NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

Wave 1 Submittal for 2011

VOLUME II

Part 2f

BACKGROUND QUESTIONS

FOR 2011 ASSESSMENT

Teacher Grade 8 Mathematics Questions



Part 2f contains: Grade 8 Mathematics Teacher Questions

The amount of time estimated to complete this form is 20 minutes.

March 31, 2010

2011 OMB Wave 1 Grade 8 -Part 2 of 3

TEACHER QUESTIONNAIRES

OMB Information on Teacher Questionnaire Cover Page

Paperwork Burden Statement

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 information collection is **1850-0790**. The time required to complete this information collection is estimated to average 20 minutes 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) or suggestions for improving this form, please write to**: U.S. Department of Education, Washington, D.C. 20202-4537. **If you have comments or concerns regarding the status of your individual submission of this form, write directly to**: NAEP/NCES, U.S. Department of Education, 1990 K Street N.W., Washington, D.C. 20006-5651.

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Mathematics Teacher Questionnaire – Grade 8

Part I: Background, Education, and Training

For some 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:



- 1. Are you Hispanic or Latino? Fill in one or more ovals.
 - 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.
 - ^(D) Yes, I am Cuban or Cuban American.
 - © Yes, I am from some other Hispanic or Latino background.
- 2. Which of the following best describes you? Fill in one or more ovals.
 - (A) White
 - [®] Black or African American
 - © Asian
 - D American Indian or Alaska Native
 - © Native Hawaiian or other Pacific Islander

VB331331

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

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."



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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."



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5. Did you enter teaching through an alternative certification program?

(An alternative program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative certification program.)

(A) Yes

B No

- 6. What type of teaching certificate do you hold in the state where you currently teach?
 - O Regular or standard state certificate or advanced professional certificate \rightarrow *Skip to Question 8.*
 - ^(B) Certificate issued after satisfying all requirements except the completion of a probationary period \rightarrow *Go to Question* 7.
 - \bigcirc Certificate that requires some additional coursework, student teaching, or passage of a test before regular certification can be obtained \rightarrow *Go to Question 7.*
 - [●] Certificate issued to persons who must complete a certification program in order to continue teaching \rightarrow *Go to Question 7.*
 - © I do not hold any of the above certificates in the state where I currently teach. \rightarrow *Go to Question* 7.

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- 7. Do you hold a currently valid regular or standard certification from a state other than the one in which you are currently teaching?
 - (A) Yes

B No

8. This school year, are you a Highly Qualified Teacher (HQT) according to your state's requirements?

(Generally, to be Highly Qualified, teachers must meet requirements related to 1) a bachelor's degree, 2) full state certification, and 3) demonstrate competency in the subject area(s) taught. The HQT requirement is a provision under the No Child Left Behind (NCLB) Act.)

- (A) Yes
- I meet my state's requirements for a Highly Qualified Teacher in at least one subject that I teach.
- © No

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9. Are you certified by the National Board for Professional Teaching Standards in at least one content area?

(The National Board for Professional Teaching Standards is a nongovernmental organization that administers National Board certification, a voluntary national assessment program that certifies teachers who meet high professional standards. In order to gain certification, the candidate must at least complete a portfolio of classroom practice and pass one or more tests of content knowledge.)

- Type: Yes, I am fully certified by the National Board for Professional Teaching Standards.
- (I am working towards my National Board certification.
- © No
- 10. What is the highest academic degree you hold?
 - High school diploma
 High schol diploma
 High schol diploma
 High schol diploma
 H
 - (D) Associate's degree/vocational certification
 - © Bachelor's degree
 - Master's degree
 - C Education specialist's or professional diploma based on at least one year's work past master's degree
 - Doctorate
 - © Professional degree (e.g., M.D., LL.B., J.D., D.D.S.)

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

	a major	emphasis	No	
a. Mathematics education	A	B	Ô	VB482657
b. Mathematics	A	B	Ô	VB482658
c. Other mathematics-related subject such as statistics	A	B	©	VB608497
d. Education (including secondary education)	A	B	©	VB482938
e. Special education (including students with disabilities)	A	B	Ô	VE113515
f. English-language learning	A	B	©	VE113516

VB345619

12. 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	\bigcirc	®	Ô	VB473837
b. Mathematics	\bigcirc	B	Ô	VB473838
c. Other mathematics-related subject such as statistics	Ø	₿	O	VB473839
d. Education (including secondary education)	\bigcirc	®	©	VB482939
e. Special education (including students with disabilities)		ß	©	VE113560
f. English-language learning	\bigcirc	B	Ô	VE113562

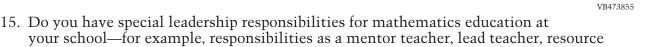
13. Consider all of the professional development activities you participated in during the last **two years**. To what extent did you learn about each of the following topics? Fill in **one** oval on each line.

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

VB482582

14. 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	A	B	VB482583
b. Workshop or training session	A	B	VB482584
c. Conference or professional association meeting	A	B	VB482585
d. Observational visit to another school	A	B	VB482586
e. Mentoring and/or peer observation and coaching as part of a formal arrangement	A	®	VB482587
f. Committee or task force focusing on curriculum, instruction, or student assessment	A	®	VB482588
g. Regularly scheduled discussion or study group	A	B	VB482589
h. Teacher collaborative or network, such as one organized by an outside agency or over the Internet	A	®	VB482590
i. Individual or collaborative research	A	B	VB482591
j. Independent reading on a regular basis—for example, educational journals, books, or the Internet	A	®	VB482592
k. Co-teaching/team teaching	A	B	VB482593
l. Consultation with a mathematics specialist	A	®	VB482594



VB543642

(A) Yes

B No

16. During the last **two years** have you participated in activities associated with school improvement efforts directed at issues such as adequate yearly progress and state accountability standards?

specialist, departmental chair, or master teacher?

(A) Yes

B No

17. Are you teaching the following mathematics courses to eighth-grade students **this year**? Include honors sections. Fill in **one** oval on each line.

	Yes	No	
a. Remedial mathematics	A	®	VB543643
b. General mathematics	$\textcircled{\ }$	B	VB543644
c. Introduction to algebra/pre-algebra	$\textcircled{\ }$	B	VB543645
d. Algebra	$\textcircled{\ }$	B	VB543646
e. Integrated or sequential mathematics	$\textcircled{\ }$	B	VB543647
f. Geometry	A	®	VB543648

Part II: Classroom Organization and Instruction - Mathematics

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

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If you do not teach mathematics, you have finished this questionnaire. Thank you for your time.

- 1. Which best describes your role in teaching mathematics to this class?
 - I do not teach mathematics to this class.
 - [®] I teach all or most subjects, including mathematics.
 - © The only subject I teach is mathematics.
 - ^(D) We team teach, and I have primary responsibility for teaching mathematics.

2. How many students are in this class?

- O 15 or fewer
- B 16–18

- © 19–20
- **D** 21–25
- © 26 or more

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- 3. How many hours of mathematics instruction do your students receive in a typical week?

 - (At least 3 hours, but less than 5 hours
 - © At least 5 hours, but less than 7 hours
 - ⑦ 7 or more hours
- 4. Are students assigned to this class by ability?
 - (A) Yes
 - [®] No
- 5. Do you create groups within this class for mathematics instruction on the basis of ability?
 - (A) Yes
 - B No

HE001130 6. How often do you use each of the following to assess student progress in mathematics? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a year	Once or twice a month	Once or twice a week	
a. Multiple-choice tests	\bigcirc	B	Õ	\bigcirc	HE001131
b. Problem sets	\bigcirc	B	Õ	\bigcirc	HE001132
c. Short (e.g., a phrase or sentence) or long (e.g., several sentences or paragraphs) written responses	A	B	O	۵	HE001133
d. Individual or group projects or presentations	A	B	O	Ø	HE001134

VC976308

- 7. Approximately how much mathematics homework do you assign to students in your mathematics class each day?
 - Mone
 None

- [®] Less than 1 hour
- © About 1 hour
- D About 2 to 3 hours
- D More than 3 hours

VB543554

- 8. To what extent are students permitted to use calculators during mathematics lessons?
 - ③ Unrestricted use
 - Restricted use
 - © Calculators are not permitted.
 - 9. What kind of calculator do your students usually use during mathematics lessons?
 - (A) None
 - (B) Basic four-function (addition, subtraction, multiplication, division)
 - © Scientific (not graphing)
 - ^(D) Graphing

- 10. When you give students a mathematics test or quiz, how often do they use a calculator?
 - Never
 - B Sometimes
 - © Always
- 11. How often do your students use calculators for each of the following purposes? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a month	Once or twice a week	Every day or almost every day	
a. Work along with the whole class on lessons led by you	A	B	Ô	\bigcirc	VC976192
b. "Check their work" on problems they do on their own	\bigcirc	B	Ô	0	VC976193
c. Calculate the answers to problems they do on their own	\bigcirc	B	Ô	Ø	VC976194
d. Graph mathematical functions	\bigcirc	B	©	D	VC976196

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VB543516

12. Think about your plans for this mathematics class for the entire year. How much emphasis did you or will you give each of the following? Fill in **one** oval on each line.

	Little or no emphasis		Heavy emphasis	
a. Numbers and operations	A	®	Ô	ID110366
b. Measurement	A	®	Ô	ID110367
c. Geometry	A	®	Ô	ID110368
d. Data analysis, statistics, and probability	A	®	Ô	VC767633
e. Algebra and functions	A	B	©	VC767634

13. Are computers available for use by you or your students?

✤ Yes, computers are available to my students and to me.

(B) Yes, I have access to computers, but my students do not.

© No, neither my students nor I have access to computers at school.

14. In your eighth-grade mathematics class this year, how often do your students use a computer or other technological resources to do each of the following? Fill in **one** oval on each line.

		Never or hardly ever	Once or twice a month	Once or twice a week	Every day or almost every day	
a.	Practice or review mathematics topics on the computer	A	B	O	0	VC976334
b.	Extend mathematics learning with enrichment activities on the computer	A	®	O	D	VC976335
c.	Research a mathematics topic on the Internet or CD-ROM	A	B	Ô	0	VC976336
d.	Use a drawing program for geometric shapes	A	B	Ô	Ø	VC976339
e.	Use a graphing program	\bigcirc	B	©	\bigcirc	VC976353
f.	Communicate via e-mail about mathematics	A	B	Ô	0	VC976354
g.	Play mathematics computer games	\bigcirc	B	©	\bigcirc	VC976355
h.	Use a basic four-function calculator (addition, subtraction, multiplication, division)	A	B	O	Ø	VC976356
i.	Use a scientific (not graphing) calculator	A	B	Ô	D	VC976358
j.	Use a graphing calculator	\bigcirc	B	©	\odot	VC976359

VC976333

- 15. Which of the following statements best describes how well your school system provides you with the materials and other resources you need for mathematics instruction?

 - ^(B) I have some of the resources I need.
 - © I have most of the resources I need.
 - \bigcirc I have all of the resources I need.

VC976362

16. When you teach mathematics to your eighth-grade class, do you do any of the following? Fill in **one** oval on each line.

	Not at all	Small extent	Moderate extent	Large extent	
a. Set different achievement standards for some students	A	B	Ô	Ø	VC976363
b. Supplement the regular course curriculum with additional material for some students	A	B	©	D	VC976364
c. Have some students engage in different classroom activities	A	B	©	O	VC976365
d. Use a different set of methods in teaching some students	A	B	©	D	VC976366
e. Pace my teaching differently for some students	\bigcirc	B	Õ	\odot	VC976367

17. How often do you do each of the following with individual students to evaluate their progress in mathematics? Fill in **one** oval on each line.

	Never or hardly ever	A few times a year	Once or twice a month	Once or twice a week	Every day or almost every day	
a. Discuss the student's current level of performance	Ø	₿	©	Ø	Ē	VC976304
b. Set goals for specific progress the student would like to make	æ	B	Ô	Ø	Ē	VC976305
c. Discuss progress the student has made toward goals previously set	A	®	O	0	Ē	VC976306
d. Determine how to adjust your teaching strategies to meet the student's current learning needs and to reflect the student's future goals	æ	®	C	D	Ē	VC976307