



Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

# School Questionnaire

<TIMSS National Research Center Name>

<Address>



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

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# School Questionnaire

Your school has agreed to participate in TIMSS Advanced 2015 (Trends in International Mathematics and Science Study), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS Advanced measures trends in student achievement in advanced mathematics and physics and studies differences in national education systems in order to help improve teaching and learning worldwide.

This questionnaire is addressed to school principals and department heads who are asked to supply information about their schools. Since your school has been selected as part of a nationwide sample, your responses are very important in helping to describe the school system in <country>.

It is important that you answer each question carefully so that the information provided reflects the situation in your school as accurately as possible. Some of the questions will require that you look up school records, so you may wish to arrange for the assistance of another staff member to help provide this information.

Since TIMSS Advanced is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in <country>. Nevertheless, it is important that you do your best to answer all of the questions so comparisons can be made across countries in the study.

It is estimated that you will need approximately 30 minutes to complete this questionnaire. We appreciate the time and effort that this takes and thank you for your cooperation and contribution.

When you have completed the questionnaire, please place it in the accompanying envelope and return it to:

<Insert country-specific information here>.

Thank you.

# TIMSS ADVANCED 2015

# School Enrollment and Characteristics

## 1

What is the total enrollment of students in your school as of <first day of month TIMSS Advanced testing begins, 2015>?

\_\_\_\_\_ students  
Write in the number.

## 2

What is the total enrollment of <twelfth grade> students in your school as of <first day of month TIMSS Advanced testing begins, 2015>?

\_\_\_\_\_ students  
Write in the number.

## 3

Approximately what percentage of students in your school have the following backgrounds?

Check **one** circle for each line.

	0 to 10%	11 to 25%	26 to 50%	More than 50%
a) Come from economically disadvantaged homes -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Come from economically affluent homes -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## 4

Approximately what percentage of students in your school have <language of test> as their native language?

Check **one** circle only.

- More than 90% ---
- 76 to 90% ---
- 51 to 75% ---
- 26 to 50% ---
- 25% or less ---

## 5

A. How many people live in the city, town, or area where your school is located?

Check **one** circle only.

- More than 500,000 people ---
- 100,001 to 500,000 people ---
- 50,001 to 100,000 people ---
- 30,001 to 50,000 people ---
- 15,001 to 30,000 people ---
- 3,001 to 15,000 people ---
- 3,000 people or fewer ---

B. Which best describes the immediate area in which your school is located?

Check **one** circle only.

- Urban—Densely populated ---
- Suburban—On fringe or outskirts of urban area ---
- Medium size city or large town ---
- Small town or village ---
- Remote rural ---

## 6

What percentage of <twelfth grade> students in your school are taking each of the following?

Write in the percent.

- a) <Advanced Mathematics> --- \_\_\_\_\_ %
- b) <Physics> ----- \_\_\_\_\_ %

## Instructional Time

7

For the <twelfth grade> students in your school:

A. How many days per year is your school open for instruction?

\_\_\_\_\_ days  
Write in the number.

B. What is the total instructional time, excluding breaks, in a typical day?

\_\_\_\_\_ minutes  
Write in the number of minutes per day.  
Please convert the number of hours into minutes.

C. In one calendar week, how many days is the school open for instruction?

Check **one** circle only.

- 6 days---
- 5 1/2 days---
- 5 days---
- 4 1/2 days---
- 4 days---
- Other---

## Resources and Technology

8

A. Does your school have a school library?

Check **one** circle only.

Yes---

No---

(If No, go to #9)

If Yes,

B. Approximately how many books (print and digital) with different titles does your school library have (exclude magazines and periodicals)?

Check **one** circle in each column.

	Print	Digital
250 or fewer---	<input type="radio"/>	<input type="radio"/>
251–500---	<input type="radio"/>	<input type="radio"/>
501–2,000---	<input type="radio"/>	<input type="radio"/>
2,001–5,000---	<input type="radio"/>	<input type="radio"/>
5,001–10,000---	<input type="radio"/>	<input type="radio"/>
More than 10,000---	<input type="radio"/>	<input type="radio"/>

C. Approximately how many titles of magazines and other periodicals (print and digital) does your school library have?

Check **one** circle in each column.

	Print	Digital
0---	<input type="radio"/>	<input type="radio"/>
1–5---	<input type="radio"/>	<input type="radio"/>
6–10---	<input type="radio"/>	<input type="radio"/>
11–30---	<input type="radio"/>	<input type="radio"/>
31 or more---	<input type="radio"/>	<input type="radio"/>

**How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following?**

Check **one** circle for each line.

Check **one** circle for each line.

**A. General School Resources**

Not at all      A little      Some      A lot

a) Instructional materials (e.g., textbooks) ----- ○ — ○ — ○ — ○

b) Supplies (e.g., papers, pencils, materials) ----- ○ — ○ — ○ — ○

c) School buildings and grounds ----- ○ — ○ — ○ — ○

d) Heating/cooling and lighting systems ----- ○ — ○ — ○ — ○

e) Instructional space (e.g., classrooms) ----- ○ — ○ — ○ — ○

f) Technologically competent staff ----- ○ — ○ — ○ — ○

g) Audio-visual resources for delivery of instruction (e.g., interactive white boards, digital projectors) ----- ○ — ○ — ○ — ○

h) Computer technology for teaching and learning (e.g., computers or tablets for student use) ----- ○ — ○ — ○ — ○

i) Resources for students with disabilities ----- ○ — ○ — ○ — ○

**B. Resources for Advanced Mathematics Instruction**

Not at all      A little      Some      A lot

a) Teachers with a specialization in advanced mathematics ----- ○ — ○ — ○ — ○

b) Computer software/ applications for advanced mathematics instruction ----- ○ — ○ — ○ — ○

c) Library resources relevant to advanced mathematics instruction ----- ○ — ○ — ○ — ○

d) Calculators for advanced mathematics instruction ----- ○ — ○ — ○ — ○

**C. Resources for Physics Instruction**

a) Teachers with a specialization in physics ----- ○ — ○ — ○ — ○

b) Computer software/ applications for physics instruction ----- ○ — ○ — ○ — ○

c) Library resources relevant to physics instruction ----- ○ — ○ — ○ — ○

d) Calculators for physics instruction ----- ○ — ○ — ○ — ○

e) Physics equipment and materials for experiments ----- ○ — ○ — ○ — ○

**10**

**How much do you agree with these statements about advanced mathematics and physics education within your school?**

Check **one** circle for each line.

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
a) The school encourages students to study advanced mathematics and physics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) The school promotes professional development for teachers of advanced mathematics and physics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) The school provides students with information about career options in advanced mathematics and physics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) The school has initiatives to promote student interest in advanced mathematics and physics (e.g., student clubs, competitions) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) The school has partnership initiatives with industry/businesses in advanced mathematics and physics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Advanced mathematics and physics teachers are admired by other teachers in the school -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Students at this school respect students who excel in advanced mathematics and physics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**11**

**To what degree is each of the following a problem among <twelfth grade> students in your school?**

Check **one** circle for each line.

	Not a problem	Minor problem	Moderate problem	Serious problem
a) Arriving late at school -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Absenteeism (i.e., unjustified absences) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Classroom disturbance -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Cheating -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Profanity -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Vandalism -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Theft -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Intimidation or verbal abuse among students (including texting, emailing, etc.) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) Physical injury to other students -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) Intimidation or verbal abuse of teachers or staff (including texting, emailing, etc.) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) Physical injury to teachers or staff -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**12**

How difficult was it to fill <twelfth grade> teaching vacancies for this school year for the following subjects?

Check **one** circle for each line.

Were no vacancies in this subject  
Easy to fill vacancies  
Somewhat difficult  
Very difficult

a) Advanced mathematics -----  —  —  —

b) Physics -----  —  —  —

c) Computer science/  
information technology -----  —  —  —

d) Other -----  —  —  —

**13**

Does your school currently use any incentives (e.g., pay, housing, signing bonus, smaller classes) to recruit or retain <twelfth grade> teachers in the following fields?

Check **one** circle for each line.

Yes  
No

a) Advanced mathematics -----  —

b) Physics -----  —

c) Computer science/information technology -----  —

d) Other -----  —

**14**

To what degree is each of the following a problem among teachers in your school?

Check **one** circle for each line.

Not a problem  
Minor problem  
Moderate problem  
Serious problem

a) Arriving late or leaving early --  —  —  —

b) Absenteeism -----  —  —  —

**15**

By the end of this school year, how many years will you have been a principal altogether?

\_\_\_\_\_ years  
Please **round** to the nearest whole number.

**16**

By the end of this school year, how many years will you have been a principal at this school?

\_\_\_\_\_ years  
Please **round** to the nearest whole number.

**17**

What is the highest level of formal education you have completed?

Check **one** circle only.

Did not complete <Bachelor's or equivalent level—ISCED Level 6> ---

<Bachelor's or equivalent level—ISCED Level 6> ---

<Master's or equivalent level—ISCED Level 7> ---

<Doctor or equivalent level—ISCED Level 8> ---

**18**

Do you hold the following degrees in educational leadership?

Check **one** circle for each line.

Yes  
No

a) <Master's or equivalent level—ISCED Level 7> -----  —

b) <Doctor or equivalent level—ISCED Level 8>--  —





# Thank You

**Thank you for the thought, time, and effort you have put into completing this questionnaire.**

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BOSTON  
COLLEGE

# TIMSS *Advanced* 2015

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for the Evaluation of  
Educational Achievement

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