

Exhibit E-3. Fourth-grade school questionnaire



<input type="text"/>						
School ID		Check one			Participation	
					Notes	

Trends in International Mathematics and Science Study

TIMSS 2007



School Questionnaire

To Be Completed By Principal or School Administrator

Grade 4

National Center for Education Statistics
Institute of Education Sciences
U.S. Department of Education
1990 K St., N.W.
Washington, D.C. 20006-5650

According to the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1850-6055. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data sources, gather the data needed, and complete and review the information collection. If you have any comments on this collection of information, including the time to review instructions, search existing data sources, gather the data needed, and complete and review the information collection, if you have any comments on the accuracy of the time estimate(s) or suggestions for improving the form, please write to: U.S. Department of Education, Washington, D.C. 20202-4031. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: National Center for Education Statistics, U.S. Department of Education, 1990 K St. N.W., Washington, D.C. 20006-5650. OMB No. 1850-6055, Approved Expires 12/31/2007

TIMSS000170

General Directions

Your school has kindly agreed to participate in TIMSS 2007, a large international study of student learning in mathematics and science in more than 60 countries around the world. Sponsored by the International Association for the Evaluation of Educational Achievement (IEA), TIMSS (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.

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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 TIMSS School Coordinator

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

School Characteristics

1 _____

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: _____

2 _____

How many people live in the geographic area where your school is located?

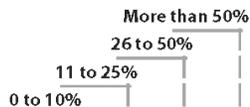
Fill in **one** circle only

- 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
- 3,000 people or fewer ----- ⑥

3 _____

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

Fill in **one** circle for each row



- a) Come from economically disadvantaged homes ----- ① -- ② -- ③ -- ④
- b) Come from economically affluent homes ----- ① -- ② -- ③ -- ④

4 _____

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
- 50 to 75% ----- ③
- Less than 50% ----- ④

5 _____

For the fourth-grade students in your school:

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

_____ days
(write in number)

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

_____ hours and _____ minutes
(write in the number of hours and minutes)

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
- Please specify _____

Exhibit E-3. Fourth-grade school questionnaire —Continued

6

Around the first of October 2006, 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*

7

Of the students currently enrolled in your school, what percentage has been identified as limited-English proficient/English language learners?

*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

8

What type of school is this?

*Fill in **all** circles that apply.*

- a) Regular public elementary school----- ①
- b) A regular public school with a magnet program ----- ①
- c) A magnet school or a school with a special program emphasis
e.g., science/math school, performing arts school, talented/gifted
school, foreign language immersion school, etc. ----- ①
- d) Special education: a school that primarily serves students with disabilities ----- ①
- e) Alternative: a school that offers a curriculum designed to provide
alternative or nontraditional education, not clearly categorized as regular
or special education ----- ①
- f) Vocational----- ①
- g) Charter school ----- ①
- h) Privately run public school----- ①
- i) Private (independent) ----- ①
- j) Private (religiously affiliated) ----- ①
- k) Other----- ①

Exhibit E-3. Fourth-grade school questionnaire —Continued

Your Role as Principal

Parental Involvement

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, meetings) ----- %
- 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%

10

Does your school ask parents to do the following?

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

- | | Yes | No |
|---|-----|----|
| a) Attend special events (e.g., science fair, concert, sporting events) ----- | ① | ② |
| b) Raise funds for the school ----- | ① | ② |
| c) Volunteer for school projects, programs, and trips ----- | ① | ② |
| d) Ensure that their child completes his/her homework ----- | ① | ② |
| e) Serve on school committees (e.g., select school personnel, review school finances) ----- | ① | ② |

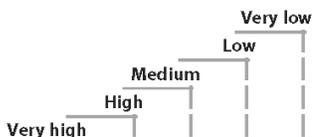
School Climate for Learning

Fourth-Grade Instruction in Mathematics and Science

11 _____

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

Fill in **one** circle for each row



- a) Teachers' job satisfaction ----- ① -- ② -- ③ -- ④ -- ⑤
- b) Teachers' understanding of the school's curricular goals ----- ① -- ② -- ③ -- ④ -- ⑤
- c) Teachers' degree of success in implementing the school's curriculum ① -- ② -- ③ -- ④ -- ⑤
- d) Teachers' expectations for student achievement ----- ① -- ② -- ③ -- ④ -- ⑤
- e) Parental support for student achievement - ① -- ② -- ③ -- ④ -- ⑤
- f) Parental involvement in school activities --- ① -- ② -- ③ -- ④ -- ⑤
- g) Students' regard for school property ----- ① -- ② -- ③ -- ④ -- ⑤
- h) Students' desire to do well in school ----- ① -- ② -- ③ -- ④ -- ⑤

12 _____

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



Fill in **one** circle only----- ① -- ②

13 _____

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

Fill in **one** circle for each row



- a) Offer enrichment mathematics ----- ① -- ②
- b) Offer remedial mathematics ----- ① -- ②

14 _____

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



Fill in **one** circle only----- ① -- ②

15 _____

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

Fill in **one** circle for each row



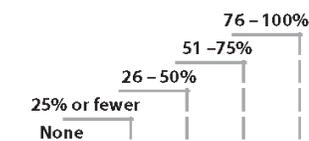
- a) Offer enrichment science----- ① -- ②
- b) Offer remedial science ----- ① -- ②

Fourth-Grade Teachers in Your School

16

In the past two years, what percentage of your fourth-grade teachers have been involved in professional development opportunities for mathematics and/or science targeted at the following?

Fill in **one** circle for each row



- a) Supporting the implementation of the state or district curriculum ① -- ② -- ③ -- ④ -- ⑤
- b) Designing or supporting the school's own improvement goals -- ① -- ② -- ③ -- ④ -- ⑤
- c) Improving content knowledge -- ① -- ② -- ③ -- ④ -- ⑤
- d) Improving teaching skills ----- ① -- ② -- ③ -- ④ -- ⑤
- e) Using information and communication technology for educational purposes ----- ① -- ② -- ③ -- ④ -- ⑤

17

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

Fill in **one** circle for each row

Yes _____ No _____

- a) Observations by the principal or senior staff ① -- ②
- b) Observations by inspectors or other persons external to the school----- ① -- ②
- c) Student achievement----- ① -- ②
- d) Teacher peer review ① -- ②

18

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

Fill in **one** circle only

- No vacancies this year ①
- Easy to fill vacancies ----- ②
- Somewhat difficult to fill vacancies ----- ③
- Very difficult to fill vacancies ----- ④

19

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

Yes _____ No _____

Fill in **one** circle only----- ① -- ②

Student Behavior

20

How often does 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?

A. Frequency in your school

Fill in **one** circle for each row in this section

- | | Never | Rarely | Monthly | Weekly | Daily |
|--|-------|--------|---------|--------|-------|
| a) Arriving late at school | ① | ② | ③ | ④ | ⑤ |
| b) Absenteeism (i.e., unexcused absences) | ① | ② | ③ | ④ | ⑤ |
| c) Skipping class | ① | ② | ③ | ④ | ⑤ |
| d) Violating dress code | ① | ② | ③ | ④ | ⑤ |
| e) Classroom disturbance | ① | ② | ③ | ④ | ⑤ |
| f) Cheating | ① | ② | ③ | ④ | ⑤ |
| g) Profanity | ① | ② | ③ | ④ | ⑤ |
| h) Vandalism | ① | ② | ③ | ④ | ⑤ |
| i) Theft | ① | ② | ③ | ④ | ⑤ |
| j) Intimidation or verbal abuse of other students | ① | ② | ③ | ④ | ⑤ |
| k) Physical injury to other students | ① | ② | ③ | ④ | ⑤ |
| l) Intimidation or verbal abuse of teachers or staff | ① | ② | ③ | ④ | ⑤ |
| m) Physical injury to teachers or staff | ① | ② | ③ | ④ | ⑤ |

B. Severity of problem in your school

Fill in **one** circle for each row in this section

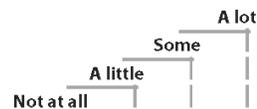
- | | Not a problem | Minor problem | Serious problem |
|--|---------------|---------------|-----------------|
| a) Arriving late at school | ① | ② | ③ |
| b) Absenteeism (i.e., unexcused absences) | ① | ② | ③ |
| c) Skipping class | ① | ② | ③ |
| d) Violating dress code | ① | ② | ③ |
| e) Classroom disturbance | ① | ② | ③ |
| f) Cheating | ① | ② | ③ |
| g) Profanity | ① | ② | ③ |
| h) Vandalism | ① | ② | ③ |
| i) Theft | ① | ② | ③ |
| j) Intimidation or verbal abuse of other students | ① | ② | ③ |
| k) Physical injury to other students | ① | ② | ③ |
| l) Intimidation or verbal abuse of teachers or staff | ① | ② | ③ |
| m) Physical injury to teachers or staff | ① | ② | ③ |

Resources and Technology

21

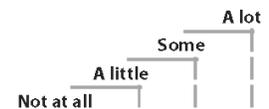
How much is your school's capacity to provide instruction affected by a shortage or inadequacy of any of the following?

Fill in **one** circle for each row



- a) Instructional materials (e.g., textbook) ----- ① -- ② -- ③ -- ④
- b) Budget for supplies (e.g., paper, pencils) ----- ① -- ② -- ③ -- ④
- c) School buildings and grounds ----- ① -- ② -- ③ -- ④
- d) Heating/cooling and lighting systems ----- ① -- ② -- ③ -- ④
- e) Instructional space (e.g., classrooms) ----- ① -- ② -- ③ -- ④
- f) Special equipment for handicapped students ----- ① -- ② -- ③ -- ④
- g) Computers for mathematics instruction ----- ① -- ② -- ③ -- ④
- h) Computer software for mathematics instruction --- ① -- ② -- ③ -- ④
- i) Calculators for mathematics instruction ----- ① -- ② -- ③ -- ④
- j) Library materials relevant to mathematics instruction - ① -- ② -- ③ -- ④
- k) Audio-visual resources for mathematics instruction --- ① -- ② -- ③ -- ④

Fill in **one** circle for each row



- l) Science laboratory equipment and materials --- ① -- ② -- ③ -- ④
- m) Computers for science instruction ----- ① -- ② -- ③ -- ④
- n) Computer software for science instruction ----- ① -- ② -- ③ -- ④
- o) Calculators for science instruction ----- ① -- ② -- ③ -- ④
- p) Library materials relevant to science instruction ----- ① -- ② -- ③ -- ④
- q) Audio-visual resources for science instruction ----- ① -- ② -- ③ -- ④
- r) Teachers ----- ① -- ② -- ③ -- ④
- s) Computer support staff ----- ① -- ② -- ③ -- ④

Exhibit E-3. Fourth-grade school questionnaire —Continued

22 _____

A. Does your school have a science laboratory?

Yes _____ No _____
① ②

Fill in **one** circle only-----

B. Do teachers usually have assistance available when students are conducting science experiments?

Yes _____ No _____
① ②

Fill in **one** circle only-----

23 _____

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 24 

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

24 _____

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

Yes _____ No _____
① ②

Fill in **one** circle only-----

Thank You
for completing
this questionnaire



School Questionnaire

Grade 4

Exhibit E-4. Eighth-grade school questionnaire



<input type="text"/>						
School ID			Checklist		Participation Status	

Trends in International Mathematics and Science Study

TIMSS 2007



School Questionnaire

To Be Completed By Principal or School Administrator

Grade 8

National Center for Education Statistics

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O.M.B. No. 1820-0685, Approval Expires 12/31/2007

TMS0690121

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School Characteristics

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

Number of students: _____

B. What is the enrollment in the eighth grade?

Number of students: _____

2 _____

How many people live in the geographic area where your school is located?

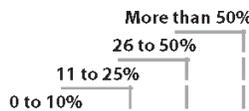
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- More than 500,000 people ----- ①
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- 3,000 people or fewer ----- ⑥

3 _____

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

Fill in **one** circle for each row



- a) Come from economically disadvantaged homes ----- ① -- ② -- ③ -- ④
- b) Come from economically affluent homes ----- ① -- ② -- ③ -- ④

4 _____

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
- 50 to 75% ----- ③
- Less than 50% ----- ④

5 _____

For the eighth-grade students in your school:

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

_____ days
(write in number)

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

_____ hours and _____ minutes
(write in the number of hours and minutes)

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
- Please specify _____

Exhibit E-4. Eighth-grade school questionnaire —Continued

6

Around the first of October 2006, 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*

7

Of the students currently enrolled in your school, what percentage has been identified as limited-English proficient/English language learners?

*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

8

What type of school is this?

*Fill in **all** circles that apply.*

- a) Regular public elementary school ①
- b) A regular public school with a magnet program ①
- c) A magnet school or a school with a special program emphasis
e.g., science/math school, performing arts school, talented/gifted
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- d) Special education: a school that primarily serves students with disabilities ①
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or special education ①
- f) Vocational ①
- g) Charter school ①
- h) Privately run public school ①
- i) Private (independent) ①
- j) Private (religiously affiliated) ①
- k) Other ①

Exhibit E-4. Eighth-grade school questionnaire —Continued

Your Role as Principal

Parental Involvement

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, meetings) ----- %
- 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%

10

Does your school ask parents to do the following?

Fill in **one** circle for each row

- | | Yes | No |
|---|-----|----|
| a) Attend special events (e.g., science fair, concert, sporting events) ----- | ① | ② |
| b) Raise funds for the school ----- | ① | ② |
| c) Volunteer for school projects, programs, and trips ----- | ① | ② |
| d) Ensure that their child completes his/her homework ----- | ① | ② |
| e) Serve on school committees (e.g., select school personnel, review school finances) ----- | ① | ② |

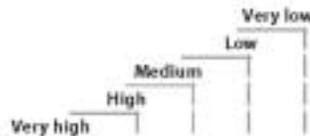
School Climate for Learning

Eighth-Grade Instruction in Mathematics and Science

11 _____

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

Fill in **one** circle for each row



- a) Teachers' job satisfaction ① -- ② -- ③ -- ④ -- ⑤
- b) Teachers' understanding of the school's curricular goals ① -- ② -- ③ -- ④ -- ⑤
- c) Teachers' degree of success in implementing the school's curriculum ① -- ② -- ③ -- ④ -- ⑤
- d) Teachers' expectations for student achievement ① -- ② -- ③ -- ④ -- ⑤
- e) Parental support for student achievement - ① -- ② -- ③ -- ④ -- ⑤
- f) Parental involvement in school activities --- ① -- ② -- ③ -- ④ -- ⑤
- g) Students' regard for school property ----- ① -- ② -- ③ -- ④ -- ⑤
- h) Students' desire to do well in school ① -- ② -- ③ -- ④ -- ⑤

12 _____

Are eighth-grade students in your school grouped by ability for their mathematics classes?

Fill in **one** circle only Yes No

13 _____

Does your school do any of the following for students in the eighth grade?

Fill in **one** circle for each row

- a) Offer enrichment mathematics Yes No
- b) Offer remedial mathematics Yes No

14 _____

Are eighth-grade students in your school grouped by ability for their science classes?

Fill in **one** circle only Yes No

15 _____

Does your school do any of the following for students in the eighth grade?

Fill in **one** circle for each row

- a) Offer enrichment science Yes No
- b) Offer remedial science Yes No

Eighth-Grade Teachers in Your School

16

In the past two years, what percentage of your eighth-grade teachers have been involved in professional development opportunities for mathematics and/or science targeted at the following?

- Fill in one circle for each row*
- | | | | | |
|------|--------------|----------|----------|-----------|
| None | 25% or fewer | 26 – 50% | 51 – 75% | 76 – 100% |
|------|--------------|----------|----------|-----------|
- a) Supporting the implementation of the state or district curriculum ① ... ② ... ③ ... ④ ... ⑤
- b) Designing or supporting the school's own improvement goals .. ① ... ② ... ③ ... ④ ... ⑤
- c) Improving content knowledge .. ① ... ② ... ③ ... ④ ... ⑤
- d) Improving teaching skills ① ... ② ... ③ ... ④ ... ⑤
- e) Using information and communication technology for educational purposes ① ... ② ... ③ ... ④ ... ⑤

17

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

- Fill in one circle for each row*
- | | |
|-----|----|
| Yes | No |
|-----|----|
- a) Observations by the principal or senior staff ① ... ②
- b) Observations by inspectors or other persons external to the school ① ... ②
- c) Student achievement ① ... ②
- d) Teacher peer review ① ... ②

18

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

- Fill in one circle for each row*
- | | |
|-----|----|
| Yes | No |
|-----|----|
- a) Observations by the principal or senior staff ① ... ②
- b) Observations by inspectors or other persons external to the school ① ... ②
- c) Student achievement ① ... ②
- d) Teacher peer review ① ... ②

19

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

- Fill in one circle for each row*
- | | | | |
|-----------------------------------|------------------------|--------------------|----------------|
| Were no vacancies in this subject | Easy to fill vacancies | Somewhat difficult | Very difficult |
|-----------------------------------|------------------------|--------------------|----------------|
- a) Mathematics ① ... ② ... ③ ... ④
- b) Science ① ... ② ... ③ ... ④
- c) Computer science / information technology ① ... ② ... ③ ... ④

20

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

- Fill in one circle for each row*
- | | |
|-----|----|
| Yes | No |
|-----|----|
- a) Mathematics ① ... ②
- b) Science ① ... ②
- c) Other ① ... ②

Student Behavior

21

How often does each of the following problem behaviors occur among eighth-grade students in your school?

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

A. Frequency in your school

Fill in **one** circle for each row in this section

	Never	Rarely	Monthly	Weekly	Daily
a) Arriving late at school	①	②	③	④	⑤
b) Absenteeism (i.e., unexcused absences)	①	②	③	④	⑤
c) Skipping class	①	②	③	④	⑤
d) Violating dress code	①	②	③	④	⑤
e) Classroom disturbance	①	②	③	④	⑤
f) Cheating	①	②	③	④	⑤
g) Profanity	①	②	③	④	⑤
h) Vandalism	①	②	③	④	⑤
i) Theft	①	②	③	④	⑤
j) Intimidation or verbal abuse of other students	①	②	③	④	⑤
k) Physical injury to other students	①	②	③	④	⑤
l) Intimidation or verbal abuse of teachers or staff	①	②	③	④	⑤
m) Physical injury to teachers or staff	①	②	③	④	⑤

B. Severity of problem in your school

Fill in **one** circle for each row in this section

	Not a problem	Minor problem	Serious problem
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③
.....	①	②	③

Resources and Technology

22

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

- Fill in one circle for each row*
- | | Not at all | A little | Some | A lot |
|--|------------|----------|------|-------|
| a) Instructional materials (e.g., textbook) | ① | ② | ③ | ④ |
| b) Budget for supplies (e.g., paper, pencils) | ① | ② | ③ | ④ |
| c) School buildings and grounds | ① | ② | ③ | ④ |
| d) Heating/cooling and lighting systems | ① | ② | ③ | ④ |
| e) Instructional space (e.g., classrooms) | ① | ② | ③ | ④ |
| f) Special equipment for handicapped students | ① | ② | ③ | ④ |
| g) Computers for mathematics instruction | ① | ② | ③ | ④ |
| h) Computer software for mathematics instruction | ① | ② | ③ | ④ |
| i) Calculators for mathematics instruction | ① | ② | ③ | ④ |
| j) Library materials relevant to mathematics instruction | ① | ② | ③ | ④ |
| k) Audio-visual resources for mathematics instruction | ① | ② | ③ | ④ |

- Fill in one circle for each row*
- | | Not at all | A little | Some | A lot |
|--|------------|----------|------|-------|
| l) Science laboratory equipment and materials | ① | ② | ③ | ④ |
| m) Computers for science instruction | ① | ② | ③ | ④ |
| n) Computer software for science instruction | ① | ② | ③ | ④ |
| o) Calculators for science instruction | ① | ② | ③ | ④ |
| p) Library materials relevant to science instruction | ① | ② | ③ | ④ |
| q) Audio-visual resources for science instruction | ① | ② | ③ | ④ |
| r) Teachers | ① | ② | ③ | ④ |
| s) Computer support staff | ① | ② | ③ | ④ |

Exhibit E-4. Eighth-grade school questionnaire —Continued

23 _____

A. Does your school have a science laboratory?

Yes _____ No _____

Fill in **one** circle only..... ①-----②

B. Do teachers usually have assistance available when students are conducting science experiments?

Yes _____ No _____

Fill in **one** circle only..... ①-----②

24 _____

A. What is the total number of computers in your school that can be used for educational purposes by eighth-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 _____

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

Yes _____ No _____

Fill in **one** circle only..... ①-----②

Thank You

for completing
this questionnaire



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

School Questionnaire

Grade 8

General Directions

Your school has kindly agreed to participate in TIMSS 2007, a large international study of student learning in mathematics and science in more than 60 countries around the world. Sponsored by the International Association for the Evaluation of Educational Achievement (IEA), TIMSS (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.

As part of the study, students in a nationwide sample of fourth-grade classes in the United States will complete the TIMSS mathematics and science tests. This questionnaire is addressed to teachers who teach mathematics and science to these students, and seeks information about teachers' academic and professional background, instructional practices, and attitudes toward teaching mathematics and science. As a teacher of the students participating in TIMSS, your responses to these questions are very important in helping to describe mathematics and science education in the United States.

Some of the questions in this questionnaire refer to teaching mathematics and teaching science to the students participating in TIMSS 2007. If you teach **both** mathematics and science to the students in the TIMSS class, please complete the entire questionnaire. If you teach **only mathematics** or **only science** to these students, you will be guided to the appropriate sections to complete.

Please set aside a time and place where you will be able to complete this questionnaire without being interrupted. This should require no more than 45 minutes. To make it as easy as possible for you to respond, most questions may be answered simply by checking or filling in the appropriate circle.

Once you have completed the questionnaire, place it in the return envelope provided and return it to: The TIMSS School Coordinator

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

Teacher Background Information To Be Completed By All Teachers

1 _____

How old are you?

Fill in **one** circle only

- Under 25 ----- ①
- 25–29 ----- ②
- 30–39 ----- ③
- 40–49 ----- ④
- 50–59 ----- ⑤
- 60 or older ----- ⑥

2 _____

Are you female or male?

Fill in **one** circle only

- Female ----- ①
- Male ----- ②

3 _____

By the end of this school year, how many years will you have been teaching altogether? Do not include substitute or student teaching.

_____ Number of years you have taught full time

_____ Number of years you have taught part time

4 _____

Do you have a teaching license or certificate?

Yes _____ No _____

Fill in **one** circle only ----- ① ----- ②

5 _____

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

Fill in **one** circle only

- Did not complete high school ----- ①
- Completed high school ----- ②
- Completed a vocational/technical certificate after high school ----- ③
- Completed an Associate's degree (AA) in a vocational/technical program ----- ④
- Completed an academic Associate's or Bachelor's degree ----- ⑤
- Completed an academic Master's degree, post-graduate certificate program (e.g., teaching) or first professional degree (e.g., law, medicine, dentistry) ----- ⑥
- Completed a doctorate (Ph.D. or Ed.D) ----- ⑦

6 _____

A. During your college or university education, what was your major or main area(s) of study?

Fill in **one** circle for each row

Major _____ Minor _____ No _____

- a) Education - Primary/Elementary ----- ① ----- ② ----- ③
- b) Education - Secondary ----- ① ----- ② ----- ③
- c) Education - Other ----- ① ----- ② ----- ③
- d) Mathematics ----- ① ----- ② ----- ③
- e) Science ----- ① ----- ② ----- ③
- f) Other ----- ① ----- ② ----- ③

B. If your major or main area of study was education, did you have a specialization in any of the following?

Fill in **one** circle for each row

Yes _____ No _____

- a) Mathematics ----- ① ----- ②
- b) Science ----- ① ----- ②
- c) Language/reading ----- ① ----- ②
- d) Other subject ----- ① ----- ②

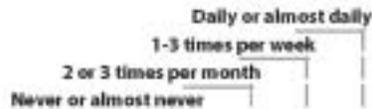
Exhibit E-5. Fourth-grade teacher questionnaire —Continued

About Your School
To Be Completed By All Teachers

7

How often do you have the following types of interactions with other teachers?

Fill in *one* circle for each row

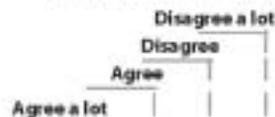


- a) Discussions about how to teach a particular concept ① -- ② -- ③ -- ④
- b) Working on preparing instructional materials ① -- ② -- ③ -- ④
- c) Visits to another teacher's classroom to observe his/her teaching ① -- ② -- ③ -- ④
- d) Informal observations of *my* classroom by another teacher ① -- ② -- ③ -- ④

8

Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements about your school.

Fill in *one* circle for each row

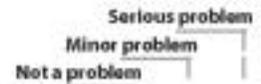


- a) This school is located in a safe neighborhood ① -- ② -- ③ -- ④
- b) I feel safe at this school ① -- ② -- ③ -- ④
- c) This school's security policies and practices are sufficient - ① -- ② -- ③ -- ④

9

In your current school, how severe is each problem?

Fill in *one* circle for each row

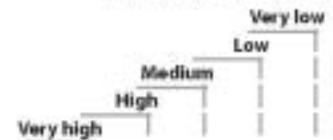


- a) The school building needs significant repair ① -- ② -- ③
- b) Classrooms are overcrowded ① -- ② -- ③
- c) Teachers do not have adequate workspace outside their classroom ① -- ② -- ③
- d) Materials are not available to conduct experiments or projects ① -- ② -- ③

10

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

Fill in *one* circle for each row



- a) Teachers' job satisfaction ① -- ② -- ③ -- ④ -- ⑤
- b) Teachers' understanding of the school's curricular goals ① -- ② -- ③ -- ④ -- ⑤
- c) Teachers' degree of success in implementing the school's curriculum-③ -- ② -- ③ -- ④ -- ⑤
- d) Teachers' expectations for student achievement ① -- ② -- ③ -- ④ -- ⑤
- e) Parental support for student achievement - ① -- ② -- ③ -- ④ -- ⑤
- f) Parental involvement in school activities ... ① -- ② -- ③ -- ④ -- ⑤
- g) Students' regard for school property ① -- ② -- ③ -- ④ -- ⑤
- h) Students' desire to do well in school ① -- ② -- ③ -- ④ -- ⑤

Exhibit E-5. Fourth-grade teacher questionnaire —Continued

About Teaching Mathematics

If you **do not** teach mathematics to students in the class identified on the cover of this questionnaire, **proceed to Question 28**. If you **do teach** mathematics to students in the class identified on the cover of this questionnaire, please **continue**.

11

How well prepared do you feel you are to teach the following mathematics topics?

Fill in **one** circle for each row

	Not applicable	Very well prepared	Somewhat prepared	Not well prepared
A. Number				
a) Whole numbers including place value and ordering	①	②	③	④
b) Adding, subtracting, multiplying and/or dividing with whole numbers.....	①	②	③	④
c) Fractions (parts of a whole or a collection, location on a number line).....	①	②	③	④
d) Fractions represented by words, numbers, or models	①	②	③	④
e) Comparing and ordering fractions	①	②	③	④
f) Adding and subtracting with fractions	①	②	③	④
g) Adding and subtracting with decimals.....	①	②	③	④
h) Number sentences (finding the missing number, modeling simple situations with number sentences)	①	②	③	④
i) Number patterns (extending number patterns and finding missing terms)	①	②	③	④
j) Relationships between given pairs of whole numbers	①	②	③	④
B. Geometric Shapes and Measures				
a) Comparing and drawing angles	①	②	③	④
b) Elementary properties of common geometric shapes.....	①	②	③	④
c) Relationships between two-dimensional and three-dimensional shapes	①	②	③	④
d) Finding areas and perimeters	①	②	③	④
e) Estimating areas and volumes	①	②	③	④
f) Using informal coordinate systems to locate points in a plane	①	②	③	④
g) Reflections and rotations.....	①	②	③	④
C. Data Display				
a) Reading data from tables, pictographs, bar graphs, or pie charts	①	②	③	④
b) Drawing conclusions from data displays.....	①	②	③	④
c) Displaying data using tables, pictographs, bar graphs, or pie charts	①	②	③	④

Exhibit E-5. Fourth-grade teacher questionnaire —Continued

Teaching Mathematics to the TIMSS Class

Questions 12-26 refer to the TIMSS class. Remember, "the TIMSS class" is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS 2007 in your school.

12

A. How many students are in the TIMSS class for mathematics?

_____ *Write in the number of students*

B. How many students in Question 12A are in the fourth grade ?

_____ *Write in the number of fourth grade students*

13

How many minutes per week do you teach mathematics to the fourth-grade students in the TIMSS class?

_____ *Write in the number of minutes per week*

14

A. Do you use a textbook(s) in teaching mathematics to the fourth-grade students in the TIMSS class?

_____ *Fill in one circle only* Yes No
① ②

If No, please go to question 15

B. How do you use a textbook(s) in teaching mathematics to the fourth-grade students in the TIMSS class?

_____ *Fill in one circle only*
 As the primary basis for my lessons----- ①
 As a supplementary resource----- ②

15

In a typical week of mathematics lessons for the fourth-grade students in the TIMSS class, what percentage of time do students spend on each of the following activities?

*Write in the percent
The total should add to 100%*

- a) Reviewing homework %
- b) Listening to lecture-style presentations %
- c) Working problems with your guidance %
- d) Working problems on their own without your guidance %
- e) Listening to you re-teach and clarify content/procedures %
- f) Taking tests or quizzes %
- g) Participating in classroom management tasks not related to the lesson's content/purpose (e.g., interruptions and keeping order) %
- h) Other student activities %
- Total 100%

Exhibit E-5. Fourth-grade teacher questionnaire —Continued

16 _____

Are the fourth-grade students in the TIMSS class permitted to use calculators during mathematics lessons?

Fill in one circle only

Yes, with unrestricted use----- ①

Yes, with restricted use----- ②

No, calculators are not permitted ----- ③

If No, please go to question 18 →

17 _____

How often do the fourth-grade students in the TIMSS class use calculators in their mathematics lessons for the following activities?

Fill in one circle for each row

- | | Every or almost every lesson | About half the lessons | Some lessons | Never |
|-------------------------------|------------------------------|------------------------|--------------|-------|
| a) Check answers ----- | ① | ② | ③ | ④ |
| b) Do routine computations--- | ① | ② | ③ | ④ |
| c) Solve complex problems--- | ① | ② | ③ | ④ |
| d) Explore number concepts -- | ① | ② | ③ | ④ |

18 _____

A. Do the fourth-grade students in the TIMSS class have computer(s) available to use during their mathematics lessons?

No
Yes

Fill in one circle only----- ①---②

If No, please go to question 20 →

B. Do any of the computer(s) have access to the Internet?

No
Yes

Fill in one circle only----- ①---②

19 _____

In teaching mathematics to the fourth-grade students in the TIMSS class, how often do you have students use a computer for the following activities?

Fill in one circle for each row

- | | Every or almost every lesson | About half the lessons | Some lessons | Never |
|--|------------------------------|------------------------|--------------|-------|
| a) Discover mathematics principles and concepts----- | ① | ② | ③ | ④ |
| b) Practice skills and procedures----- | ① | ② | ③ | ④ |
| c) Look up ideas and information----- | ① | ② | ③ | ④ |

Exhibit E-5. Fourth-grade teacher questionnaire —Continued

20

In teaching mathematics to the fourth-grade students in the TIMSS class, how often do you usually ask them to do the following?

Fill in **one** circle for each row

	Every or almost every lesson	About half the lessons	Some lessons	Never
a) Practice adding, subtracting, multiplying, and dividing without using a calculator	①	②	③	④
b) Work on fractions and decimals	①	②	③	④
c) Measure things in the classroom and around the school	①	②	③	④
d) Make tables, charts, or graphs	①	②	③	④
e) Learn about shapes such as circles, triangles, rectangles, and cubes	①	②	③	④
f) Write equations for word problems	①	②	③	④
g) Explain their answers	①	②	③	④
h) Relate what they are learning in mathematics to their daily life	①	②	③	④
i) Memorize formulas and procedures	①	②	③	④

21

By the end of this school year, approximately what percentage of teaching time will you have spent during this school year on each of the following mathematics content areas for the fourth-grade students in the TIMSS class?

Write in the percent
The total should add to 100%

a) Number (includes computation with whole numbers, fractions, decimals and number patterns)	_____ %
b) Geometric Shapes and Measures (includes two- and three-dimensional shapes, length, area and volume)	_____ %
c) Data Display (includes reading, making, and interpreting tables and graphs)	_____ %
d) Other, please specify: _____	_____ %
Total	100%