D study are published separately as individual national reports prepared by each of the countries' National Centre teams.

The OECD's PISA-D website (<http://www.oecd.org/pisa/pisa-for-development/>) includes a set of working papers and blogs, as well as a series of PISA-D Briefs that highlight various aspects of the project.