

# **Mathematics Teacher Background Questionnaire**

**2006** Grade 8

## TEACHER QUESTIONNAIRE GRADE 8 – MATHEMATICS

During the 2005–2006 school year, a sample of students across the country, including some of your eighth-grade students, will participate in the National Assessment of Educational Progress (NAEP). The current assessment focuses on achievement in U.S. history, civics, economics, reading, writing, and mathematics. To investigate the relationship between students' achievement and various school, teacher, and home factors, NAEP is also collecting information from schools and teachers.

This questionnaire collects information about teachers' backgrounds and instructional practices as they relate to students selected for the assessment. Since you teach mathematics to one or more students selected for the assessment, you are being asked to answer questions about these students' classes.

Obviously, only you can provide this important information. So, although we realize that you are very busy, we urge you to complete this questionnaire as accurately as possible. All responses that relate to or describe identifiable characteristics of teachers or schools may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose, unless otherwise compelled by law.

NAEP is authorized under Public Law 107–110. While your participation is voluntary, your responses to these questions are needed to make this survey accurate and complete.

#### **Instructions**

This questionnaire contains two parts.

Part I – Background, Education, and Training

Part II - Classroom Organization and Instruction-Mathematics

You should complete all parts. Please record your answers online, following the instructions on the front cover. If you do not have Internet access, please answer questions directly on this questionnaire by filling in the appropriate ovals.

If you do answer questions directly on this questionnaire, please return the questionnaire to your school's NAEP coordinator when you are finished.

THANK YOU VERY MUCH.

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### Mathematics Teacher Questionnaire - Grade 8

### Part I: Background, Education, and Training

For several questions on this survey, you are asked to fill in numbers. For these questions, please print the appropriate number in each of the boxes provided. Please print legibly with a No. 2 pencil. Keep all printing within the boxes, and erase any stray marks.

Using one number per box, fill in every box. For example, 95 students would be written as:



VB331330

- 1. Are you Hispanic or Latino? Fill in one or more ovals.
  - (A) No, I am not Hispanic or Latino.
  - (B) Yes, I am Mexican, Mexican American, or Chicano.
  - © Yes, I am Puerto Rican or Puerto Rican American.
  - Yes, I am Cuban or Cuban American.
  - © Yes, I am from some other Hispanic or Latino background.

VB331331

- 2. Which of the following best describes you? Fill in one or more ovals.
  - White
  - Black or African American
  - Asian

  - D Native Hawaiian or other Pacific Islander

Questions 3–4. For the next two questions, include any full-time teaching assignment art-time teaching assignments, and long-term substitute assignments, but not students.	
eaching.	

3.	. Counting this year, how many years have you worked as an elementary or secondary					
	teacher? If less than 4 months total experience, enter "00."					
	Years					

VB482728

4. Counting this year, how many years have you taught mathematics in grades 6 through 12? Include any full-time teaching assignments, part-time teaching assignments, and long-term substitute assignments, but not student teaching. If less than 4 months total experience, enter "00."



VB333654

- 5. What type of teaching certificate do you hold in the state where you currently teach?
  - Regular or standard state certificate or advanced professional certificate → Skip to Question 7
  - Probationary certificate (the initial certificate issued after satisfying all requirements except the completion of a probationary period) → Go to Question 6
  - © Provisional or other type of certificate given to persons who are still participating in what the state calls an "alternative certification program"  $\rightarrow$  *Go to Question 6*
  - Temporary certificate (requires some additional college coursework and/or student teaching before regular certification can be obtained) → Go to Question 6
  - © Emergency certificate or waiver (issued to persons with insufficient teacher preparation who must complete a regular certification program in order to continue teaching) → *Go to Question 6*
  - lacktriangle No certificate  $\rightarrow$  Go to Question 6

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		Yes, a minor or Yes, a major special emphasis No
8.		you have a major, minor, or special emphasis in any of the following subjects as part our <b>undergraduate</b> coursework? Fill in <b>one</b> oval on each line.
	<b>©</b>	Professional degree (e.g., M.D., LL.B., J.D., D.D.S.)
	Ð	Doctorate
	Œ	Education specialist's or professional diploma based on at least one year's work past master's degree
	0	Master's degree
	0	Bachelor's degree
	®	Associate's degree/vocational certification
	<b>(A)</b>	High-school diploma
7.	Wh	at is the highest academic degree you hold?
	®	No
	lack	Yes
6.		you hold a currently valid regular or standard certification from a state other than the in which you are currently teaching?

	Yes, a major	Yes, a minor or special emphasis	No	
a. Mathematics education	<b>(A)</b>	B	0	VB482657
b. Mathematics	<b>(A)</b>	B	0	VB482658
c. Other mathematics-related subject such as statistics	<b>(A)</b>	<b>®</b>	0	VB608497
d. Education (including secondary education	n) 🔈	B	0	VB482938

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9. Did you have a major, minor, or special emphasis in any of the following subjects as part of your **graduate** coursework? Fill in **one** oval on each line.

	Yes, a major	Yes, a minor or special emphasis	No	
a. Mathematics education	A	<b>®</b>	0	VB473837
b. Mathematics	A	<b>®</b>	0	VB473838
c. Other mathematics-related subject such as statistics	<b>(A)</b>	<b>®</b>	0	VB473839
d. Education (including secondary education		®	0	VB482939

VB543426

10. As part of either your undergraduate or graduate coursework, how many **advanced mathematics** courses (such as trigonometry, calculus, or statistics) did you take?

- None
- 1 or 2 courses
- © 3 or 4 courses
- © 5 or more courses

VB543427

11. As part of either your undergraduate or graduate coursework, how many **mathematics education** courses did you take?

- A None
- 1 or 2 courses
- © 3 or 4 courses
- © 5 or more courses

12. During the last **two years**, did you participate in or lead any of the following professional development activities **related to the teaching of mathematics**? Fill in **one** oval on each line.

	Yes	No	
a. College course taken after your first certification	<b>(A)</b>	® VB48	32583
b. Workshop or training session	<b>(A)</b>	® VB48	32584
c. Conference or professional association meeting	<b>(A)</b>	® VB48	32585
d. Observational visit to another school	<b>(A)</b>	® VB48	32586
e. Mentoring and/or peer observation and coaching as part of a formal arrangement	<b>(A)</b>	® VB48	32587
f. Committee or task force focusing on curriculum, instruction, or student assessment	A	® VB48	32588
g. Regularly scheduled discussion or study group	<b>(A)</b>	® VB48	32589
h. Teacher collaborative or network (such as one organized by an outside agency or over the Internet)	<b>(A)</b>	® VB48	32590
i. Individual or collaborative research	<b>(A)</b>	® VB48	32591
j. Independent reading on a regular basis (for example, educational journals, books, or the Internet)	<b>(A)</b>	® VB48	32592
k. Co-teaching/team teaching	<b>(A)</b>	B VB48	32593
1. Consultation with a mathematics specialist	<b>(A)</b>	B VB48	32594

13. Consider all of the professional development activities you participated in during the last **two years**. To what extent did you learn about each of the following topics? Fill in **one** oval on each line.

	Not at all	Small extent	Moderate extent	Large extent	
a. How students learn mathematics	A	$^{ ext{ B}}$	©	0	VB543502
b. Mathematics theory or applications	A	$^{ ext{ B}}$	©	0	VB543503
c. Content standards in mathematics	A	$^{ ext{ B}}$	©	0	VB543504
d. Curricular materials available in mathematics (units, texts)	A	₿	©	0	VB543505
e. Instructional methods for teaching mathematics	A	₿	0	0	VB543506
f. Effective use of manipulatives in mathematics instruction	A	₿	©	0	VB519181
g. Effective use of calculators in mathematics instruction	A	₿	0	0	VB543507
h. Use of computers or other technology in mathematics instruction	A	®	©	0	VB543508
i. Methods for assessing students in mathematics	A	®	0	<b>(D)</b>	VB543509
j. Preparation of students for district and state assessments	A	®	0	•	VB543510
k. Issues related to ability grouping in mathematics	A	®	0	•	VB543511
1. Strategies for teaching mathematics to students from diverse backgrounds (including English language learners)	A	B	©	0	VB543512

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		40	UH	12

14.	Are you teaching the following mathematics courses to eighth-grade students this year	ar?
	Include honors sections. Fill in <b>one</b> oval on each line.	

	Yes	No	
a. Remedial mathematics	A	B '	VB543643
b. General mathematics	A	B '	VB543644
c. Introduction to Algebra/Pre-algebra	A	B '	VB543645
d. Algebra	<b>(A)</b>	B '	VB543646
e. Integrated or sequential mathematics	<b>(A)</b>	B '	VB543647
f. Geometry	<b>(A)</b>	® '	VB543648

15. Do you have special leadership responsibilities for **mathematics** education at your school (for example, responsibilities as a mentor teacher, lead teacher, resource specialist, departmental chair, or master teacher)?

A Yes

® No

VC110270

16. Some states and districts have recently initiated school improvement efforts directed at issues such as adequate yearly progress and state accountability standards. During the last two years have you participated in such activities?

	Yes	No	
a. Within your school	<b>(A)</b>	®	C110296
b. As part of a team outside your school	A	® V	C110314

#### Part II: Classroom Organization and Instruction: Mathematics - Grade 8

The following questions ask about the organization of your classroom. If you teach more than one eighth-grade class, please pick a single one of these classes to use as the basis for answering the questions about classroom organization.

VB54351

- 1. How many hours of mathematics instruction do your students receive in a typical week?
  - Less than 3 hours
  - At least 3 hours, but less than 5 hours
  - © At least 5 hours, but less than 7 hours
  - ① 7 or more hours

VB543516

- 2. Are computers available for use by you or your students?
  - Yes, computers are available to my students and to me.
  - Yes, I have access to computers, but my students do not.
  - © No, neither my students nor I have access to computers at school.

VB518853

3. To what extent are students permitted to use calculators during mathematics lessons? Please answer separately for your **most advanced** and **least advanced** eighth-grade mathematics classes. Fill in **one** oval on each line. If you teach only one mathematics class for eighth-grade students, treat the class as your most advanced class and mark "D" on the second line.

	Unrestricted use	Restricted use	Calculators are not permitted	I teach only one class	
a. Most advanced class	<b>(A)</b>	®	©		VB518854
b. Least advanced class	A	®	©	<b>(D)</b>	VB518855

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4. When you give students a mathematics test or quiz, how often do they use a calculator? Please answer separately for your **most advanced** and **least advanced** eighth-grade mathematics classes. Fill in **one** oval on each line. If you teach only one mathematics class for eighth-grade students, treat that class as your most advanced class and mark "D" on the second line.

	Never	Sometimes	Always	I teach only one class	
a. Most advanced class	<b>(A)</b>	®	©		VB543399
b. Least advanced class	A	B	©	<b>(</b>	VB543400

VC102234

5. Think about your **most advanced** mathematics students. Do these students receive mathematics instruction that differs in any of the following ways from the instruction provided to the **average-ability** students? Fill in **one** oval on each line.

	Yes	No	
a. I set different achievement standards for these students	<b>(A)</b>	$^{ ext{ B}}$	VC102236
b. I supplement the regular course curriculum with additional material for these students	<b>(A)</b>	₿	VC102238
c. I have these students engage in different classroom activities	<b>(A)</b>	<b>®</b>	VC102239
d. I use a different set of methods in teaching these students	<b>(A)</b>	<b>®</b>	VC102241
e. I pace my teaching differently for these students	<b>(A)</b>	$^{ ext{                                  $	VC102245

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VC102246

6. Think about your **least advanced** mathematics students. Do these students receive mathematics instruction that differs in any of the following ways from the instruction provided to the **average-ability** students? Fill in **one** oval on each line.

	Yes	No	
a. I set different achievement standards for these students	A	®	VC102247
b. I reduce the regular course curriculum and provide additional practice in the topics covered with these students	<b>(A)</b>	₿	VC102248
c. I have these students engage in different classroom activities	A	<b>®</b>	VC102249
d. I use a different set of methods in teaching these students	A	®	VC102250
e. I pace my teaching differently for these students	(A)	B	VC102251