

# TIMSS 2011

## Quality Control Observations of the TIMSS 2011 Data Collection

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International Quality Control Monitors (IQCMs) conducted site visits at a sample of 15 schools per grade in each country during the TIMSS test administration. For each school visit, the IQCMs completed the TIMSS 2011 Classroom Observation Record. The observation record was organized into four sections, listed below, in order to facilitate accurate recording of the data collection's major activities in each participating country:

- ◆ Section A—Documentation of the TIMSS Testing Session;
- ◆ Section B—Summary Observations of the TIMSS Testing Session;
- ◆ Section C—Student Questionnaire Administration; and
- ◆ Section D—Interview with the School Coordinator.

In total, the TIMSS 2011 IQCMs observed 776 fourth-grade testing sessions and 692 eighth-grade testing sessions, and results of their observations are reported in the following sections.

### Documentation of the TIMSS 2011 Testing Sessions

Section A of the Classroom Observation Record addressed activities that took place during the actual testing sessions. The achievement test was administered in two parts with up to 30 minutes break in between each part. During test administration, IQCMs were asked to observe the activities of the Test Administrator, specifically the following:

- ◆ Distributing, securing, and collecting the test booklets;
- ◆ Following the assessment administration script; and
- ◆ Making time announcements during the testing sessions.

Documentation of these activities is presented in Exhibits 1 to 6. In general, IQCMs reported that the assessments were conducted in accordance with the international procedures, particularly with regard to booklet distribution and adherence to time limits (see Exhibits 1 and 2). In a few sessions (8% for Part 1 and 11% for Part 2 for grade 4; 6% for Part 1 and 7% for Part 2 for grade 8), the total testing time for either Part 1 or Part 2 was not equal to the time allowed. In most sessions, this was because students had 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 warning to inform students that they still had ample time to complete their work without rushing.

For both grades, 94% of all IQCM records stated that the break between Part 1 and Part 2 of the testing session was equal to or less than the required 30 minutes and that almost always the testing materials were either secured or supervised during the break. At the end of the testing session, Test Administrators were asked to collect or secure the test booklets. However, in a few cases, the Student Questionnaire was attached to the test booklet; in such instances, these students were returned the test booklets in order for them to complete the attached questionnaire.

**Exhibit 1: Observations of TIMSS 2011 Fourth-grade Assessment Administration Sessions – 776 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
Did the Test Administrator distribute the test booklets according to the booklet assignment on the <i>Student Tracking Form</i> and booklet labels?	99	1	0
Did the total testing time for Part 1 equal the time allowed?	91	8	1
Did the Test Administrator announce “you have 10 minutes left” prior to the end of Part 1?	90	9	1
Were there any other time remaining announcements made during Part 1?	21	77	2
Was the total time for the break equal to or less than 30 minutes?	94	5	1
Were the booklets left unattended or unsecured during the break?	3	96	1
Did the total testing time for Part 2 equal the time allowed?	88	11	1
Did the Test Administrator announce “you have 10 minutes left” prior to the end of Part 2?	88	11	1
Were there any other time remaining announcements made during Part 2?	18	81	1
Did any students finish either Part 1 or Part 2 of the assessment early (before the 36 minutes were up)?	89	10	1
Did the test administrator have a watch with a seconds hand (or stopwatch) for accurately timing the testing session(s)?	92	7	1
Were the booklets collected and secured after the testing session?	93	5	2

**Exhibit 2: Observations of TIMSS 2011 Eighth-grade Assessment Administration Sessions – 692 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
Did the Test Administrator distribute the test booklets according to the booklet assignment on the <i>Student Tracking Form</i> and booklet labels?	98	1	1
Did the total testing time for Part 1 equal the time allowed?	93	6	1
Did the Test Administrator announce “you have 10 minutes left” prior to the end of Part 1?	92	7	1
Were there any other time remaining announcements made during Part 1?	20	79	1
Was the total time for the break equal to or less than 30 minutes?	94	4	2
Were the booklets left unattended or unsecured during the break?	3	94	3
Did the total testing time for Part 2 equal the time allowed?	91	7	2
Did the Test Administrator announce “you have 10 minutes left” prior to the end of Part 2?	92	6	2
Were there any other time remaining announcements made during Part 2?	17	81	2
Did any students finish either Part 1 or Part 2 of the assessment early (before the 45 minutes were up)?	79	19	2
Did the test administrator have a watch with a seconds hand (or stopwatch) for accurately timing the testing session(s)?	92	7	1
Were the booklets collected and secured after the testing session?	86	12	2

Exhibits 3 and 4 report on the activities conducted during the assessment sessions. One of the most important means of standardizing of the assessment administration was to have all test administrators follow the script in the Test Administrator Manual. IQCMs reported that, in more than three-quarters of their observations, the Test Administrators followed their script exactly and that, of the changes that were made, nearly all were minor.

**Exhibit 3 Test Administrators Following the Fourth-grade Test Administration Script – 776 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
Had the test administrator familiarized himself or herself with the test administration script prior to the testing?	93	4	2 ( <i>I Cannot Answer</i> ) 1 ( <i>Not Answered</i> )
Did the test administrator follow the test administration script in the Test Administrator Manual?	74	23 ( <i>Minor changes</i> ) 2 ( <i>Major changes</i> )	1
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	15	6	5 ( <i>Not Answered</i> ) 74 ( <i>Not Applicable</i> )
<i>Revisions</i>	8	9	9 ( <i>Not Answered</i> ) 74 ( <i>Not Applicable</i> )
<i>Deletions</i>	5	11	10 ( <i>Not Answered</i> ) 74 ( <i>Not Applicable</i> )
Did the test administrator address student questions appropriately?	98	1	1

**Exhibit 4 Test Administrators Following the Eighth-grade Test Administration Script – 692 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
Had the test administrator familiarized himself or herself with the test administration script prior to the testing?	90	7	3 ( <i>I Cannot Answer</i> ) 0 ( <i>Not Answered</i> )
Did the test administrator follow the test administration script in the Test Administrator Manual?	80	16 ( <i>Minor changes</i> ) 3 ( <i>Major changes</i> )	1
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	6	7	7 ( <i>Not Answered</i> ) 80 ( <i>Not Applicable</i> )
<i>Revisions</i>	8	6	6 ( <i>Not Answered</i> ) 80 ( <i>Not Applicable</i> )
<i>Deletions</i>	7	7	6 ( <i>Not Answered</i> ) 80 ( <i>Not Applicable</i> )
Did the test administrator address student questions appropriately?	97	2	1

Exhibits 5 and 6 present observations on student compliance with instructions and overall cooperation with the test administration. 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 testing session. Most students stopped working immediately upon instruction. In addition, IQCMs described students as orderly and cooperative during most testing sessions.

**Exhibit 5: Student Cooperation During the Fourth-grade Assessment Administration – 776 Sessions**

Question	Very Well (%)	Fairly Well (%)	Not well at all (%)	Not Answered (%)
When the Test Administrator ended Part 1, how well did the student comply with the instruction to stop work?	88	11	0	1
When the Test Administrator ended Part 2, how well did the student comply with the instruction to stop work?	89	10	0	1

Question	Extremely (%)	Moderately (%)	Somewhat (%)	Hardly (%)	Not Answered (%)
To what extent would you describe the students as orderly and cooperative?	71	26	2	0	1

**Exhibit 6: Student Cooperation During the Eighth-grade Assessment Administration – 692 Sessions**

Question	Very Well (%)	Fairly Well (%)	Not well at all (%)	Not Answered (%)
When the Test Administrator ended Part 1, how well did the student comply with the instruction to stop work?	84	14	1	1
When the Test Administrator ended Part 2, how well did the student comply with the instruction to stop work?	83	15	1	1

Question	Extremely (%)	Moderately (%)	Somewhat (%)	Hardly (%)	Not answered (%)
To what extent would you describe the students as orderly and cooperative?	67	27	5	0	1

## Summary Observations of the TIMSS 2011 Testing Sessions

Section B of the Classroom Observation Record comprised the IQCMs' general observations of the TIMSS assessment administration. Exhibits 7 and 8 summarize these observations, including the following:

- ◆ Overall impressions of the test administration;
- ◆ How well the Test Administrator monitored students; and
- ◆ Any unusual circumstances that arose during the testing session (e.g., student refusal to participate, defective instruments, emergency situations, and cheating).

IQCMs reported that the overall quality of testing sessions in almost all instances was good, very good, or, in about half of all cases (53% for grade 4 and 49% for grade 8), excellent. For most testing sessions, no problems were observed. In the few sessions where a defective test instrument was detected, the Test Administrator always replaced the instrument appropriately. In 16 percent of the observed fourth-grade testing sessions and in 11 percent of the observed eighth-grade testing sessions, a student left the room for an “emergency” (usually a bathroom visit) during the testing session. In such cases, Test Administrators were instructed that they should collect the student’s test booklet, and return it upon re-admission to the testing session; however, in a small number of cases, the student had already completed the test and, thus, it was not necessary to return the test booklet after re-admission. In all remaining cases, students were instructed to close their booklets and leave them on their tables while being out of the classroom.

**Exhibit 7 General Observations of the Fourth-grade Testing Session – 776 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
Did the student identification information on the booklets correspond with the Student Tracking Form?	96	3	1
Were any defective test booklets detected and replaced?	2 (BEFORE the testing began) 2 (AFTER the testing began)	97 (BEFORE the testing began) 93 (AFTER the testing began)	1 (BEFORE the testing began) 5 (AFTER the testing began)
<i>If any defective test booklets were replaced, did the Test Administrator replace them appropriately?</i>	2	0	1 (Not Answered) 97 (Not Applicable)
Did any students refuse to take the test?	1	98	1
If a student refused, did the Test Administrator accurately follow the instructions for excusing the student?	1	0	1 (Not Answered) 98 (Not Applicable)
Were any late students admitted to the testing room?	4 (BEFORE the testing began) 2 (AFTER the testing began)	92 (There were no late students) 1 (Late students were not admitted)	1
Did any students leave the room for an “emergency” during the testing?	16	83	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>	12	4	1 (Not Answered) 83 (Not Applicable)
Were there any students requiring special accommodations (e.g., students with visual or hearing impairment, Dyslexia)?	7	91	2
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?	93	6	1
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?	95	4	1
Were the conditions in the testing room suitable (lighting, temperature, noise, etc.) for the students to work without distractions?	93	5	2
Did the seating arrangement provide adequate space for students to work and not be distracted by each other?	95	4	1
Did you see any evidence of students attempting to cheat on the tests (e.g., by copying from a neighbor)?	8	91	1

Question	Excellent (%)	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Not Answered (%)
In general, how would you describe the overall quality of the testing session?	53	33	11	2	0	1

**Exhibit 8 General Observations of the Eighth-grade Testing Session – 692 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
Did the student identification information on the booklets correspond with the Student Tracking Form?	96	3	1
Were any defective test books detected and replaced?	3 (BEFORE the testing began) 1 (AFTER the testing began)	95 (BEFORE the testing began) 92 (AFTER the testing began)	2 (BEFORE the testing began) 7 (AFTER the testing began)
<i>If any defective test books were replaced, did the Test Administrator replace them appropriately?</i>	3	1	1 (Not Answered) 95 (Not Applicable)
Did any students refuse to take the test?	2	97	1
<i>If a student refused, did the Test Administrator accurately follow the instructions for excusing the student?</i>	1	0	2 (Not Answered) 97 (Not Applicable)
Were any late students admitted to the testing room?	5 (BEFORE the testing began) 5 (AFTER the testing began)	87 (There were no late students) 2 (Late students were not admitted)	1
Did any students leave the room for an “emergency” during the testing?	11	86	3
<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>	8	3	3 (Not Answered) 86 (Not Applicable)
Were there any students requiring special accommodations (e.g., students with visual or hearing impairment, Dyslexia)?	5	94	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?	91	8	1
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?	95	4	1
Were the conditions in the testing room suitable (lighting, temperature, noise, etc.) for the students to work without distractions?	93	5	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)?	8	91	1

Question	Excellent (%)	Very Good (%)	Good (%)	Fair (%)	Poor (%)	Not Answered (%)
In general, how would you describe the overall quality of the testing session?	49	30	13	5	2	1

## Student Questionnaire Administration

Section C of the Classroom Observation Record comprised the IQCMs' observations of the Student Questionnaire administration, summarized in Exhibits 9 and 10.

IQCMs reported that the Student Questionnaires were distributed according to the Student Tracking Forms and questionnaire labels. Also, in most cases (74% for grade 4 and 82% for grade 8), Test Administrators followed the Student Questionnaire administration script exactly. If the Test Administrator made changes to the script, most frequently these were "minor". In 42 percent of all the fourth-grade sessions, Test Administrators read Student Questionnaire questions aloud (this was not an option for the eighth-grade sessions), while in 50 percent of the sessions, students answered these questions independently. Note that some schools chose to administer the questionnaire on a different date than the TIMSS assessment. In such cases, IQCMs were not required to observe the questionnaire administration. Also, if the same students were assessed for PIRLS/prePIRLS 2011 and TIMSS 2011, students were required to complete only one Student Questionnaire, which most frequently was administered on the first assessment day.

**Exhibit 9: Fourth-grade, Student Questionnaire Administration – 776 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
When the test administrator read the script to end the assessment session followed by the Student Questionnaire administration, did the test administrator announce a break?	87	8	5
Did the Test Administrator distribute the Student Questionnaires according to the Student Tracking Form and questionnaire labels?	90	3	7 (Not Applicable)
Did the test administrator follow the questionnaire administration script in the Test Administrator Manual?	74	18 (Minor changes) 1 (Major changes)	7 (Not Applicable)
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	12	4	3 (Not Answered) 81 (Not Applicable)
<i>Revisions</i>	8	6	5 (Not Answered) 81 (Not Applicable)
<i>Deletions</i>	3	10	6 (Not Answered) 81 (Not Applicable)
Did the test administrator read the questions aloud to the students?	42	50 (students answer the questions independently)	1 (Not Answered) 7 (Not Applicable)

**Exhibit 10: Eighth-grade, Student Questionnaire Administration – 692 Sessions**

Question	Yes (%)	No (%)	Not Answered (%)
When the test administrator read the script to end the assessment session followed by the Student Questionnaire administration, did the test administrator announce a break?	86	12	2
Did the Test Administrator distribute the Student Questionnaires according to the Student Tracking Form and questionnaire labels?	90	6	4 (Not Applicable)
Did the test administrator follow the questionnaire administration script in the Test Administrator Manual?	82	11 (Minor changes) 3 (Major changes)	4 (Not Applicable)
<i>If the Test Administrator made changes to the script, how would you describe them?</i>			
<i>Additions</i>	4	7	3 (Not Answered) 86 (Not Applicable)
<i>Revisions</i>	6	5	3 (Not Answered) 86 (Not Applicable)
<i>Deletions</i>	6	5	3 (Not Answered) 86 (Not Applicable)

### Interview with the School Coordinator

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

- ◆ Shipment of assessment materials;
- ◆ Arrangements for test administration;
- ◆ Responsiveness of the national center to queries;
- ◆ Necessity for make-up sessions; and
- ◆ Organization of classes in the school, as a validation of within-school sampling procedures.

As shown in Exhibits 11 and 12, a large majority of School Coordinators responded that the TIMSS 2011 administration in their school went very well overall (84% for grade 4 and 83% for grade 8), that the provided School Coordinator Manual worked well (93% for grade 4 and 87% for grade 8), and that other school staff members had mostly positive attitudes towards the TIMSS testing (76% for grade 4 and 80% for grade 8).

**Exhibit 11: Interview with the School Coordinator – Grade 4**

Question	Very well, no problems (%)	Satisfactorily, few problems (%)	Unsatisfactorily, many problems (%)	Not Answered (%)
Overall, how would you say the session went?	84	14	0	2
	Positive (%)	Neutral (%)	Negative (%)	Not Answered (%)
Overall, how would you rate the attitude of the other school staff members towards the TIMSS testing?	76	22	1	1
	Worked well (%)	Needs improvement (%)	Not Answered (%)	
Overall, do you feel the School Coordinator Manual worked well for you or does it need improvement?	93	5	2	

**Exhibit 12: Interview with the School Coordinator – Grade 8**

Question	Very well, no problems (%)	Satisfactorily, few problems (%)	Unsatisfactorily, many problems (%)	Not Answered (%)
Overall, how would you say the session went?	83	15	1	1
	Positive (%)	Neutral (%)	Negative (%)	Not Answered (%)
Overall, how would you rate the attitude of the other school staff members towards the TIMSS testing?	80	18	1	1
	Worked well (%)	Needs improvement (%)	Not Answered (%)	
Overall, do you feel the School Coordinator Manual worked well for you or does it need improvement?	87	5	8	

Exhibits 13 and 14 show that there were only a small number of cases where components were missing from shipments of test materials. In some cases where the School Coordinator reported not receiving all of the TIMSS materials, test materials were delivered on the testing day by the external Test Administrator who administered the assessment.

In more than half of the cases (60% for grade 4 and 65% for grade 8), School Coordinators indicated that students were given special instructions, motivational talks, or incentives by a school official or the classroom teacher prior to testing. Ten percent of School Coordinators for fourth grade and 18 percent of School Coordinators for eighth grade anticipated needing a makeup session, and almost all of these coordinators intended to conduct one.

Because the sampling of classes requires a complete list of all classes in the school at the target grade, IQCMs were asked to verify that the class list did indeed include all classes. Most School Coordinators confirmed that the complete list of classes had been documented and that all students appeared in one and only one of these classes.

Finally, a tribute to the planning and implementation of TIMSS 2011 was the fact that almost all of respondents (91% for grade 4 and 86% for grade 8) said they would be willing to serve as a School Coordinator in future international assessments.

**Exhibit 13: Interview with the School Coordinator (Continued) – Grade 4**

Question	Yes (%)	No (%)	Not Answered (%)
Prior to the testing day, did you have time to check your shipment of materials from the national center?	78	17	5
Did you receive the correct shipment of the materials as listed in your School Coordinator Manual and according to the tracking forms?	85	8	7
<i>If no, did the national center provide the missing materials in time for the testing?</i>	3	4	8 (Not Answered) 85 (Not Applicable)
Was the national center responsive to your questions or concerns?	87	5	8
Was the Teacher Questionnaire administered online?	21	77	2
<i>If the Teacher Questionnaire was administered online, did the teacher(s) encounter any problems?</i>	3	18	2 (Not Answered) 77 (Not Applicable)
Was the School Questionnaire administered online?	22	74	4
<i>If the School Questionnaire was administered online, did the person completing it encounter any problems?</i>	1	20	5 (Not Answered) 74 (Not Applicable)
Do you anticipate that a makeup session will be required at your school?	10	89	1
<i>If yes, do you intend to conduct one?</i>	9	1	1 (Not Answered) 89 (Not Applicable)
Did the students receive any special instructions, motivational talk, or incentives to prepare them for the assessment?	60	38	2
Is this a complete list of the classes in this grade in this school?	87	10	3
To the best of your knowledge, are there any students in this grade level who are not in any of these classes?	4	92	4
To the best of your knowledge, are there any students in this grade level in more than one of these classes?	3	94	3
If there was another international assessment, would you be willing to serve as a School Coordinator?	91	6	3

**Exhibit 14: Interview with the School Coordinator (Continued) – Grade 8**

Question	Yes (%)	No (%)	Not Answered (%)
Prior to the testing day, did you have time to check your shipment of materials from the national center?	74	21	5
Did you receive the correct shipment of the materials as listed in your School Coordinator Manual and according to the tracking forms?	84	9	7
<i>If no, did the national center provide the missing materials in time for the testing?</i>	2	6	8 (Not Answered) 84 (Not Applicable)
Was the national center responsive to your questions or concerns?	88	5	7
Was the Teacher Questionnaire administered online?	24	74	2
<i>If the Teacher Questionnaire was administered online, did the teacher(s) encounter any problems?</i>	4	20	2 (Not Answered) 74 (Not Applicable)
Was the School Questionnaire administered online?	24	74	2
<i>If the School Questionnaire was administered online, did the person completing it encounter any problems?</i>	1	22	3 (Not Answered) 74 (Not Applicable)
Do you anticipate that a makeup session will be required at your school?	18	81	1
<i>If yes, do you intend to conduct one?</i>	14	3	2 (Not Answered) 81 (Not Applicable)
Did the students receive any special instructions, motivational talk, or incentives to prepare them for the assessment?	65	33	2
Is this a complete list of the classes in this grade in this school?	86	12	2
To the best of your knowledge, are there any students in this grade level who are not in any of these classes?	6	92	2
To the best of your knowledge, are there any students in this grade level in more than one of these classes?	2	96	2
If there was another international assessment, would you be willing to serve as a School Coordinator?	86	8	6