

# Quality Control in the PIRLS Data Collection

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## 7.1 Overview

The International Study Center (ISC) conducted an ambitious program of site visits to document the quality of the PIRLS 2001 data collection. Together with the IEA Secretariat and the national centers, the ISC identified and appointed one international Quality Control Monitor (QCM) in each country to observe data collection procedures at both national and school levels.

Quality Control Monitors had two major responsibilities: to interview the National Research Coordinator (NRC) about the survey operations and activities, and to arrange visits to a random sample of 15 schools in their country during the test administration. An Interview with the NRC Form was used to record the NRC's responses during the interview. For each testing session observed, QCMs completed a Classroom Observation Record.

More than 30 monitors attended a two-day training session conducted by the staff of the ISC, where they were introduced to the PIRLS 2001 survey operations procedures and instructed on how to conduct their site visit observations and interviews. At the training session, QCMs received a copy of the *Manual for International Quality Control Monitors* (PIRLS, 2000), which explained their duties in detail, and copies of the PIRLS survey operations manual and manuals for school coordinators and test administrators.

The QCMs who attended the training session were asked to recruit other QCMs within their country when necessary, in order to allow for efficiency in the coverage of the territory and testing timetable. A total of 71 QCMs were trained across the 33 countries where the

**Exhibit 7.1: Preliminary Activities of the Test Administrator**

Question	Yes	No	Not Answered
Had the Test Administrator verified adequate supplies of the test booklets?	454*	21**	0
Had the Test Administrator familiarized himself or herself with the test administration script prior to the testing?	449*	23**	3
Did the student identification information on the test booklets and student questionnaires correspond with the Student Tracking Form?	465	8	2
Was there adequate seating space for the students to work without distractions?	462	12	1
Was there adequate room for the Test Administrator to move about during the testing to ensure that student were following directions correctly?	470	4	1
Did the Test Administrator have a stop watch or timer for accurately timing the testing session?	451	21	3

\* Represents the number of respondents answering either Definitely Yes or Probably Yes

\*\* Represents the number of respondents answering either Definitely No or Probably No

international quality control was conducted.<sup>1</sup> All together, these monitors observed 475 testing sessions and conducted interviews with the national research coordinator in each of the 33 PIRLS countries.

## 7.2 Observing the PIRLS Test Administration

When visiting the school, the QCM was to complete a Classroom Observation Record Form. This form was organized into four sections to facilitate the accurate recording of the test administration's major activities. The four sections are:

- Preliminary activities of the Test Administrator
- Test session activities

- General impressions
- Interview with the School Coordinator.

### 7.2.1 Preliminary Activities of the Test Administrator

Section A of the Classroom Observation Record addressed the extent to which the Test Administrator had prepared for the testing session. Monitors were asked to note the following activities of the Test Administrator: checking the testing materials, reading the administration script, organizing space for the session, and arranging for the necessary equipment (e.g., pencils, a watch for timing the testing session).

Exhibit 7.1 summarizes the results for Section A. In almost all testing sessions, test administrators observed the proper preparatory procedures. When deviations occurred,

<sup>1</sup> Operational constraints did not permit QCM visits to be conducted in Argentina or Iceland.

the QCMs provided reasonable explanations for the discrepancies. For example, QCMs noted that the main reason for students receiving booklets with student identifications that did not correspond to the Student Tracking Form was because new students did not appear on the list because the tracking forms had been created before they were enrolled. In the few cases where there reportedly was not enough room for students, QCMs reported unavoidable circumstances (e.g., the test was administered in a small classroom, the desks were too narrow, students had to sit three to a table).

The absence of a stopwatch was considered a negligible limitation. Test Administrators who did not have a stopwatch had a wristwatch available to monitor the time remaining on the test sessions. In general, QCMs observed no procedural deviations in test preparations severe enough to jeopardize the integrity of the test administration.

### 7.2.2 Test Session Activities

Section B of the Classroom Observation Record addressed the activities that took place during the actual testing session. These activities included following the Test Administrator script, distributing and collecting test booklets, and making announcements during the testing sessions.

The achievement test was administered in two parts with a short break in-between. Activities during the first part of the testing session are presented in Exhibit 7.2. In

at least 80 percent of the schools visited, the Test Administrators followed their script exactly when preparing the students, distributing the test materials, and reading the directions and examples. Of the changes that were made, the majority were considered minor. Changes made to the script were most frequently acceptable additions – rather than revisions or deletions.

In about 15 percent of the sessions visited, the total testing time for Part 1 was not equal to the time allowed. However, in most of these sessions, this was because all students had completed Part 1 before the allotted time had elapsed, and so the test administrator reasonably went on with the next part of the session according to the prescribed procedures. The average testing session for Part 1 was approximately 36 minutes in duration instead of the 40 minutes allocated. Students were instructed to close their test booklets and leave them on their desk during the break. In most sessions, the room was then either secured or supervised during the break. In no instance did a QCM report a breach of security during the break.

In more than 80 percent of the testing sessions visited, the total time for the break between parts was equal to or less than 15 minutes. Of those sessions with breaks longer than 15 minutes, most reportedly took up to 20 minutes for the break. The total break time across all countries ranged between 1 and 40 minutes.

**Exhibit 7.2: Testing Session Part 1**

Question	Yes	No	Not Answered
Did the test administrator follow the test administrator's script exactly in each of the following tasks?			
Preparing the students	404	63 (Minor changes) 6 (Major)	2
Distributing the materials	449	23 (Minor) 1 (Major)	2
Reading the directions	381	88 (Minor) 5 (Major)	1
Reading the examples	410	59 (Minor) 5 (Major)	1
If the Test Administrator made changes to the script, how would you describe them?			
Additions	107	136	232
Revisions	57	161	257
Deletions	30	177	268
Did the Test Administrator distribute test booklets one at a time to each student?	468	7	0
Did the Test Administrator distribute the test booklets according to the booklet assignments on the Student Tracking Form?	463	12	0
Did the Test Administrator record attendance correctly on the Student Tracking Form?	458	11	6
Did the total testing time for Part 1 equal the time allowed?	402	71	2
Did the Test Administrator announce "you have 5 minutes left" prior to the end of Part 1?	419	55	1
Were there any other time remaining announcements made during Part 1?	57	413	5
At the end of Part 1, did the Test Administrator make sure all students had closed their booklets?	460	10	5
Was the total time for the break equal to or less than 15 minutes?	391	71	13
Were the booklets left unattended or unsecured during the break?	21	443	11

**Exhibit 7.3: Testing Session Part 2**

Question	Yes	No	Not Answered
Was the time spent to restart the testing for Part 2 equal to or less than 5 minutes?	445	18	12
Was the total time for testing in Part 2 correct as indicated in the script?	355	107	13
Did the Test Administrator announce "you have 5 minutes left" prior to the end of Part 2?	359	100	16
Were there any other time remaining announcements made during Part 2?	35	420	20
At the end of Part 2, did the Test Administrator collect the test books one at a time from each student?	425	41	9
When the Test Administrator read the script to end the testing for Part 2, did he/she announce a break to be followed by the Student Questionnaire?	374	76	25
Did the Test Administrator accurately read the script to end the testing and signal a break?	321 (No changes)	91 (Minor) 23 (Major)	40
If there were changes, how would you describe them?			
Additions	46	131	298
Some minor changes	57	130	288
Omissions	38	137	300
Did the Test Administrator distribute the Student Questionnaires and give directions as specified in the script?	407	17	51
Did the students ask for additional time to complete the questionnaire?	150	252	73
Did the Test Administrator distribute a Learning to Read Survey to each student who participated in the testing?	321	115	39
At the end of the session, prior to dismissing the students, did the Test Administrator thank the students for participating in the study?	391	50	34

Exhibit 7.3 summarizes the QCMs' observations during the second part of the testing session. In over 90 percent of the sessions, the Test Administrator adhered to the prescribed time limits in the directions; the time spent to restart the testing session was 5 minutes or less. The rest of the ses-

sions took up to 10 minutes to restart the testing session. Similar to the timing of Part 1, the average testing session in Part 2 was shorter than the 40 minutes allotted because students had finished the achievement test early.

**Exhibit 7.4: Testing Session Activities**

Question	Very Well	Well	Fairly Well	Not well at all
When the Test Administrator ended Part 1, how well did the student comply with the instruction to stop work (close their booklets and put their pencils down)?	418	50	6	1
When the Test Administrator ended Part 2, how well did the student comply with the instruction to stop work (close their booklets and put their pencils down)?	414	46	5	10

Question	Exactly the same	Longer	Shorter	Not Answered
How does the total time allocated for the administration of the Student Questionnaire compare to the time specified in the script?	158	225	25	67

Question	Very orderly	Somewhat orderly	Not orderly at all	Not Answered
How orderly was the dismissal of the student?	350	88	8	29

About 65 percent of the Test Administrators kept to the testing script for signaling a break before administering the student questionnaire. Of those who did make changes, most made acceptable additions or other minor changes, such as paraphrasing the directions. More than 80 percent of the students requested additional time to complete the student questionnaire, which, in most cases, was granted.

Results of the remaining questions that focused on the test session activities are provided in Exhibit 7.4. These questions dealt with topics such as student compli-

ance with instructions, and the alignment of the scripted instructions with their implementation.

Exhibit 7.4 shows that in almost all of the sessions, the students complied well or very well with the instructions to stop testing. In more than half the sessions, however, the amount of time needed to complete the student questionnaire was longer than the time specified in the script. Usually this was because the Test Administrators read each question aloud to the students, a practice that was encouraged to help students complete the questionnaire accurately.

**Exhibit 7.5: Summary Observations of the QCM**

Question	Yes	No	Not Answered
During the testing sessions 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?	462	11	2
Did the Test Administrator address students' questions appropriately?	473	1	1
Did you see any evidence of students attempting to cheat on the tests (e.g., by copying from a neighbor)?	21	454	0
Were any defective test books detected and replaced <i>before</i> the testing began?	27	445	3
Were any defective test books detected and replaced <i>after</i> the testing began?	14	452	9
If any defective test books were replaced, did the Test Administrator replace them appropriately?	32	11	432
Did any students refuse to take the test either prior to the testing or during the testing?	11	462	2
If a student refused, did the Test Administrator accurately follow the instructions for excusing the student (collect the test book and record the incident on the Student Tracking Form)?	23	4	448
Did any students leave the room for an "emergency" during the testing?	58	411	6
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)?	61	11	403

### 7.2.3 General Impressions

Section C of the Classroom Observation Record asked QCMs to reflect on their observations. The QCMs reported overall impressions of the test administration – including how well the Test Administrator monitored students' conduct, and any unusual circumstances that arose during the testing session (e.g., student refusal to participate, defective instrumentation, emergency situations, cheating).

The results presented in Exhibit 7.5 show that in almost all sessions, the testing took place without any problems. In the few ses-

sions where problems arose due to defective instrumentation, the Test Administrator replaced the instruments appropriately.

In less than 5 percent of sessions, QCMs reported evidence of students attempting to cheat on the exam. However, when asked to explain the situation, QCMs generally indicated that students were merely looking around at their neighbors to see whether their test booklets were indeed different. Because the PIRLS test design involves 10 different booklets, students were unlikely to have the same booklet as their neighbors. Anyone who may have

**Exhibit 7.6: Summary Observations of Student Behavior**

Question	Extremely	Moderately	Somewhat	Hardly	Not answered	
To what extent would you describe the students as orderly and cooperative?	333	131	10	1	0	

  

	Definitely	Some effort	Hardly any effort	Not answered		
If the students were not cooperative and orderly, did the Test Administrator make an effort to control the students and the situation?	129	24	0	322		

  

	No, there were no late students	No, they were not admitted	Yes, but before testing began	Yes, after testing began	Not answered	
Were any late students admitted to the testing room?	439	3	15	13	5	

  

	Excellent	Very good	Good	Fair	Poor	Not answered
In general, how would you describe the overall quality of the testing session?	224	181	55	8	3	4

tried to copy a neighbor's answers would have had to find a student with the same booklet around them, and this is very unlikely – given the test design and booklet rotation. The QCMs reported that on the rare occasions when they observed serious efforts to cheat, the Test Administrator intervened to prevent cheating.

Most of the 58 students who reportedly left the room for an “emergency” during the testing session had already completed the test. When students left the room for an emergency, Test Administrators handled the situation appropriately by ensuring the security of the test booklets until the students returned. Students were permitted to complete the test when they returned to the classroom.

Finally, Exhibit 7.6 indicates that in almost all of the testing sessions, QCMs found the behavior of students to be orderly and cooperative. The problem cited most often by QCMs as the reason for disorderly behavior was the noise level of those students who had completed the test well before the prescribed 40 minutes had passed. In the few cases where it was less than perfect, the Test Administrator was able to control the students and the situation. For the great majority of sessions, QCMs reported that the overall quality of the sessions was either excellent or very good.

#### 7.2.4 Interview with the School Coordinator

The QCM recorded details of the interview with the School Coordinator in Section D of the Classroom Observation Record. The interview addressed the shipment of assessment materials, arrangements for the test administration, the responsiveness of the NRC to queries, the necessity for make-up sessions, and, as a validation of within-school sampling procedures, the organization of classes in the school.

PIRLS' administrative success, according to the school coordinators, is exemplified by the results presented in Exhibit 7.7. School Coordinators received the correct shipment of the test materials in at least 80 percent of all the testing sessions. School Coordinators reportedly not having received materials provided legitimate reasons (such as materials were brought by the Test Administrators as planned, etc.). In those cases where shipment errors occurred, they tended to be minor and were remedied prior to testing. More than 85 percent of School Coordinators reported that the NRCs were responsive to their questions or concerns.

More than half of the School Coordinators reported that they were able to collect the completed teacher questionnaires prior to student testing. Of those who did not, most reported that teachers completed their questionnaires during the testing sessions. Almost half of the School Coordinators indicated that the estimate of 30 minutes to

complete the questionnaire was accurate; while about 35 percent reported that the questionnaires took longer, and about 15 percent that they took less time to complete.

In about 35 percent of the observed classes, School Coordinators indicated that students were given special instructions, motivational talks, or incentives prior to testing. The majority of students received motivational talks either by a school official, classroom teacher, or the PIRLS Test Administrator. Only a few classes received special instructions or practice, such as reading competitions or extra reading assignments prior to the testing session.

A tribute to the planning and implementation of PIRLS 2001 was the fact that about 90 percent of respondents said they would be willing to serve as a School Coordinator in future international assessments. Furthermore, the results shown in Exhibit 7.8 suggest that the majority of School Coordinators believed the testing session went very well, and that the school staff members had positive attitudes towards the PIRLS testing.

**Exhibit 7.7:** Results of the QCM Interviews with the School Coordinator

Question	Yes	No	Not Answered
Prior to the test day did you have time to check your shipment of materials from your PIRLS National Coordinator?	393	50	32
Did you receive the correct shipment of the following items?			
School Coordinator Manual	373	70	32
Test Administrator Manual	423	6	46
Student Tracking Forms	440	4	31
Test booklets	411	18	46
Student Questionnaires	417	12	46
Learning to Read Surveys	396	33	46
Teacher Questionnaires	442	2	31
School Questionnaire	444	1	30
Test Administration Form	424	4	47
Teacher Tracking Form	322	102	51
Envelopes or boxes addressed to the National Center for the purpose of returning the materials after the assessment	313	113	49
Was the National Coordinator responsive to your questions or concerns?	426	19	30
Were you able to collect completed Teacher Questionnaire(s) prior to the test administration?	282	174	19
Was the estimated time of 30 minutes to complete the Teacher Questionnaires a correct estimate?	230	166 (Took longer) 34 (Took less time)	45
Were you able to collect the completed School Questionnaire prior to the test administration?	275	181	19
Were you satisfied with the accommodations (testing room) you were able to arrange for the testing?	462	10	3

**Exhibit 7.7:** Results of the QCM Interviews with the School Coordinator (continued)

Question	Yes	No	Not Answered
Do you anticipate that makeup session will be required at your school?	56	411	8
If you anticipate makeup sessions, do you intend to conduct one?	75	71	329
Did the students receive any special instructions, a motivational talk, or incentives to prepare them for the assessment?	178	278	19
Is this a complete list of the classes in this grade in this school?	390	35	50
To the best of your knowledge, are there any students in this grade level who are not in any of these classes?	17	401	57
To the best of your knowledge, are there any students in this grade level in more than one of these classes?	6	409	60
If there were another international assessment, would you be willing to serve as a School Coordinator?	434	29	12

**Exhibit 7.8:** Overall Impressions from the QCM Interviews with the School Coordinator

Question	Very well, no problems	Satisfactorily, few problems	Unsatisfactorily, many problems	Not Answered
Overall, how would you say the session went?	385	81	6	3

	Positive	Neutral	Negative	Not Answered
Overall, how would you rate the attitude of the other school staff members towards the PIRLS testing?	345	112	16	2

	Worked well	Needs improvement	N/A	
Overall, do you feel the PIRLS School Coordinator Manual worked well or does it need improvement?	342	24	79	

### 7.3 Interview with the National Research Coordinator

In addition to observing testing sessions, QCMs conducted face-to-face interviews with the National Research Coordinator for their country. The QCM who attended the training session was responsible for conducting this interview, and for completing an Interview with the NRC Form.

The interview questions were designed to examine NRCs' experiences in preparing for, and conducting, the PIRLS data collection – with a focus on identifying and selecting samples, working with school coordinators, translating the instruments, assembling and printing the test materials, packing and shipping the test materials, scoring constructed-response questions, entering and verifying data, choosing quality assurance samples, and suggesting improvement in the process.

#### 7.3.1 Sampling

Section A of the NRC interview form involved questions about the sampling process. Topics covered in this section included the extent to which the NRCs used the manuals and sampling software provided by the International Study Center, and the extent to which the process was difficult in terms of the complexity of the tasks.

Exhibit 7.9 shows that only one country did not use the sampling manuals provided, mainly because Statistics Canada performed the sampling for the country. Just over two-thirds of the NRCs used the within-school sampling software provided by the IEA DPC to select classes. In the cases where the

sampling software was not used, the within-school sampling was done manually, or using other sampling software not provided by the ISC.

Some NRCs reported deviations from the sample design due to organizational constraints in their systems. A sampling expert was consulted in each case, to verify that the adopted design remained compatible with the PIRLS standards. Of those who found the sampling process very difficult, some NRCs cited the lack of personnel as a major obstacle. Despite any problems, all NRCs provided high-quality school and student samples for the data collection.

#### 7.3.2 Working with School Coordinators

Questions in Section B of the NRC interview asked about cooperation with the School Coordinators, specifically about communication, shipment of materials, and training.

A summary of the responses to the questions in Section B is presented in Exhibit 7.10. At the time the interviews were conducted, nearly all NRCs had contacted the School Coordinators for their sample, and sent the appropriate materials on the testing procedures. Where this was not the case, it was often because a meeting had been scheduled but not yet held. About half of the NRCs planned to conduct formal training sessions for school coordinators prior to the test administration.

**Exhibit 7.9:** Results of the QCM Interviews with Their NRC – Sampling

Question	Yes	No	Not Answered
Were you able to select a sample of schools and students within schools using the manuals provided by the International Study Center?	31	1	1
Did you use the Within-School Sampling Software provided by the International Study Center to select classes or students?	22	11	0
Were there any conditions or organizational constraints that necessitated deviations from the basic PIRLS sampling design?	9	24	0

	Very difficult	Somewhat difficult	Not difficult at all	Not Answered
In terms of the complexity of the procedures and number of personnel needed, how would you describe the process of sample selection?	5	10	17	1

**Exhibit 7.10:** Results of the QCM Interviews with Their NRC – School Coordinator

Question	Yes	No	Not Answered
Have all the School Coordinators for your sample been contacted?	24	9	0
If all School Coordinators have been contacted, have you sent them materials about the testing procedures?	20	9	4
Did you or do you plan to have formal training sessions for the School Coordinators?	15	18	0

### 7.3.3 Translating the Instruments

Section C of the NRC interview dealt with the difficulty of translating and adapting the assessment instruments and manuals.

Exhibit 7.11 shows that most NRCs reported little difficulty in translating and adapting the test booklets and questionnaires, and even less difficulty in translating the Test Administrator and School Coordinator manuals.

NRCs generally used their own staff (or a combination of staff and outside experts) to translate the test booklets. The majority of NRCs reported that they already had submitted the achievement test booklets to the translation verification program at the ISC. Of those that did not, one country did not make adaptations to the international version, and the other two had submitted their test booklets and questionnaires for verification – but did not receive verifier’s comments in time to make all recommended changes.

**Exhibit 7.11:** Results of the QCM Interviews with Their NRC – Translation

Question	Own Staff	Outside Experts	Combination	Not Answered
Did you use your own staff or outside experts to translate the test booklets for verification?	8	6	17	2

  

	Very difficult	Somewhat difficult	Not difficult at all	Not Answered
How difficult was it to translate and/or adapt the test booklets?	1	15	15	2
How difficult was it to adapt the questionnaires?	0	18	14	1
How difficult was it to adapt the Test Administrator Manual?	0	10	22	1
How difficult was it to adapt the School Coordinator Manual?	0	10	19	4

  

	Yes	No	Not Answered	
Did you go through the process of submitting test booklets and receiving a translation verification report from the IEA?	29	3	1	
Did you translate, or do you plan to translate, the Scoring Guides for Constructed-Response Items?	20	12	1	

### 7.3.4 Assembling and Printing the Test Materials

Section D of the NRC survey addressed assembling and printing the test materials. Also, it included instructions for quality control issues related to checking the materials and securely storing them.

The results in Exhibit 7.12 show that NRCs were able to assemble the test booklets according to the instructions provided, and that almost all NRCs conducted the recommended quality control checks during the

process. In the cases where the NRCs did not conduct quality assurance procedures during the printing process, it was because of a shortage of time.

Most countries elected to send their test booklets and questionnaires to an external printer, but printed their manuals in-house. All NRCs reported having followed procedures to protect the security of the tests during assembly and printing. In no instance was there a breach of security reported.

**Exhibit 7.12:** Interview with the NRC – Assembling and Printing Test Materials

Question	Yes	No	Not Answered	
Were you able to assemble the test booklets according to the instructions provided by the International Study Center?	29	4	0	
Did you conduct the quality assurance procedures for checking the test booklets during the printing process?	28	5	0	
Were any errors detected during the printing process?	11	19	3	
If errors were detected, what was the nature of the errors?				
Poor print quality	6	5	22	
Pages missing	1	9	23	
Page order	2	8	23	
Upside down pages	1	9	23	
Did you follow procedures to protect the security of the tests during the assembly and printing process?	31	1	1	
Did you discover any potential breaches of security?	0	32	1	

Question	In-House	External	Combination	Not Answered
Where did you print the test booklets?	6	21	6	0
Where did you print the questionnaires?	8	18	7	0
Where did you print the manuals?	22	7	3	1

### 7.3.5 Packing and Shipping the Testing Materials

Section E of the NRC interview addressed the extent to which NRCs detected errors in the testing materials as they were packed for shipping to School Coordinators. As shown in Exhibit 7.13, very few errors were found in any of the materials. Errors that were discovered before distribution were remedied.

In addition, almost half of the NRCs reported having established a procedure to confirm the schools' receipt of the testing materials, and for verification of their contents. In most countries, NRCs reported that the deadline for return of materials from the schools was within a day or two of testing. All NRCs reported that the deadline was within two weeks of testing.

**Exhibit 7.13:** Interview with the NRC – Packaging Test Materials

Question	No Errors, or not used	Errors found before distribution	Errors found after distribution	Not Answered
In packing the assessment materials for shipment to schools, did you detect any errors in any of the following items?				
Supply of test booklets	18	2	1	12
Supply of Student Questionnaires	18	2	1	12
Supply of Learning to Read Surveys	17	1	1	14
Student tracking Forms	21	0	0	12
Teacher tracking Forms	21	0	0	12
Test administrator Manual	21	0	0	12
School coordinator Manual	19	0	0	14
Supply of Teacher Questionnaires	20	1	0	12
School Questionnaire	21	0	0	12
Test book ID labels	19	1	1	12
Sequencing of books or questionnaires	19	2	0	12
Return labels	19	0	0	14
Self-addressed post-cards for test dates	19	0	0	14

**Exhibit 7.14:** Interview with the NRC – Scoring

Question	Yes	No	Not Answered
Have you selected your scorers for the constructed-response questions?	23	8	2
If you have selected them, have you trained the scorers?	10	16	7
Have you scheduled the scoring sessions for the constructed-response questions?	21	11	1
Do you understand the procedure for scoring the 25 percent reliability sample as explained in the survey operations manual?	30	3	0

### 7.3.6 Scoring Constructed-Response Questions

Section F of the NRC interview form focused on the NRC's preparation for scoring the constructed-response items. The scoring process was an ambitious effort, requiring the recruitment and training of scoring staff to score student responses – including double scoring 25 percent of the responses to verify reliability.

Exhibit 7.14 indicates that, at the time of the NRC interview, at least two-thirds of the NRCs had selected their scoring staff, and about half of these had already begun the training process. Each country planned to

use about 15 scorers, on average. Almost all NRCs reported that they understood the procedures for scoring the 25 percent reliability sample as explained in the *Survey Operations Manual*.

### 7.3.7 Data Entry and Verification

Section G of the NRC interview addressed preparations for data entry and verification. As shown in Exhibit 7.15, at the time of the interviews about two-thirds of the NRCs had selected their data entry staff and more than half of those selected had taken part in training sessions.

**Exhibit 7.15:** Interview with the NRC – Data Entry and Verification

Question	Yes	No	Not Answered
Have you selected the data entry staff?	23	9	1
If yes, have you conducted training sessions for the data entry staff?	15	9	9
Do you plan to key enter a percentage of test booklets twice as a verification procedure?	22	10	1
Have you established a secure storage area for the returned tests after coding and until the original documents can be discarded?	33	0	0

About two-thirds of the NRCs reported that they planned to enter the data from a percentage of booklets twice – as a verification procedure. The estimated proportion of booklets to be entered twice ranged from 5 percent to 25 percent, with one country reporting that it planned to re-enter 100 percent of the data.

### **7.3.8 Quality Assurance Sample**

As part of their national quality assurance activities, NRCs were required to send National Quality Control Observers to a 10 percent sample of the PIRLS schools to observe the test administration and document compliance with prescribed procedures. These site visits were over and above those visits to 15 schools conducted by the International Quality Control Monitors.

At the time of the NRC interviews, two-thirds of the NRCs had selected their 10 percent quality assurance sample for site visits. Three NRCs reported that an external agency would conduct the observations, eleven reported that a member of their staff would do so, and eight reported that a combination of staff and external agency people would conduct the observations. Five NRCs reported that teachers would be recruited to conduct the on-site observations.

### **7.3.9 The Survey Activities Report**

The final section of the NRC interview asked the NRC for comments on any aspects of the study they felt might improve the assessment process. A major concern expressed by many NRCs was a time constraint for accomplishing all that was required to keep up with the demanding PIRLS schedule – particularly the translation and instrument preparation aspects. Some NRCs indicated they did not have ample staff.

## References

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Progress in International Reading Literacy Study (PIRLS). (2001) *Manual for International Quality Control Monitors* (PIRLS Ref. No. 01-0005). Prepared by the International Study Center at Boston College. Chestnut Hill, MA: Boston College.

