

# 2011

## TIMSS 2011

# School Coordinator Manual



**TIMSS & PIRLS**  
International Study Center  
Lynch School of Education, Boston College

# TIMSS

## **Instructions for the NRC**

The TIMSS 2011 School Coordinator Manual is provided for you as a template in order to prepare (translate and/or adapt) your national version of the manual that meets your country's needs.

You should use this version of the manual template if your country is participating in just TIMSS at the fourth grade and/or eighth grade, or if PIRLS / prePIRLS and TIMSS at the fourth grade are administered to separate samples of schools.

### ***Adaptation Notes:***

The text appearing in or right after square brackets [ ] either specifies text for deletion, requires a country-specific adaptation, or is a note for you that a country-specific adaptation might be necessary. Since some procedures (e.g., sampling classes within the schools and linking students to their teachers) can differ across countries, it is critical that you adapt this manual according to the specifics in your country. In addition, some points contained in this manual may not apply to your educational system, or it may not be necessary to explain them to the School Coordinators. In other places, you may need to provide more details than are given in this international version. Finally, you should insert appropriate deadlines for all actions to be undertaken by the School Coordinators in your country.

A copy of the Test Administration Form and the Student Response Rate Form are provided in the appendices of this manual. The forms also are provided as separate documents to facilitate your translations and/or adaptations if necessary. You will need to prepare a copy (plus an extra copy for make-up sessions if necessary) of the Test Administration Form for each testing session and a copy of the Student Response Rate Form for each school.

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# Introduction

Thank you for agreeing to be a School Coordinator for the IEA's Trends in International Mathematics and Science Study (TIMSS).

The International Association for the Evaluation of Educational Achievement (IEA) is an independent international cooperative of national research institutions and government agencies that has been conducting studies of cross-national achievement since 1959.

TIMSS 2011 is the fifth in IEA's series of international assessments of student achievement dedicated to improving teaching and learning in mathematics and science. First conducted in 1995, TIMSS reports every four years on the achievement of fourth and eighth grade students. It is designed to measure and interpret differences in national educational systems in order to help improve the teaching and learning of mathematics and science worldwide. About 70 countries are participating in TIMSS 2011. **[Insert name of your country]** is among the countries participating in this important project.

In **[insert name of your country]**, a sample of schools has been selected. Within each of the sampled schools, at least one fourth-grade and/or eighth-grade class will be selected to participate in the assessment. Based on initial information, which you as School Coordinator will be asked to provide, the national center will select the class(es) and provide you with the required survey instruments and materials.

Every student in the selected class(es) will be asked to participate in an achievement testing session and to complete a Student Questionnaire. Additionally, teachers teaching mathematics and/or science to the selected students will receive a Teacher Questionnaire and the school principal will receive a School Questionnaire.

Please note that the study isn't in any way an effort to evaluate the performance of individual students, teachers, or school principals. No data will be published that will enable individual students, teachers, or schools to be identified. The data you are asked to collect will enable us to monitor educational systems and provide policy-relevant information without revealing the identity of the respondents.

To document the quality of the administrative procedures, the national center will send Quality Control Observers to a random selection of 10% of the participating schools. Furthermore, the IEA will also send international Quality Control Monitors to 15 of the participating schools. These observers will not interfere in the testing in any way. Their responsibility is only to observe whether the standardized procedures described in this manual and the Test Administrator Manual (provided later) are followed. It is very important that you provide us with up-to-date information about the dates and times of the testing sessions so that these visits can be scheduled accordingly.

# 1 Your Role as the School Coordinator

Your responsibility as a School Coordinator for TIMSS is to assist us in identifying classes, teachers, and students in the selected school and ensuring the correct distribution, completion, and collection of the administrative and testing materials. You also have an overall responsibility for the administration of the achievement test and background questionnaires in your school.

It is your responsibility to identify and train at least one Test Administrator (which may be yourself) to prepare for and administer the TIMSS achievement test and Student Questionnaires.

Once the testing materials have been delivered to your school, you are responsible for keeping them secure at all times. All testing materials are confidential and should not be photocopied or given to anyone who is not directly involved in the testing. All testing materials, including all completed and unused achievement booklets should be returned to the national center.

In particular, your work will include the following:

- › *Providing a list[s] of [fourth-grade and/or eighth-grade] classes and their mathematics and science teachers*
- › *Providing student information for the selected classes, and assisting in completing a series of tracking forms to track all the class, teacher, and student information*
- › **[Delete this bullet point if parental permission is not required in your country.]**  
*Sending letters and permission forms to parents, and ensuring that the forms are signed and returned in time for testing*
- › *Arranging the dates of the test administration with the national center*
- › *Checking the testing materials when they arrive from the national center, ensuring that they are for the right students and teachers and there are enough copies for all selected students and teachers in the school*
- › *Ensuring that the confidential testing materials are kept in a secure place at all times*
- › *Selecting and training the Test Administrator(s)*
- › *Working with the school principal, the Test Administrator, and the teachers to plan the testing day (e.g., arranging rooms, times, classes, and testing materials)*
- › *Providing Test Administrator(s) with materials necessary for each particular testing session and ensuring that the Test Administrator returns all testing materials to you after the testing session, including the completed tracking forms and any unused materials*
- › *Calculating the student response rates for each testing session, and arranging for a makeup session if the student response rate for an original session is below 90%*
- › *Distributing and collecting the Teacher Questionnaires and recording teacher participation information in the corresponding tracking form*
- › *Returning the required materials to the national center*

All of these tasks are described in detail in this document. If you have any questions or concerns, please contact us: **[Insert contact information of the national center.]**

## 1.1. Provided Resources and Documentation

This School Coordinator Manual describes the steps you should take from the moment you are nominated as the School Coordinator until the moment the completed testing materials are returned to the national center.

In addition to this document, there are several forms and documents that will be provided by the national center to help you work with the national center to sample classes, track students and teachers of the selected classes, and administer the assessments in your school.

### *Survey Tracking Forms*

TIMSS relies on a series of tracking forms to sample classes, assign achievement test booklets and background questionnaires, and track the participation status of the respondents. It is very important that they are completed accurately because they record what happens in all participating schools and are used to assign instruments to the participants.

**[All tracking forms can be completed and submitted to the national center either electronically or on paper.]**

Throughout this document, you will be given directions for completing the tracking forms. All tracking forms will be provided in **[MS Excel format and/or as paper copies]**. If you have any questions about the completion of these forms, please contact the national center. There are four different tracking forms in all, which are listed below.

- › ***Class Listing Form:*** *The national center will prepare a Class Listing Form for your school and send it to you for completion. You will be asked to list all **[fourth-grade and/or eighth-grade]** classes in your school and provide such details as number of students, and names of teachers.*
- › ***Student-Teacher Linkage Form:*** *The national center will prepare a Student-Teacher Linkage Form for each sampled class and send it to you for completion. You will be asked to list students and their teachers in the sampled classes and to link the students to their teachers.*
- › ***Student Tracking Form:*** *The national center will prepare a Student Tracking Form for each sampled class and send it to you for completion by the Test Administrators during test administration.*
- › ***Teacher Tracking Form:*** *The national center will prepare a Teacher Tracking Form(s) for your school and send it to you for completion. You will be asked to use this form to distribute the Teacher Questionnaire(s) and indicate the completion of the Teacher Questionnaire(s).*

### ***Test Administrator Manual***

You will be provided with the Test Administrator Manual, which covers the procedures from the beginning of testing to the return of the testing materials and completed Student Tracking Forms to you, the School Coordinator.

### ***Test Administration Form***

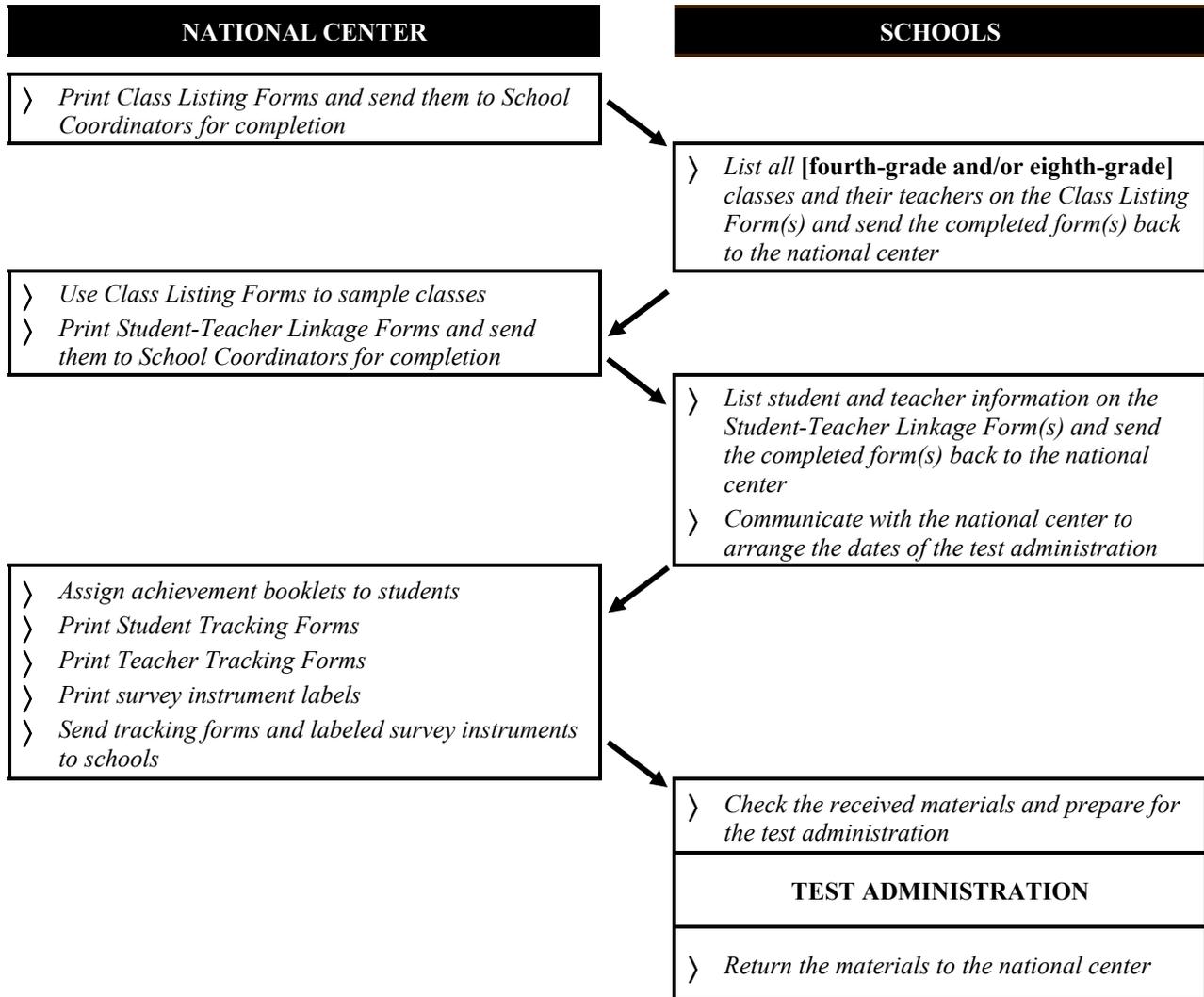
A Test Administration Form should be used during each of the test administration sessions. Test Administrators will be asked to complete the Test Administration Form to document the timing of the sessions and answer a few questions on any special circumstances or problems during the assessment administration. **[A blank Test Administration Form is provided in Appendix A of this document and in the Appendix of the Test Administrator Manual.]**

### ***Student Response Rate Form***

A Student Response Rate Form should be used to calculate and document the student participation rate for each test administration session in order to determine if a make-up session is necessary. Make-up sessions should be conducted if less than 90% of the students in the selected class were present during the testing session. **[A blank Student Response Rate Form is provided in Appendix B of this document.]**

## 1.2. Steps for Working with the National Center

The following diagram illustrates the major steps for working with the national center to exchange information in order to sample classes and prepare for the test administration. These steps are explained in detail throughout this document. The column on the left lists activities to be conducted by the national center, and the column on the right lists activities to be carried out by you, the School Coordinator.



## 2 Identifying Classes, Teachers, and Students

At least one **[fourth-grade and/or eighth-grade]** class will be selected within each school, and all students in the selected class(es) will be assessed. The TIMSS procedures for sampling classes call for randomly sampling intact mathematics classes. This procedure can only be applied if all mathematics classes in the school represent an exhaustive and mutually exclusive partition of all the students in the target grade. That is, every student must be in one and only one of these classes. If all students in a class are required to attend more than one mathematics course (e.g., algebra and geometry), the mathematics class will be either algebra or geometry, but not both. If this is not the case in your school, and students are not grouped by classes in individual classrooms, you should notify the national center in order to receive further instructions on how to proceed.

### 2.1. Completing the Class Listing Form

Your first task is identifying all eligible **[fourth-grade and or eighth-grade]** classes within the school and listing them on the Class Listing Form received from the national center. For each class, this list should include the class name, the grade, **[delete “streams or tracks” if not used in your country]** the stream or track, the number of students enrolled in the class, and class-level exclusion status. **[Delete and or adapt the next two sentences depending on your country’s participation.]** For the **[fourth grade]**, the names of the mathematics and science teachers should be listed. For the **[eighth grade]**, only the names of the mathematics teachers should be identified.

In preparing the list of classes, you should use the class names that you usually use to label the classes in your school. It may be, for example, that the school uses the grade plus a letter for the class name (8a, 8b, etc.), the grade plus a number (8.1, 8.2, etc.), the class location (Room 7, Room 8, etc.), or some other scheme. This is important because these identifiers will later be used to indicate to the Test Administrator which class will be tested and to the teachers which class they should consider in completing their Teacher Questionnaire.

If there are multi-grade classes (e.g., students from more than one grade level in the same class), only the **[fourth-grade / eighth-grade]** students should be counted as a class in the list. For example, if three Grade 7 students, five Grade 8 students and ten Grade 9 students form a multi-grade class and the target grade is eight, then the School Coordinator should record one Grade 8 class with five students in the class list.

**[If applicable, define “streams or tracks” in your country and codes to be used consistently in all schools.]**

All classes in the target grade must be included in the list, even if in rare cases a class needs to be excluded. Examples of class-level exclusions include classes where ALL students belong to at least one of the following three exclusion status categories: 1 – students with functional disabilities; 2 – students with intellectual disabilities; 3 – non-native language speakers. If more than one exclusion category applies, please assign the category that describes the majority of the students in this class. All class-level exclusions must be approved by the national center.

Please return your completed Class Listing Form to the national center no later than **[insert target date]**, along with your name and the telephone number where you can be reached during working hours.

An example of a completed Class Listing Form is provided in Figure 2.1. There are three eighth-grade classes in this example. The classes are identified by the grade (8) and a letter ('a', 'b', 'c').

**Figure 2.1: [Create your example] Example of a Completed Class Listing Form**

| TIMSS 2011 - Class Listing Form - Grade 8 |       |                    |                    |                        |                             |
|---|-------|--------------------|--------------------|------------------------|-----------------------------|
| TIMSS Participant Country                 |       | <name of country>  |                    |                        |                             |
| School Name                               |       | City Public School |                    |                        |                             |
| School ID                                 |       | 0001               |                    |                        |                             |
| School Coordinator Name                   |       | Charles Parker     |                    |                        |                             |
| Phone Number                              |       | +12-456-6789       |                    |                        |                             |
| 1   | 2     | 3                  | 4                  | 5                      | 6                           |
| Class Name                                | Grade | Stream             | Number of Students | Class Exclusion Status | Name of Mathematics Teacher |
| 8a  | 8     |                    | 19                 |                        | Linda Green                 |
| 8b  | 8     |                    | 23                 |                        | Sarah Roberts               |
| 8c  | 8     |                    | 20                 |                        | Debbie Smith                |

## 2.2. Completing the Student-Teacher Linkage Form(s)

Using your completed Class Listing Form, the national center will select the class(es) to be tested in your school. In about **[specify the time]** working days, the national center will inform you which class(es) are selected and will send the Student-Teacher Linkage Form(s) for the selected class(es) for you to complete.

As the first step in completing the Student-Teacher Linkage Form(s), you should list all students in the corresponding class in Column 1. For each student in the class, this list should indicate the student's name (or identification number) in Column 1, date of birth in Column 2, gender (using codes—1 for female and 2 for male) in Column 3, and exclusion code in Column 4. Please also indicate if a student does not take any mathematics or science courses in Column 6.

Once the student information is complete, you should verify that the teacher information, listed in the header of Column 5, is correct and adapt and/or add information as necessary. All teachers teaching mathematics and/or science to the students in the selected class should be listed in the header of Column 5. **[If the forms are completed electronically, please make sure that teacher names, class (course) names, and subject codes are entered in the corresponding, lighter shaded, cells.]**

### **Exclusion Categories**

If a student is to be excluded from testing, you are asked to indicate the exclusion code in Column 4. It is the responsibility of the school officials to ensure that only students meeting the conditions for exclusions are excluded. Students whose parents do not permit them to participate should not be assigned an exclusion code. When in doubt, the student should always be included.

If your country and school has a special policy for handling testing differently for students who are conceptually capable of taking the test but unable to access it because of a special need, such as hearing or visual impairment, dyslexia, or physical impairment, you should apply the same policy to the TIMSS testing.

You should use the following codes to indicate the reason for exclusion: **[Carefully define the national conditions using the following internationally defined categories under which students may be excluded and provide precise instructions for School Coordinators and Test Administrators on how to handle student exclusions.]**

- |        |  |
|--------|--|
| Code 1 | Students with functional disabilities. These are students who have permanent physical disabilities in such a way that they cannot perform in the TIMSS testing situation. Students who can respond should be included in the testing.  |
| Code 2 | Students with intellectual disabilities. These are students who are considered in the professional opinion of the school principal or by other qualified staff members to have intellectual disabilities or who have been psychologically tested as such. This includes students who are emotionally or mentally unable to follow even the general instructions of the test. Students should not be excluded solely because of poor academic performance or normal disciplinary problems. It should be noted that the exclusion of students with dyslexia, or other such learning disabilities, is not acceptable. |
| Code 3 | Non-native language speakers. These are students who are unable to read or speak the language of the test and would be unable to overcome the language barrier in the test situation. Typically, a student who has received less than one year of instruction in the language of the test should be excluded, but there may be a need to adapt this definition in different countries.   |

### Class (Course) Name

All teachers teaching mathematics and/or science to the students in the selected class should be listed in the header of Column 5. **[Delete the rest of the paragraph if such linkage situation is not applicable in your country. If it is applicable, however, provide such an example of completed Student-Teacher Linkage Form.]** If a teacher teaches a mathematics and/or science course with only some of the students from the selected class (the course may be formed in a combination with students from another class), the Class (Course) Name in this case would not be the name of a sampled class, but rather the name of the course taught by this teacher.

### Subject Codes

For each teacher listed in the header of Column 5, you should indicate a Subject Code. This code corresponds to the subject(s) this teacher teaches to students in the selected class. **[Delete the Subject Codes that are not applicable in your country.]** The following codes should be used:

#### Fourth Grade:

|        |                         |
|--------|-------------------------|
| Code 1 | Mathematics             |
| Code 6 | Science                 |
| Code 7 | Mathematics and Science |

#### Eighth Grade:

|         |                           |
|---------|---------------------------|
| Code 1  | Mathematics               |
| Code 2  | Physics                   |
| Code 3  | Biology                   |
| Code 4  | Chemistry                 |
| Code 5  | Earth Science             |
| Code 6  | Integrated Science        |
| Code 8  | Physics / Chemistry       |
| Code 9  | Biology / Earth Science   |
| Code 10 | Biology / Chemistry       |
| Code 11 | Physics / Biology         |
| Code 12 | Physics / Earth Science   |
| Code 13 | Chemistry / Earth Science |
| Code 14 | Natural Science           |
| Code 15 | Scientific Work           |
| Code 16 | <Country Specific 1>      |
| Code 17 | <Country Specific 2>      |

As the final step, link each student to his or her teachers by placing a checkmark in the corresponding cells of Column 5 showing that a student is taught by a particular teacher.

Please return your completed Student-Teacher Linkage Form to the national center no later than [insert target date].

An example of a completed Student-Teacher Linkage Form is provided in Figure 2.2.

**Figure 2.2: [Create your example] Example of a Completed Student-Teacher Linkage Form**

| TIMSS 2011 - Student-Teacher Linkage Form - Grade 8 |               |    |      |                                   |                  |                                     |               |                                     |               |                                     |               |                                     |               |
|---|---------------|----|------|-----------------------------------|------------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|-------------------------------------|---------------|
| <b>School Name:</b>                                 |               |    |      | <b>TIMSS Participant Country:</b> |                  |                                     |               |                                     |               |                                     |               |                                     |               |
| City Public School                                  |               |    |      | <name of country>                 |                  |                                     |               |                                     |               |                                     |               |                                     |               |
|   |               |    |      | [a]                               | [b]              | [c]                                 | [d]           |                                     |               |                                     |               |                                     |               |
|   |               |    |      | I ID                              | Class ID         | Class Name                          | Grade         |                                     |               |                                     |               |                                     |               |
|   |               |    |      | 0001                              | 000101           | 8a                                  | 8             |                                     |               |                                     |               |                                     |               |
| 1   | 2             | 3  | 4    | 5                                 |                  |                                     |               |                                     |               |                                     |               | 6                                   |               |
|   |               |    |      | Teacher Information               |                  |                                     |               |                                     |               |                                     |               |                                     |               |
| Student Name or Number                              | Date of Birth |    |      | Gender                            | Exclusion Status | Linda Green                         |               | Peter Bright                        |               |                                     |               |                                     |               |
|   | DD            | M  | YYYY |                                   |                  | Teacher's Name: Class (Course) Name | Subject Code: | Teacher's Name: Class (Course) Name | Subject Code: | Teacher's Name: Class (Course) Name | Subject Code: | Teacher's Name: Class (Course) Name | Subject Code: |
| Mark Young  | 14            | 04 | 1995 | 2                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Laura Turner  | 06            | 06 | 1994 | 1                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Mary Anderson                                       | 22            | 09 | 1993 | 1                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Paul Brown  | 29            | 11 | 1993 | 2                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Partricia King                                      | 17            | 08 | 1995 | 1                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| David Thompson                                      | 19            | 01 | 1995 | 2                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Charles Harris                                      | 02            | 02 | 1994 | 2                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Maria Hernandez                                     | 23            | 10 | 1994 | 1                                 | 3                | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Nancy Miller  | 11            | 07 | 1994 | 1                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |
| Michael Wilson                                      | 05            | 02 | 1995 | 2                                 |                  | X                                   | X             |                                     |               |                                     |               |                                     |               |

**[Delete the next section if not applicable in your country.] *Using Student Numbers Instead of Names***

If the school is not allowed to identify the names of students, you can use specific identification numbers to identify students later on, or you should proceed as follows:

- › *Prepare two versions of the Student-Teacher Linkage Form for each corresponding class—one with sequential numbers and student names and the other with just a sequential number to represent each student. The students on both sheets must be listed in the same order, and the rest of the information should be identical on both versions of the form(s).*
- › *Send the version without student names to the national center. Keep the version with student names in the school and use it to identify students in the Student Tracking Forms during the test administration later on. You should keep the form(s) with student names in a secure place until all testing materials have been sent back to the national center.*

All achievement booklets and Student Questionnaires will be identified by these numbers, rather than by names.

## **3 Preparing for the Test Administration**

To prepare for the test administration, you will need to select and train the Test Administrator(s), schedule testing dates with the national center, **[distribute parental permission forms,]** and familiarize yourself with the timing and other guidelines of the testing sessions.

### **3.1. Selecting and Training the Test Administrator(s)**

It is your responsibility to identify at least one Test Administrator (which may be yourself). You might need more than one Test Administrator if TIMSS is administered to more than one class in your school.

The Test Administrator should not be the teacher of the sampled class but rather another teacher in the school or a school staff member, such as a guidance counselor. The Test Administrator should be a person who has good organizational and classroom management skills. The teacher of the class should be encouraged to attend the testing session as an observer whenever possible.

Once you have identified the Test Administrator(s), you will need to train him or her. You should explain the study, the testing materials, and the testing sessions. The Test Administrator Manual describes all administrative procedures for the test. Read the Test Administrator Manual carefully, and review all procedures with the Test Administrator about a week prior to the testing session. Any questions that the Test Administrator might have should be answered well in advance of the testing session.

You should know the testing procedures as thoroughly as the Test Administrator. If he/she is sick or absent on the testing date, you may be required to administer the tests.

### **3.2. Scheduling the Testing Dates**

The test can be administered between **[insert range for the testing dates]**. You should work with the school principal and the classroom teachers involved to ensure that the dates you choose do not conflict with holidays, or other events at the school. Avoid testing students on the first or the last day of the school week, or before a school holiday.

Testing should preferably take place during the first periods of the school day. Scheduling the testing sessions outside school hours, or in the late hours of the school day, might increase absenteeism and is therefore not recommended.

While it is highly recommended to administer the Student Questionnaires on the same day as the achievement test, if this is not possible, you may choose a different day. This day should be after the achievement test administration. You should allocate about 30 minutes for completion of the Student Questionnaire.

**[Modify the next paragraph if you use a different way to communicate with schools about testing dates.]** You should notify the national center of the date and time of testing using the self-addressed postcards that have been provided. If there are any changes in the schedule, you should notify the national center immediately. This is important because some testing sessions will be visited by a representative of the national center or an international Quality Control Monitor on the day of testing.

The teacher(s) and students should be notified of the time and location of the testing.

### **3.3. [Delete the next section if not applicable in your country.] Distributing Parental Permission Forms**

Schools may require parental permission for students to participate in the testing. If this is the case in your school, parental information or permission letters must be distributed as soon as you know which class(es) has been selected. In these letters, you should explain the study and what students will be asked to do. **[Provide a sample letter(s) for parental permission with the national version of the manual. Example letters for you are available in Appendix B of the “Survey Operations Procedures for Administering PIRLS and TIMSS in 2011: Unit 1.”]** An example letter(s), including a permission form, will be provided by the national center. You should ask the parents to sign the permission form and return it to you as soon as they can. Every effort should be made to ensure the participation of all sampled students.

### **3.4. Arranging for the Testing Sessions**

For each testing session, you will need to arrange a room that is quiet, spacious, and allows students to work without distractions. There should be enough aisle space to allow the Test

Administrator to move quietly between the students while they work and enough writing and seating space for the number of students that will be tested. Although the teacher of the students should not be the Test Administrator, he or she should be encouraged to attend the testing session.

### 3.5. Timing of the Testing Sessions

As the School Coordinator, you are responsible for arranging the required amount of uninterrupted time for each testing session. Each testing session should require a maximum of 2.5 hours.

It is essential that the Test Administrator strictly follows the time limits indicated below. The actual timing of the testing sessions should be recorded by the Test Administrator on the Test Administration Form, along with any deviations in the timing.

The administration of the achievement test is divided into two parts, coinciding with the two parts of the achievement booklets. Both parts of the achievement test have to be administered to students on the same day, with a short break in between. This break should be approximately 15 minutes, depending on the school scheduling policy, but should not exceed 30 minutes. A “lunch break” of one and a half hours does not qualify as a short break.

The timing of the achievement testing sessions for TIMSS should be as follows **[If either fourth- or eighth-grade is not tested in your country, delete the description on timing for that grade.]**:

#### **At the fourth grade:**

- › *approximately 10 minutes for preparation, including preparation of students, reading instructions, distribution of test booklets, etc.*
- › *36 minutes for answering Part 1 of the achievement test booklet*
- › *a short break of approximately 15 minutes*
- › *5 minutes for preparing students for Part 2, including reading directions from the Test Administrator Manual, etc.*
- › *36 minutes for answering Part 2 of the achievement test booklet.*

#### **TIMSS at the eighth grade:**

- › *approximately 10 minutes for preparation, including preparation of students, reading instructions, distribution of test booklets, etc.*
- › *45 minutes for answering Part 1 of the achievement test booklet*
- › *a short break of approximately 15 minutes*
- › *5 minutes for preparing students for Part 2, including reading directions from the Test Administrator Manual, etc.*
- › *45 minutes for answering Part 2 of the achievement test booklet.*

If a student has completed Part 1 or Part 2 of his or her test booklet before the achievement testing session is over, he/she may use the time to review his/her answers to the items within the corresponding part of the booklet. It is highly advisable for students to remain in the testing room until the testing time is over. **[You might either provide Test Administrators with some activities sheets for students to work on, or instruct Test Administrators to suggest that students have a book easily available to read quietly in such cases.]** Allowing students to leave the classroom might result in much lower participation rates for either Part 2 of the achievement test or the Student Questionnaire. However, if a student needs to leave the room for an emergency, his or her achievement test booklet (or questionnaire) should be collected and kept secure during the time a student is not in the class.

## 4 Tasks Upon Arrival of the Testing Materials

When you receive the testing materials from the national center, you should check them to make sure everything is included, keep them secure at all times, administer the Teacher Questionnaires and School Questionnaire(s), and make arrangements for the testing sessions.

### 4.1. Checking and Storing the Testing Materials

About **[indicate a number of working days or change to a number of weeks (should be a minimum of 7 working days prior to the scheduled testing date)]** working days prior to the scheduled date of testing, you will receive the materials described below. As soon as these materials arrive, you should check the shipment to make sure everything has been included.

For your school, you should receive:

- › *a cover letter, including a list of the classes and students to be tested and a list of the contents of the package*
- › **[mailing label(s) addressed to the national center to facilitate the return of all the testing materials]**
- › *at least one copy of the Test Administrator Manual*
- › **[Adapt if the School Questionnaire will be administered online. In such a case paper printed online directions should be sent.]** *one [fourth-grade and/or eighth-grade] School Questionnaire*
- › **[Adapt if the Teacher Questionnaires will be administered online. In such a case paper printed online directions should be sent.]** *a set of Teacher Questionnaires along with the Teacher Tracking Form(s)*
- › *one to two extra unlabeled paper copies of the [fourth-grade and/or eighth-grade] School Questionnaire[s] and Teacher Questionnaire(s).*

For each sampled class, you should receive:

- › *a Student Tracking Form*
- › *one achievement booklet and one Student Questionnaire for each student in the class and three spare copies, as listed on the Student Tracking Form*
- › *a copy of the Test Administration Form, plus one or two extra copies in case a make-up session is necessary*
- › *a copy of the Student Response Rate Form.*

If you do not receive the complete set of testing materials by **[indicate target date]**, you should contact the national center immediately.

As School Coordinator, you are responsible for the security and safe storage of all materials at all times. The testing materials must not be given to anyone except the Test Administrator on the testing day. The Test Administrator will distribute them to the selected students. They must not be duplicated or displayed in any way. The materials should be locked up when not in use, and any unused materials should be returned to the national center.

## **4.2. Administering the School Questionnaire**

You should distribute the School Questionnaire to the school principal as soon as the materials arrive at the school. If your school does not have a school principal, then it is your responsibility to identify another appropriate person to complete the School Questionnaire.

**[Delete the next paragraphs if the School Questionnaires are not administered online.]** If the School Questionnaire(s) will be completed online, the school principal will receive printed directions. Within the directions, he or she will find information on accessing the online questionnaire. If the principal has problems completing the questionnaire online or he or she simply prefers a paper copy, you can use the provided spare copy of the School Questionnaire. In such a case, you should either copy all information from the original label, or staple the original cover page with the identification label to the spare copy used.

You should instruct the school principal that the questionnaire takes approximately 30 minutes to complete and should be completed **[unless completed online]** and returned to you no later than the date of the test administration.

## **4.3. Administering the Teacher Questionnaire(s)**

All teachers listed on the Teacher Tracking Form(s) will receive a Teacher Questionnaire. The label on the cover page of each questionnaire will indicate the name and identification code of the teacher to whom the questionnaire should be administered. You should distribute the Teacher Questionnaires to the designated individuals. Only teachers whose names are indicated on the teacher questionnaires should be given the Teacher Questionnaire. No substitutions should be allowed.

You should instruct the teachers that the questionnaire takes approximately 30 to 45 minutes to complete and should be completed **[unless completed online]** and returned to you no later than the date of the test administration.

**[Delete the next two paragraphs if Teacher Questionnaires are not administered online.]** If some or all Teacher Questionnaires will be completed online, teachers will receive printed directions with an identification label containing the name and identification code of the teacher to whom the questionnaire should be administered. Within the directions, teachers will find information on accessing the online questionnaire. If a teacher has problems completing the questionnaire online or he or she simply prefers a paper copy, you can use a corresponding copy of the Teacher Questionnaire. In such a case, you should either copy all information from the original label, or staple the original paper printed online directions to the spare copy used.

Teachers completing their questionnaires online will be required to enter their Subject Code at the time of logging in into the online system. The Subject Code described earlier in this manual can be found on their online directions labels and identifies which subject(s) he or she is teaching to the corresponding class. For the fourth-grade Teacher Questionnaires, the online system will display mathematics, and/or science related questions based on the entered Subject Code information. If for any reason a wrong set of questions is displayed (e.g., a teacher teaches mathematics to the corresponding class, but science-related questions are displayed), the teacher may exit the questionnaire at any time and log in again using Subject Code 99. Questions related to both subjects will be displayed and the teacher can simply skip the parts that are not applicable. For the eighth-grade, there are two intact questionnaires—Mathematics Teacher Questionnaire and Science Teacher Questionnaire—and they are displayed based on the provided Web-page link. If a wrong questionnaire is displayed, you should require the national center to provide the correct Web-page link, or provide the corresponding paper questionnaire for that teacher.

Once the teachers have returned their completed questionnaires, you should use the following codes to record the teacher participation status in the Teacher Tracking Forms(s):

|        |   |
|--------|---|
| Code R | Returned completed  |
| Code N | Not completed   |
| Code O | <b>[Use this code only if some or all Teacher Questionnaires are administered online]</b> This code will be assigned in advance for the teachers completing their questionnaire online. If a teacher chooses to complete a paper copy of the questionnaire instead, you should change the code of his or her participation status to either “R” or “N” accordingly. |

# 5 Tasks on the Testing Day

There might be one or more testing days in your school (e.g., testing more than one class, **[testing both fourth grade and eighth grade]**, possible make-up sessions). Your major tasks for each testing session are described in the sections below.

## 5.1. Before the Testing Session

You will need to ask the Test Administrator to be present about one hour before the testing session begins. At this time, you should give the materials to the Test Administrator. Check the room that will be used to make sure there is enough writing and seating space for the number of students that will be tested.

To speed up distribution of the student materials on the testing day, check that the packages with the test booklets and the Student Questionnaires are sorted in the same sequence as the students are listed in the Student Tracking Form.

Enter the following information on the Test Administration Form:

- › *Class ID for the class to be tested (the information can be found on the corresponding Student Tracking Form)*
- › *school name*
- › *name of the class being tested*
- › *name of the School Coordinator*
- › *name of the Test Administrator*
- › *position of the Test Administrator in the school*
- › *an indication of whether this is a regular or a make-up session*
- › *date of testing*
- › *scheduled starting time of the testing session.*

Make sure that the Test Administrator has the following materials:

- › *the Test Administrator Manual*
- › *the Student Tracking Form for the class tested*
- › *packages with the achievement test booklets and Student Questionnaires*
- › *a copy of the Test Administration Form that you prepared*
- › *a stopwatch, timer, or watch with a second hand*
- › *a supply of pens or pencils [For scanning purposes, fine liners or ballpoint pens with black or blue ink should be used. The use of fountain pens, pencils, crayons, or felt tip pens should be avoided.]*

## 5.2. During the Testing Session

Check that the Test Administrator conducts the testing session in accordance with the instructions in the Test Administrator Manual and that the Test Administration Form is completed properly.

During the testing sessions, visit the testing room(s) to make sure everything is going well and help the Test Administrator if he or she has any problems.

Please note that for all testing sessions, students must store away all their electronic devices (e.g., cell phones, portable computers, photo or video cameras) for the duration of the test administration. **[Calculators are allowed for the eight-grade achievement testing sessions.]**

### *Students with Special Needs*

If your country and school has a special policy for handling testing differently for students who are conceptually capable of taking the test but unable to access it because of a special need, such as hearing or visual impairment, If your country and school has a special policy for handling testing differently for students who are conceptually capable of taking the test but unable to access it because of a special need, such as hearing or visual impairment, dyslexia, or physical impairment, you should apply the same policy to the TIMSS and/or **[PIRLS / prePIRLS]** testing.

#### *5.2.1. Completing the Student Tracking Form*

The Student Tracking Form is important to the test administration. In particular, it specifies which test booklet should be given to each student, and should be used to record students' participation status.

During the test administration, the Test Administrator will be asked to record which students were administered the test and which were absent. The column dedicated to recording student participation status is divided into two sections—one for the main or regular session and the other (shaded) for a make-up session if one is being held. A makeup session should be held if the student response rate is below 90% in the class. It is very important to ensure that the Test Administrator completes the Student Tracking Form accurately.

You will find that there are more pre-coded Student IDs in the Student Tracking Form than there are students in the class. The Test Administrator should use these extra records along with the spare achievement test booklets and/or Student Questionnaires as follows:

- › *If there is a new student in the class at the time of testing who was not recorded in the Student Tracking Form, the Test Administrator should use one spare booklet and the corresponding Student Questionnaire. The Test Administrator should write the name of the student on the copies used and complete the Student Tracking Form using the corresponding row from the three rows (marked with <A>) dedicated to spare test instruments.*
- › *If an originally assigned achievement booklet and/or Student Questionnaire is damaged and needs to be replaced with one of the spare copies provided for each sampled class, the Test Administrator should copy the name of the student, the original student identification number (Student ID), and CheckSum onto the spare copy(ies) and add a note on the corresponding Student Tracking Form.*

The Test Administrator should code the participation status of the students as follows:

|         |  |
|---------|--|
| Code C  | Student participated in the session  |
| Code SA | <b>[Use the code only if applicable in your country.]</b> Student participated in the session with special accommodation |
| Code A  | Student was absent from the session  |
| Code P  | <b>[Use the code only if permission is necessary for testing]</b> Parental permission was denied                         |
| Code NA | Student had left school permanently.   |

A student should be marked as having participated even if he or she completed only one of the two parts of the achievement test booklet. No code needs to be assigned to students who were excluded from the assessment.

### 5.3. After the Testing Session

The Test Administrator should return the completed and unused achievement test booklets and Student Questionnaires, together with the completed Student Tracking Form to you immediately after the testing session.

Check that the Test Administrator has entered the participation information correctly into the Student Tracking Form. If a student booklet has not been used (e.g., because the corresponding student was absent), you should check that the Test Administrator has correctly recorded this in the Student Tracking Form.

Check that the Test Administration Form has been completed properly, and include any information that you think is necessary.

### 5.3.1. Calculating Student Response Rate and Holding a Make-up Session

It is very important that a high level of student participation is reached. To determine whether a make-up session is necessary, student response rates should be computed for each class individually.

You should first complete the general information on the Student Response Rate Form (e.g., Country, School ID, School Name). Then, to determine if a make-up session needs to be held, you should perform the following calculations and record the corresponding information in the Student Response Rate Form.

For each testing session, you should complete the Student Response Rate Form as follows:

- › Record the Class ID in Column 1
- › Record the number of students in the class who were present during at least one part of the achievement testing session (Column 2). This is indicated by the code “C - Participated” or “SA – Participated with special accommodation” in the Participation Status column of the corresponding Student Tracking Form.
- › Record the number of students in the class who were absent from the testing session (both parts) or did not receive parental permission to participate (Column 3). This is indicated by the code “A - Absent” or “P – No parental permission” in the Participation Status column of the corresponding Student Tracking Form. Do not count students with the code “NA – Left school Permanently”
- › Add the values in columns 2 and 3 for each class and put the result in Column 4
- › Calculate the response rate of students for each class as:

$$\text{Response Rate} = 100 \times \frac{\text{students present}}{\text{students present} + \text{students not present}} = \boxed{\phantom{000}} \%$$

- › Record the result of the response rate calculation in Column 5

If the response rate is less than 90% for any of the selected classes, a make-up session is required in the school. If the low student response rate is only due to students being absent because parents have refused permission, a make-up session would not be possible and is not required.

In the lower part of the Student Response Rate Form, calculate the response rate for the make-up sessions according to the directions above.

Make-up sessions should be conducted if less than 90% of the students in the selected class were present during the testing session. The make-up sessions should be held for the absent students as soon as possible after the originally scheduled testing date. One make-up session can be held for all students in the school who were absent during the original testing session.

Only students who were originally selected as part of the sample and who are listed on the Student Tracking Form should be tested. No substitutions of students are allowed.

You should follow the same procedures for the make-up session as for the regular session. During the make-up session, the Test Administrator should indicate in the Student Tracking Form (the shaded part of the Participation Status column) which students were present during the make-up session and which were absent. The Test Administrator should also complete a Test Administration Form for the make-up session.

## 6 Returning Materials to the National Center

After the administration is finished and the testing materials have all been accounted for, you should prepare a brief report for the national center describing how the administration went in your school and indicating any problems or difficulties you had. Then you should return all materials to the national center using the shipping labels provided. **[Modify this if you have different arrangements for collecting materials from schools.]**

This package should contain:

- › *the completed Student Tracking Form(s)*
- › *a package of the completed and unused achievement test booklets, sorted in the order in which they are listed in the corresponding Student Tracking Form*
- › *a package of the completed and unused Student Questionnaires, sorted in the order in which they are listed in the corresponding Student Tracking Form*
- › *the completed Teacher Tracking Form*
- › *the completed and unused Teacher Questionnaires*
- › *the completed and unused School Questionnaires*
- › *the completed Test Administration Form(s) and Student Response Rate Form(s)*

All materials must be sent to the national center no later than **[insert target date]**. If you have any questions, please contact the national center.

**Thank you again for your help in conducting this important international study.**



# **Appendix A: Test Administration Form**



# TIMSS 2011

## Test Administration Form – [Grade 4 or 8]

Class ID:

(1) School Name:

(2) Class Name:

(3) School Coordinator Name:

(4) Test Administrator Name:

(5) Test Administrator's Position:

TIMSS national center staff

Teacher from school but not teacher of the selected class

Other, please describe

(6) Type of testing session:  Regular  Make-up

(7) Date of testing:

(8) Scheduled starting time:

(9) **Timing of Test and Questionnaire Sessions**

| Start time | End time |   |
|------------|----------|---|
| (9a)       | (9b)     | Administrative tasks (preparation of students, reading of instructions, distribution of achievement test booklets, etc.)                  |
| (10a)      | (10b)    | Testing, first part   |
| (11a)      | (11b)    | Preparation of students for second part   |
| (12a)      | (12b)    | Testing, second part  |
| (13a)      | (13b)    | Session for the Student Questionnaire (If the Student Questionnaire is administered on a different date than the test, write in the date) |

**14**

---

Were there any special circumstances or unusual events during the testing session (e.g., loud noises, students leaving or disturbing the testing session, or attempting to cheat, fire or smoke alarms, etc.)?

No--       Yes, please explain--

**15**

---

Did students have any particular problems with the testing (e.g., tests too difficult, confusing, struggling with any particular item, etc.)?

No--       Yes, please explain--

**16**

---

Were there any problems with the testing materials (e.g., errors or omissions in the Student Tracking Forms, incorrect test booklet assignments, or insufficient booklets)?

No--       Yes, please explain--

**17**

---

Were there any students requiring special accommodations (e.g., students with visual or hearing impairment, dyslexia, etc.)?

No--       Yes, please specify the accommodation(s) provided--

**18**

---

Did a Quality Control Monitor observe the testing session?

No--       Yes, please explain--

## **Appendix B: Student Response Rate Form**



# TIMSS 2011

## Student Response Rate Form

Country:

School ID:  School Name:

| Regular-Session |                                      |  |  |                      |
|-----------------|--------------------------------------|--|--|----------------------|
| (1)<br>Class ID | (2)<br>Number of<br>Students Present | (3)<br>Number of<br>Students Not<br>Present<br>(Do Not Include<br>Students Who Have<br>Left School<br>Permanently) | (4)<br>Number of<br>Students Present +<br>Number of<br>Students Not<br>Present | (5)<br>Response Rate |
|                 |                                      |  |  |                      |
|                 |                                      |  |  |                      |
|                 |                                      |  |  |                      |

*If Student Response Rate is less than 90% then a make-up session is required. If the low student response rate is only due to students with no parental permission, a make-up session would not be possible and is not required.*

| Make-up Session |                                      |  |  |                      |
|-----------------|--------------------------------------|--|--|----------------------|
| (1)<br>Class ID | (2)<br>Number of<br>Students Present | (3)<br>Number of<br>Students Not<br>Present<br>(Do Not Include<br>Students Who Have<br>Left School<br>Permanently) | (4)<br>Number of<br>Students Present +<br>Number of<br>Students Not<br>Present | (5)<br>Response Rate |
|                 |                                      |  |  |                      |
|                 |                                      |  |  |                      |
|                 |                                      |  |  |                      |

The response rate is calculated as follows:

$$\text{Response Rate} = 100 \times \frac{\text{students present}}{\text{students present} + \text{students not present}} = \boxed{\phantom{000}} \%$$





The background features a stylized globe with a grid of latitude and longitude lines. The globe is rendered in shades of light blue and white. A dark blue triangular shape is positioned on the left side, containing the year '2011'. A horizontal green bar is located below the year. The text 'TIMSS' is written in a large, blue, serif font at the bottom of the image.

2011

TIMSS