

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

## Mathematics

 Teacher Background Questionnaire
## 2009

Grade 8

## 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:


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.
(c) Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
(E) 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
(B) Black or African American
(c) Asian
(D) American Indian or Alaska Native
(E) Native Hawaiian or other Pacific Islander

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.
vB337243
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
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 ."


Years
5. Did you enter teaching through an alternative certification program?
(An alternative program is a program that was designed to expedite the transition of nonteachers to a teaching career, for example, a state, district, or university alternative certification program.)
(4) Yes
(B) No

VC309874
6. What type of teaching certificate do you hold in the state where you currently teach?
(A) 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.
© Certificate that requires some additional coursework, student teaching or passage of a test before regular certification can be obtained $\rightarrow$ Go to Question 7.
(D) Certificate issued to persons who must complete a certification program in order to continue teaching $\rightarrow$ Go to Question 7.
(E) I do not hold any of the above certificates in the state where I currently teach $\rightarrow$ Go to Question 7.

VB595188
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.)
(4) Yes
(B) I meet my state's requirements for a Highly Qualified Teacher in at least one subject that I teach.
© No
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.)
(A) Yes, I am fully certified by the National Board for Professional Teaching Standards.
(B) I am working towards my National Board certification.
(c) No
10. What is the highest academic degree you hold?
(A) High-school diploma
(B) Associate's degree/vocational certification
(c) Bachelor's degree
(D) Master's degree
(E) Education specialist's or professional diploma based on at least one year's work past master's degree
(ㄷ) Doctorate
(c) 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 major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Mathematics education | (4) | (B) | © | vB482657 |
| b. Mathematics | (4) | (B) | © | vB482658 |
| c. Other mathematics-related subject such as statistics | (4) | (B) | © | vв608497 |
| d. Education (including secondary education) | (4) | (B) | © | vB482938 |

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.
a. Mathematics education
b. Mathematics
c. Other mathematics-related subject such as statistics
d. Education (including secondary education)

|  | Yes, a |  |
| :--- | :---: | :--- |
|  | minor or |  |
| Yes, a | special |  |
| major | emphasis | No |


| (A) | (B) | (C) | VB473837 |
| :--- | :--- | :--- | :--- |
| (A) | (B) | (C) | VB473838 |
| (A) | (B) | (C) | VB473839 |
| (A) | (B) | (C) | VB482939 |

vB543441
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.
a. How students learn mathematics
b. Mathematics theory or applications
c. Content standards in mathematics
d. Curricular materials available in mathematics (units, texts)
e. Instructional methods for teaching mathematics
f. Effective use of manipulatives in mathematics instruction
g. Effective use of calculators in mathematics instruction
h. Use of computers or other technology in mathematics instruction
i. Methods for assessing students in mathematics
j. Preparation of students for district and state assessments
k. Issues related to ability grouping in mathematics

1. Strategies for teaching mathematics to students from diverse backgrounds (including English language learners)
2. 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) | (B) | VB482587 |
| f. Committee or task force focusing on curriculum, instruction, or student assessment | (A) | (B) | 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) | (B) | 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) | (B) | VB482592 |
| k. Co-teaching/team teaching | (A) | (B) | VB482593 |
| 1. Consultation with a mathematics specialist | (A) | (B) | VB482594 |

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
(B) No

VC304724
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?
(A) Yes
(B) No
vB543642
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) | (B) | vB543643 |
| b. General mathematics | (A) | (B) | VB543644 |
| c. Introduction to Algebra/Pre-algebra | (A) | (B) | VB543645 |
| d. Algebra | (A) | (B) | vB543646 |
| e. Integrated or sequential mathematics | (A) | (B) | VB543647 |
| f. Geometry | (A) | (B) | 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.

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?
(A) I do not teach mathematics to this class.
(B) 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?
(A) 15 or fewer
(B) 16-18
© 19-20
(D) 21-25
(E) 26 or more
3. How many hours of mathematics instruction do your students receive in a typical week?
(A) Less than 3 hours
(B) At least 3 hours, but less than 5 hours
© At least 5 hours, but less than 7 hours
(D) 7 or more hours
4. Are students assigned to this class by ability?
(A) Yes
(B) No

HE001 104
5. Do you create groups within this class for mathematics instruction on the basis of ability?
(A) Yes
(B) No

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

| a．Multiple－choice tests | （4） | （B） | © | （1） | HE001131 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| b．Problem sets | （4） | （B） | © | （1） | HE001132 |
| c．Short（e．g．，a phrase or sentence） or long（e．g．，several sentences or paragraphs）written responses | （4） | （B） | © | （1） | HE001133 |
| d．Individual or group projects or presentations | （4） | （B） | © | （1） | нЕоо113 |

7．Approximately how much mathematics homework do you assign to students in your mathematics class each day？
（A）None
（B）Less than 1 hour
© About 1 hour
（D）About 2 to 3 hours
（E）More than 3 hours

VB543554
8. To what extent are students permitted to use calculators during mathematics lessons?
(A) Unrestricted use
(B) Restricted use
(c) Calculators are not permitted.

VB535973
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?
(A) Never
(B) Sometimes
© Always

VC976178
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 | (4) | (B) | © | (1) | vC976192 |
| b. "Check their work" on problems they do on their own | (4) | (B) | © | (1) | vC976193 |
| c. Calculate the answers to problems they do on their own | (4) | (B) | © | (1) | vC976194 |
| d. Graph mathematical functions | (A) | (B) | © | (1) | vC976196 |

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 | Moderate <br> emphasis$\quad$Heavy <br> emphasis |

a. Numbers and operations

| (A) | (B) | © | ID110366 |
| :---: | :---: | :---: | :---: |
| (A) | (B) | © | 10367 |
| (A) | (B) | © | 0368 |
| (A) | (B) | © | vC767633 |
| (A) | (B) | © | VC767634 |

e. Algebra and functions
13. Are computers available for use by you or your students?
(A) 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 | (4) | (B) | © | (1) | vc976334 |
| b. Extend mathematics learning with enrichment activities on the computer | (4) | (B) | © | (1) | vc976335 |
| c. Research a mathematics topic on the Internet or CD-ROM | (4) | (B) | © | (1) | vc976336 |
| d. Work with a spreadsheet program | (4) | (B) | © | (1) | vc976337 |
| e. Work with a word processing program for a mathematics assignment | (4) | (B) | © | (1) | vc976338 |
| f. Use a drawing program for geometric shapes | (4) | (B) | © | (1) | vc976339 |
| g. Use a graphing program | (4) | (B) | © | (1) | vc976353 |
| h. Communicate via e-mail about mathematics | (4) | (B) | © | (1) | vc976354 |
| i. Play mathematics computer games | (4) | (8) | © | (1) | vc976355 |
| j. Use a basic four-function calculator (addition, subtraction, multiplication, division) | (4) | (B) | © | (1) | vc976356 |
| k. Use a scientific (not graphing) calculator | (4) | (B) | © | (1) | vc976358 |
| 1. Use a graphing calculator | (4) | (B) | © | (1) | vc976359 |
| m . Use another kind of calculator | (4) | (B) | © | (1) | vc976361 |

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?
© $\triangle$ I do not have the resources I need.
(B) I have some of the resources I need.

I have most of the resources I need.
(D) 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 | (4) | (B) | © | (1) | vc976363 |
| b. Supplement the regular course curriculum with additional material for some students | (4) | (B) | © | (1) | vc976364 |
| c. Have some students engage in different classroom activities | (4) | (B) | © | (1) | vc976655 |
| d. Use a different set of methods in teaching some students | (4) | (B) | © | (1) | vc976366 |
| e. Pace my teaching differently for some students | (4) | (B) | © | (1) | vc976367 |

17. How often do you meet with students one-on-one to review their work and evaluate their progress in mathematics?
(A) Never or hardly ever
(B) A few times a year
© Once or twice a month
(D) Once or twice a week
© Every day or almost every day

VC976303
18. 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 | (A) | (B) | (c) | (D) | (E) | VC976304 |
| b. Set goals for specific progress the student would like to make | (A) | (B) | (c) | (D) | (E) | vC976305 |
| c. Discuss progress the student has made toward goals previously set | (A) | (B) | (c) | (D) | (E) | 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 | (A) | (B) | (c) | (D) | (E) | VC976307 |

