Mathematics
Teacher Background Questionnaire

2005

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:

$$\boxed{0}\ \boxed{9}\ \boxed{5}$$

VB331330

1. Are you Hispanic or Latino? Fill in **one or more ovals.**

   Ⓐ   No, I am not Hispanic or Latino.

   Ⓑ   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

   Ⓓ   American Indian or Alaska Native

   Ⓔ   Native Hawaiian or other Pacific Islander

Questions 3–4. For the next two questions, include any full-time teaching assignments, part-time 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

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."

☐☐ Years

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" → *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*

Ⓕ No certificate → *Go to Question 6*

6. Do you hold a currently valid regular or standard certification from a state other than the one in which you are currently teaching?

    Ⓐ Yes

    Ⓑ No

7. What is the highest academic degree you hold?

    Ⓐ High-school diploma

    Ⓑ Associate's degree/vocational certification

    Ⓒ Bachelor's degree

    Ⓓ Master's degree

    Ⓔ 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.)

8. 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	Ⓐ	Ⓑ	Ⓒ	VB482657
b. Mathematics	Ⓐ	Ⓑ	Ⓒ	VB482658
c. Other mathematics-related subject such as statistics	Ⓐ	Ⓑ	Ⓒ	VB608497
d. Education (including secondary education)	Ⓐ	Ⓑ	Ⓒ	VB482938
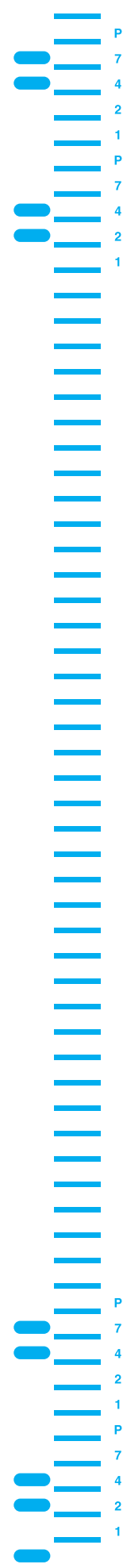
9. Did you have a major, minor, or special emphasis in any of the following subjects as part of your **graduate** coursework? Fill in **one** oval on each line.

VB345619

	Yes, a major	Yes, a minor or special emphasis	No
a. Mathematics education	Ⓐ	Ⓑ	Ⓒ VB473837
b. Mathematics	Ⓐ	Ⓑ	Ⓒ VB473838
c. Other mathematics-related subject such as statistics	Ⓐ	Ⓑ	Ⓒ VB473839
d. Education (including secondary education)	Ⓐ	Ⓑ	Ⓒ 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?

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

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	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543502
b. Mathematics theory or applications	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543503
c. Content standards in mathematics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543504
d. Curricular materials available in mathematics (units, texts)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543505
e. Instructional methods for teaching mathematics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543506
f. Effective use of manipulatives in mathematics instruction	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB519181
g. Effective use of calculators in mathematics instruction	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543507
h. Use of computers or other technology in mathematics instruction	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543508
i. Methods for assessing students in mathematics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543509
j. Preparation of students for district and state assessments	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543510
k. Issues related to ability grouping in mathematics	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543511
l. Strategies for teaching mathematics to students from diverse backgrounds (including English language learners)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543512

14. 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	Ⓐ	Ⓑ	VB543643
b. General mathematics	Ⓐ	Ⓑ	VB543644
c. Introduction to Algebra/Pre-algebra	Ⓐ	Ⓑ	VB543645
d. Algebra	Ⓐ	Ⓑ	VB543646
e. Integrated or sequential mathematics	Ⓐ	Ⓑ	VB543647
f. Geometry	Ⓐ	Ⓑ	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)?

Ⓐ Yes

Ⓑ No

16. Some states and districts have recently initiated school improvement efforts directed at issues such as adequate yearly progress and state accountability standards. These activities are usually led by personnel from outside the particular school. During the last two years have you participated in such activities?

	Yes	No	
a. Within your school	Ⓐ	Ⓑ	VB595193
b. As part of a team outside your school	Ⓐ	Ⓑ	VB595194

Part II: Classroom Organization and Mathematics Instruction

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.

VB543515

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

   Ⓓ   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 → *Go to Question 3*

   Ⓑ   Yes, I have access to computers, but my students do not → *Skip to Question 8*

   Ⓒ   No, neither my students nor I have access to computers at school → *Skip to Question 12*

VB543517

3. When using computers for mathematics instruction **in your classroom**, how many computers are available for your students?

   Ⓐ   One computer for each student

   Ⓑ   One computer for every two students

   Ⓒ   One computer for every three students

   Ⓓ   One computer for every four students

   Ⓔ   One computer for every five or more students

   Ⓕ   I do not use computers in my classroom for mathematics instruction.

4. When using computers for mathematics instruction **in a computer lab** or **media center**, how many computers are available for your students?

Ⓐ There is no computer lab/media center available

Ⓑ One computer for each student

Ⓒ One computer for every two students

Ⓓ One computer for every three students

Ⓔ One computer for every four students

Ⓕ One computer for every five or more students

Ⓖ I do not use computers in a computer lab or media center for mathematics instruction.

5. How often do you use computers to administer each of the following types of mathematics tests?

	Never use computers	Sometimes use computers	Always use computers	
a. Tests that you give to the whole class	Ⓐ	Ⓑ	Ⓒ	VB535964
b. Make-up tests for individual students	Ⓐ	Ⓑ	Ⓒ	VB535965
c. Individualized tests for some or all students (other than make-up tests)	Ⓐ	Ⓑ	Ⓒ	VB535966

The following questions ask about your mathematics instruction in general.

VB543650

6. Think about the **most advanced** class you teach for eighth-grade students. How often do you have students in this class do each of the following activities? 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, answer this question, then skip to Question 8.

	Never or almost never	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	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543652
b. Extend mathematics learning with enrichment activities on the computer	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543651
c. Research a mathematics topic on the Internet or CD-ROM	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543653
d. Work with a spreadsheet program	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543657
e. Work with a word processing program for a mathematics assignment	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543658
f. Use a drawing program—on either a computer or a graphing calculator—for drawing geometric shapes	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543702
g. Use a graphing program	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543659
h. Use a basic four-function calculator (addition, subtraction, multiplication, division)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556074
i. Use a scientific (not graphing) calculator	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556075
j. Use a graphing calculator	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556076
k. Use another kind of calculator	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556077

7. Now think about the **least advanced** class you teach for eighth-grade students. How often do you have students in this class do each of the following activities? Fill in **one** oval on each line.

	Never or almost never	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	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543704
b. Extend mathematics learning with enrichment activities on the computer	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543705
c. Research a mathematics topic on the Internet or CD-ROM	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543706
d. Work with a spreadsheet program	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543710
e. Work with a word processing program for a mathematics assignment	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543711
f. Use a drawing program—on either a computer or a graphing calculator—for drawing geometric shapes	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543714
g. Use a graphing program	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543712
h. Use a basic four-function calculator (addition, subtraction, multiplication, division)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556078
i. Use a scientific (not graphing) calculator	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556079
j. Use a graphing calculator	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556080
k. Use another kind of calculator	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556081

8. How often do **you** do each of the following computer activities? Fill in **one** oval on each line.

VB535967

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day	
a. Use the computer as a tool to present mathematics concepts to your students	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB535968
b. Look up mathematics information using the Internet or a CD-ROM	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB535969
c. Develop mathematics curricula or assignments	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB535970
d. Use a gradebook program	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB535971
e. Post homework, assignment, or schedule information on the web	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB535972

VB543551

9. Is there technical support available to you in your school to help answer computer questions?

Ⓐ Yes

Ⓑ No

VB543552

10. Is there software for mathematics instruction available at your school?

Ⓐ Yes

Ⓑ No

VB543555

11. Is there training or professional development in using computers for mathematics instruction available at your school or district?

Ⓐ Yes

Ⓑ No

12. 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	Ⓐ	Ⓑ	Ⓒ		VB518854
b. Least advanced class	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB518855

13. At your school, who sets the policy on calculator use in the classroom?

Ⓐ Each individual teacher

Ⓑ The mathematics teachers collectively within the school

Ⓒ The curriculum supervisor of the district

Ⓓ The local Board of Education

14. Think about the **most advanced** mathematics class you teach for eighth-grade students. How often do your students use calculators for each of the following purposes? 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, answer this question, then skip to Question 16.

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day	
a. To work along with whole-class lessons led by you	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB550414
b. To "check their work" on problems they do on their own	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB550415
c. To calculate the answers to problems they do on their own	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB550416
d. To graph mathematical functions	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB550417
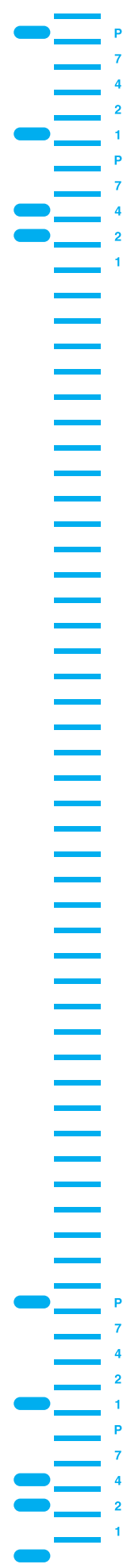
15. Think about the **least advanced** mathematics class you teach for eighth-grade students. How often do your students use calculators for each of the following purposes? Fill in **one** oval on each line.

VB543725

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day	
a. To work along with whole-class lessons led by you	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543726
b. To "check their work" on problems they do on their own	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543727
c. To calculate the answers to problems they do on their own	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543728
d. To graph mathematical functions	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543729

VB543398

16. 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	Ⓐ	Ⓑ	Ⓒ		VB543399
b. Least advanced class	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB543400

17. How often do you and/or your students in **any** of your eighth-grade mathematics classes use each of the following devices during mathematics lessons? Fill in **one** oval on each line.

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day	
a. Personal digital devices (e.g., PDA or tablet computer)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB550421
b. Symbolic manipulator (manipulates and transforms algebraic expressions)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556062
c. Geometry sketchbook (translates freehand drawings into mathematics functions)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556063
d. Data collection device (records distance, acceleration, pressure, voltage, etc.)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	VB556064