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

2. What is the total enrollment of twelfth-grade 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.
   
   - 0 to 10% 
   - 11 to 25% 
   - 26 to 50% 
   - More than 50%

   a) Come from economically disadvantaged homes -------
   
   b) Come from economically affluent homes ------------

4. 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.
   - More than 90% --- 1
   - 76 to 90% --- 2
   - 51 to 75% --- 3
   - 26 to 50% --- 4
   - 25% or less --- 5

   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.
   - 0% -- 1
   - 1 - 5% -- 2
   - 6 - 10% -- 3
   - 11 - 25% -- 4
   - 26 - 50% -- 5
   - 51 - 75% -- 6
   - 76 - 90% -- 7
   - Over 90% -- 8
6

What type of school is this?

*Fill in one circle only.*

- 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 -- ⑩

7

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

*Fill in one circle only.*

- 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.*

- 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

8

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

*Write in the percent.*

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

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

9

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
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?

__________ hours   ___________ minutes
Write in the number of hours and minutes per day.

C. In one calendar week, 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
How much is your school’s capacity to provide instruction affected by a shortage or inadequacy of the following?

**A. General School Resources**

a) Instructional materials (e.g., textbooks)  
   ![Rating Options]

b) Supplies (e.g., papers, pencils, materials)  
   ![Rating Options]

c) School buildings and grounds  
   ![Rating Options]

d) Heating/cooling and lighting systems  
   ![Rating Options]

e) Instructional space (e.g., classrooms)  
   ![Rating Options]

f) Technologically competent staff  
   ![Rating Options]

g) Audio-visual resources for delivery of instruction (e.g., interactive white boards, digital projectors)  
   ![Rating Options]

h) Computer technology for teaching and learning (e.g., computers or tablets for student use)  
   ![Rating Options]

i) Resources for students with disabilities  
   ![Rating Options]

**B. Resources for Advanced Mathematics Instruction**

a) Teachers with a specialization in advanced mathematics  
   ![Rating Options]

b) Computer software/applications for advanced mathematics instruction  
   ![Rating Options]

c) Library resources relevant to advanced mathematics instruction  
   ![Rating Options]

d) Calculators for advanced mathematics instruction  
   ![Rating Options]

**C. Resources for Physics Instruction**

a) Teachers with a specialization in physics  
   ![Rating Options]

b) Computer software/applications for physics instruction  
   ![Rating Options]

c) Library resources relevant to physics instruction  
   ![Rating Options]

d) Calculators for physics instruction  
   ![Rating Options]

e) Physics equipment and materials for experiments  
   ![Rating Options]
School Emphasis on Advanced Mathematics and Physics Education

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.

Agree a lot
Agree a little
Disagree a little
Disagree a lot

a) The school encourages students to study advanced mathematics and physics

1 2 3 4

b) The school promotes professional development for teachers of advanced mathematics and physics

1 2 3 4

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.

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.*

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

<table>
<thead>
<tr>
<th>Subject</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Advanced mathematics, such as calculus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Advanced physics, such as college preparatory physics or AP Physics</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>c) Computer science/information technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Other</td>
<td></td>
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</tbody>
</table>

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.*

<table>
<thead>
<tr>
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</tr>
<tr>
<td>d) Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**
- **Minor problem**
- **Moderate problem**
- **Serious problem**

<table>
<thead>
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<th>Problem</th>
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<th>2</th>
<th>3</th>
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</tr>
</thead>
<tbody>
<tr>
<td>a) Arriving late or leaving early</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Absenteeism</td>
<td></td>
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</tbody>
</table>

### Principal Experience and Education

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

*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?**

*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.*

- Did not complete Bachelor's degree (4-year college program) --- 1
- Bachelor's degree (4-year college program) --- 2
- Master's degree or professional degree (MD, DDS, lawyer, minister) --- 3
- Doctorate (Ph.D., or Ed.D.) --- 4

20. **Do you hold the following degrees in educational leadership?**

*Fill in only one circle for each row.*

<table>
<thead>
<tr>
<th>Degree</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
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Thank you for the thought, time, and effort you have put into completing this questionnaire.
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TIMSS Advanced 2015
TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

School Questionnaire