

Place Label Here
School ID
Checksum

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

School Questionnaire

National Center for Education Statistics U.S. Department of Education 1990 K St. NW Washington, DC 20006-5650



© IEA, 2014

U.S. participation in this study is sponsored by the National Center for Education Statistics (NCES), U.S. Department of Education, and authorized by the Education Sciences Reform Act of 2002 (20 U.S.C., § 9543). Your responses are protected by federal statute (20 U.S.C., § 9573) and may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0695. The time required to complete this information collection is estimated to average 30 minutes per respondent, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s), suggestions for improving the form, or comments or concerns regarding the status of your individual submission of this form, write directly to: Trends in International Mathematics and Science Study (TIMSS), National Center for Education Statistics, U.S. Department of Education, 1990 K Street, N.W., Washington, D.C. 20006.

OMB No. 1850-0695, Approval Expires 9/30/2017.

869867 Printed in the USA by Pearson ISD10753

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 the United States.

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 the United States. 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 the TIMSS school coordinator.

NCES is authorized to collect information from the questionnaire under the Education Science Reform Act of 2002 (ESRA 2002), 20 U.S. Code, § 9543. You do not have to provide the information requested. However, the information you provide will help the U.S. Department of Education's ongoing efforts to understand better how the educational system in the United States compares to that in other countries. There are no penalties should you choose not to participate in this study. Your answers may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law (20 U.S. Code, § 9573). Your response will be combined with those from other participants to produce summary statistics and reports.

This survey is estimated to take an average of 30 minutes, including time for reviewing instructions, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to: Stephen Provasnik, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 8123, Washington, DC 20006-5650. Do not return the completed form to this address.

Thank you.

TIMSS ADVANCED 2015

School Enrollment and Characteristics

1

What is the total enrollment of students in your school as of March 1, 2015?

	students
Write in the numbe	r.

2

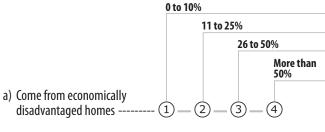
What is the total enrollment of <u>twelfth-grade</u> students in your school as of March 1, 2015?

```
_____ students Write in the number.
```

3

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

Fill in only **one** circle for each row.



b)	Come from econ-	omically	_	_	_	_
	affluent homes		(1) _	(2) —	(3)	(4

Л

Around the 1st of October 2014, what percentage of students at this school were eligible to receive free or reduced-price lunches through the National School Lunch Program?

```
_____ percentage of students Write in the number.
```

5

A. Approximately what percentage of students in your school have English as their native language?

Fill in **one** circle only.

B. Of the students currently enrolled in your school, what percentage has been identified as limited-English proficient (LEP)/English language learners (ELL)?

Fill in **one** circle only.

What type of school is this?

Regular public school -- (1)

A regular public school with a magnet program -- (2)

A magnet school or school with a special program emphasis (e.g., Montessori, science/math school, performing arts school, talented/ gifted school, foreign language

immersion school) -- (3)

Special education: a school that primarily serves students with

disabilities -- (4)

Alternative: a school designed to address the needs of students, typically at risk of educational failure, which cannot be met in

regular schools -- (5)

Vocational -- 6

Charter School -- (7)

Private (independent) -- (8)

Private (religiously affiliated) -- 9

Other -- (0)

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

Fill	in	one	circ	þ	onl	v
1 111	111	Ulle	CIICI	C	OHI	у

More than 500,000 people --- (1)

100,001 to 500,000 people --- (2)

50,001 to 100,000 people --- (3)

30,001 to 50,000 people --- (4)

15,001 to 30,000 people --- (5)

3,001 to 15,000 people --- (6)

3,000 people or fewer--- (7)

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

Fill in one circle only.	Fill in	one	circle	only.
---------------------------------	---------	-----	--------	-------

Urban—Densely populated --- (1)

Suburban—On fringe or outskirts of urban area --- (2)

Medium size city or large town --- (3)

Small town or village --- (4)

Remote rural --- (5)

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

Write	in ti	he p	ercent
-------	-------	------	--------

a) Advanced mathematics, such as calculus courses -----

b) Advanced physics, such as college preparatory physics or AP Physics -----

Does your school have a special program or track to prepare students for courses such as calculus or advanced physics?

Fill in **one** circle only.

Yes--- (1)

No--- (2)

Instructional Time

10			

For the twelfth-grade students in your school:

A. How many <u>days per year</u> is your school open for instruction?

		days
Write in th	ne nu	mber.

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

hours	minutes
Write in the number of h	ours and minutes per day.

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

Fill in **one** circle only.

- 6 days --- (1)
- 5 1/2 days--- 2
 - 5 days--- (3)
- 4 1/2 days --- 4
 - 4 days --- (5)
 - Other--- (6)

Resources and Technology

11

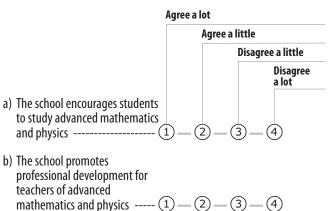
How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following?

Fill in only **one** circle for each row. Fill in only one circle for each row. Not at all Not at all A little A little Some Some A lot A lot A. General School Resources B. Resources for Advanced **Mathematics Instruction** a) Instructional materials (e.g., textbooks) ------ 1 2 3 4 a) Teachers with a specialization in advanced mathematics ---- (1) (2) (3) (4)b) Supplies (e.g., papers, pencils, materials) ----- 1 2 3 4 b) Computer software/ applications for advanced mathematics instruction ----- (1) (2) (3) (4)c) School buildings and grounds ----- 1 2 3 4 c) Library resources relevant d) Heating/cooling and lighting systems ----- (1) — (2) — (3) — (4) to advanced mathematics instruction ----- (1) (2) (3) (4)e) Instructional space (e.g., classrooms) ------ 1 _ 2 _ 3 _ 4 d) Calculators for advanced mathematics instruction -----(1) -(2) -(3) -(4)f) Technologically competent staff ----- 1 2 3 4 C. Resources for Physics Instruction g) Audio-visual resources a) Teachers with a specialization in physics -----(1) --(2) --(3) --(4)for delivery of instruction (e.g., interactive white boards, digital projectors) ---- (1) — (2) — (3) — (4) b) Computer software/ applications for physics instruction ----- (1) (2) (3) (4)h) Computer technology for teaching and learning (e.g., computers or tablets c) Library resources relevant for student use) ----- (1) — (2) — (3) — (4) to physics instruction ----- 1 - 2 - 3 - 4 i) Resources for students d) Calculators for physics with disabilities ---- 1) - 2) - 3) - 4 instruction ----- (1) — (2) — (3) — (4) e) Physics equipment and materials for experiments ---- (1) -- (2) -- (3) -- (4)

12 •

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

Fill in only **one** circle for each row.



- c) The school provides students with information about career options in advanced
 - mathematics and physics ----- (1) (2) (3) (4)
- d) The school has initiatives to promote student interest in advanced mathematics and physics (e.g., student clubs,
 - competitions) -----(1) (2) (3) (4)
- e) The school has partnership initiatives with industry/ businesses in advanced
 - mathematics and physics ----- 1 2 3 4
- f) Advanced mathematics and physics teachers are admired by other teachers in the school-(1) (2) (3) (4)
- g) Students at this school respect students who excel in advanced mathematics and physics ----(1) --(2) --(3) --(4)

School Discipline and Safety

13

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

Fill in only **one** circle for each row.

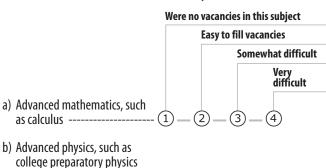
	riii in only one circle for each row.
	Not a problem
	Minor problem
	Moderate problem
	Serious problem
a) Arriving late at school	1-2-3-4
b) Absenteeism (i.e., unjustified absences)	1-2-3-4
c) Classroom disturbance	1-2-3-4
d) Cheating	1-2-3-4
e) Profanity	1-2-3-4
f) Vandalism	1-2-3-4
g) Theft	1-2-3-4
h) Intimidation or verbal abuse among students (including texting, emailing, etc.)	1-2-3-4
i) Physical injury to other students	1) 2) 3) 4)
j) Intimidation or verbal abuse of teachers or staff (including texting, emailing, etc.)	1)-2-3-4
k) Physical injury to teachers or staff	1-2-3-4

Teachers in Your School

14

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

Fill in only **one** circle for each row.



	or AP Physics	1	2—	3—	4
c)	Computer science/ information technology	1)_	2_	3)_	(4)

d) 0ther ----- 1 2 3 4

15 -

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

Fill in only **one** circle for each row.

V--

	162	
	No	
a) Advanced mathematics, such as calculus (1) – 2	
b) Advanced physics, such as college preparatory physics or AP Physics (1	2) — 2	
c) Computer science/information technology (1	2	
d) Other (1	2	

16

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

Fill in only **one** circle for each row.

	Not a problem		
	Mi	Minor problem	
		Moderate problem	
			Serious problem
a) Arriving late or leaving early	1-2	_3-	4
b) Absenteeism	1-2	_3-	4

Principal Experience and Education

17

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

years
Please round to the nearest whole number.

18 =

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

19

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

Fill in only **one** circle only.

20

Do you hold the following degrees in educational leadership?

Fill in only **one** circle for each row.

	Yes	
	No	
a) Master's degree or professional degree (MD, DDS, lawyer, minister)(1	2) — (2)	
b) Doctorate (Ph.D., or Ed.D.) (1	-(2)	

Thank You

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

THIS PAGE LEFT BLANK ON PURPOSE

THIS PAGE LEFT BLANK ON PURPOSE





TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

School Questionnaire



© IEA, 2014 International Association for the Evaluation of Educational Achievement

timss.bc.edu