IEA Trends in International Mathematics and Science Study

Main Survey

School Questionnaire

Grade 4

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O.M.B. No. 1850-0695, Approval Expires 02/28/2006
Your school has agreed to participate in TIMSS 2003, a large international study of student learning in mathematics and science in more than 50 countries around the world. Sponsored by the International Association for the Evaluation of Educational Achievement (IEA), TIMSS (for Trends in International Mathematics and Science Study) is measuring trends in student achievement and studying differences in national education systems in order to help improve the teaching and learning of mathematics and science 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.

Please identify a time and place where you will be able to complete this questionnaire without being interrupted. This should require no more than 30 minutes. To make it as easy as possible for you to respond, most questions may be answered simply by filling in the appropriate circle.

Once you have completed the questionnaire, place it in the return envelope provided and return it to the school coordinator.

Thank you very much for the time and effort you have put into responding to this questionnaire.
The School Characteristics

Some of the questions in this questionnaire ask about your school in general. If your school has a wide range of grades, please try to answer such questions with regard to the primary grades.

1. What are the lowest and highest grade levels in your school?

   Fill in one circle for each column

   A: Lowest Grade  B: Highest Grade

   Kindergarten  ①  ②
   1  ①  ②
   2  ①  ②
   3  ①  ②
   4  ①  ②
   5  ①  ②
   6  ①  ②
   7  ①  ②
   8  ①  ②
   9  ①  ②
   10  ①  ②
   11  ①  ②
   12  ①  ②
   13  ①  ②

2. A. What is the total school enrollment (number of students) in all grades?

   Number of students:___________

   B. What is the enrollment in the fourth-grade?

   Number of students:___________

3. 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
   15,001 to 50,000 people  ④
   3,001 to 15,000 people  ⑤
   Less than 3,000 people  ⑥

4. On a typical school day, what percentage of students are absent from school for any reason?

   Fill in one circle only

   Less than 5%  ①
   5 to 10%  ②
   11 to 20%  ③
   More than 20%  ④
5

A. Of the students who were enrolled in your school at the start of this school year, about what percentage are still enrolled?

\[ \text{Fill in one circle only} \]

- 96 to 100%  \[ \text{1} \]
- 90 to 95%  \[ \text{2} \]
- 80 to 89%  \[ \text{3} \]
- Less than 80%  \[ \text{4} \]

B. What percentage of the students in your school enrolled after the beginning of the school year?

\[ \text{Fill in one circle only} \]

- Less than 5%  \[ \text{1} \]
- 5 to 10%  \[ \text{2} \]
- 11 to 20%  \[ \text{3} \]
- More than 20%  \[ \text{4} \]

6

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

\[ \text{Fill in one circle for each row} \]

- More than 50%  \[ \text{1} \]
- 26 to 50%  \[ \text{2} \]
- 11 to 25%  \[ \text{3} \]
- 0 to 10%  \[ \text{4} \]

\( \text{a) Come from economically disadvantaged homes} \)

\( \text{b) Come from economically affluent homes} \)

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

\[ \text{Fill in one circle only} \]

- More than 90%  \[ \text{1} \]
- 76 to 90%  \[ \text{2} \]
- 50 to 75%  \[ \text{3} \]
- Less than 50%  \[ \text{4} \]

C. Around the first of October 2002, what percentage of students at this school were eligible to receive free or reduced-price lunches through the National School Lunch Program?

\[ \text{Check none if Zero (0), or write in a percent} \]

\( \text{None □ or} \)  \[ \text{___________%} \]

7

How would you characterize each of the following within your school?

\[ \text{Fill in one circle for each row} \]

\[ \text{Very low} \]

<table>
<thead>
<tr>
<th>\text{Low}</th>
<th>\text{Medium}</th>
<th>\text{High}</th>
<th>\text{Very high}</th>
</tr>
</thead>
</table>

\( \text{a) Teachers' job satisfaction} \)

\( \text{b) Teachers' understanding of the school's curricular goals} \)

\( \text{c) Teachers' degree of success in implementing the school's curriculum} \)

\( \text{d) Teachers' expectations for student achievement} \)

\( \text{e) Parental support for student achievement} \)

\( \text{f) Parental involvement in school activities} \)

\( \text{g) Students' regard for school property} \)

\( \text{h) Students' desire to do well in school} \)

2
Your Role as Principal

8

Including this year, how long have you been principal of this school?

Number of years: ____________

9

By the end of this school year, approximately what percentage of time in your role as principal will you have spent on these activities?

Write in the percent
The total should add to 100%

a) Administrative duties (e.g., hiring, budgeting, scheduling) ____________ %

b) Instructional leadership (e.g., developing curriculum and pedagogy) ____________ %

c) Supervising and evaluating teachers and other staff ____________ %

d) Teaching ____________ %

e) Public relations and fundraising ____________ %

f) Other ____________ %

Total ________________________________ 100%

Parental Involvement

10

Does your school expect parents to do the following?

Fill in one circle for each row

No
Yes

a) Attend special events (e.g., science fair, concert, sporting events) ____________

b) Raise funds for the school ____________

c) Volunteer for school projects, programs, and trips ____________

d) Ensure that their child completes his/her homework ____________

e) Serve on school committees (e.g., select school personnel, review school finances) ____________
11

A. How many days per year is your school open for instruction for fourth-grade students?

Number of days: _____________

B. How many instructional days are there in the school week (typical calendar week from Monday through Sunday) for fourth-grade students?

<table>
<thead>
<tr>
<th>Number of FULL days (over 4 hours)</th>
<th>Number of HALF days (4 hours or less)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day</td>
<td>1</td>
</tr>
<tr>
<td>2 days</td>
<td>1</td>
</tr>
<tr>
<td>3 days</td>
<td>1</td>
</tr>
<tr>
<td>4 days</td>
<td>1</td>
</tr>
<tr>
<td>5 days</td>
<td>1</td>
</tr>
<tr>
<td>6 days</td>
<td>1</td>
</tr>
<tr>
<td>None</td>
<td>1</td>
</tr>
</tbody>
</table>

12

How does your school organize mathematics instruction for fourth-grade students with different levels of ability?

Fill in one circle only

- Students study the same mathematics curriculum
- Students study the same mathematics curriculum, but at different levels of difficulty
- Students study different mathematics curricula according to their ability levels

13

Are fourth-grade students in your school grouped by ability within their mathematics lessons?

Fill in one circle only

No | Yes

14

Does your school do either of the following for students in the fourth-grade?

Fill in one circle for each row

- a) Offer enrichment mathematics
- b) Offer remedial mathematics
### 15

**How does your school organize science instruction for fourth-grade students with different levels of ability?**

- **Students study the same science curriculum**
- **Students study the same science curriculum, but at different levels of difficulty**
- **Students study different science curricula according to their ability levels**

*Fill in one circle only*

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students study the same science curriculum</td>
<td>Students study the same science curriculum, but at different levels of difficulty</td>
</tr>
<tr>
<td>Students study different science curricula according to their ability levels</td>
<td></td>
</tr>
</tbody>
</table>

### 16

**Are fourth-grade students in your school grouped by ability within their science lessons?**

- **No**
- **Yes**

*Fill in one circle only*

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### 17

**Does your school do either of the following for students in the fourth-grade?**

- **Offer enrichment science**
- **Offer remedial science**

*Fill in one circle for each row*

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer enrichment science</td>
<td>Offer remedial science</td>
</tr>
</tbody>
</table>

### 18

**How difficult was it to fill fourth-grade teaching vacancies for this school year?**

*Fill in one circle only*

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No vacancies</td>
<td>Easy to fill vacancies</td>
<td>Somewhat difficult</td>
<td>Very difficult</td>
</tr>
</tbody>
</table>

### 19

**Does your school currently use any incentives (e.g., pay, housing, signing bonus) to recruit or retain fourth-grade teachers?**

- **No**
- **Yes**

*Fill in one circle only*

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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**Page 7**

**School Questionnaire Grade 4**
20 During this school year, how often have your fourth-grade teachers been involved in professional development opportunities for mathematics and/or science targeted at the following?

<table>
<thead>
<tr>
<th>More than 10 times</th>
<th>6 to 10 times</th>
<th>3 to 5 times</th>
<th>1 to 2 times</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill in one circle for each row</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   a) Supporting the implementation of the state or district curriculum

   b) Designing or supporting the school’s own improvement goals

   c) Improving content knowledge

   d) Improving teaching skills

   e) Using information and communication technology for educational purposes

21 In your school, are any of the following used to evaluate the practice of fourth-grade teachers?

<table>
<thead>
<tr>
<th>Fill in one circle for each row</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

   a) Observations by the principal or senior staff

   b) Observations by inspectors or other persons external to the school

   c) Student achievement

   d) Teacher peer review
How often do each of the following problem behaviors occur among fourth-grade students in your school?

If the behavior occurs, how severe a problem does it present?

<table>
<thead>
<tr>
<th>A. Frequency in your school</th>
<th>B. Severity of problem in your school</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Daily</strong></td>
<td><strong>Serious problem</strong></td>
</tr>
<tr>
<td>Weekly</td>
<td>Minor problem</td>
</tr>
<tr>
<td>Monthly</td>
<td>Not a problem</td>
</tr>
<tr>
<td>Rarely</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
</tr>
</tbody>
</table>

a) Arriving late at school

b) Absenteeism (i.e., unexcused absences)

c) Skipping class

d) Violating dress code

e) Classroom disturbance

f) Cheating

g) Profanity

h) Vandalism

i) Theft

j) Intimidation or verbal abuse of other students

k) Physical injury to other students

l) Intimidation or verbal abuse of teachers or staff

m) Physical injury to teachers or staff

Fill in one circle for each row in this section.
How much is your school’s capacity to provide instruction affected by a shortage or inadequacy of any of the following?

<table>
<thead>
<tr>
<th>A lot</th>
<th>Some</th>
<th>A little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) <strong>Instructional materials</strong> (e.g., textbooks)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b) <strong>Budget for supplies</strong> (e.g., paper, pencils)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c) <strong>School buildings and grounds</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d) <strong>Heating/cooling and lighting systems</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e) <strong>Instructional space</strong> (e.g., classrooms)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f) <strong>Special equipment for students with disabilities</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g) <strong>Computers for mathematics instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) <strong>Computer software for mathematics instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) <strong>Calculators for mathematics instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j) <strong>Library materials relevant to mathematics instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>k) <strong>Audiovisual resources for mathematics instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>l) <strong>Science laboratory equipment and materials</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>m) <strong>Computers for science instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>n) <strong>Computer software for science instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
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<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>q) <strong>Audiovisual resources for science instruction</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>r) <strong>Teachers</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>s) <strong>Computer support staff</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
24
A. What is the total number of computers in your school that can be used for educational purposes by fourth-grade students?

Number of computers:_____________

If None, please go to question 25

B. How many of these computers have access to the Internet (e-mail or World Wide Web) for educational purposes?

Fill in one circle only

- All -------------------------------------------------- ①
- Most -------------------------------------------------- ②
- Some ------------------------------------------ ③
- None ------------------------------------------ ④

25
A. Is anyone available to help your teachers use information and communication technology for teaching and learning?

Yes

If No, you have completed the questionnaire

B. Which of the following statements best describes the person at this school who helps teachers use information and communication technology for teaching and learning?

Fill in one circle for the best description of that person. If more than one person, choose the one person who spends the most time on this work.

A full-time school level coordinator (who has no other job responsibility) ①
A library media specialist who also serves as computer coordinator ②
A teacher who also has the title of this type of coordinator ③
A teacher who provides leadership informally to other teachers ④
A district-level coordinator ⑤
The principal or another school administrator ⑥
Other person ⑦

Thank You for completing this questionnaire