

Chapter 6: FIELD OPERATIONS

OVERVIEW OF ROLES AND RESPONSIBILITIES

PISA-D was co-ordinated in each country by a National Project Manager (NPM) who implemented the procedures specified by the international contractors responsible for PISA-D implementation. Each NPM typically had several assistants working from a base location that is referred to throughout this report as a National Centre. For the school-level operations, the NPM co-ordinated activities with school-level staff, referred to in PISA-D as School Co-ordinators.¹ Trained Test Administrators administered the PISA-D assessment in schools.

National Project Managers

NPMs were responsible for implementing the project within their own country. They:

- attended NPM Meetings and received training in all aspects of PISA-D operational procedures;
- negotiated nationally specific aspects of the implementation of PISA-D with the international contractors;
- established procedures for maintaining the security and confidentiality of materials during all phases of the assessment implementation;
- prepared a series of sampling forms documenting sampling-related aspects of the national educational structure;
- prepared the school sampling frame and submitted it to the international contractor for the selection of the school sample;
- organised for the preparation of national versions of the test instruments, questionnaires, school-level materials (manuals, scripts, and forms), and coding guides;
- identified School Co-ordinators from each of the sampled schools (nominated by the school principal or a volunteer from the school staff) and worked with them on school preparation activities;
- used software to select the student sample from the lists of eligible students provided by the School Co-ordinators;
- recruited and trained Test Administrators according to the PISA-D Technical Standards—Standards 9.1, 9.2, 9.3, and 9.4—to administer the assessments within schools;
- nominated suitable persons to work on behalf of the international contractors as external PISA-D Quality Monitors (PQMs) to observe the assessment administration in a selection of schools (Main Survey only);
- monitored the completion of School Questionnaires;
- monitored the completion of Teacher Questionnaires;
- recruited and trained coders to code the open-ended test items and the occupational data on questionnaires;
- arranged for the data entry of the test responses, Student Questionnaire responses,

- Teacher Questionnaire responses, and School Questionnaire responses;
- submitted the national database to the international contractors; and
 - prepared and disseminated reports.

A National Project Manager's Manual provided detailed information about the duties and responsibilities of the NPM. Supplementary manuals, with detailed information about particular aspects of the project, were also provided and are described in the relevant chapters.

School Co-ordinators

School Co-ordinators co-ordinated school-related activities with the National Centre and the Test Administrators. A School Co-ordinator's Manual, prepared by the international contractors, described in detail the activities and responsibilities of the School Co-ordinator.

The School Co-ordinator:

- established the assessment date and time in consultation with the NPM;
- prepared the student list with the names of all eligible students in the school and sent it to the National Centre so that the NPM could select the student sample using MyMWestra, the system developed by the international contractor to support and implement the National Centre activities associated with PISA-D student sampling;
- prepared the teacher list with the names of all eligible teachers in the school and sent it to the National Centre;
- received the list of sampled students from the NPM on the Student Tracking Form (a form designed to record sampled students with their background data) and updated it if necessary (e.g., identifying students with disabilities or limited assessment language proficiency who could not take the assessment according to criteria established by the international contractors and the PISA-D Technical Standards);
- received the list of teachers on the Teacher Tracking Form from the NPM and updated it (e.g., identifying teachers who refused to complete the questionnaire, no longer taught at the school, or were otherwise ineligible);
- received, distributed, and collected the School Questionnaire;
- received, distributed, and collected the Teacher Questionnaire;
- informed school staff, students, and parents of the nature of the assessment and the assessment date by sending a letter or organising a meeting;
- secured parental permission if required by the school or education system;
- informed the NPM and Test Administrator of any assessment date or time changes; and
- assisted the Test Administrator with room arrangements for the assessment day. On the assessment day, the School Co-ordinator was expected to ensure that the sampled students attended the assessment session(s). If necessary, the School Co-ordinator also made arrangements for a follow-up session and ensured that absent students attended the session.

Test administrators

The Test Administrators were primarily responsible for administering PISA-D fairly, impartially, and uniformly, in accordance with international standards and PISA-D procedures. To maintain objectivity, a Test Administrator could not be the science, reading, or mathematics teacher of the students being assessed, and it was preferred that he or she not be a staff member at any participating school (see Standard 8.2). Prior to the test date, Test Administrators were trained by National Centres. Training included a thorough review of the Test Administrator's Manual, including the Test Administrator's Script and Student Background Questionnaire Notes. Additional responsibilities included:

- ensuring receipt of the testing materials from the NPM and maintaining their security;
- contacting the School Co-ordinator one to two weeks prior to the test to confirm plans;
- completing final arrangements on the test day;
- reviewing and updating the Student Tracking Form;
- completing the Session Attendance Form (a form used to individually allocate test instruments and Student Questionnaires to students and to record students' attendance);
- completing the Session Report Form (a form designed to summarise session timing and to document any irregularities in the session that might affect data reliability and validity);
- maintaining the security and confidentiality of test booklets and Student Questionnaires;
- obtaining the School Questionnaire and the Teacher Questionnaires from the School Co-ordinator, except when the National Centre obtained these directly from the schools (rather than through the Test Administrators);
- conducting a follow-up session, if needed, in consultation with the School Co-ordinator; and
- returning the School Questionnaire, Student Questionnaires, and Teacher Questionnaires, as well as all test materials (both completed and not completed) to the National Centre after the testing.

THE SELECTION OF THE SCHOOL SAMPLE

NPMs used the detailed instructions in the Main Survey Sampling Preparation Manual to document their school sampling plan and to prepare their school sampling frame.

The national target population was defined, school and student level exclusions were identified, and aspects such as the extent of small schools (a small school is defined as any school whose approximate enrolment falls below the target cluster size) and the homogeneity of students within schools were considered in the preparation of the school sampling plan.

The sampling frame was submitted to the international contractor, which selected the school sample. Having the international contractor select the school sample minimised the potential for errors in the sampling process and ensured uniformity in the outputs for more efficient data processing later (student sampling, data analysis, etc.). It also relieved the burden of this task from National Centres. NPMs worked closely with the international contractor

throughout the process of preparing the sampling documentation, ensuring that all nationally specific considerations related to sampling were thoroughly documented and incorporated into the school sampling plan.

PREPARATION OF TEST BOOKLETS, QUESTIONNAIRES, AND MANUALS

As explained in Chapter 2, the Field Trial assessment design for PISA-D required all countries to test using the 15 paper-and-pencil forms that included the cognitive items for Reading, Mathematics, and Scientific Literacy. As part of the quality control process, the contractors assumed responsibility for preparing national versions of the paper-based booklets by assembling clusters of selected items for PISA-D. All countries updated and translated the common booklet parts, which were revised for PISA-D and included the cover, general instructions, formula sheet for Mathematics, and the acknowledgements page.

Once the clusters and common booklet parts were finalised and approved by the National Centres, the Field Trial booklets were assembled by the contractors and shared with countries for final review and signoff. Following that approval process, print-ready files were provided to National Centres.

National Centres were asked to document any errors in the Field Trial versions of their booklets that required correction. Those requests were reviewed by the contractors and, where appropriate, revisions were made for the Main Survey. As was the case in the Field Trial, booklets were provided to National Centres for final review and signoff and print-ready files were then provided.

All countries administered the obligatory School Questionnaire.

As with the test material, source versions of the questionnaire instruments in both French and English, as well as a base Spanish version, were provided to NPMs for translation or adaptation into the languages of the test.

NPMs were permitted to add questions of national interest as national add-ons to the questionnaires. Proposals and text for these add-ons were submitted to the international contractor for approval as part of the process of reviewing adaptations to the questionnaires. It was required that the additional material be placed at the end of the international modules. Following approval of adaptations, the material was verified by the international contractor. NPMs implemented feedback from verification in the assembly of their questionnaires. After all changes and adaptations were made, print-ready versions were finalised by the NPM and uploaded to the PISA-D Portal.

English, French, and Spanish source versions of the School Co-ordinator Manual, Test Administrator Manual, Test Administrator's Script, and forms were provided by the international contractors. NPMs were required to make adaptations to the documents using the New Comment and Track Changes functions in Microsoft Word. Following approval of the adaptations, the manuals and scripts were translated into the national test language(s) as needed. As with the regular PISA assessment, there was no verification of translations into the non-primary national language because the source materials were prepared in the major

test language of most countries. The exception was Cambodia, where the National Centre translated the English source version into Khmer. Instead, Westat Survey Operations reviewed key elements of the adapted Khmer version. No significant deviations were noted that might affect data validity and reliability.

The selection of the student sample

Following the selection of the school sample by the international contractor, the list of sampled schools was returned to National Centres. NPMs then contacted these schools and requested a list of all PISA-D-eligible students from each school.

NPMs were required to submit the student lists to the international contractor using MyMWestra. The student samples were selected by the international contractor, and MyMWestra then generated the list of sampled students for each school, known as the Student Tracking Form, and the Session Attendance Form that served as the central administration documents for the study and linked students, test booklets, and student questionnaires.

Packaging and shipping materials

The following key documents and items needed to be sent either to the Test Administrator or to the school:

- test booklets and Student Questionnaires for the number of students sampled plus extra unassigned booklets and questionnaires;
- Student Tracking Form;
- Session Attendance Form;
- Session Report Form(s);
- Materials Reception Form;
- Materials Return Form; and
- additional materials such as pens/pencils, and calculators depending on local circumstances.²

One of the 15 separate test booklets in the Field Trial and one of the 12 separate test booklets in the Main Survey was pre-allocated to each student by the MyMWestra software from a random starting point in each school. MyMWestra was then used to generate the school's Session Attendance Forms, which contained the number of the allocated booklet alongside each sampled student's name. This information was used by the Test Administrators when distributing the booklets to students.

Field operations procedures

It was recommended that National Centres print removable labels, each with a student identification number and his or her specific test booklet number, as well as the student's name, if this was an acceptable procedure within the country. Two or three copies of each student's label could be printed and used to identify the test booklet and the questionnaire. After the assessment, labels were removed to help ensure the confidentiality of students' responses.

NPMs were allowed some flexibility in how the materials were packaged and distributed, depending on national circumstances. In most countries, materials were shipped directly to Test Administrators rather than to the schools. It was specified, however, that the test booklets for a school be packaged so that they remained secure, possibly by wrapping or binding bundles of booklets and questionnaires, or by sealing each booklet in a labelled envelope. Most countries bundled booklets and questionnaires specific to a school, and the Test Administrator applied the removable student labels prior to the test date. Procedures for preparing test booklets and Student Questionnaires and maintaining their security were described in the Test Administrator’s Manual.

Test administration

After arriving at the school on assessment day, Test Administrators were required to review the Student Tracking Form with the School Co-ordinator and update the form as necessary. The Session Attendance Form also was updated as necessary. Once the forms were updated, the Test Administrator set up the room and materials for the assessment session following the steps as described in the Test Administrator’s Manual:

- allocate a work space to each participating student;
- distribute test booklets (and later Student Questionnaire) to students, ensuring that each student received only the test booklet assigned on the Session Attendance Form;
- write the testing date on a board visible to all students;
- ask the students to write the testing date on their test booklet covers in the required format DD/MM/YYYY at the beginning of the session; and
- set aside the materials for students who had any non-participant codes recorded on the Student Tracking Form or did not attend the assessment session from the very beginning.

Administering and monitoring the test

To obtain comparable and reliable data, Test Administrators were required to strictly follow the timing of the assessment, especially the administration of the test sessions (two sessions of exactly one hour) shown in Table 6.1 below.

Table 6.1 **Timing of assessment**

Activity	Timing
Distributing materials and reading the General Directions	15 minutes (approximately)
First 60 minutes of test	60 minutes (exactly)
Short break	Generally no more than 5 minutes
Second 60 minutes of test	60 minutes (exactly)
Break	Generally no more than 15 minutes ³
Student Questionnaire	35 minutes (approximately)
Collecting the materials and ending the session	15 minutes (approximately)
Total	Student time: 3 hours 15 minutes (approximately)

NPMs were allowed to adapt the length of the short break after the first hour of testing. Most countries allowed only the recommended five-minute break.

No changes to the timing of the test sessions were allowed. Adaptation to the timing of the Student Questionnaire session was more flexible to maximise the contextual data obtained from students. If some students had not completed the questionnaire after the standard 35 minutes, Test Administrators could allow a maximum of 10 additional minutes.

The test script had to be read to the students word-for-word to maintain standardised assessment procedures across all participating countries. The Test Administrators were required to read the extensive practice exercises and other key instructions to the students. Therefore, if a student arrived after the instructions were started, the student could not participate in the session and was marked absent. He or she could be invited to a follow-up session if one was required at the school.

Once started, students were not allowed to leave the session unless absolutely necessary. If a student could not complete the session for any reason, the Test Administrator had to collect the student's test material. If the student was absent for more than 10 minutes from the test session, the Test Administrator recorded this student as "partially present" on the Session Attendance Form. Absences of 10 minutes or more in the questionnaire section did not affect the participant status of students.

Test Administrators were not allowed to provide any help with the test items. However, they could answer questions about items in the Student Questionnaire following specific instructions in explanatory notes for Student Questionnaire items provided to them by the international contractors.

Observers were limited to necessary staff members, observers designated by the National Centre, and the international PISA-D Quality Monitors (Main Survey). National Centres were responsible for ensuring that confidentiality arrangements were in place (Technical Standard 11.1). In most cases, it was national policy that an observer was required to sign a confidentiality agreement. All PQMs were required to sign a confidentiality agreement.

At the end of the test administration (test and Student Questionnaire), Test Administrators collected all assessment materials as well as the completed School Questionnaire from the School Co-ordinator. In most cases, they also collected the Teacher Questionnaires. The assessment material from each administration session had to be bundled together with the corresponding Session Attendance Forms, Student Tracking Form, Session Report Form, unused test booklets, and Student Questionnaires and shipped to the National Centre, typically within 24 hours of completing the assessment or follow-up session.

Receipt of materials at the National Centre after testing

The National Centre established a database of schools before testing began to track the shipment of materials to and from schools, tallies of materials sent and returned, and to monitor the progress of the materials returned, including the School Questionnaire and Teacher Questionnaires.

It was recommended that upon receipt of materials from schools, the counts of completed and unused booklets also be checked against the participation status information recorded on the Student Tracking Form.

All test booklets—used and unused—as well as all questionnaires assigned to students had to be accounted for. Any missing confidential item had to be reported immediately to Westat Survey Operations, which would report it to the OECD and to relevant international contractors. There were no incidents reported for PISA-D.

Notes

1. Throughout this document, the terms “School Co-ordinator” and “Test Administrator” are used when discussing the administration of the test in schools. However, please note that some countries use School Associates, individuals who fulfil the role of both School Co-ordinator and Test Administrator. School Associates received a School Associate’s Manual and were trained by the National Centre.
2. In some countries the additional materials were supplied by schools.
3. The amount of break time before beginning the Student Questionnaire is not absolute. The recommended amount of time is 15 to 30 minutes, but the time can be longer or shorter depending on the discretion of the National Centre, and school circumstances.