

CHAPTER 8

Quality Assurance Program for PIRLS 2016

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Considerable efforts were made to develop standardized materials and survey operations procedures so that the PIRLS 2016 data met the highest standards. To document data collection activities and verify that the standardized procedures were followed, the TIMSS & PIRLS International Study Center working with IEA Amsterdam developed and implemented an International Quality Assurance Program, whereby International Quality Control Monitors visited a sample of schools in each country and observed the PIRLS 2016 administration. The purpose of this chapter is to provide an overview of the International Quality Assurance Program and report on the data collected through the program.

Overview

The International Quality Assurance Program was implemented by independent International Quality Control Monitors (IQCMs) appointed by IEA Amsterdam. The major task of the IQCMs was to conduct site visits during the data collection process. In each country, the IQCM visited a sample of 15 participating schools during the assessment administration. When there were one or more benchmarking participants from the same country and only one centrally organized national center responsible for all aspects of data collection, the IQCM visited five additional schools in each benchmarking entity on top of the schools visited for the country as a whole. For countries participating in ePIRLS, the IQCM made two visits per school—the first visit to observe the PIRLS testing session, and then another visit to observe the ePIRLS testing session and interview the School Coordinator responsible for overseeing the [survey operations](#) for that school.

In each school that they visited, IQCMs observed the PIRLS testing sessions and recorded their observations, noting any deviations from the standardized administration script, timing, and procedures, and interviewed the School Coordinators about their experiences coordinating the assessment. In addition, IQCMs checked whether the suggestions made by the international translation and layout verifiers for the national achievement booklets and context questionnaires

had been integrated into the final assessment instruments, as documented in the National Adaptations Forms. Since ePIRLS translation and verification were conducted via the ePIRLS Online Translation System, all changes were tracked by the software and no additional IQCM checking was necessary for ePIRLS instruments.

Prior to beginning their assignments, the IQCMs attended a mandatory training session conducted by the TIMSS & PIRLS International Study Center. There were two training sessions, one for Southern Hemisphere countries (September) and one for Northern Hemisphere countries (January). During the training, IQCMs were introduced to the PIRLS and ePIRLS survey operations procedures and the design of the PIRLS/PIRLS Literacy 2016 achievement booklets, ePIRLS assessment tasks, and context questionnaires. IQCMs were also supplied with a manual detailing their role and responsibilities as well as the necessary materials for completing the quality control tasks.

An important aspect of the International Quality Assurance Program is the independence of the IQCMs from the national centers. In most participating countries and benchmarking entities, IEA Amsterdam recruited IQCMs who had served in the same role in previous IEA assessments. For the remaining countries, National Research Coordinators assisted IEA Amsterdam in nominating an International Quality Control Monitor. The nominated person could not be a member of the national center, or a family member or personal friend of the National Research Coordinator. Often, this person was a school inspector, ministry official, or retired school teacher. The IQCM was required to be fluent in both English and the language(s) spoken in the country.

When necessary, the IQCMs were permitted to recruit assistants to effectively cover the territory and testing timetable. For PIRLS 2016, a total of 54 IQCMs were trained across the 50 participating countries and 10 benchmarking participants. In addition, the IQCMs trained more than 200 assistant monitors. Altogether, International Quality Control Monitors observed 814 PIRLS/PIRLS Literacy testing sessions and 209 ePIRLS testing sessions. The results of the PIRLS 2016 IQCM observations are reported in the following sections of this chapter.

Quality Control Observations of the PIRLS 2016 Data Collection

International Quality Control Monitors conducted site visits during the assessment administration to a sample of 15 schools in each country. For each school visit, the IQCMs completed the Classroom Observation Record. The records were completed online via the IEA's Online SurveySystem (OSS).

The observation records were organized into the following sections:

- Section A—Documentation of the PIRLS/PIRLS Literacy Testing Session
- Section B—Summary Observations of the PIRLS/PIRLS Literacy Testing Session

- Section C—Student Questionnaire Administration and Distribution of the Learning to Read Survey
- Section D—Documentation of the ePIRLS Testing Session
- Section E—Summary Observations of the ePIRLS Testing Session
- Section F—Interview with the School Coordinator

Only IQCMs in countries participating in ePIRLS were administered Sections D and E.

Documentation and Summary Observations of the PIRLS 2016 Testing Sessions

Sections A, B, D, and E of the Classroom Observation Record addressed activities that took place during the testing sessions. The assessments were administered in two parts with a break of up to 30 minutes between each part. During test administration, IQCMs were asked to observe the activities of the Test Administrator, such as distributing, collecting, and securing the testing materials, following the assessment administration script, and timing the testing sessions.

Exhibit 8.1 reflects percentages of IQCM responses on these activities for PIRLS/PIRLS Literacy testing sessions and Exhibit 8.2 reflects this information for ePIRLS. IQCMs reported that the assessments were conducted in accordance with the international procedures. In those sessions where the total testing time for a part of the PIRLS/PIRLS Literacy assessment administration was not equal to the time allowed, it was usually because students completed their work a few minutes before the allotted time had elapsed. If Test Administrators observed students working faster than expected, a remaining-time announcement was made prior to the planned 5 minute warning to inform students that they still had ample time to complete their work. Sometimes, the break exceeded 30 minutes, and this often occurred when schools decided to follow their regular break schedule. These extended breaks were usually reported to be 35 to 45 minutes in duration.

Exhibit 8.1: Observations of PIRLS/PIRLS Literacy 2016 Assessment Administration Sessions – 814 Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
Did the Test Administrator distribute the PIRLS/PIRLS Literacy booklets according to the booklet assignment on the Student Tracking Form and booklet labels?	94	3	3
Did the total testing time for Part 1 of the testing session equal the time allowed?	83	15	2
Did the Test Administrator announce “you have 5 minutes left” prior to the end of Part 1 of the testing session?	83	14	3
Were there any other time remaining announcements made during Part 1 of the testing session?	12	88	0
Was the total time for the break between Part 1 and Part 2 of the testing session equal to or less than 30 minutes?	78	10	12
Were the booklets left unattended or unsecured during the break?	2	93	5
Did the total testing time for Part 2 of the testing session equal the time allowed?	83	16	1
Did the Test Administrator announce “you have 5 minutes left” prior to the end of Part 2 of the testing session?	86	13	1
Were there any other time remaining announcements made during Part 2 of the testing session?	10	90	0
Did any students finish either Part 1 or Part 2 of the PIRLS/PIRLS Literacy assessment early (before the 40 minutes were up)?	77	21	2
Did the test administrator have a watch with a seconds hand (or stopwatch/timer) for accurately timing the testing session?	90	9	1
Were the booklets collected and secured after the testing session?	91	8	1

For ePIRLS, Test Administrators ensured that the achievement test booklets were distributed and students were logged into the ePIRLS Software with their student IDs and passwords according to the Student Tracking Forms¹ and labels. In accordance with the procedure, at the end of the testing session, Test Administrators were asked to collect and secure the test booklets. The IQCMs reported that in 91 percent of the PIRLS/PIRLS Literacy testing sessions this occurred. However, in a few cases, the Student Questionnaire was attached to the test booklet, and in these cases students retained their test booklets until they completed their questionnaire.

¹ As described in more detail [Chapter 6](#), the Test Administrators used the student tracking form to verify the assignment of survey instruments to students and to indicate participation status.

Exhibit 8.2: Observations of ePIRLS 2016 Assessment Administration Sessions – 209 Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
Did the Test Administrator make sure that students were seated at their assigned computers (logged into the ePIRLS Software with his/her Student ID and password) according to the Student Tracking Form?	79	0	21
Did the Test Administrator read the directions (presented on each student's computer) aloud to the students?	35	50 (<i>students followed through the directions by themselves</i>)	15
Did the Test Administrator announce "you have 5 minutes left" prior to the end of Part 1 of the testing session?	55	27	18
Were there any other time remaining announcements made during Part 1 of the testing session?	6	82	12
Was the total time for the break between Part 1 and Part 2 of the testing session equal to or less than 30 minutes?	46	10	44
Were the computers and USB sticks kept secure during the break?	48	4	48
Did the Test Administrator announce "you have 5 minutes left" prior to the end of Part 2 of the testing session?	48	33	19
Were there any other time remaining announcements made during Part 2 of the testing session?	4	83	13
Did any students finish either Part 1 or Part 2 of the ePIRLS assessment early (before the 40 minutes were up)?	91	5	4

Exhibits 8.3 and 8.4 report on the activities conducted during the assessment sessions for PIRLS/PIRLS Literacy and ePIRLS, respectively. To standardize test administration, all Test Administrators were instructed to read the script in the Test Administrator Manual to the students. IQCMs reported that in more than half of the PIRLS/PIRLS Literacy observations, the Test Administrators followed the script exactly. When the Test Administrator deviated from the script, nearly all modifications were reported to be “minor.” For ePIRLS, students were allowed to click through the directions on their own, and for this reason many ICQMS did not answer this question or marked it “not applicable.”

Exhibit 8.3: Test Administrators Following the Test Administration Script – 814 PIRLS/PIRLS Literacy Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
Had the test administrator familiarized himself or herself with the test administration script prior to the testing?	88	6	5 (<i>I Cannot Answer</i>) 1 (<i>Not Answered</i>)
Did the test administrator follow the test administration script in the PIRLS 2016 Test Administrator Manual?	58	36 (<i>Minor changes</i>) 5 (<i>Major changes</i>)	1
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	3	6	0 (<i>Not Answered</i>) 91 (<i>Not Applicable</i>)
<i>Revisions</i>	2	7	0 (<i>Not Answered</i>) 91 (<i>Not Applicable</i>)
<i>Deletions</i>	1	8	0 (<i>Not Answered</i>) 91 (<i>Not Applicable</i>)
Did the test administrator address student questions appropriately?	91	4	5

Exhibit 8.4: Test Administrators Following the Test Administration Script – 209 ePIRLS Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
Had the test administrator familiarized himself or herself with the test administration script prior to the testing?	68	4	9 (<i>I Cannot Answer</i>) 18 (<i>Not Answered</i>)
Did the test administrator follow the test administration script in the PIRLS 2016 Test Administrator Manual?	41	38 (<i>Minor changes</i>) 5 (<i>Major changes</i>)	16
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	4	7	3 (<i>Not Answered</i>) 86 (<i>Not Applicable</i>)
<i>Revisions</i>	3	7	4 (<i>Not Answered</i>) 86 (<i>Not Applicable</i>)
<i>Deletions</i>	2	10	2 (<i>Not Answered</i>) 86 (<i>Not Applicable</i>)
Did the test administrator address student questions appropriately?	95	2	3

Exhibit 8.5 summarizes observations on student compliance with instructions and overall cooperation during assessment administration for both PIRLS/PIRLS Literacy and ePIRLS. According to the IQCMs’ observations, in almost all of the sessions, students complied well or very well with the instruction to stop work at the end of both Part 1 and Part 2 of the PIRLS/PIRLS Literacy testing sessions. In addition, IQCMs described the students as extremely orderly and cooperative during most of the testing sessions.

Exhibit 8.5: Student Cooperation During Assessment Administration – 814 PIRLS/PIRLS Literacy Sessions and 209 ePIRLS Sessions (Percent of IQCM Responses)

Question	Very Well (%)	Fairly Well (%)	Not well at all (%)	Not Answered or Not Applicable (%)	
When the Test Administrator ended Part 1 of the PIRLS/PIRLS Literacy testing session, how well did the student comply with the instruction to stop work?	85	11	2	2	
When the Test Administrator ended Part 2, of the PIRLS/PIRLS Literacy testing session, how well did the student comply with the instruction to stop work?	85	14	0	1	

Question	Extremely (%)	Moderately (%)	Somewhat (%)	Hardly (%)	Not Answered or Not Applicable (%)
To what extent would you describe the students as orderly and cooperative during the PIRLS/PIRLS Literacy testing session?	61	31	6	1	1
To what extent would you describe the students as orderly and cooperative during the ePIRLS testing session?	74	20	2	2	2

Summary Observations of the PIRLS 2016 Testing Sessions

Exhibit 8.6 reports on the IQCMs’ general observations of the PIRLS/PIRLS Literacy assessment administrations and Exhibit 8.7 reports on the IQCM’s general observations of the ePIRLS administrations. Overall, IQCMs reported that the quality of testing sessions was good, very good, or excellent (90% for PIRLS/PIRLS Literacy and 93% for ePIRLS). In most of the testing sessions the IQCMs attended, no problems were observed, and in only 1 percent of cases for both PIRLS/PIRLS Literacy and ePIRLS did a student refuse to take the test. In addition, nearly all of the observed testing sessions took place under favorable room conditions that were suitable for students to work without distraction. The large majority of students, 96 percent for PIRLS/PIRLS Literacy and 92 percent for ePIRLS, followed the direction to store away everything, including electronic devices, for the duration of test administration. The IQCMs also reported that in 94 percent of observed testing sessions, students were seated in an arrangement that provided adequate space for students to work and not be distracted by one another.

Exhibit 8.6: General Observations of the PIRLS/PIRLS Literacy 2016 Testing Sessions – 814 Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)			
Did the student identification information on the PIRLS/PIRLS Literacy booklets correspond with the Student Tracking Form?	95	3	2			
Were any defective test booklets detected and replaced?	2 (BEFORE the testing began) 1 (AFTER the testing began)	97 (BEFORE the testing began) 89 (AFTER the testing began)	1 (BEFORE the testing began) 11 (AFTER the testing began)			
<i>If any defective test booklets were replaced, did the Test Administrator replace them appropriately?</i>	1	1	0 (Not Answered) 98 (Not Applicable)			
Did any students refuse to take the test?	1	98	1			
<i>If a student refused, did the Test Administrator accurately follow the instructions for excusing the student?</i>	0	0	1 (Not Answered) 99 (Not Applicable)			
Were any late students admitted to the testing room?	10 (BEFORE the testing began) 9 (AFTER the testing began)	77 (There were no late students) 2 (Late students were not admitted)	2			
Did any students leave the room for an "emergency" during the testing?	12	87	1			
<i>If a student left the room for an emergency during the testing, did the Test Administrator address the situation appropriately (collect the test booklet, and if re-admitted, return the test booklet)?</i>	2	2	9 (Not Answered) 87 (Not Applicable)			
Were there any students requiring special accommodations (e.g., students with visual or hearing impairment, Dyslexia)?	6	93	1			
Did students store away everything, including all electronic devices, having only a pen or a pencil and the test booklet for the duration of the test administration?	92	6	2			
During the testing session did the test administrator walk around the room to be sure students were working on the correct section of the test and/or behaving properly?	88	10	2			
Were the conditions in the testing room suitable (lighting, temperature, noise, etc.) for the students to work without distractions?	89	9	2			
Did the seating arrangement provide adequate space for students to work and not be distracted by each other?	94	5	1			
Did you see any evidence of students attempting to cheat on the tests (e.g., by copying from a neighbor)?	3	96	1			
Question	Excellent (%)	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Not Answered (%)
In general, how would you describe the overall quality of the testing session?	40	37	13	6	2	2

Exhibit 8.7: General Observations of the ePIRLS 2016 Testing Sessions – 209 Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
Were any defective USB sticks detected and replaced?	7 (BEFORE the testing began) 2 (AFTER the testing began)	81 (BEFORE the testing began) 83 (AFTER the testing began)	12 (BEFORE the testing began) 15 (AFTER the testing began)
Did any students refuse to take the test?	1	96	3
<i>If a student refused, did the Test Administrator accurately follow the instructions for excusing the student?</i>	1	0	3 (Not Answered) 96 (Not Applicable)
Were any late students admitted to the testing room?	3 (BEFORE the testing began) 1 (AFTER the testing began)	73 (There were no late students) 2 (Late students were not admitted)	21
Did any students leave the room for an "emergency" during the testing?	13	83	4
Were there any students requiring special accommodations (e.g., students with visual or hearing impairment, Dyslexia)?	15	82	3
Did students store away everything (school books/papers and all electronic devices), having only the computer used for the ePIRLS testing session?	96	1	3
Were the conditions in the testing room suitable (lighting, temperature, noise, etc.) for the students to work without distractions?	93	3	4
Did the seating arrangement provide adequate space for students to work and not be distracted by each other?	94	3	3
Were all students in the participating class tested together in one session or on groups (multiple testing sessions due to the number of computers available)?	46	37 (Multiple sessions)	17
If laptops were used, did students have an external mouse available?	41	17	13 (Not Answered) 29 (Not Applicable)
<i>If no external mouse was available, did using the laptop touchpads cause any problems?</i>	1	30	23 (Not Answered) 46 (Not Applicable)
In addition to the Test Administrator, were there any additional personnel (e.g., School Coordinator, class teacher, an IT specialist) available during the testing session?	86	11	3
Did any technical problems occur during the testing session?	52	45	3
Did the Test Administrator submit the data from each computer students used for the ePIRLS testing session directly after the testing session?	46	38	16

Question	Excellent (%)	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Not Answered or Not Applicable (%)
In general, how would you describe the overall quality of the testing session?	52	31	10	4	0	3

Student Questionnaire Administration

Exhibit 8.8 summarizes the IQCMs’ observations of the Student Questionnaire administration. IQCMs reported that in the majority of the testing sessions, the Student Questionnaires were distributed according to the Student Tracking Forms and questionnaire labels. In some cases, Test Administrators did not follow the Student Questionnaire administration script exactly. In the cases that the Test Administrator deviated from the script, the modifications were “minor” for the most part. In 15 percent of the observed testing sessions, Test Administrators read Student Questionnaire questions aloud, and in 58 percent of the sessions students answered these questions independently. It should be noted that some schools chose to administer the questionnaire on a different date than the assessment, and in these cases, IQCMs were not required to observe student questionnaire administration.

Exhibit 8.8: Student Questionnaire Administration – 814 Sessions (Percent of IQCM Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
When the test administrator read the script to end the PIRLS/PIRLS Literacy testing session followed by the Student Questionnaire administration, did the test administrator announce a break?	56	10	34 (Not Applicable)
Did the Test Administrator distribute the Student Questionnaires according to the Student Tracking Form and questionnaire labels?	62	4	34 (Not Applicable)
Did the test administrator follow the questionnaire administration script in the PIRLS 2016 Test Administrator Manual?	43	23 (Minor changes) 4 (Major changes)	0 (Not Answered) 30 (Not Applicable)
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	2	6	3 (Not Answered) 89 (Not Applicable)
<i>Revisions</i>	2	6	3 (Not Answered) 89 (Not Applicable)
<i>Deletions</i>	1	7	3 (Not Answered) 89 (Not Applicable)
Did the test administrator read the questions aloud to the students?	15	55 (students answer the questions independently)	0 (Not Answered) 30 (Not Applicable)
After the Student Questionnaire administration, did the Test Administrator distribute the Learning to Read Surveys?	12	58	0 (Not Answered) 30 (Not Applicable)
<i>If the Learning to Read Surveys were distributed at this time, did the Test Administrator distribute them according to the PIRLS Student Tracking Form and survey labels?</i>	4	3	4 (Not Answered) 89 (Not Applicable)

Interview with the School Coordinator

Section F was the final component of the Classroom Observation Record and involved the IQCM conducting an interview with the School Coordinator. The interview addressed issues such as the following:

- Shipment of assessment materials
- Arrangements for test administration
- Responsiveness of the national center to queries
- Necessity for make-up sessions
- Organization of classes in the school (to validate the within-school sampling procedure)

As shown in Exhibit 8.9, 91 percent of School Coordinators reported that the PIRLS administration in their school went “very well” or “satisfactorily” overall. In addition, the School Coordinators noted that that the School Coordinator Manual worked well for them and most other school staff members had positive attitudes toward PIRLS testing.

Exhibit 8.9: Interview with the School Coordinator, Overview – 814 Records (Percent of School Coordinator Responses)

Question	Very well, no problems (%)	Satisfactory, few problems (%)	Unsatisfactory, many problems (%)	Not Answered or Not Applicable (%)
Overall, how would you say the testing went in your school?	66	25	1	8

Question	Positive (%)	Neutral (%)	Negative (%)	Not Answered or Not Applicable (%)
Overall, how would you rate the attitude of the other school staff members towards the PIRLS testing?	59	33	5	3

Question	Worked well (%)	Needs improvement (%)	Not Answered or Not Applicable (%)
Overall, do you feel the School Coordinator Manual worked well for you or does it need improvement?	74	5	21

Exhibit 8.10 shows that there were only a small number of cases where components were missing from the shipments of test materials. In some cases where the School Coordinator reported not receiving all of the PIRLS materials, test materials were brought to the school on the testing day by external Test Administrators. The School Coordinators also reported that in 74 percent of the schools observed for PIRLS 2016, the national centers were responsive to the school’s questions and concerns.

Exhibit 8.10: Interview with the School Coordinator, Details – 814 Records (Percent of School Coordinator Responses)

Question	Yes (%)	No (%)	Not Answered or Not Applicable (%)
Prior to the (first) testing day, did you have time to check your shipment of materials from the national center?	67	22	11
Did you receive the correct shipment of the materials as listed in your School Coordinator Manual and according to the tracking forms?	69	8	23
<i>If no, did the national center provide the missing materials in time for the testing?</i>	1	0	0 (Not Answered) 99 (Not Applicable)
Was the national center responsive to your questions or concerns?	74	4	22
Was the Teacher Questionnaire administered online?	17	81	2
<i>If the Teacher Questionnaire was administered online, did the teacher(s) encounter any problems?</i>	0	7	10 (Not Answered) 83 (Not Applicable)
Was the School Questionnaire administered online?	19	77	4
<i>If the School Questionnaire was administered online, did the person completing it encounter any problems?</i>	0	9	10 (Not Answered) 81 (Not Applicable)
Was the Learning to Read Survey administered online?	2	75	23
<i>If the Learning to Read Survey was administered online, did the parents/guardians encounter any problems?</i>	0	2	0 (Not Answered) 98 (Not Applicable)
Do you anticipate that a makeup session will be required at your school?	9	90	1
<i>If yes, do you intend to conduct one?</i>	2	1	6 (Not Answered) 91 (Not Applicable)
Did the students receive any special instructions, motivational talk, or incentives to prepare them for the assessment(s)?	46	47	7
Did you provide the list of classes in the tested grade to the national center?	83	12 (Centralized database used)	5
If there was another international assessment, would you be willing to serve as a School Coordinator?	82	13	5

In 46 percent of the visited schools, School Coordinators indicated that students were given special instructions, motivational talks, or incentives by a school official or the classroom teacher prior to testing. Only nine percent of School Coordinators anticipated needing a makeup session.

Because the sampling of classes requires a complete list of all classes in the school at the target grade, IQCMs were also asked to verify that all classes were included in the sampling process. School Coordinators were asked how many classes of the tested grade are in the school, how many were selected to participate, and whether he/she provided the list of classes to the national center. Over 80 percent of School Coordinators confirmed that they sent a complete list of classes to the national center. In 12 percent of the observed schools, centralized databases were used instead of class lists.

As a reflection of the successful planning and implementation of PIRLS 2016, 82 percent of respondents for both grades said that they would be willing to serve as a School Coordinator in future international assessments.