SECTION THREE

MATHEMATICS TEACHER QUESTIONNAIRE

Mathematics Teacher Questionnaire

Mathematics Teacher Questionnaire Tables

2012 NATIONAL SURVEY OF SCIENCE AND MATHEMATICS EDUCATION
MATHEMATICS TEACHER QUESTIONNAIRE

Section A. Teacher Background and Opinions

1. How many years have you taught prior to this school year: [Enter each response as a whole number (for example: 15).]

a. any subject at the K–12 level? _____
b. mathematics at the K–12 level? _____
c. at this school, any subject? _____

2. At what grade levels do you currently teach mathematics? [Select all that apply.]

□	K–5
□	6–8
□	9–12
□	You do not currently teach mathematics

3. ***[Presented to self-contained teachers only]***

Which best describes the mathematics instruction provided to the entire class?

- Do not consider pull-out instruction that some students may receive for remediation or enrichment.
- Do not consider instruction provided to individual or small groups of students, for example by an English-language specialist, special educator, or teacher assistant.

○	This class receives mathematics instruction ***only*** from you. ***[Presented only to teachers who answered in Q2 that they teach mathematics]***
○	This class receives mathematics instruction from you and another teacher (for example: a mathematics specialist or a teacher you team with). ***[Presented only to teachers who answered in Q2 that they teach mathematics]***

4. ***[Presented to self-contained teachers only]***

Which best describes your mathematics teaching?

○	I teach mathematics all or most days, every week of the year.
○	I teach mathematics every week, but typically three or fewer days each week.
○	I teach mathematics some weeks, but typically not every week.

5. ***[Presented to self-contained teachers only]***

Which best describes your science teaching?

○	I teach science all or most days, every week of the year.
○	I teach science every week, but typically three or fewer days each week.
○	I teach science some weeks, but typically not every week. ***[Skip to Q7]***
○	I do not teach science.

6. ***[Presented to self-contained teachers only]***

In a typical week, how many days do you teach lessons on each of the following subjects and how many minutes per week are spent on each subject? [Enter each response as a whole number (for example: 5, 150).]

	Number of days per week	Total number of minutes per week
a. Mathematics		
b. Science		
c. Social Studies		
d. Reading/Language Arts		

[SKIP to Q8]

7. ***[Presented to self-contained teachers only]*** In a typical year, how many weeks do you teach lessons on each of the following subjects and how many minutes per week are spent on each subject? [Enter each response as a whole number (for example: 36, 150).]

	Number of weeks per year	Average number of minutes per week when taught
a. Mathematics		
b. Science		
c. Social Studies		
d. Reading/Language Arts		

8. ***[Presented to non-self-contained teachers only]***

In a typical week, how many different mathematics classes do you teach?

- If you meet with the *same class of students* multiple times per week, count that class only once.
- If you teach the *same mathematics course* to multiple classes of students, count each class separately.

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

9. ***[Presented to non-self-contained teachers only]***

For each mathematics class you teach, select the course type and enter the number of students enrolled in the class.

Grades 9–12 Course Type	Example Courses
Non-college prep mathematics courses	Developmental Math; High School Arithmetic; Remedial Math; General Math; Vocational Math; Consumer Math; Basic Math; Business Math; Career Math; Practical Math; Essential Math; Pre-Algebra; Introductory Algebra; Algebra 1 Part 1; Algebra 1A; Math A; Basic Geometry; Informal Geometry; Practical Geometry
Formal/College-prep Mathematics Level 1 courses	Algebra 1; Integrated Math 1; Unified Math I; Algebra 1 Part 2; Algebra 1B; Math B
Formal/College-prep Mathematics Level 2 courses	Geometry; Plane Geometry; Solid Geometry; Integrated Math 2; Unified Math II; Math C
Formal/College-prep Mathematics Level 3 courses	Algebra 2; Intermediate Algebra; Algebra and Trigonometry; Advanced Algebra; Integrated Math 3; Unified Math III
Formal/College-prep Mathematics Level 4 courses	Algebra 3; Trigonometry; Pre-Calculus; Analytic/Advanced Geometry; Elementary Functions; Integrated Math 4; Unified Math IV; Calculus (not including college level/AP); any other College Prep Senior Math with Algebra 2 as a prerequisite
Mathematics courses that might qualify for college credit	Advanced Placement Calculus (AB, BC); Advanced Placement Statistics; IB Mathematics standard level; IB Mathematics higher level; concurrent college and high school credit/dual enrollment

Class	Course Type	Number of Students
Your 1st mathematics class:		
Your 2nd mathematics class:		
…		
Your Nth mathematics class:		

Course Type List	
1	Mathematics (Grades K–5)
2	Remedial Mathematics 6
3	Regular Mathematics 6
4	Accelerated/Pre-Algebra Mathematics 6
5	Remedial Mathematics 7
6	Regular Mathematics 7
7	Accelerated Mathematics 7
8	Remedial Mathematics 8
9	Regular Mathematics 8
10	Accelerated Mathematics 8
11	Algebra 1, Grade 7 or 8
12	Non-college prep mathematics course (Grades 9–12)
13	Formal/College-prep Mathematics Level 1 course (Grades 9–12)
14	Formal/College-prep Mathematics Level 2 course (Grades 9–12)
15	Formal/College-prep Mathematics Level 3 course (Grades 9–12)
16	Formal/College-prep Mathematics Level 4 course (Grades 9–12)
17	Mathematics course that might qualify for college credit (Grades 9–12)

10. ***[Presented to non-self-contained teachers only]***
Later in this questionnaire, we will ask you questions about you're your randomly selected mathematics class, which you indicated was [*course type teacher selected in Q9*]. What is your school's title for this course? _____

11. Have you been awarded one or more bachelor's and/or graduate degrees in the following fields? (With regard to bachelor's degrees, count only areas in which you majored.) [Select one on each row.]

	Yes	No
a. Education, including mathematics education	○	○
b. Mathematics	○	○
c. Computer Science	○	○
d. Engineering	○	○
e. Other, please specify._____	○	○

12. ***[Presented only to teachers that answered "Yes" to Q11a]***
What type of education degree do you have? (With regard to bachelor's degrees, count only areas in which you majored.) [Select all that apply.]

□	Elementary Education
□	Mathematics Education
□	Science Education
□	Other Education, please specify. _____

13. For each of the following areas, indicate the number of semester and/or quarter mathematics courses you completed.

- Count *courses* **not** credit hours.
- Include courses taken at the graduate or undergraduate level, as well as courses for which you received college credit while you were in high school.
- Count each course taken in high school for college credit as a one semester college course.
- Count courses that lasted multiple semesters or quarters as multiple courses.
- If your transcripts are not available, provide your best estimates.
- Enter your responses as whole numbers (for example: 3). You may either enter 0 (zero) or leave the box empty wherever applicable.

	Number of SEMESTER college courses	**Number of QUARTER college courses**
a. Mathematics content for elementary school teachers		
b. Mathematics content for middle school teachers		
c. Mathematics content for high school teachers		
d. Integrated mathematics (a single course that addresses content across ***multiple*** mathematics subjects, such as algebra and geometry)		
e. College algebra/trigonometry/functions		
f. Abstract algebra (for example: groups, rings, ideals, fields) ***[Presented to grades 6–12 teachers only]***		
g. Linear algebra (for example: vectors, matrices, eigenvalues) ***[Presented to grades 6–12 teachers only]***		
h. Calculus		
i. Advanced calculus ***[Presented to grades 6–12 teachers only]***		
j. Real analysis ***[Presented to grades 6–12 teachers only]***		
k. Differential equations ***[Presented to grades 6–12 teachers only]***		
l. Analytic/Coordinate Geometry (for example: transformations or isometries, conic sections) ***[Presented to grades 6–12 teachers only]***		
m. Axiomatic Geometry (Euclidean or non-Euclidean) ***[Presented to grades 6–12 teachers only]***		
n. College geometry ***[Presented to grades K–5 teachers only]***		
o. Probability		
p. Statistics		
q. Number theory (for example: divisibility theorems, properties of prime numbers) ***[Presented to grades 6–12 teachers only]***		
r. Discrete mathematics (for example: combinatorics, graph theory, game theory)		
s. Other upper division mathematics		

14. For each of the following areas, indicate the number of semester and/or quarter courses you completed.

- Count *courses* **not** credit hours.
- Include courses taken at the graduate or undergraduate level, as well as courses for which you received college credit while you were in high school.
- Count each course taken in high school for college credit as a one semester college course.
- Count courses that lasted multiple semesters or quarters as multiple courses.
- If your transcripts are not available, provide your best estimates.
- Enter your responses as whole numbers (for example: 3). You may either enter 0 (zero) or leave the box empty wherever applicable.

	Number of SEMESTER college courses	Number of QUARTER college courses
a. Computer science		
b. Engineering		
c. Science		

15. How many of the undergraduate and graduate level mathematics courses you completed were taken at each of the following types of institutions? (Please do not include mathematics education courses.) [Enter each response as a whole number (for example: 15).]

a. Two-year college, community college, and/or technical school _____
b. Four-year college and/or university _____

16. Which of the following best describes your teacher certification program?

○	An undergraduate program leading to a bachelor's degree and a teaching credential
○	A post-baccalaureate credentialing program (no master's degree awarded)
○	A master's program that also awarded a teaching credential
○	You do not have any formal teacher preparation

17. When did you **last participate** in professional development (sometimes called in-service education) focused on mathematics or mathematics teaching? (Include attendance at professional meetings, workshops, and conferences, as well as professional learning communities/lesson studies/teacher study groups. **Do not** include formal courses for which you received college credit or time spent **providing** professional development for other teachers.)

○	In the last 3 years
○	4–6 years ago
○	7–10 years ago
○	More than 10 years ago
○	Never

} ***Skip to Q21***

18. In the last 3 years have you… [Select one on each row.]

	Yes	No
a. attended a workshop on mathematics or mathematics teaching?	○	○
b. attended a national, state, or regional mathematics teacher association meeting?	○	○
c. participated in a professional learning community/lesson study/teacher study group focused on mathematics or mathematics teaching?	○	○

19. What is the **total** amount of time you have spent on professional development in mathematics or mathematics teaching **in the last 3 years**? (Include attendance at professional meetings, workshops, and conferences, as well as professional learning communities/lesson studies/teacher study groups. **Do not** include formal courses for which you received college credit or time spent **providing** professional development for other teachers.)

○	Less than 6 hours
○	6–15 hours
○	16–35 hours
○	More than 35 hours

20. Thinking about all of your mathematics-related professional development **in the last 3 years**, to what extent does each of the following describe your experiences? [Select one on each row.]

	Not at all		**Somewhat**		**To a great extent**
a. You had opportunities to engage in mathematics investigations.	①	②	③	④	⑤
b. You had opportunities to examine classroom artifacts (for example: student work samples).	①	②	③	④	⑤
c. You had opportunities to try out what you learned in your classroom ***and*** then talk about it as part of the professional development.	①	②	③	④	⑤
d. You worked closely with other mathematics teachers from your school.	①	②	③	④	⑤
e. You worked closely with other mathematics teachers who taught the same grade and/or subject whether or not they were from your school.	①	②	③	④	⑤
f. The professional development was a waste of your time.	①	②	③	④	⑤

21. When did you last take a formal course for **college credit** in each of the following areas? Do not count courses for which you received only Continuing Education Units. [Select one on each row.]

	In the last 3 years	**4 – 6 years ago**	**7 – 10 years ago**	**More than 10 years ago**	**Never**
a. Mathematics	○	○	○	○	○
b. How to teach mathematics	○	○	○	○	○
c. Student teaching in mathematics	○	○	○	○	○
d. Student teaching in other subjects	○	○	○	○	○

22. ***[Presented only to teachers that have participated in professional development in the last three years as indicated in Q17, OR took a course in "Mathematics" or "How to teach mathematics" in the last three years as indicated in q21a/b]***

Considering all the opportunities to learn about mathematics or the teaching of mathematics (professional development and coursework) **in the last 3 years**, how much was each of the following emphasized? [Select one on each row.]

	Not at all		**Somewhat**		**To a great extent**
a. Deepening your own mathematics content knowledge	①	②	③	④	⑤
b. Learning how to use hands-on activities/manipulatives for mathematics instruction	①	②	③	④	⑤
c. Learning about difficulties that students may have with particular mathematical ideas and procedures	①	②	③	④	⑤
d. Finding out what students think or already know about the key mathematical ideas prior to instruction on those ideas	①	②	③	④	⑤
e. Implementing the mathematics textbook/program to be used in your classroom	①	②	③	④	⑤
f. Planning instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	①	②	③	④	⑤
g. Monitoring student understanding during mathematics instruction	①	②	③	④	⑤
h. Providing enrichment experiences for gifted students	①	②	③	④	⑤
i. Providing alternative mathematics learning experiences for students with special needs	①	②	③	④	⑤
j. Teaching mathematics to English-language learners	①	②	③	④	⑤
k. Assessing student understanding at the conclusion of instruction on a topic	①	②	③	④	⑤

23. In the last 3 years have you… [Select one on each row.]

	Yes	**No**
a. received feedback about your mathematics teaching from a mentor/coach **formally assigned** by the school or district/diocese?	○	○
b. served as a **formally assigned** mentor/coach for mathematics teaching? (Please do not include supervision of student teachers.)	○	○
c. supervised a student teacher in your classroom?	○	○
d. taught in-service workshops on mathematics or mathematics teaching ?	○	○
e. led a professional learning community/lesson study/teacher study group focused on mathematics or mathematics teaching?	○	○

24. ***[Presented to self-contained teachers only]***

Many teachers feel better prepared to teach some subjects/topics than others. How well prepared do you feel to teach each of the following **at the grade level(s) you teach**, whether or not they are currently included in your teaching responsibilities? [Select one on each row.]

	Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a. Number and Operations	①	②	③	④
b. Early Algebra	①	②	③	④
c. Geometry	①	②	③	④
d. Measurement and Data Representation	①	②	③	④
e. Science	①	②	③	④
f. Reading/Language Arts	①	②	③	④
g. Social Studies	①	②	③	④

25. ***[Presented to non-self-contained teachers only]***

Within mathematics many teachers feel better prepared to teach some topics than others. How prepared do you feel to teach each of the following topics **at the grade level(s) you teach**, whether or not they are currently included in your curriculum? [Select one on each row.]

	Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a. The number system and operations	①	②	③	④
b. Algebraic thinking	①	②	③	④
c. Functions	①	②	③	④
d. Modeling	①	②	③	④
e. Measurement	①	②	③	④
f. Geometry	①	②	③	④
g. Statistics and probability	①	②	③	④
h. Discrete mathematics	①	②	③	④

26. How well prepared do you feel to do each of the following in your mathematics instruction? [Select one on each row.]

	Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a. Plan instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	①	②	③	④
b. Teach mathematics to students who have learning disabilities	①	②	③	④
c. Teach mathematics to students who have physical disabilities	①	②	③	④
d. Teach mathematics to English-language learners	①	②	③	④
e. Provide enrichment opportunities for gifted students	①	②	③	④
f. Encourage students' interest in mathematics	①	②	③	④
g. Encourage participation of females in mathematics	①	②	③	④
h. Encourage participation of racial or ethnic minorities in mathematics	①	②	③	④
i. Encourage participation of students from low socioeconomic backgrounds in mathematics	①	②	③	④
j. Manage classroom discipline	①	②	③	④

27. Please provide your opinion about each of the following statements. [Select one on each row.]

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
a. Students learn mathematics best in classes with students of similar abilities.	①	②	③	④	⑤
b. Inadequacies in students' mathematics background can be overcome by effective teaching.	①	②	③	④	⑤
c. It is better for mathematics instruction to focus on ideas in depth, even if that means covering fewer topics.	①	②	③	④	⑤
d. Students should be provided with the purpose for a lesson as it begins.	①	②	③	④	⑤
e. At the beginning of instruction on a mathematical idea, students should be provided with definitions for new vocabulary that will be used.	①	②	③	④	⑤
f. Teachers should explain an idea to students before having them investigate the idea.	①	②	③	④	⑤
g. Most class periods should include some review of previously covered ideas and skills.	①	②	③	④	⑤
h. Most class periods should provide opportunities for students to share their thinking and reasoning.	①	②	③	④	⑤
i. Hands-on activities/manipulatives should be used primarily to reinforce a mathematical idea that the students have already learned.	①	②	③	④	⑤
j. Students should be assigned homework most days.	①	②	③	④	⑤
k. Most class periods should conclude with a summary of the key ideas addressed.	①	②	③	④	⑤

Section B. Your Mathematics Instruction

The rest of this questionnaire is about your mathematics instruction in this class.

28. ***[Presented to non-self-contained teachers only]***
On average, how many minutes per week does this class meet? [Enter your response as a whole number (for example: 300).] _____

29. Enter the number of students for each grade represented in this class. [Enter each response as a whole number (for example: 15).]

Kindergarten	
1st grade	
2nd grade	
3rd grade	
4th grade	
5th grade	
6th grade	
7th grade	
8th grade	
9th grade	
10th grade	
11th grade	
12th grade	

30. For the students in this class, indicate the number of males and females in each of the following categories of race/ethnicity. [Enter each response as a whole number (for example: 15).]

	Males	**Females**
a. American Indian or Alaska Native		
b. Asian		
c. Black or African American		
d. Hispanic/Latino		
e. Native Hawaiian or Other Pacific Islander		
f. White		
g. Two or more races		

31. Which of the following best describes the prior mathematics achievement levels of the students in this class relative to other students in this school?

○	Mostly low achievers
○	Mostly average achievers
○	Mostly high achievers
○	A mixture of levels

32. How much control do you have over each of the following aspects of mathematics instruction in this class? [Select one on each row.]

	No Control		Moderate Control		Strong Control
a. Determining course goals and objectives	①	②	③	④	⑤
b. Selecting textbooks/modules	①	②	③	④	⑤
c. Selecting content, topics, and skills to be taught	①	②	③	④	⑤
d. Selecting teaching techniques	①	②	③	④	⑤
e. Determining the amount of homework to be assigned	①	②	③	④	⑤
f. Choosing criteria for grading student performance	①	②	③	④	⑤

33. Think about your plans for this class for the entire course/year. By the end of the course/year, how much emphasis will each of the following student objectives receive? [Select one on each row.]

	None	Minimal emphasis	Moderate emphasis	Heavy emphasis
a. Learning mathematical procedures and/or algorithms	①	②	③	④
b. Learning to perform computations with speed and accuracy	①	②	③	④
c. Understanding mathematical ideas	①	②	③	④
d. Learning mathematical practices (for example: considering how to approach a problem, justifying solutions)	①	②	③	④
e. Learning about real-life applications of mathematics	①	②	③	④
f. Increasing students' interest in mathematics	①	②	③	④
g. Preparing for further study in mathematics	①	②	③	④
h. Learning test taking skills/strategies	①	②	③	④

34. How often do you do each of the following in your mathematics instruction in this class? [Select one on each row.]

	Never	Rarely (for example: a few times a year)	Sometimes (for example: once or twice a month)	Often (for example: once or twice a week)	All or almost all mathematics lessons
a. Explain mathematical ideas to the whole class	①	②	③	④	⑤
b. Engage the whole class in discussions	①	②	③	④	⑤
c. Have students work in small groups	①	②	③	④	⑤
d. Provide manipulatives for students to use in problem-solving/investigations	①	②	③	④	⑤
e. Have students read from a mathematics textbook/program or other mathematics-related material in class, either aloud or to themselves	①	②	③	④	⑤
f. Have students consider multiple representations in solving a problem (for example: numbers, tables, graphs, pictures)	①	②	③	④	⑤
g. Have students explain and justify their method for solving a problem	①	②	③	④	⑤
h. Have students compare and contrast different methods for solving a problem	①	②	③	④	⑤
i. Have students develop mathematical proofs	①	②	③	④	⑤
j. Have students present their solution strategies to the rest of the class	①	②	③	④	⑤
k. Have students write their reflections (for example: in their journals) in class or for homework	①	②	③	④	⑤
l. Give tests and/or quizzes that are predominantly short-answer (for example: multiple choice, true/false, fill in the blank)	①	②	③	④	⑤
m. Give tests and/or quizzes that include constructed-response/open-ended items	①	②	③	④	⑤
n. Focus on literacy skills (for example: informational reading or writing strategies)	①	②	③	④	⑤
o. Have students practice for standardized tests	①	②	③	④	⑤
p. Have students attend presentations by guest speakers focused on mathematics in the workplace	①	②	③	④	⑤

35. Which best describes the availability of each of the following for small group (4-5 students) work in this class? [Select one on each row.]

	Do not have one per group available	At least one per group available upon request or in another room	At least one per group located in your classroom
a. Personal computers, including laptops	○	○	○
b. Hand-held computers (for example: PDAs, tablets, smartphones, iPads)	○	○	○
c. Internet access	○	○	○
d. Four-function calculators	○	○	○
e. Scientific calculators	○	○	○
f. Graphing calculators	○	○	○
g. Probes for collecting data (for example: motion sensors, temperature probes)	○	○	○
h. Classroom response system or "Clickers" (handheld devices used to respond electronically to questions in class)	○	○	○

36. For each of the following, are students expected to provide their own for use in this mathematics class? [Select one on each row.]

	Yes	No
a. Laptop computers	○	○
b. Hand-held computers	○	○
c. Four-function calculators	○	○
d. Scientific calculators	○	○
e. Graphing calculators	○	○

37. How often do students use each of the following instructional technologies in this mathematics class? [Select one on each row.]

	Never	Rarely (for example: A few times a year)	Sometimes (for example: once or twice a month)	Often (for example: once or twice a week)	All or almost all mathematics lessons
a. Personal computers, including laptops	①	②	③	④	⑤
b. Hand-held computers	①	②	③	④	⑤
c. Internet	①	②	③	④	⑤
d. Four-function calculators	①	②	③	④	⑤
e. Scientific calculators	①	②	③	④	⑤
f. Graphing calculators	①	②	③	④	⑤
g. Probes for collecting data	①	②	③	④	⑤
h. Classroom response system or “Clickers”	①	②	③	④	⑤

38. How often are students in this class required to take mathematics tests that you did **not** develop yourself, for example state assessments or district benchmarks? Do **not** include Advanced Placement or International Baccalaureate exams or students retaking a test because of failure.

○	Never
○	Once a year
○	Twice a year
○	Three or four times a year
○	Five or more times a year

39. How much mathematics homework do you assign to this class in a typical **week**? (Do not include time that the class spends getting started on homework during class.)

○	Fewer than 15 minutes per week
○	15–30 minutes per week
○	31–60 minutes per week
○	61–90 minutes per week
○	91–120 minutes per week
○	2–3 hours per week
○	3–4 hours per week
○	More than 4 hours per week

40. Which best describes the instructional materials students **most frequently** use in this class?

○	One commercially-published textbook or program most of the time
○	Multiple commercially-published textbooks/programs most of the time ***[Skip to Q42]***
○	Non-commercially-published instructional materials most of the time ***[Skip to Q46]***

41. Please indicate the title, author, most recent copyright year, and ISBN code of the textbook/program used by the students in this class.

- The 10- or 13-character ISBN code can be found on the copyright page and/or the back cover of your textbook/program.
- Do not include the dashes when entering the ISBN.
- An example of the location of the ISBN is shown to the right.

Title:
First Author:
Year:
ISBN:
[Skip to Q43]

42. Please indicate the title, author, most recent copyright year, and ISBN code of the commercially-published textbook/program used most often by the students in this class.

- The 10- or 13-character ISBN code can be found on the copyright page and/or the back cover of your textbook/program.
- Do not include the dashes when entering the ISBN.
- An example of the location of the ISBN is shown to the right.

Title:
First Author:
Year:
ISBN:

43. How would you rate the overall quality of this textbook/program?

○	Very poor
○	Poor
○	Fair
○	Good
○	Very good
○	Excellent

44. ***[Presented only to teachers who indicated using one commercially-published textbook/program in Q40]***

Over the course of the school year, approximately what percentage of the mathematics **instructional time** will students in this class spend using this textbook/program?

○	Less than 25%
○	25–49%
○	50–74%
○	75–90%
○	More than 90%

45. ***[Presented only to teachers who indicated using one commercially-published textbook/program in Q40]***

Approximately what percentage of the chapters/units in this textbook/program will students in this class engage with during the school year?

○	Less than 25%
○	25–49%
○	50–74%
○	75–90%
○	More than 90%

46. Mathematics courses may benefit from the availability of particular resources. Considering what you have available, how adequate is each of the following for teaching this mathematics class? [Select one on each row.]

	Not Adequate		**Somewhat Adequate**		**Adequate**
a. Instructional technology (for example: calculators, computers, probes/sensors)	①	②	③	④	⑤
b. Measurement tools (for example: protractors, rulers)	①	②	③	④	⑤
c. Manipulatives (for example: pattern blocks, algebra tiles)	①	②	③	④	⑤
d. Consumable supplies (for example: graphing paper, batteries)	①	②	③	④	⑤

47. In your opinion, how great a problem is each of the following for your mathematics instruction in this class? [Select one on each row.]

	Not a significant problem	**Somewhat of a problem**	**Serious problem**
a. Lack of access to computers	○	○	○
b. Old age of computers	○	○	○
c. Lack of access to the Internet	○	○	○
d. Unreliability of the Internet connection	○	○	○
e. Slow speed of the Internet connection	○	○	○
f. Lack of availability of appropriate computer software	○	○	○
g. Lack of availability of technology support	○	○	○

48. Please rate the effect of each of the following on your mathematics instruction in this class. [Select one on each row.]

	Inhibits effective instruction		**Neutral or Mixed**		**Promotes effective instruction**	**N/A or Don't Know**
a. Current state standards	①	②	③	④	⑤	○
b. District/Diocese curriculum frameworks ***[Not presented to non-Catholic private schools]***	①	②	③	④	⑤	○
c. District/Diocese and/or school pacing guides	①	②	③	④	⑤	○
d. State testing/accountability policies ***[Not presented to non-Catholic private schools]***	①	②	③	④	⑤	○
e. District/Diocese testing/accountability policies ***[Not presented to non-Catholic private schools]***	①	②	③	④	⑤	○
f. Textbook/program selection policies	①	②	③	④	⑤	○
g. Teacher evaluation policies	①	②	③	④	⑤	○
h. College entrance requirements ***[Presented to grades 9–12 teachers only]***	①	②	③	④	⑤	○
i. Students' motivation, interest, and effort in mathematics	①	②	③	④	⑤	○
j. Students' reading abilities	①	②	③	④	⑤	○
k. Community views on mathematics instruction	①	②	③	④	⑤	○
l. Parent expectations and involvement	①	②	③	④	⑤	○
m. Principal support	①	②	③	④	⑤	○
n. Time for you to plan, individually and with colleagues	①	②	③	④	⑤	○
o. Time available for your professional development	①	②	③	④	⑤	○

Section C. Your Most Recently Completed Mathematics Unit in this Class

The questions in this section are about the most recently completed mathematics unit in this class.

- Depending on the structure of your class and the instructional materials you use, a unit may range from a few to many class periods.
- Do not be concerned if this unit was not typical of your instruction.

49. How many class periods were devoted to instruction on the **most recently completed mathematics unit**? [Enter your response as a whole number (for example: 15).] _____

50. Which of the following best describes the content focus of this unit?

○	Number and Operations
○	Measurement and Data Representation
○	Algebra
○	Geometry
○	Probability
○	Statistics
○	Trigonometry
○	Calculus

51. What mathematical ideas and/or skills were addressed in this unit? _____

52. ***[Presented only to teachers who indicated using commercially-published textbooks/programs in Q40]***

Was this unit based primarily on the commercially-published textbook/program you described earlier as the one most used in this class?

○	Yes ***[Skip to Q55]***
○	No

53. Was this unit based on a commercially-published textbook/program?

○	Yes
○	No ***[Skip to Q59]***

54. Please indicate the title, author, most recent copyright year, and ISBN code of that textbook/ program.

- The 10- or 13-character ISBN code can be found on the copyright page and/or the back cover of the textbook/module.
- Do not include the dashes when entering the ISBN.
- An example of the location of the ISBN is shown to the right.

Title:
First Author:
Year:
ISBN:

55. Please indicate the extent to which you did each of the following while teaching this unit. [Select one on each row.]

	Not at all		Somewhat		To a great extent
a. You used the textbook/program to guide the overall structure and content emphasis of the unit.	①	②	③	④	⑤
b. You followed the textbook/program to guide the detailed structure and content emphasis of the unit.	①	②	③	④	⑤
c. You picked what is important from the textbook/program and skipped the rest.	①	②	③	④	⑤
d. You incorporated activities (for example: problems, investigations, readings) from other sources to supplement what the textbook/program was lacking.	①	②	③	④	⑤

56. ***[Presented only to teachers who answered "2–5" in Q55c]***

During this unit, when you skipped activities (for example: problems, investigations, readings) in your textbook/program, how much was each of the following a factor in your decisions? [Select one on each row.]

	Not a factor	A minor factor	A major factor
a. The mathematical ideas addressed in the activities you skipped are not included in your pacing guide and/or current state standards.	①	②	③
b. You did not have the materials needed to implement the activities you skipped.	①	②	③
c. The activities you skipped were too difficult for your students.	①	②	③
d. Your students already knew the mathematical ideas or were able to learn them without the activities you skipped.	①	②	③
e. You have different activities for those mathematical ideas that work better than the ones you skipped.	①	②	③

57. ***[Presented only to teachers who answered "2–5" in Q55d]***

During this unit, when you supplemented the textbook/program with additional activities, how much was each of the following a factor in your decisions? [Select one on each row.]

	Not a factor	A minor factor	A major factor
a. Your pacing guide indicated that you should use supplemental activities.	①	②	③
b. Supplemental activities were needed to prepare students for standardized tests.	①	②	③
c. Supplemental activities were needed to provide students with additional practice.	①	②	③
d. Supplemental activities were needed so students at different levels of achievement could increase their understanding of the ideas targeted in each activity.	①	②	③

58. How well prepared did you feel to do each of the following as part of your instruction on this particular unit? [Select one on each row.]

	Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a. Anticipate difficulties that students will have with particular mathematical ideas and procedures in this unit	①	②	③	④
b. Find out what students thought or already knew about the key mathematical ideas	①	②	③	④
c. Implement the mathematics textbook/ program to be used during this unit ***[Presented only to teachers who indicated using a commercially-published textbook/program in Q52/53]***	①	②	③	④
d. Monitor student understanding during this unit	①	②	③	④
e. Assess student understanding at the conclusion of this unit	①	②	③	④

59. Which of the following did you do during this unit? [Select all that apply.]

□	Administered an assessment, task, or probe at the beginning of the unit to find out what students thought or already knew about the key mathematical ideas
□	Questioned individual students during class activities to see if they were "getting it"
□	Used information from informal assessments of the entire class (for example: asking for a show of hands, thumbs up/thumbs down, clickers, exit tickets) to see if students were "getting it"
□	Reviewed student work (for example: homework, notebooks, journals, portfolios, projects) to see if they were "getting it"
□	Administered one or more quizzes and/or tests to see if students were "getting it"
□	Had students use rubrics to examine their own or their classmates' work
□	Assigned grades to student work (for example: homework, notebooks, journals, portfolios, projects)
□	Administered one or more quizzes and/or tests to assign grades
□	Went over the correct answers to assignments, quizzes, and/or tests with the class as a whole

Section D. Your Most Recent Mathematics Lesson in this Class

The next three questions refer to the most recent mathematics lesson in this class, whether or not that instruction was part of the unit you've just been describing. Do not be concerned if this lesson included activities and/or interruptions that are not typical (for example: a test, students working on projects, a fire drill).

60. How many minutes was that lesson? [Enter your response as a non-zero whole number (for example: 50).] _____

61. Of these minutes, how many were spent on the following: [Enter each response as a whole number (for example: 15).]

a. Non-instructional activities (for example: attendance taking, interruptions) ____
b. Whole class activities (for example: lectures, explanations, discussions) ____
c. Small group work ___
d. Students working individually (for example: reading textbooks, completing worksheets, taking a test or quiz) ___

62. Which of the following activities took place during that mathematics lesson? [Select all that apply.]

□	Teacher explaining a mathematical idea to the whole class
□	Whole class discussion
□	Students completing textbook/worksheet problems
□	Teacher conducting a demonstration while students watched
□	Students doing hands-on/manipulative activities
□	Students reading about mathematics
□	Students using instructional technology
□	Practicing for standardized tests
□	Test or quiz
□	None of the above

Section E. Demographic Information

63. Indicate your sex:

○	Male
○	Female

64. Are you of Hispanic or Latino origin?

○	Yes
○	No

65. What is your race? [Select all that apply.]

□	American Indian or Alaska Native
□	Asian
□	Black or African American
□	Native Hawaiian or Other Pacific Islander
□	White

66. In what year were you born? [Enter your response as a whole number (for example: 1969). Do not use commas.] _____

Thank you!

MATHEMATICS TEACHER QUESTIONNAIRE TABLES

Table MTQ 1
Number of Years Mathematics Teachers Spent Teaching Prior to This School Year

	Mean Number of Years		
	Elementary	Middle	High
Any subject at the K–12 level	13.6 (0.4)	12.8 (0.4)	13.7 (0.3)
Mathematics at the K–12 level	12.7 (0.4)	11.1 (0.4)	13.4 (0.3)
At this school, any subject	9.1 (0.3)	8.1 (0.4)	8.7 (0.2)

Table MTQ 2
Grade Levels Taught by Mathematics Teachers

	Percent of Teachers
Grades K–5	75 (0.6)
Grades 6–8	15 (0.6)
Grades 9–12	14 (0.4)

Table MTQ 3
Instructional Arrangements for Mathematics in Self-Contained Elementary School Classes

	Percent of Teachers
This class receives mathematics instruction only from you	79 (1.8)
This class receives mathematics instruction from you and another teacher (e.g., a mathematics specialist or a teacher you team with)	21 (1.8)

Table MTQ 4
Frequency with Which Self-Contained Elementary School Teachers Provide Mathematics Instruction

	Percent of Teachers
I teach mathematics all or most days, every week of the year	99 (0.4)
I teach mathematics every week, but typically three or fewer days each week	1 (0.3)
I teach mathematics some weeks, but typically not every week	0 (0.2)

Table MTQ 5
Frequency with Which Self-Contained Elementary School Teachers Provide Science Instruction

	Percent of Teachers
I teach science all or most days, every week of the year	24 (1.6)
I teach science every week, but typically three or fewer days each week	33 (1.6)
I teach science some weeks, but typically not every week	37 (1.9)
I do not teach science	7 (0.8)

Table MTQ 6 and 7
Average Number of Minutes per Day Spent Teaching Each Subject in Self-Contained Elementary School Classes†

	Average Number of Minutes
Reading/Language Arts	87.7 (1.3)
Mathematics	55.4 (0.8)
Science	19.9 (0.4)
Social Studies	17.3 (0.4)

† Only teachers who indicated they teach reading/language arts, mathematics, science, and social studies to one class of students are included in these analyses.

Table MTQ 8
Number of Sections of Mathematics Classes Taught per Week

	Percent of Teachers†		
	Elementary	Middle	High
1 Section	13 (4.0)	3 (0.7)	5 (1.2)
2 Sections	43 (5.5)	15 (2.0)	8 (0.8)
3 Sections	24 (4.5)	22 (2.0)	18 (1.1)
4 Sections	8 (2.5)	19 (1.7)	14 (1.3)
5 Sections	8 (2.6)	24 (2.0)	32 (1.7)
6 Sections	2 (1.1)	14 (1.3)	20 (1.2)
7 Sections	0 ---‡	2 (0.5)	3 (0.4)
8 Sections	0 ---‡	0 (0.1)	0 (0.1)
9 Sections	0 ---‡	0 (0.0)	0 (0.1)
10 Sections	2 (1.1)	1 (0.5)	0 (0.1)

† Only classes taught by non-self-contained teachers are included in this analysis.

‡ No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

There is no table for MTQ 9.

There is no table for MTQ 10.

Table MTQ 11
Subjects of Mathematics Teachers' Degrees

	Percent of Teachers		
	Elementary	Middle	High
Education, including Mathematics Education	90 (1.0)	82 (1.6)	71 (1.4)
Mathematics	4 (0.5)	23 (1.7)	52 (1.5)
Computer Science	1 (0.4)	4 (0.9)	4 (0.5)
Engineering	0 (0.2)	2 (0.5)	6 (0.7)
Other Subject	43 (1.9)	45 (2.3)	40 (1.8)

Table MTQ 12
Mathematics Teachers with Education Degrees

	Percent of Teachers[†]					
	Elementary		Middle		High	
Elementary Education	84	(1.1)	46	(2.3)	6	(0.7)
Mathematics Education	2	(0.3)	26	(2.0)	54	(1.7)
Science Education	1	(0.3)	5	(1.1)	2	(0.4)
Other Education	22	(1.4)	29	(2.1)	18	(1.1)

[†] Teachers indicating in Q11 that they do not have an education degree are treated as not having a degree in these areas.

Table MTQ 13
Mathematics College Courses[†] Completed by Mathematics Teachers

	Percent of Teachers					
	Elementary		Middle		High	
Mathematics for elementary school teachers	95	(0.7)	62	(2.1)	19	(1.3)
Mathematics for middle school teachers	12	(1.2)	56	(2.3)	31	(1.6)
Mathematics content for high school teachers	2	(0.6)	27	(1.8)	71	(1.8)
Integrated mathematics (a single course that addresses content across multiple mathematics subjects, such as algebra and geometry)	43	(1.7)	40	(2.0)	34	(1.7)
College algebra/trigonometry/functions	55	(1.6)	68	(2.1)	65	(1.8)
Abstract algebra (e.g., groups, rings, ideals, fields)[‡]	—	—	28	(1.6)	67	(1.7)
Linear algebra (e.g., vectors, matrices, eigenvalues)[‡]	—	—	39	(1.9)	80	(1.7)
Calculus	19	(1.4)	63	(2.3)	93	(0.9)
Advanced calculus[‡]	—	—	37	(2.1)	79	(1.6)
Real analysis[‡]	—	—	18	(1.7)	44	(1.7)
Differential equations[‡]	—	—	22	(1.5)	62	(1.7)
Analytic/Coordinate Geometry (e.g., transformations or isometries, conic sections)[‡]	—	—	26	(1.9)	53	(1.7)
Axiomatic Geometry (Euclidean or non-Euclidean)[‡]	—	—	21	(1.6)	55	(1.7)
College geometry[††]	24	(1.5)	—	—	—	—
Probability	24	(1.5)	39	(2.2)	56	(1.7)
Statistics	46	(1.6)	69	(2.1)	83	(1.5)
Number theory (e.g., divisibility theorems, properties of prime numbers)[‡]	—	—	32	(2.0)	54	(1.9)
Discrete mathematics (e.g., combinatorics, graph theory, game theory)[‡]	—	—	26	(1.7)	52	(1.8)
Other upper division mathematics	10	(1.0)	19	(1.5)	43	(1.5)

[†] A number of respondents to Q13 appear to have provided contact hours/credits rather than number of courses. Thus, it is not possible to report the number of courses taken with confidence and the percentage of teachers taking at least one course in each area is presented instead.

[‡] Item presented only to middle and/or high school teachers.

[††] Item presented only to elementary school teachers.

Table MTQ 14
College Courses† Completed by Mathematics Teachers

	Percent of Teachers					
	Elementary		Middle		High	
Computer science	50	(2.1)	61	(2.1)	77	(1.7)
Engineering	1	(0.4)	9	(1.2)	19	(1.4)
Science	93	(0.8)	89	(1.3)	87	(1.0)

† A number of respondents to Q14 appear to have provided contact hours/credits rather than number of courses. Thus, it is not possible to report the number of courses taken with confidence and the percentage of teachers taking at least one course in each area is presented instead.

Table MTQ 15
Mathematics College Courses† Completed by Mathematics Teachers at Various Institutions

	Percent of Courses					
	Elementary		Middle		High	
Two-year college, community college, and/or technical school	17	(1.4)	12	(1.4)	9	(0.8)
Four-year college and/or university	83	(1.4)	88	(1.4)	91	(0.8)

† A number of respondents to Q15 appear to have provided contact hours/credits rather than number of courses. Thus, it is not possible to report the number of courses taken at various institutions with confidence. However, assuming respondents entered the same type of data for both two-year and four-year institutions, it is possible to calculate the percentage of courses taken at each.

Table MTQ 16
Mathematics Teachers' Paths to Certification

	Percent of Teachers					
	Elementary		Middle		High	
An undergraduate program leading to a bachelor's degree and a teaching credential	63	(2.2)	55	(3.1)	48	(2.3)
A post-baccalaureate credentialing program (no master's degree awarded)	14	(1.9)	17	(2.1)	20	(1.8)
A master's program that also awarded a teaching credential	22	(2.0)	25	(2.7)	22	(1.6)
You do not have any formal teacher preparation	1	(0.4)	3	(1.1)	10	(1.9)

Table MTQ 17
Mathematics Teachers' Most Recent Participation in Mathematics-Focused† Professional Development

	Percent of Teachers					
	Elementary		Middle		High	
In the last 3 years	87	(1.3)	89	(1.6)	88	(1.0)
4–6 years ago	7	(0.9)	4	(0.7)	6	(0.6)
7–10 years ago	1	(0.4)	1	(0.5)	2	(0.4)
More than 10 years ago	1	(0.3)	2	(0.6)	1	(0.3)
Never	3	(0.7)	4	(1.0)	4	(0.7)

† Includes professional development focused on mathematics or mathematics teaching.

Table MTQ 18
Mathematics Teachers Participating in Various Professional Development Activities in the Last Three Years

	Percent of Teachers[†]					
	Elementary		Middle		High	
Attended a workshop on mathematics or mathematics teaching	91	(1.0)	92	(1.4)	89	(1.0)
Attended a national, state, or regional mathematics teacher association meeting	10	(1.0)	32	(2.5)	38	(1.5)
Participated in a professional learning community/lesson study/teacher study group focused on mathematics or mathematics teaching	66	(1.7)	76	(2.2)	73	(2.1)

[†] Only teachers indicating in Q17 that they participated in professional development in the last three years are included in this analysis.

Table MTQ 19
Time Spent by Mathematics Teachers on Mathematics-Focused[†] Professional Development in the Last Three Years

	Percent of Teachers					
	Elementary		Middle		High	
None[‡]	13	(1.3)	11	(1.6)	12	(1.0)
Less than 6 hours	21	(1.6)	11	(1.8)	11	(1.0)
6–15 hours	35	(1.6)	24	(2.1)	24	(1.4)
16–35 hours	20	(1.5)	23	(1.6)	22	(1.1)
More than 35 hours	11	(1.0)	31	(1.9)	32	(1.5)

[†] Includes professional development focused on mathematics or mathematics teaching.

[‡] Includes those teachers indicating in Q17 that they had not participated in professional development in the last three years.

Table MTQ 20.1
Elementary School Mathematics Teachers' Descriptions of Mathematics-Focused[†] Professional Development in the Last Three Years

	Percent of Teachers[‡]									
	Not at All				Somewhat				To a Great Extent	
	1		2		3		4		5	
You had opportunities to engage in mathematics investigations	8	(1.3)	7	(1.3)	40	(2.4)	26	(1.8)	20	(1.7)
You had opportunities to examine classroom artifacts (e.g., student work samples)	14	(1.6)	13	(1.5)	30	(2.2)	26	(2.0)	18	(1.8)
You had opportunities to try out what you learned in your classroom and then talk about it as part of the professional development	14	(1.8)	12	(1.7)	28	(2.5)	28	(2.6)	18	(1.9)
You worked closely with other mathematics teachers from your school	8	(1.3)	9	(1.4)	28	(2.3)	29	(2.2)	25	(2.0)
You worked closely with other mathematics teachers who taught the same grade and/or subject whether or not they were from your school	14	(1.8)	13	(1.5)	24	(2.3)	29	(2.2)	21	(2.1)
The professional development was a waste of your time	56	(2.1)	21	(1.7)	18	(1.6)	4	(0.9)	1	(0.5)

[†] Includes professional development focused on mathematics or mathematics teaching.
[‡] Only elementary school teachers indicating in Q17 that they participated in professional development in the last three years are included in this analysis.

Table MTQ 20.2
Middle School Mathematics Teachers' Descriptions of Mathematics-Focused[†] Professional Development in the Last Three Years

	Percent of Teachers[‡]									
	Not at All				Somewhat				To a Great Extent	
	1		2		3		4		5	
You had opportunities to engage in mathematics investigations	9	(1.8)	10	(1.7)	31	(2.6)	32	(3.0)	19	(2.7)
You had opportunities to examine classroom artifacts (e.g., student work samples)	13	(2.3)	13	(2.3)	30	(2.9)	28	(3.0)	17	(2.2)
You had opportunities to try out what you learned in your classroom and then talk about it as part of the professional development	11	(2.4)	13	(2.1)	25	(2.4)	34	(2.6)	17	(1.9)
You worked closely with other mathematics teachers from your school	7	(2.2)	7	(1.3)	16	(2.1)	26	(3.3)	44	(3.1)
You worked closely with other mathematics teachers who taught the same grade and/or subject whether or not they were from your school	14	(2.8)	8	(1.5)	20	(2.0)	23	(2.9)	35	(3.4)
The professional development was a waste of your time	56	(3.4)	25	(2.9)	15	(2.3)	3	(1.0)	1	(0.3)

[†] Includes professional development focused on mathematics or mathematics teaching.
[‡] Only middle school teachers indicating in Q17 that they participated in professional development in the last three years are included in this analysis.

Table MTQ 20.3
High School Mathematics Teachers' Descriptions of Mathematics-Focused[†] Professional Development in the Last Three Years

	Percent of Teachers[‡]									
	Not at All			Somewhat			To a Great Extent			
	1		2		3		4		5	
You had opportunities to engage in mathematics investigations	10	(1.8)	10	(1.3)	38	(2.3)	26	(1.7)	16	(1.3)
You had opportunities to examine classroom artifacts (e.g., student work samples)	11	(1.8)	18	(2.0)	34	(1.9)	24	(1.9)	12	(1.3)
You had opportunities to try out what you learned in your classroom and then talk about it as part of the professional development	13	(1.9)	14	(1.8)	27	(2.1)	29	(2.1)	17	(1.8)
You worked closely with other mathematics teachers from your school	6	(1.7)	7	(1.3)	19	(1.6)	30	(2.3)	38	(2.1)
You worked closely with other mathematics teachers who taught the same grade and/or subject whether or not they were from your school	10	(2.1)	12	(1.6)	22	(1.6)	31	(2.3)	25	(1.7)
The professional development was a waste of your time	48	(2.4)	23	(1.8)	21	(2.0)	5	(0.7)	2	(0.6)

[†] Includes professional development focused on mathematics or mathematics teaching.
[‡] Only high school teachers indicating in Q17 that they participated in professional development in the last three years are included in this analysis.

Table MTQ 21.1
Elementary School Mathematics Teachers' Most Recent Participation in a Formal Course for College Credit in Various Areas

	Percent of Teachers									
	In the last 3 years		4–6 years ago		7–10 years ago		More than 10 years ago		Never	
Mathematics	12	(1.1)	17	(1.4)	20	(1.3)	50	(1.7)	1	(0.3)
How to teach mathematics	14	(1.3)	17	(1.4)	18	(1.2)	46	(1.7)	5	(0.7)
Student teaching in mathematics	8	(0.9)	11	(1.1)	16	(1.1)	50	(1.6)	14	(1.2)
Student teaching in other subjects	10	(0.9)	13	(1.2)	16	(1.1)	56	(1.7)	6	(0.7)

Table MTQ 21.2
Middle School Mathematics Teachers' Most Recent Participation in a Formal Course for College Credit in Various Areas

	Percent of Teachers									
	In the last 3 years		4–6 years ago		7–10 years ago		More than 10 years ago		Never	
Mathematics	19	(1.4)	20	(1.5)	18	(1.6)	43	(1.8)	1	(0.4)
How to teach mathematics	19	(1.5)	17	(1.4)	16	(1.5)	35	(2.2)	13	(1.7)
Student teaching in mathematics	10	(1.2)	10	(0.8)	12	(1.5)	42	(2.2)	27	(2.1)
Student teaching in other subjects	8	(1.3)	10	(0.8)	11	(1.5)	43	(2.1)	27	(1.8)

Table MTQ 21.3
High School Mathematics Teachers' Most Recent Participation in a Formal Course for College Credit in Various Areas

	Percent of Teachers									
	In the last 3 years		4–6 years ago		7–10 years ago		More than 10 years ago		Never	
Mathematics	18	(1.1)	19	(1.1)	15	(1.0)	48	(1.8)	0	(0.1)
How to teach mathematics	20	(1.1)	15	(1.0)	13	(0.9)	40	(1.5)	13	(1.6)
Student teaching in mathematics	9	(0.8)	10	(0.9)	11	(0.9)	49	(1.7)	21	(1.6)
Student teaching in other subjects	5	(0.8)	4	(0.6)	5	(0.6)	30	(1.1)	56	(1.4)

Table MTQ 22.1
Elementary School Mathematics Teachers' Perceptions of Topics Emphasized During Professional Development/Coursework in the Last Three Years

	Percent of Teachers[†]									
	Not at All				Somewhat				To a Great Extent	
	1		2		3		4		5	
Deepening your own mathematics content knowledge	10	(1.5)	11	(1.3)	36	(2.5)	26	(2.3)	17	(1.7)
Learning how to use hands-on activities/ manipulatives for mathematics instruction	1	(0.6)	2	(0.9)	16	(2.0)	40	(2.6)	40	(2.6)
Learning about difficulties that students may have with particular mathematical ideas and procedures	4	(1.1)	12	(1.7)	35	(2.5)	32	(2.6)	16	(2.2)
Finding out what students think or already know about the key mathematical ideas prior to instruction on those ideas	5	(1.1)	15	(1.5)	38	(2.3)	31	(2.3)	11	(1.8)
Implementing the mathematics textbook/ program to be used in your classroom	10	(1.9)	10	(1.5)	25	(2.3)	30	(2.3)	25	(2.6)
Planning instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	3	(0.9)	8	(1.4)	30	(2.4)	36	(2.5)	23	(2.4)
Monitoring student understanding during mathematics instruction	3	(0.9)	8	(1.5)	33	(2.4)	33	(2.3)	24	(2.4)
Providing enrichment experiences for gifted students	13	(1.8)	22	(2.2)	29	(2.4)	26	(2.5)	11	(1.7)
Providing alternative mathematics learning experiences for students with special needs	11	(1.7)	24	(2.3)	31	(2.6)	23	(2.2)	10	(1.5)
Teaching mathematics to English-language learners	33	(3.0)	23	(2.4)	24	(2.3)	13	(1.7)	7	(1.6)
Assessing student understanding at the conclusion of instruction on a topic	3	(1.0)	9	(1.4)	29	(2.3)	38	(2.7)	20	(2.2)

[†] Only elementary school teachers indicating in Q17 that they participated in professional development years or indicating in Q21 that they took a college course in "Mathematics" or "How to teach mathematics" in the last three are included in this analysis.

Table MTQ 22.2
Middle School Mathematics Teachers' Perceptions of Topics Emphasized During Professional Development/Coursework in the Last Three Years

	Percent of Teachers[†]				
	Not at All		Somewhat		To a Great Extent
	1	2	3	4	5
Deepening your own mathematics content knowledge	14 (2.6)	11 (1.6)	31 (3.5)	26 (2.9)	17 (2.3)
Learning how to use hands-on activities/ manipulatives for mathematics instruction	2 (0.6)	5 (1.0)	25 (3.2)	38 (3.0)	29 (3.1)
Learning about difficulties that students may have with particular mathematical ideas and procedures	5 (1.2)	10 (1.7)	34 (3.2)	34 (2.8)	17 (2.1)
Finding out what students think or already know about the key mathematical ideas prior to instruction on those ideas	7 (1.9)	18 (2.6)	38 (3.5)	26 (3.0)	11 (2.0)
Implementing the mathematics textbook/ program to be used in your classroom	21 (2.6)	18 (2.0)	23 (2.8)	20 (2.5)	19 (2.9)
Planning instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	3 (1.0)	7 (1.5)	25 (3.1)	40 (3.1)	24 (2.9)
Monitoring student understanding during mathematics instruction	5 (1.3)	9 (1.9)	32 (3.2)	34 (3.2)	20 (2.5)
Providing enrichment experiences for gifted students	15 (2.4)	23 (2.5)	32 (2.8)	19 (2.4)	12 (2.3)
Providing alternative mathematics learning experiences for students with special needs	14 (2.1)	19 (2.8)	28 (2.5)	25 (3.0)	14 (2.0)
Teaching mathematics to English-language learners	39 (3.3)	23 (2.8)	19 (2.4)	12 (1.7)	8 (1.5)
Assessing student understanding at the conclusion of instruction on a topic	5 (1.1)	12 (2.3)	27 (3.4)	37 (3.4)	20 (2.4)

[†] Only middle school teachers indicating in Q17 that they participated in professional development or indicating in Q21 that they took a college course in "Mathematics" or "How to teach mathematics" in the last three years are included in this analysis.

Table MTQ 22.3
High School Mathematics Teachers' Perceptions of Topics Emphasized During Professional Development/Coursework in the Last Three Years

	Percent of Teachers[†]				
	Not at All		Somewhat		To a Great Extent
	1	2	3	4	5
Deepening your own mathematics content knowledge	15 (1.4)	15 (1.5)	36 (2.1)	19 (1.5)	15 (1.5)
Learning how to use hands-on activities/ manipulatives for mathematics instruction	6 (0.9)	9 (1.3)	30 (2.1)	33 (2.0)	23 (1.8)
Learning about difficulties that students may have with particular mathematical ideas and procedures	6 (0.9)	16 (1.7)	33 (2.0)	32 (2.1)	14 (1.5)
Finding out what students think or already know about the key mathematical ideas prior to instruction on those ideas	9 (1.3)	21 (1.4)	38 (1.8)	24 (1.6)	8 (1.1)
Implementing the mathematics textbook/ program to be used in your classroom	20 (1.9)	21 (1.8)	27 (1.7)	21 (1.8)	11 (1.1)
Planning instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	6 (0.9)	10 (1.1)	31 (2.1)	36 (2.2)	18 (1.5)
Monitoring student understanding during mathematics instruction	5 (0.8)	13 (1.3)	33 (1.7)	34 (1.9)	15 (1.3)
Providing enrichment experiences for gifted students	22 (1.8)	28 (2.0)	29 (2.0)	15 (1.5)	6 (1.2)
Providing alternative mathematics learning experiences for students with special needs	16 (1.3)	25 (1.5)	29 (1.6)	22 (1.7)	8 (1.1)
Teaching mathematics to English-language learners	42 (2.0)	23 (1.6)	17 (1.7)	13 (1.6)	4 (0.6)
Assessing student understanding at the conclusion of instruction on a topic	7 (1.3)	12 (1.6)	32 (1.6)	35 (2.2)	14 (1.5)

[†] Only high school teachers indicating in Q17 that they participated in professional development or indicating in Q21 that they took a college course in "Mathematics" or "How to teach mathematics" in the last three years are included in this analysis.

Table MTQ 23
Mathematics Teachers Participating in Various Professional Activities in the Last Three Years

	Percent of Teachers		
	Elementary	Middle	High
Received feedback about your mathematics teaching from a mentor/coach formally assigned by the school or district/diocese	46 (2.2)	57 (3.0)	54 (2.2)
Served as a formally assigned mentor/coach for mathematics teaching, not including supervision of student teachers	10 (1.5)	22 (2.5)	22 (1.8)
Supervised a student teacher in your classroom	35 (2.3)	24 (2.6)	23 (2.0)
Taught in-service workshops on mathematics or mathematics teaching	6 (1.2)	14 (2.1)	15 (1.4)
Led a professional learning community/lesson study/teacher study group focused on mathematics or mathematics teaching	8 (1.4)	21 (2.4)	25 (1.9)

Table MTQ 24.1
Self-Contained Elementary School Mathematics Teachers' Perceptions of their Preparedness to Teach Various Subjects

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
Number and Operations	0 (0.1)	2 (0.4)	21 (1.3)	77 (1.4)
Early Algebra	5 (0.7)	13 (1.2)	36 (1.7)	46 (2.0)
Geometry	3 (0.6)	10 (1.0)	33 (1.7)	54 (1.9)
Measurement and Data Representation	1 (0.4)	9 (1.0)	33 (1.9)	56 (2.0)
Science	3 (0.5)	16 (1.3)	43 (1.6)	38 (2.0)
Reading/Language Arts	0 (0.0)	2 (0.5)	20 (1.3)	77 (1.3)
Social Studies	2 (0.4)	13 (1.4)	39 (1.8)	47 (1.8)

There is no middle school table for MTQ 24.2.

There is no high school table for MTQ 24.3.

Table MTQ 25.1
Non-Self-Contained Elementary School Mathematics Teachers' Perceptions of their Preparedness to Teach Various Subjects

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
The number system and operations	0 ---[†]	2 (1.3)	16 (3.4)	81 (3.6)
Algebraic thinking	1 (0.8)	5 (2.0)	37 (4.7)	57 (5.3)
Functions	6 (2.5)	8 (2.5)	31 (5.0)	54 (5.8)
Modeling	0 (0.2)	7 (2.6)	34 (4.9)	59 (5.0)
Measurement	0 (0.2)	6 (2.4)	30 (5.1)	64 (4.6)
Geometry	0 (0.3)	6 (2.7)	33 (5.2)	60 (5.1)
Statistics and probability	3 (1.6)	17 (3.9)	30 (4.5)	50 (5.4)
Discrete mathematics	18 (3.7)	26 (4.8)	35 (4.7)	21 (4.5)

[†] No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 25.2
Middle School Mathematics Teachers'
Perceptions of their Preparedness to Teach Various Subjects

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
The number system and operations	0 (0.2)	1 (0.4)	11 (1.3)	88 (1.4)
Algebraic thinking	0 (0.1)	3 (0.7)	21 (1.8)	76 (1.9)
Functions	2 (0.5)	10 (1.2)	29 (1.9)	60 (1.9)
Modeling	1 (0.4)	12 (1.5)	38 (2.2)	49 (2.3)
Measurement	0 (0.1)	6 (1.3)	28 (2.0)	66 (2.1)
Geometry	2 (0.5)	8 (1.4)	28 (1.7)	62 (2.0)
Statistics and probability	2 (0.5)	11 (1.1)	39 (2.0)	48 (2.2)
Discrete mathematics	17 (1.5)	27 (1.7)	38 (2.1)	18 (1.5)

Table MTQ 25.3
High School Mathematics Teachers'
Perceptions of their Preparedness to Teach Various Subjects

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
The number system and operations	0 (0.2)	1 (0.3)	9 (1.0)	90 (1.1)
Algebraic thinking	0 (0.2)	1 (0.3)	7 (0.9)	91 (0.9)
Functions	0 (0.2)	3 (0.9)	13 (1.1)	84 (1.5)
Modeling	1 (0.3)	10 (1.3)	31 (1.6)	58 (2.0)
Measurement	0 (0.1)	4 (0.6)	17 (1.2)	79 (1.2)
Geometry	2 (0.3)	7 (0.7)	21 (1.4)	70 (1.4)
Statistics and probability	7 (0.8)	25 (1.4)	38 (1.3)	30 (1.2)
Discrete mathematics	14 (1.1)	28 (1.4)	32 (1.3)	25 (1.2)

Table MTQ 26.1
Elementary School Mathematics Teachers' Perceptions of their Preparedness for Each of a Number of Tasks

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
Plan instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	1 (0.6)	12 (1.6)	45 (2.6)	42 (2.2)
Teach mathematics to students who have learning disabilities	8 (1.2)	32 (2.3)	37 (2.6)	23 (2.1)
Teach mathematics to students who have physical disabilities	22 (2.0)	32 (2.2)	30 (2.2)	16 (1.6)
Teach mathematics to English-language learners	20 (2.2)	28 (2.4)	28 (2.4)	23 (2.2)
Provide enrichment opportunities for gifted students	6 (1.1)	23 (2.2)	44 (2.5)	27 (2.2)
Encourage students' interest in mathematics	1 (0.4)	8 (1.2)	44 (2.2)	48 (2.3)
Encourage participation of females in mathematics	2 (0.7)	9 (1.3)	33 (1.9)	56 (2.2)
Encourage participation of racial or ethnic minorities in mathematics	4 (0.9)	13 (1.5)	34 (2.1)	50 (2.1)
Encourage participation of students from low socioeconomic backgrounds in mathematics	2 (0.6)	11 (1.5)	35 (1.9)	52 (2.2)
Manage classroom discipline	0 ---[†]	2 (0.6)	29 (2.2)	69 (2.1)

[†] No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 26.2
Middle School Mathematics Teachers' Perceptions of their Preparedness for Each of a Number of Tasks

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
Plan instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	3 (1.6)	21 (2.6)	40 (2.7)	36 (2.7)
Teach mathematics to students who have learning disabilities	11 (2.1)	30 (2.7)	32 (2.6)	27 (3.0)
Teach mathematics to students who have physical disabilities	22 (2.9)	22 (1.8)	35 (2.9)	21 (2.7)
Teach mathematics to English-language learners	26 (3.2)	30 (3.0)	27 (2.8)	17 (2.1)
Provide enrichment opportunities for gifted students	8 (1.6)	24 (2.8)	35 (3.2)	33 (3.2)
Encourage students' interest in mathematics	3 (1.3)	13 (1.9)	39 (2.8)	46 (3.0)
Encourage participation of females in mathematics	3 (1.7)	7 (0.9)	34 (2.9)	56 (2.9)
Encourage participation of racial or ethnic minorities in mathematics	5 (1.8)	14 (2.2)	33 (3.0)	48 (2.8)
Encourage participation of students from low socioeconomic backgrounds in mathematics	5 (2.0)	12 (1.8)	30 (2.6)	53 (3.1)
Manage classroom discipline	1 (0.3)	5 (1.1)	33 (2.9)	61 (2.9)

Table MTQ 26.3
High School Mathematics Teachers' Perceptions of their Preparedness for Each of a Number of Tasks

	Percent of Teachers			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
Plan instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	2 (0.6)	18 (1.8)	48 (2.2)	31 (1.9)
Teach mathematics to students who have learning disabilities	9 (1.3)	32 (1.8)	39 (1.9)	19 (1.6)
Teach mathematics to students who have physical disabilities	15 (1.6)	32 (1.7)	36 (2.1)	17 (1.4)
Teach mathematics to English-language learners	25 (1.8)	33 (2.2)	30 (1.9)	13 (1.2)
Provide enrichment opportunities for gifted students	7 (0.9)	29 (2.2)	41 (2.0)	23 (1.8)
Encourage students' interest in mathematics	1 (0.3)	14 (1.4)	46 (1.8)	39 (2.2)
Encourage participation of females in mathematics	2 (0.6)	12 (1.5)	35 (1.8)	51 (2.2)
Encourage participation of racial or ethnic minorities in mathematics	3 (0.7)	16 (1.6)	41 (2.0)	39 (2.0)
Encourage participation of students from low socioeconomic backgrounds in mathematics	2 (0.6)	17 (1.5)	41 (1.9)	40 (2.2)
Manage classroom discipline	0 (0.2)	6 (1.2)	35 (2.1)	58 (2.3)

Table MTQ 27.1
Elementary School Mathematics Teachers' Opinions about Teaching and Learning

	Percent of Teachers									
	Strongly Disagree		Disagree		No Opinion		Agree		Strongly Agree	
Students learn mathematics best in classes with students of similar abilities	4	(0.6)	35	(1.7)	10	(1.0)	39	(1.6)	12	(1.1)
Inadequacies in students' mathematics background can be overcome by effective teaching	0	(0.2)	5	(0.7)	7	(0.9)	65	(1.6)	23	(1.3)
It is better for mathematics instruction to focus on ideas in depth, even if that means covering fewer topics	0	---†	10	(1.1)	12	(1.2)	48	(1.3)	30	(1.6)
Students should be provided with the purpose for a lesson as it begins	0	(0.1)	1	(0.4)	3	(0.5)	43	(1.5)	52	(1.6)
At the beginning of instruction on a mathematical idea, students should be provided with definitions for new vocabulary that will be used	0	(0.2)	5	(0.7)	5	(0.8)	44	(1.7)	46	(1.7)
Teachers should explain an idea to students before having them investigate the idea	2	(0.5)	33	(1.6)	17	(1.2)	30	(1.6)	18	(1.3)
Most class periods should include some review of previously covered ideas and skills	0	---†	1	(0.3)	3	(0.5)	56	(1.7)	40	(1.7)
Most class periods should provide opportunities for students to share their thinking and reasoning	0	(0.2)	1	(0.3)	2	(0.5)	40	(1.7)	57	(1.7)
Hands-on activities/manipulatives should be used primarily to reinforce a mathematical idea that the students have already learned	6	(0.9)	34	(1.6)	7	(0.8)	27	(1.3)	25	(1.5)
Students should be assigned homework most days	1	(0.3)	16	(1.4)	15	(1.2)	46	(1.5)	21	(1.4)
Most class periods should conclude with a summary of the key ideas addressed	0	(0.1)	1	(0.3)	4	(0.8)	46	(1.6)	49	(1.7)

† No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 27.2
Middle School Mathematics Teachers' Opinions about Teaching and Learning

	Percent of Teachers									
	Strongly Disagree		Disagree		No Opinion		Agree		Strongly Agree	
Students learn mathematics best in classes with students of similar abilities	1	(0.4)	21	(1.9)	9	(1.1)	51	(2.4)	18	(1.7)
Inadequacies in students' mathematics background can be overcome by effective teaching	0	(0.2)	10	(1.4)	7	(0.8)	67	(2.0)	16	(1.7)
It is better for mathematics instruction to focus on ideas in depth, even if that means covering fewer topics	1	(0.4)	8	(1.2)	9	(1.4)	48	(2.2)	34	(2.1)
Students should be provided with the purpose for a lesson as it begins	0	(0.1)	3	(0.7)	5	(1.1)	45	(2.2)	47	(2.2)
At the beginning of instruction on a mathematical idea, students should be provided with definitions for new vocabulary that will be used	0	(0.1)	7	(0.9)	9	(1.2)	42	(2.1)	41	(2.7)
Teachers should explain an idea to students before having them investigate the idea	3	(0.7)	35	(1.9)	24	(1.6)	26	(1.8)	11	(1.4)
Most class periods should include some review of previously covered ideas and skills	0	(0.1)	4	(0.9)	6	(0.9)	55	(2.8)	36	(2.9)
Most class periods should provide opportunities for students to share their thinking and reasoning	0	---†	1	(0.5)	4	(0.7)	46	(2.3)	49	(2.2)
Hands-on activities/manipulatives should be used primarily to reinforce a mathematical idea that the students have already learned	5	(1.2)	35	(2.0)	20	(1.7)	27	(2.0)	13	(1.4)
Students should be assigned homework most days	1	(0.4)	12	(1.6)	11	(1.2)	50	(2.1)	26	(2.0)
Most class periods should conclude with a summary of the key ideas addressed	0	---†	1	(0.4)	5	(0.9)	51	(2.3)	42	(2.3)

† No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 27.3
High School Mathematics Teachers' Opinions about Teaching and Learning

	Percent of Teachers									
	Strongly Disagree		Disagree		No Opinion		Agree		Strongly Agree	
Students learn mathematics best in classes with students of similar abilities	1	(0.3)	14	(1.0)	8	(0.8)	53	(1.6)	24	(1.6)
Inadequacies in students' mathematics background can be overcome by effective teaching	1	(0.3)	13	(1.1)	9	(0.8)	64	(1.6)	12	(1.1)
It is better for mathematics instruction to focus on ideas in depth, even if that means covering fewer topics	0	(0.2)	10	(0.9)	11	(0.9)	50	(1.5)	28	(1.4)
Students should be provided with the purpose for a lesson as it begins	0	(0.2)	5	(0.7)	10	(0.8)	53	(1.5)	32	(1.5)
At the beginning of instruction on a mathematical idea, students should be provided with definitions for new vocabulary that will be used	0	(0.1)	8	(0.8)	11	(0.7)	51	(1.6)	30	(1.5)
Teachers should explain an idea to students before having them investigate the idea	4	(0.6)	38	(1.6)	21	(1.4)	29	(1.5)	8	(1.0)
Most class periods should include some review of previously covered ideas and skills	0	(0.1)	5	(0.7)	8	(0.8)	62	(1.7)	25	(1.7)
Most class periods should provide opportunities for students to share their thinking and reasoning	0	(0.1)	1	(0.3)	6	(0.7)	56	(1.7)	37	(1.6)
Hands-on activities/manipulatives should be used primarily to reinforce a mathematical idea that the students have already learned	2	(0.3)	32	(1.3)	27	(1.6)	31	(1.4)	8	(0.8)
Students should be assigned homework most days	1	(0.3)	8	(1.1)	9	(0.9)	52	(1.4)	30	(1.4)
Most class periods should conclude with a summary of the key ideas addressed	0	(0.0)	1	(0.3)	8	(0.8)	58	(1.5)	33	(1.5)

Table MTQ 28
Average Minutes per Week Mathematics Classes Meet

	Average Number of Minutes†	
Elementary	299.5	(13.7)
Middle	286.6	(7.3)
High	284.6	(5.6)

† Only non-self-contained classes are included in this analysis.

Table MTQ 29
Average Number of Students in Mathematics Classes

	Average Number of Students	
Elementary	21.4	(0.2)
Middle	22.1	(0.4)
High	21.4	(0.3)

Table MTQ 30
Race/Ethnicity of Students in Mathematics Classes

	Percent of Students		
	Elementary	Middle	High
American Indian or Alaskan Native	1 (0.2)	1 (0.3)	1 (0.2)
Asian	3 (0.3)	5 (0.8)	5 (0.5)
Black or African American	15 (1.4)	17 (1.4)	12 (0.6)
Hispanic/Latino	21 (1.7)	16 (1.2)	15 (0.9)
Native Hawaiian or Other Pacific Islander	1 (0.2)	0 (0.1)	1 (0.1)
White	55 (1.6)	58 (1.9)	63 (1.1)
Two or more races	4 (0.3)	3 (0.4)	3 (0.3)

Table MTQ 31
Prior Mathematics Achievement Level of Students in Mathematics Classes

	Percent of Classes		
	Elementary	Middle	High
Mostly low achievers	12 (1.0)	27 (1.8)	24 (1.1)
Mostly average achievers	35 (1.6)	24 (1.8)	28 (1.5)
Mostly high achievers	9 (0.9)	24 (1.7)	26 (1.1)
A mixture of levels	45 (1.5)	26 (1.8)	22 (1.1)

Table MTQ 32.1
Elementary School Mathematics Classes Where Teachers Report Having Control Over Various Curriculum and Instruction Decisions

	Percent of Classes				
	No Control		Moderate Control		Strong Control
	1	2	3	4	5
Determining course goals and objectives	44 (2.3)	15 (1.8)	19 (1.7)	10 (1.6)	12 (1.5)
Selecting textbooks/programs	46 (2.4)	24 (2.2)	17 (1.9)	10 (1.5)	3 (0.8)
Selecting content, topics, and skills to be taught	47 (2.3)	17 (2.1)	18 (2.1)	10 (1.3)	8 (1.1)
Selecting teaching techniques	3 (1.1)	3 (0.7)	19 (2.0)	30 (2.0)	44 (2.5)
Determining the amount of homework to be assigned	3 (0.8)	3 (0.7)	16 (1.9)	22 (2.1)	56 (2.6)
Choosing criteria for grading student performance	9 (1.3)	10 (1.5)	28 (2.0)	24 (2.2)	29 (2.4)

Table MTQ 32.2
Middle School Mathematics Classes Where Teachers Report Having Control Over Various Curriculum and Instruction Decisions

	Percent of Classes									
	No Control			Moderate Control					Strong Control	
	1		2		3		4		5	
Determining course goals and objectives	26	(2.2)	14	(1.6)	24	(2.3)	12	(1.5)	24	(2.1)
Selecting textbooks/programs	34	(2.7)	18	(2.2)	26	(2.4)	10	(1.3)	13	(2.3)
Selecting content, topics, and skills to be taught	25	(1.9)	15	(1.8)	24	(2.7)	14	(2.3)	23	(2.2)
Selecting teaching techniques	1	(0.3)	1	(0.5)	8	(2.1)	20	(2.1)	70	(2.6)
Determining the amount of homework to be assigned	2	(1.6)	1	(0.4)	5	(0.9)	16	(2.0)	77	(2.4)
Choosing criteria for grading student performance	5	(1.8)	3	(0.9)	17	(2.1)	19	(1.9)	56	(2.7)

Table MTQ 32.3
High School Mathematics Classes Where Teachers Report Having Control Over Various Curriculum and Instruction Decisions

	Percent of Classes									
	No Control			Moderate Control					Strong Control	
	1		2		3		4		5	
Determining course goals and objectives	18	(1.4)	12	(1.3)	26	(1.7)	15	(1.6)	28	(2.1)
Selecting textbooks/programs	32	(1.8)	15	(1.4)	19	(1.5)	14	(1.5)	20	(2.1)
Selecting content, topics, and skills to be taught	16	(1.6)	15	(1.3)	26	(1.8)	19	(1.5)	24	(1.9)
Selecting teaching techniques	0	(0.3)	1	(0.3)	6	(0.9)	22	(1.7)	72	(1.8)
Determining the amount of homework to be assigned	1	(0.4)	1	(0.4)	7	(1.0)	16	(1.6)	75	(2.0)
Choosing criteria for grading student performance	2	(0.5)	3	(0.8)	17	(1.4)	23	(1.8)	55	(2.1)

Table MTQ 33.1
Emphasis Given in Elementary School Mathematics Classes to Various Instructional Objectives

	Percent of Classes							
	None		Minimal Emphasis		Moderate Emphasis		Heavy Emphasis	
Learning mathematical procedures and/or algorithms	1	(0.3)	9	(0.9)	45	(1.9)	44	(1.9)
Learning to perform computations with speed and accuracy	2	(0.4)	16	(1.3)	47	(1.7)	36	(1.9)
Understanding mathematical ideas	0	(0.1)	2	(0.5)	29	(1.4)	69	(1.4)
Learning mathematical practices (e.g., considering how to approach a problem, justifying solutions)	0	(0.2)	7	(0.8)	41	(1.5)	51	(1.5)
Learning about real-life applications of mathematics	0	(0.1)	10	(1.2)	44	(1.8)	45	(1.7)
Increasing students' interest in mathematics	0	(0.2)	10	(1.1)	40	(1.8)	50	(1.7)
Preparing for further study in mathematics	2	(0.5)	11	(0.9)	41	(1.8)	47	(1.8)
Learning test taking skills/strategies	2	(0.5)	19	(1.3)	42	(1.5)	37	(1.5)

Table MTQ 33.2
Emphasis Given in Middle School
Mathematics Classes to Various Instructional Objectives

	Percent of Classes							
	None		Minimal Emphasis		Moderate Emphasis		Heavy Emphasis	
Learning mathematical procedures and/or algorithms	1	(0.5)	7	(0.9)	42	(2.1)	49	(2.2)
Learning to perform computations with speed and accuracy	1	(0.4)	25	(1.6)	51	(2.1)	24	(1.8)
Understanding mathematical ideas	0	(0.2)	1	(0.3)	29	(2.0)	70	(2.0)
Learning mathematical practices (e.g., considering how to approach a problem, justifying solutions)	0	(0.2)	6	(0.9)	40	(2.2)	54	(2.3)
Learning about real-life applications of mathematics	0	---[†]	11	(1.4)	47	(1.9)	42	(1.9)
Increasing students' interest in mathematics	0	(0.1)	12	(1.2)	50	(2.1)	37	(1.9)
Preparing for further study in mathematics	1	(0.4)	8	(1.0)	34	(2.0)	57	(2.2)
Learning test taking skills/strategies	1	(0.3)	16	(1.6)	47	(2.4)	36	(2.5)

[†] No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 33.3
Emphasis Given in High School
Mathematics Classes to Various Instructional Objectives

	Percent of Classes							
	None		Minimal Emphasis		Moderate Emphasis		Heavy Emphasis	
Learning mathematical procedures and/or algorithms	0	(0.1)	6	(0.7)	45	(1.5)	48	(1.5)
Learning to perform computations with speed and accuracy	2	(0.4)	29	(1.2)	51	(1.4)	18	(1.2)
Understanding mathematical ideas	0	(0.0)	2	(0.4)	30	(1.3)	69	(1.4)
Learning mathematical practices (e.g., considering how to approach a problem, justifying solutions)	0	(0.1)	6	(0.8)	39	(1.4)	55	(1.3)
Learning about real-life applications of mathematics	1	(0.3)	16	(1.2)	54	(1.6)	29	(1.3)
Increasing students' interest in mathematics	1	(0.3)	19	(1.2)	52	(1.7)	27	(1.4)
Preparing for further study in mathematics	1	(0.2)	9	(0.8)	35	(1.5)	55	(1.6)
Learning test taking skills/strategies	2	(0.3)	22	(1.2)	48	(1.6)	28	(1.3)

Table MTQ 34.1
Elementary School Mathematics Classes in which Teachers Report Various Activities in their Classrooms

	Percent of Classes									
	Never		Rarely (e.g., a few times a year)		Sometimes (e.g., once or twice a month)		Often (e.g., once or twice a week)		All or almost all mathematics lessons	
Explain mathematical ideas to the whole class	0	(0.2)	0	(0.2)	2	(0.4)	20	(1.6)	77	(1.7)
Engage the whole class in discussions	0	(0.2)	1	(0.2)	3	(0.7)	20	(1.5)	76	(1.6)
Have students work in small groups	0	(0.2)	2	(0.5)	13	(1.1)	51	(1.9)	34	(1.8)
Provide manipulatives for students to use in problem-solving/investigations	0	---[†]	2	(0.4)	16	(1.1)	47	(1.9)	34	(1.9)
Have students read from a mathematics textbook/program or other mathematics-related material in class, either aloud or to themselves	14	(1.1)	22	(1.6)	23	(1.5)	24	(1.4)	18	(1.5)
Have students consider multiple representations in solving a problem (e.g., numbers, tables, graphs, pictures)	1	(0.2)	3	(0.6)	18	(1.3)	44	(1.6)	33	(1.9)
Have students explain and justify their method for solving a problem	0	(0.1)	2	(0.4)	10	(0.9)	39	(1.7)	49	(1.7)
Have students compare and contrast different methods for solving a problem	2	(0.4)	7	(0.8)	25	(1.7)	41	(1.5)	25	(1.5)
Have students develop mathematical proofs	28	(1.6)	20	(1.5)	22	(1.2)	20	(1.5)	10	(1.5)
Have students present their solution strategies to the rest of the class	3	(0.5)	8	(0.8)	25	(1.3)	38	(1.6)	26	(1.5)
Have students write their reflections (e.g., in their journals) in class or for homework	22	(1.4)	25	(1.4)	28	(1.4)	17	(1.5)	9	(1.2)
Give tests and/or quizzes that are predominantly short-answer (e.g., multiple choice, true/false, fill in the blank)	11	(1.2)	13	(1.2)	29	(1.8)	35	(1.7)	12	(1.4)
Give tests and/or quizzes that include constructed-response/open-ended items	13	(1.2)	15	(1.2)	33	(1.7)	30	(1.7)	9	(1.0)
Focus on literacy skills (e.g., informational reading or writing strategies)	11	(1.0)	20	(1.5)	30	(1.6)	25	(1.9)	15	(1.4)
Have students practice for standardized tests	17	(1.4)	24	(1.4)	29	(1.8)	22	(1.4)	9	(1.1)
Have students attend presentations by guest speakers focused on mathematics in the workplace	79	(1.5)	16	(1.4)	3	(0.5)	2	(0.6)	1	(0.3)

[†] No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 34.2
Middle School Mathematics Classes in which Teachers Report Various Activities in their Classrooms

	Percent of Classes									
	Never		Rarely (e.g., a few times a year)		Sometimes (e.g., once or twice a month)		Often (e.g., once or twice a week)		All or almost all mathematics lessons	
Explain mathematical ideas to the whole class	0	---[†]	1	(0.2)	2	(0.5)	26	(1.8)	71	(1.8)
Engage the whole class in discussions	0	---[†]	1	(0.3)	6	(1.0)	34	(1.7)	59	(1.9)
Have students work in small groups	1	(0.2)	6	(0.9)	23	(1.8)	46	(2.3)	24	(1.6)
Provide manipulatives for students to use in problem-solving/investigations	1	(0.4)	18	(1.3)	48	(1.9)	28	(1.8)	4	(0.9)
Have students read from a mathematics textbook/program or other mathematics-related material in class, either aloud or to themselves	9	(1.0)	32	(1.9)	25	(2.0)	24	(1.8)	10	(1.3)
Have students consider multiple representations in solving a problem (e.g., numbers, tables, graphs, pictures)	0	(0.2)	4	(0.6)	21	(1.5)	51	(2.1)	24	(1.7)
Have students explain and justify their method for solving a problem	0	(0.2)	3	(1.0)	11	(1.1)	37	(1.8)	48	(1.9)
Have students compare and contrast different methods for solving a problem	1	(0.3)	11	(1.4)	26	(1.8)	43	(1.9)	19	(1.5)
Have students develop mathematical proofs	28	(1.8)	30	(2.0)	25	(2.1)	12	(1.5)	5	(0.9)
Have students present their solution strategies to the rest of the class	2	(0.5)	10	(1.0)	28	(1.7)	39	(1.8)	21	(1.8)
Have students write their reflections (e.g., in their journals) in class or for homework	26	(1.9)	31	(1.9)	22	(1.6)	15	(1.5)	6	(0.9)
Give tests and/or quizzes that are predominantly short-answer (e.g., multiple choice, true/false, fill in the blank)	8	(1.2)	19	(1.4)	34	(1.9)	30	(2.1)	8	(0.9)
Give tests and/or quizzes that include constructed-response/open-ended items	4	(0.7)	12	(1.5)	33	(1.9)	38	(2.4)	13	(1.4)
Focus on literacy skills (e.g., informational reading or writing strategies)	14	(1.3)	35	(1.8)	29	(1.8)	18	(1.8)	5	(0.8)
Have students practice for standardized tests	4	(0.8)	21	(2.2)	35	(2.0)	29	(2.0)	10	(1.5)
Have students attend presentations by guest speakers focused on mathematics in the workplace	76	(1.8)	18	(1.4)	4	(1.0)	1	(0.3)	1	(0.5)

[†] No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 34.3
High School Mathematics Classes in which Teachers Report Various Activities in their Classrooms

	Percent of Classes									
	Never		Rarely (e.g., a few times a year)		Sometimes (e.g., once or twice a month)		Often (e.g., once or twice a week)		All or almost all mathematics lessons	
Explain mathematical ideas to the whole class	0	(0.2)	1	(0.3)	3	(0.6)	24	(1.3)	72	(1.4)
Engage the whole class in discussions	0	(0.2)	3	(0.6)	12	(0.9)	36	(1.4)	48	(1.3)
Have students work in small groups	1	(0.5)	8	(0.9)	28	(1.2)	43	(1.5)	20	(1.3)
Provide manipulatives for students to use in problem-solving/investigations	7	(0.7)	34	(1.4)	40	(1.3)	15	(1.0)	3	(0.5)
Have students read from a mathematics textbook/program or other mathematics-related material in class, either aloud or to themselves	18	(1.1)	34	(1.1)	23	(1.1)	18	(1.2)	8	(0.8)
Have students consider multiple representations in solving a problem (e.g., numbers, tables, graphs, pictures)	1	(0.3)	6	(0.6)	29	(1.3)	45	(1.5)	19	(1.0)
Have students explain and justify their method for solving a problem	0	(0.2)	3	(0.6)	17	(1.2)	44	(1.4)	36	(1.6)
Have students compare and contrast different methods for solving a problem	2	(0.3)	10	(0.9)	33	(1.4)	41	(1.4)	14	(1.0)
Have students develop mathematical proofs	24	(1.2)	33	(1.4)	26	(1.3)	13	(1.0)	4	(0.6)
Have students present their solution strategies to the rest of the class	4	(0.6)	17	(1.1)	34	(1.4)	33	(1.2)	12	(1.0)
Have students write their reflections (e.g., in their journals) in class or for homework	43	(1.5)	30	(1.2)	16	(1.1)	8	(0.9)	3	(0.4)
Give tests and/or quizzes that are predominantly short-answer (e.g., multiple choice, true/false, fill in the blank)	13	(1.2)	25	(1.2)	26	(1.1)	26	(1.1)	10	(0.8)
Give tests and/or quizzes that include constructed-response/open-ended items	4	(1.0)	9	(0.8)	30	(1.4)	38	(1.5)	18	(1.0)
Focus on literacy skills (e.g., informational reading or writing strategies)	23	(1.3)	38	(1.3)	25	(1.2)	11	(0.9)	4	(0.4)
Have students practice for standardized tests	9	(0.8)	25	(1.4)	34	(1.3)	22	(1.3)	9	(0.9)
Have students attend presentations by guest speakers focused on mathematics in the workplace	78	(1.2)	18	(1.1)	3	(0.4)	1	(0.3)	0	(0.1)

Table MTQ 35.1
Availability of Instructional Technology in Elementary School Mathematics Classrooms

	Percent of Classes		
	Do not have one per group available	At least one per group available upon request or in another room	At least one per group located in your classroom
Personal computers, including laptops	32 (2.5)	32 (2.5)	36 (3.0)
Hand-held computers (e.g., PDAs, tablets, smartphones, iPads)	83 (2.2)	11 (1.8)	6 (1.2)
Internet access	20 (1.9)	25 (2.0)	55 (2.6)
Four-function calculators	42 (3.0)	13 (1.8)	45 (3.0)
Scientific calculators	84 (2.2)	9 (1.6)	7 (1.5)
Graphing calculators	89 (1.9)	10 (1.8)	1 (0.4)
Probes for collecting data (e.g., motion sensors, temperature probes)	81 (2.0)	16 (1.9)	2 (0.7)
Classroom response system or "Clickers" (handheld devices used to respond electronically to questions in class)	61 (2.6)	28 (2.5)	12 (1.8)

Table MTQ 35.2
Availability of Instructional Technology in Middle School Mathematics Classrooms

	Percent of Classes		
	Do not have one per group available	At least one per group available upon request or in another room	At least one per group located in your classroom
Personal computers, including laptops	32 (2.5)	43 (2.6)	25 (2.6)
Hand-held computers (e.g., PDAs, tablets, smartphones, iPads)	79 (2.5)	16 (2.3)	5 (1.2)
Internet access	20 (2.0)	40 (2.9)	40 (2.9)
Four-function calculators	23 (2.0)	14 (2.1)	63 (2.7)
Scientific calculators	31 (2.7)	16 (1.7)	53 (2.8)
Graphing calculators	50 (2.9)	21 (2.4)	29 (2.6)
Probes for collecting data (e.g., motion sensors, temperature probes)	82 (2.1)	16 (2.0)	2 (0.7)
Classroom response system or "Clickers" (handheld devices used to respond electronically to questions in class)	47 (3.0)	25 (2.0)	28 (2.8)

Table MTQ 35.3
Availability of Instructional Technology in High School Mathematics Classrooms

	Percent of Classes		
	Do not have one per group available	At least one per group available upon request or in another room	At least one per group located in your classroom
Personal computers, including laptops	42 (2.3)	39 (2.1)	18 (1.6)
Hand-held computers (e.g., PDAs, tablets, smartphones, iPads)	83 (1.4)	12 (1.2)	6 (0.9)
Internet access	30 (1.9)	38 (1.8)	32 (1.6)
Four-function calculators	39 (1.9)	13 (1.5)	48 (2.0)
Scientific calculators	26 (1.7)	16 (1.6)	58 (2.0)
Graphing calculators	17 (1.7)	17 (1.6)	66 (2.3)
Probes for collecting data (e.g., motion sensors, temperature probes)	74 (2.2)	22 (1.8)	4 (0.8)
Classroom response system or "Clickers" (handheld devices used to respond electronically to questions in class)	56 (2.5)	27 (2.0)	17 (1.6)

Table MTQ 36
Expectations that Students Will Provide their Own Instructional Technologies in Mathematics Classes

	Percent of Classes		
	Elementary	Middle	High
Laptop computers	3 (0.9)	4 (0.9)	7 (1.1)
Hand-held computers	3 (0.8)	3 (0.9)	6 (0.9)
Four-function calculators	5 (1.3)	23 (2.4)	23 (1.8)
Scientific calculators	3 (0.8)	22 (2.2)	38 (2.0)
Graphing calculators	3 (0.7)	8 (1.9)	30 (2.0)

Table MTQ 37.1
Frequency of Instructional Technology Use in Elementary School Mathematics Classes

	Percent of Classes				
	Never	Rarely (e.g., a few times a year)	Sometimes (e.g., once or twice a month)	Often (e.g., once or twice a week)	All or almost all mathematics lessons
Personal computers, including laptops	33 (1.9)	11 (1.7)	20 (2.2)	30 (2.3)	6 (1.2)
Hand-held computers	84 (2.1)	5 (1.1)	6 (1.5)	4 (1.0)	2 (0.5)
Internet	22 (1.8)	15 (1.8)	21 (2.1)	34 (2.4)	9 (1.3)
Four-function calculators	56 (2.7)	15 (2.0)	17 (2.0)	11 (1.6)	2 (0.7)
Scientific calculators	92 (1.7)	3 (1.2)	1 (0.4)	3 (1.2)	1 (0.5)
Graphing calculators	97 (1.2)	3 (1.2)	0 ---†	0 (0.0)	0 ---†
Probes for collecting data	87 (1.9)	7 (1.2)	6 (1.2)	0 (0.3)	0 ---†
Classroom response system or "Clickers"	71 (2.3)	16 (1.9)	9 (1.4)	4 (1.1)	1 (0.5)

† No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 37.2
Frequency of Instructional Technology Use in Middle School Mathematics Classes

	Percent of Classes									
	Never		Rarely (e.g., A few times a year)		Sometimes (e.g., once or twice a month)		Often (e.g., once or twice a week)		All or almost all mathematics lessons	
Personal computers, including laptops	31	(2.5)	25	(2.4)	21	(2.2)	20	(2.8)	2	(0.7)
Hand-held computers	77	(2.4)	12	(1.6)	6	(1.3)	4	(1.3)	1	(0.7)
Internet	23	(2.3)	24	(2.2)	27	(2.3)	23	(2.7)	3	(0.7)
Four-function calculators	31	(2.2)	15	(1.9)	14	(2.1)	21	(2.0)	19	(2.4)
Scientific calculators	37	(2.5)	10	(1.6)	13	(1.5)	16	(2.1)	24	(2.4)
Graphing calculators	62	(3.0)	17	(1.8)	8	(1.3)	6	(1.6)	8	(1.4)
Probes for collecting data	82	(2.1)	14	(1.8)	2	(0.6)	1	(0.6)	0	(0.3)
Classroom response system or "Clickers"	59	(2.7)	17	(1.9)	13	(1.8)	8	(1.4)	3	(0.8)

Table MTQ 37.3
Frequency of Instructional Technology Use in High School Mathematics Classes

	Percent of Classes									
	Never		Rarely (e.g., A few times a year)		Sometimes (e.g., once or twice a month)		Often (e.g., once or twice a week)		All or almost all mathematics lessons	
Personal computers, including laptops	46	(2.3)	27	(1.8)	17	(1.6)	6	(0.9)	4	(0.8)
Hand-held computers	78	(1.8)	13	(1.5)	5	(1.0)	2	(0.6)	2	(0.5)
Internet	31	(2.0)	31	(1.8)	26	(2.0)	8	(1.0)	4	(0.9)
Four-function calculators	52	(2.3)	10	(1.1)	5	(0.9)	10	(1.3)	22	(1.9)
Scientific calculators	33	(1.8)	7	(0.9)	8	(1.1)	15	(1.4)	38	(2.1)
Graphing calculators	18	(1.7)	7	(1.0)	11	(1.3)	18	(1.6)	46	(2.3)
Probes for collecting data	83	(2.1)	13	(1.7)	3	(0.7)	1	(0.4)	0	---[†]
Classroom response system or "Clickers"	72	(2.2)	14	(1.6)	10	(1.2)	4	(0.7)	1	(0.3)

[†] No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 38
Frequency of Required External Mathematics Testing in Mathematics Classes

	Percent of Classes					
	Elementary		Middle		High	
Never	9	(0.9)	2	(0.4)	21	(1.3)
Once a year	14	(1.3)	19	(2.2)	28	(1.3)
Twice a year	7	(0.9)	10	(1.4)	15	(1.0)
Three or four times a year	38	(1.7)	38	(2.4)	22	(1.2)
Five or more times a year	31	(1.7)	31	(1.7)	14	(1.1)

Table MTQ 39
Amount of Homework Assigned in Mathematics Classes per Week

	Percent of Classes					
	Elementary		Middle		High	
Fewer than 15 minutes per week	16	(1.9)	5	(0.8)	7	(1.0)
15–30 minutes per week	19	(2.0)	13	(2.6)	8	(1.2)
31–60 minutes per week	35	(2.6)	28	(2.9)	22	(1.7)
61–90 minutes per week	17	(1.8)	29	(2.9)	27	(1.8)
91–120 minutes per week	9	(1.3)	14	(1.5)	13	(1.1)
2–3 hours per week	3	(0.9)	8	(1.4)	17	(1.6)
3–4 hours per week	1	(0.5)	1	(0.4)	4	(0.6)
More than 4 hours per week	0	---†	1	(0.3)	2	(0.4)

† No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 40
Instructional Materials Used in Mathematics Classes

	Percent of Classes					
	Elementary		Middle		High	
One commercially-published textbook or program most of the time	62	(2.2)	55	(2.4)	65	(1.4)
Multiple commercially-published textbooks/programs most of the time	23	(1.6)	27	(2.1)	16	(0.9)
Non-commercially-published instructional materials most of the time	15	(1.5)	19	(1.8)	19	(1.0)

Table MTQ 41a and 42a
Most Recent Copyright Year of
Instructional Materials Used in Mathematics Classes

	Percent of Classes†					
	Elementary		Middle		High	
2012	5	(1.2)	4	(1.1)	4	(0.5)
2011	9	(1.5)	6	(0.9)	7	(0.7)
2010	4	(0.9)	6	(0.8)	4	(0.6)
2009	24	(2.0)	8	(1.2)	9	(0.8)
2008	12	(1.5)	19	(2.3)	10	(1.1)
2007	16	(1.6)	17	(2.1)	15	(1.3)
2006 or earlier	30	(2.4)	40	(2.4)	52	(1.9)

† Only classes of teachers indicating in Q40 that they use one or multiple commercially-published textbooks/programs are included in this analysis.

Table MTQ 41b.1 and 42b.1
Market Share of Commercial Textbook/Program
Publishers Used in Elementary School Mathematics Classes

	Percent of Classes†	
Houghton Mifflin Harcourt	35	(2.7)
Pearson	33	(3.0)
McGraw-Hill	29	(2.5)
A Beka Book	1	(0.3)
Carolina Biological Supply Company	1	(0.6)
Delta Education	0	(0.2)
Frank Schaffer Publications	0	(0.1)
Math Solutions Publications	0	(0.1)
Mimosa Publications	0	(0.1)
Purposeful Design	0	(0.1)
Sadlier-Oxford	0	(0.2)
Stenhouse Publishers	0	(0.1)
The Math Learning Center	0	(0.3)

† Only classes of elementary school teachers indicating in Q40 that they use one or multiple commercially-published textbooks/programs are included in this analysis.

Table MTQ 41b.2 and 42b.2
Market Share of Commercial Textbook/Program
Publishers Used in Middle School Mathematics Classes

	Percent of Classes†	
Houghton Mifflin Harcourt	41	(3.2)
McGraw-Hill	28	(2.8)
Pearson	26	(2.5)
A Beka Book	1	(0.4)
CPM Educational Program	1	(0.5)
Creative Publications	1	(0.4)
Amsco	0	(0.1)
Bob Jones University Press	0	(0.3)
Buckle Down	0	(0.1)
Cambium Learning	0	(0.0)
Carnegie Learning	0	(0.2)
Creative Teaching Press	0	(0.1)
Frank Schaffer Publications	0	(0.1)
Kendall Hunt	0	(0.1)
PCI Educational Publishing	0	(0.0)
The College Board	0	(0.1)

† Only classes of middle school teachers indicating in Q40 that they use one or multiple commercially-published textbooks/programs are included in this analysis.

Table MTQ 41b.3 and 42b.3
Market Share of Commercial Textbook/Program Publishers Used in High School Mathematics Classes

	Percent of Classes†
Houghton Mifflin Harcourt	35 (1.6)
Pearson	30 (2.0)
McGraw-Hill	18 (1.6)
Cengage Learning	9 (1.0)
W. H. Freeman	2 (0.6)
Amsco	1 (0.3)
CPM Educational Program	1 (0.4)
John Wiley & Sons	1 (0.2)
Kendall Hunt	1 (0.4)
Barron's	0 (0.0)
Carnegie Learning	0 (0.1)
Duxbury Press	0 (0.0)
Haese & Harris Publications	0 (0.2)
IBID Press	0 (0.1)
Key Curriculum Press	0 (0.1)
LearningExpress	0 (0.1)
Lexington Books	0 (0.1)
PCI Educational Publishing	0 (0.1)
Renaissance Learning	0 (0.1)
Teaching Textbooks Inc.	0 (0.2)
The College Board	0 (0.1)
Triumph Learning	0 (0.1)
Venture Publishing	0 (0.1)
Willow Tree Publishing	0 (0.1)

† Only classes of high school teachers indicating in Q40 that they use one or multiple commercially-published textbooks/programs are included in this analysis.

Table MTQ 43
Perceived Quality of Instructional Materials Used Most Often in Mathematics Classes

	Percent of Classes†		
	Elementary	Middle	High
Very poor	1 (0.6)	2 (1.2)	1 (0.4)
Poor	3 (0.9)	4 (0.9)	4 (0.8)
Fair	20 (2.4)	19 (2.4)	16 (1.3)
Good	38 (2.5)	34 (2.6)	33 (2.5)
Very good	30 (2.5)	33 (2.9)	37 (2.3)
Excellent	9 (1.4)	9 (1.6)	8 (1.0)

† Only classes of teachers indicating in Q40 that they use one or multiple commercially-published textbooks/programs are included in this analysis.

Table MTQ 44
Percentage of Instructional Time Spent Using Instructional Materials during the Mathematics Course

	Percent of Classes†		
	Elementary	Middle	High
Less than 25%	4 (1.2)	14 (2.0)	21 (2.2)
25–49%	12 (2.3)	14 (1.9)	14 (0.8)
50–74%	20 (2.6)	23 (3.2)	20 (1.7)
75–90%	33 (3.0)	35 (3.2)	30 (2.3)
More than 90%	31 (3.2)	14 (2.5)	15 (2.3)

† Only classes of teachers indicating in Q40 that they use one commercially-published textbook/program are included in this analysis.

Table MTQ 45
Percentage of the Textbook/Program Covered during the Mathematics Course

	Percent of Classes†		
	Elementary	Middle	High
Less than 25%	2 (0.8)	2 (0.7)	1 (0.4)
25–49%	5 (1.3)	7 (2.1)	7 (1.2)
50–74%	13 (1.8)	22 (3.1)	25 (2.1)
75–90%	33 (2.8)	47 (3.8)	46 (2.3)
More than 90%	47 (3.3)	22 (2.9)	22 (2.0)

† Only classes of teachers indicating in Q40 that they use one commercially-published textbook/program are included in this analysis.

Table MTQ 46.1
Adequacy of Classroom Resources for Mathematics Instruction in Elementary Schools

	Percent of Classes				
	Not Adequate		Somewhat Adequate		Adequate
	1	2	3	4	5
Instructional technology (e.g., calculators, computers, probes/sensors)	15 (1.2)	8 (1.0)	27 (1.4)	22 (1.4)	29 (1.8)
Measurement tools (e.g., protractors, rulers)	7 (0.9)	7 (0.9)	20 (1.4)	23 (1.5)	44 (1.8)
Manipulatives (e.g., pattern blocks, algebra tiles)	3 (0.7)	4 (0.8)	11 (1.3)	24 (1.6)	58 (2.0)
Consumable supplies (e.g., graphing paper, batteries)	9 (1.1)	9 (0.9)	25 (1.3)	25 (1.3)	32 (1.3)

Table MTQ 46.2
Adequacy of Classroom Resources for Mathematics Instruction in Middle Schools

	Percent of Classes				
	Not Adequate		Somewhat Adequate		Adequate
	1	2	3	4	5
Instructional technology (e.g., calculators, computers, probes/sensors)	7 (1.1)	7 (1.0)	24 (1.7)	21 (1.6)	41 (1.9)
Measurement tools (e.g., protractors, rulers)	4 (1.0)	6 (1.1)	19 (1.8)	23 (1.9)	49 (1.9)
Manipulatives (e.g., pattern blocks, algebra tiles)	8 (1.1)	8 (1.2)	25 (1.6)	23 (2.0)	36 (2.2)
Consumable supplies (e.g., graphing paper, batteries)	8 (1.3)	7 (1.0)	21 (1.6)	25 (1.7)	39 (1.7)

Table MTQ 46.3
Adequacy of Classroom Resources for Mathematics Instruction in High Schools

	Percent of Classes				
	Not Adequate		Somewhat Adequate		Adequate
	1	2	3	4	5
Instructional technology (e.g., calculators, computers, probes/sensors)	6 (0.7)	4 (0.7)	19 (1.1)	22 (1.1)	49 (1.6)
Measurement tools (e.g., protractors, rulers)	6 (0.6)	6 (0.7)	18 (1.1)	21 (1.1)	49 (1.5)
Manipulatives (e.g., pattern blocks, algebra tiles)	14 (1.0)	15 (1.1)	28 (1.2)	16 (1.2)	27 (1.3)
Consumable supplies (e.g., graphing paper, batteries)	6 (0.6)	8 (0.9)	20 (1.2)	23 (1.4)	43 (1.5)

Table MTQ 47.1
Elementary School Mathematics Classes for which Teachers Report Technology Problems

	Percent of Classes		
	Not a Significant Problem	Somewhat of a Problem	Serious Problem
Lack of access to computers	51 (2.5)	36 (2.3)	13 (1.7)
Old age of computers	54 (2.2)	28 (1.9)	18 (2.0)
Lack of access to the Internet	78 (1.9)	16 (1.7)	6 (1.0)
Unreliability of the Internet connection	73 (2.3)	21 (1.8)	6 (1.2)
Slow speed of the Internet connection	67 (2.4)	23 (1.7)	10 (1.4)
Lack of availability of appropriate computer software	55 (2.5)	35 (2.5)	10 (1.4)
Lack of availability of technology support	59 (2.2)	31 (2.1)	11 (1.7)

Table MTQ 47.2
Middle School Mathematics Classes
for which Teachers Report Technology Problesm

	Percent of Classes		
	Not a Significant Problem	Somewhat of a Problem	Serious Problem
Lack of access to computers	58 (3.2)	33 (2.9)	9 (1.5)
Old age of computers	66 (2.6)	21 (2.2)	13 (1.9)
Lack of access to the Internet	76 (2.5)	20 (2.3)	4 (0.9)
Unreliability of the Internet connection	70 (2.5)	24 (2.4)	6 (0.9)
Slow speed of the Internet connection	68 (2.4)	25 (2.2)	7 (1.0)
Lack of availability of appropriate computer software	56 (2.7)	33 (2.7)	11 (1.6)
Lack of availability of technology support	65 (2.7)	27 (2.3)	8 (1.4)

Table MTQ 47.3
High School Mathematics Classes
for which Teachers Report Technology Problems

	Percent of Classes		
	Not a Significant Problem	Somewhat of a Problem	Serious Problem
Lack of access to computers	65 (1.9)	28 (1.8)	8 (1.3)
Old age of computers	70 (1.9)	21 (1.7)	9 (1.4)
Lack of access to the Internet	80 (1.5)	16 (1.5)	3 (0.8)
Unreliability of the Internet connection	79 (1.7)	17 (1.5)	5 (1.0)
Slow speed of the Internet connection	74 (1.7)	21 (1.6)	6 (1.2)
Lack of availability of appropriate computer software	59 (2.0)	30 (2.0)	11 (1.4)
Lack of availability of technology support	68 (1.9)	23 (1.6)	8 (1.1)

Table MTQ 48.1
Elementary School Mathematics Classes for which Teachers Report the Effect Various Factors Have on Mathematics Instruction

	Percent of Classes											
	Inhibits Effective Instruction				Neutral or Mixed				Promotes Effective Instruction		N/A or Don't Know	
	1		2		3		4		5			
Current state standards	4	(1.0)	2	(0.7)	19	(2.1)	15	(1.6)	60	(2.7)	1	(0.4)
District/Diocese curriculum frameworks†	4	(1.1)	3	(0.9)	16	(1.9)	21	(2.0)	53	(2.5)	2	(0.8)
District/Diocese and/or school pacing guides	6	(1.2)	6	(1.2)	17	(1.8)	21	(2.2)	46	(2.7)	4	(0.9)
State testing/accountability policies†	8	(1.4)	9	(1.4)	27	(2.0)	22	(2.1)	26	(2.3)	7	(1.4)
District/Diocese testing/ accountability policies†	6	(1.1)	7	(1.4)	24	(2.3)	25	(2.4)	29	(2.5)	8	(1.3)
Textbook/program selection policies	6	(1.1)	7	(1.2)	26	(2.2)	22	(1.9)	32	(2.3)	7	(1.2)
Teacher evaluation policies	4	(0.9)	4	(1.0)	30	(2.1)	20	(1.7)	35	(2.4)	7	(1.3)
Students' motivation, interest, and effort in mathematics	4	(1.0)	5	(1.0)	13	(1.6)	23	(2.3)	53	(2.4)	2	(0.8)
Students' reading abilities	5	(1.3)	12	(1.7)	21	(2.2)	22	(1.9)	37	(2.2)	3	(0.8)
Community views on mathematics instruction	4	(0.9)	6	(1.1)	35	(2.4)	18	(1.7)	23	(2.1)	15	(1.5)
Parent expectations and involvement	5	(1.1)	9	(1.4)	25	(2.5)	21	(2.1)	36	(2.1)	2	(0.9)
Principal support	2	(0.8)	3	(0.6)	13	(1.7)	18	(1.9)	59	(2.4)	5	(1.1)
Time for you to plan, individually and with colleagues	8	(1.3)	10	(1.3)	15	(1.8)	18	(1.7)	46	(2.4)	3	(0.8)
Time available for your professional development	5	(1.1)	9	(1.3)	21	(2.0)	22	(1.9)	40	(2.2)	3	(0.7)

† Item presented only to public and Catholic schools.

Table MTQ 48.2
Middle School Mathematics Classes for which Teachers Report the Effect Various Factors Have on Mathematics Instruction

	Percent of Classes											
	Inhibits Effective Instruction				Neutral or Mixed				Promotes Effective Instruction		N/A or Don't Know	
	1		2		3		4		5			
Current state standards	4	(1.2)	4	(0.8)	20	(2.4)	26	(3.1)	45	(3.7)	1	(0.5)
District/Diocese curriculum frameworks†	4	(1.2)	5	(1.0)	22	(2.5)	24	(3.1)	41	(3.2)	4	(1.1)
District/Diocese and/or school pacing guides	7	(1.7)	9	(1.4)	22	(2.1)	21	(2.5)	32	(2.8)	10	(2.5)
State testing/accountability policies†	11	(1.6)	15	(1.9)	28	(2.7)	25	(2.9)	18	(2.3)	2	(0.8)
District/Diocese testing/ accountability policies†	13	(2.2)	10	(1.5)	27	(2.2)	22	(2.4)	20	(2.3)	6	(2.1)
Textbook/program selection policies	8	(1.9)	11	(1.7)	32	(2.4)	21	(1.9)	19	(2.3)	9	(1.9)
Teacher evaluation policies	5	(0.9)	6	(0.9)	31	(2.5)	27	(2.8)	26	(3.2)	5	(1.8)
Students' motivation, interest, and effort in mathematics	8	(1.3)	14	(1.7)	18	(2.8)	22	(2.4)	37	(3.3)	1	(0.3)
Students' reading abilities	10	(1.8)	19	(2.9)	17	(1.7)	27	(2.9)	26	(3.0)	1	(0.5)
Community views on mathematics instruction	6	(1.5)	9	(1.4)	40	(2.8)	17	(2.1)	16	(2.4)	12	(2.1)
Parent expectations and involvement	9	(1.6)	15	(2.2)	29	(2.9)	19	(2.1)	26	(2.3)	1	(0.4)
Principal support	2	(0.6)	4	(1.8)	14	(1.5)	22	(2.3)	55	(3.2)	4	(1.5)
Time for you to plan, individually and with colleagues	8	(1.8)	9	(1.3)	15	(2.5)	23	(2.3)	43	(2.8)	2	(0.5)
Time available for your professional development	7	(2.0)	10	(1.5)	25	(2.9)	23	(2.2)	32	(2.8)	2	(0.6)

† Item presented only to public and Catholic schools.

Table MTQ 48.3
High School Mathematics Classes for which Teachers Report the Effect Various Factors Have on Mathematics Instruction

	Percent of Classes											
	Inhibits Effective Instruction				Neutral or Mixed				Promotes Effective Instruction		N/A or Don't Know	
	1		2		3		4		5			
Current state standards	5	(0.6)	5	(0.9)	27	(1.5)	24	(1.9)	30	(1.8)	9	(1.6)
District/Diocese curriculum frameworks†	2	(0.6)	5	(0.8)	26	(1.9)	25	(1.7)	33	(1.7)	8	(1.3)
District/Diocese and/or school pacing guides	3	(0.7)	5	(0.9)	23	(1.8)	24	(1.7)	31	(1.7)	13	(1.6)
State testing/accountability policies†	10	(1.0)	12	(1.6)	32	(1.8)	17	(1.4)	19	(1.4)	10	(1.3)
District/Diocese testing/ accountability policies†	7	(1.0)	8	(1.2)	31	(1.9)	19	(1.6)	21	(1.5)	15	(1.5)
Textbook/program selection policies	5	(1.1)	7	(0.9)	31	(1.9)	20	(1.6)	27	(2.0)	10	(1.0)
Teacher evaluation policies	5	(0.8)	7	(1.0)	31	(1.9)	23	(1.7)	28	(1.4)	8	(1.0)
College entrance requirements	1	(0.4)	3	(0.6)	26	(1.8)	28	(1.9)	31	(1.6)	11	(1.5)
Students' motivation, interest, and effort in mathematics	11	(1.1)	14	(1.5)	19	(1.9)	22	(1.7)	32	(1.7)	2	(0.7)
Students' reading abilities	8	(1.0)	18	(1.8)	28	(1.8)	21	(1.5)	21	(1.7)	4	(1.0)
Community views on mathematics instruction	5	(0.8)	14	(1.7)	35	(2.0)	19	(1.4)	15	(1.5)	12	(1.2)
Parent expectations and involvement	7	(1.0)	17	(1.8)	28	(1.8)	24	(1.7)	20	(1.4)	4	(0.8)
Principal support	3	(0.7)	3	(0.7)	18	(1.6)	23	(1.8)	48	(2.2)	5	(0.8)
Time for you to plan, individually and with colleagues	7	(1.0)	13	(1.5)	18	(1.6)	22	(1.7)	38	(1.9)	2	(0.6)
Time available for your professional development	5	(1.0)	11	(1.1)	27	(1.9)	25	(1.9)	29	(1.8)	4	(0.8)

† Item presented only to public and Catholic schools.

Table MTQ 49
Average Number of Class Periods Devoted to the Most Recently Completed Mathematics Unit

	Average Number of Periods
Elementary	12.2 (0.3)
Middle	13.3 (0.7)
High	11.0 (0.2)

Table MTQ 50
Focus of the Most Recently Completed Mathematics Unit

	Percent of Classes					
	Elementary		Middle		High	
Number and Operations	52	(2.0)	18	(1.3)	3	(0.5)
Measurement and Data Representation	23	(2.0)	9	(0.8)	1	(0.2)
Algebra	3	(0.6)	35	(1.8)	47	(1.4)
Geometry	18	(1.7)	28	(2.0)	22	(1.2)
Probability	4	(0.6)	6	(0.7)	3	(0.5)
Statistics	1	(0.3)	4	(0.6)	6	(0.6)
Trigonometry	0	---†	0	(0.2)	10	(0.8)
Calculus	0	---†	0	---†	8	(0.7)

† No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

There is no table for MTQ 51.

Table MTQ 52
Most Recent Mathematics Unit Based Primarily on Previously Indicated Commercially-Published Textbook/Program

	Percent of Classes†	
Elementary	81	(1.7)
Middle	74	(1.9)
High	83	(1.2)

† Only classes of teachers indicating in Q40 that they use one or multiple commercially-published textbooks/programs are included in this analysis.

Table MTQ 53
Most Recent Mathematics Unit Based Primarily on Any Commercially-Published Textbook/Program

	Percent of Classes	
Elementary	73	(2.0)
Middle	64	(1.9)
High	73	(1.3)

There is no table for MTQ 54.

Table MTQ 55.1
Ways Textbooks/Programs Were Used in the Most Recently Completed Unit in Elementary School Mathematics Classes

	Percent of Classes[†]				
	Not at All		Somewhat		To a Great Extent
	1	2	3	4	5
You used the textbook/program to guide the overall structure and content emphasis of the unit	1 (0.3)	1 (0.4)	17 (1.6)	24 (1.7)	57 (2.1)
You followed the textbook/program to guide the detailed structure and content emphasis of the unit	1 (0.5)	5 (0.8)	20 (1.8)	30 (1.9)	44 (2.1)
You picked what is important from the textbook/program and skipped the rest	24 (1.9)	16 (1.5)	18 (1.6)	24 (1.6)	19 (1.6)
You incorporated activities (e.g., problems, investigations, readings) from other sources to supplement what the textbook/program was lacking	7 (0.9)	8 (0.9)	23 (1.9)	33 (2.0)	29 (1.8)

[†] Only classes of elementary school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit are included in this analysis.

Table MTQ 55.2
Ways Textbooks/Programs Were Used in the Most Recently Completed Unit in Middle School Mathematics Classes

	Percent of Classes[†]				
	Not at All		Somewhat		To a Great Extent
	1	2	3	4	5
You used the textbook/program to guide the overall structure and content emphasis of the unit	1 (0.4)	4 (1.0)	24 (2.1)	30 (2.3)	42 (2.8)
You followed the textbook/program to guide the detailed structure and content emphasis of the unit	4 (1.0)	9 (1.6)	31 (2.4)	28 (2.1)	27 (2.3)
You picked what is important from the textbook/program and skipped the rest	12 (1.6)	14 (1.7)	23 (1.9)	27 (2.3)	25 (2.3)
You incorporated activities (e.g., problems, investigations, readings) from other sources to supplement what the textbook/program was lacking	4 (1.0)	6 (0.9)	22 (2.1)	42 (3.2)	26 (2.2)

[†] Only classes of middle school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit are included in this analysis.

Table MTQ 55.3
Ways Textbooks/Programs Were Used in the Most Recently Completed Unit in High School Mathematics Classes

	Percent of Classes†				
	Not at All		Somewhat		To a Great Extent
	1	2	3	4	5
You used the textbook/program to guide the overall structure and content emphasis of the unit	1 (0.4)	2 (0.4)	23 (1.5)	31 (1.7)	43 (1.8)
You followed the textbook/program to guide the detailed structure and content emphasis of the unit	4 (0.6)	7 (0.8)	32 (1.5)	33 (1.6)	24 (1.5)
You picked what is important from the textbook/program and skipped the rest	13 (1.2)	13 (1.2)	23 (1.3)	30 (1.4)	22 (1.4)
You incorporated activities (e.g., problems, investigations, readings) from other sources to supplement what the textbook/program was lacking	8 (1.0)	11 (1.1)	25 (1.6)	33 (1.8)	23 (1.5)

† Only classes of high school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit are included in this analysis.

Table MTQ 56.1
Reasons Parts of the Textbook/Program Were Skipped in Elementary School Mathematics Classes

	Percent of Classes†		
	Not a Factor	A Minor Factor	A Major Factor
The mathematical ideas addressed in the activities you skipped are not included in your pacing guide and/or current state standards	32 (2.9)	32 (3.2)	37 (3.1)
You did not have the materials needed to implement the activities you skipped	71 (2.9)	24 (2.7)	6 (1.6)
The activities you skipped were too difficult for your students	69 (3.2)	23 (2.6)	8 (1.6)
Your students already knew the mathematical ideas or were able to learn them without the activities you skipped	29 (2.9)	34 (3.0)	37 (3.0)
You have different activities for those mathematical ideas that work better than the ones you skipped	22 (2.5)	30 (3.3)	48 (3.5)

† Only classes of elementary school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit and indicating in Q55 that they "picked what was important from the textbook/program and skipped the rest" at all are included in this analysis.

Table MTQ 56.2
Reasons Parts of the Textbook/Program Were Skipped in Middle School Mathematics Classes

	Percent of Classes†		
	Not a Factor	A Minor Factor	A Major Factor
The mathematical ideas addressed in the activities you skipped are not included in your pacing guide and/or current state standards	22 (3.2)	34 (3.7)	44 (3.7)
You did not have the materials needed to implement the activities you skipped	70 (4.4)	24 (4.2)	5 (1.3)
The activities you skipped were too difficult for your students	59 (3.3)	31 (3.2)	10 (2.0)
Your students already knew the mathematical ideas or were able to learn them without the activities you skipped	43 (3.9)	31 (3.6)	26 (3.3)
You have different activities for those mathematical ideas that work better than the ones you skipped	21 (2.9)	33 (3.7)	47 (3.7)

† Only classes of middle school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit and indicating in Q55 that they "picked what was important from the textbook/program and skipped the rest" at all are included in this analysis.

Table MTQ 56.3
Reasons Parts of the Textbook/Program Were Skipped in High School Mathematics Classes

	Percent of Classes†		
	Not a Factor	A Minor Factor	A Major Factor
The mathematical ideas addressed in the activities you skipped are not included in your pacing guide and/or current state standards	34 (2.9)	30 (2.8)	37 (2.6)
You did not have the materials needed to implement the activities you skipped	70 (2.7)	25 (2.4)	5 (1.2)
The activities you skipped were too difficult for your students	45 (2.5)	37 (2.4)	18 (1.8)
Your students already knew the mathematical ideas or were able to learn them without the activities you skipped	46 (2.8)	33 (2.5)	21 (2.5)
You have different activities for those mathematical ideas that work better than the ones you skipped	21 (2.0)	36 (2.4)	43 (2.5)

† Only classes of high school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit and indicating in Q55 that they "picked what was important from the textbook/program and skipped the rest" at all are included in this analysis.

Table MTQ 57.1
Reasons Why the Textbook/Program Was Supplemented in Elementary School Mathematics Classes

	Percent of Classes†		
	Not a Factor	A Minor Factor	A Major Factor
Your pacing guide indicated that you should use supplemental activities	51 (3.1)	33 (2.7)	15 (2.7)
Supplemental activities were needed to prepare students for standardized tests	35 (2.7)	38 (2.7)	27 (2.5)
Supplemental activities were needed to provide students with additional practice	5 (1.5)	25 (2.8)	69 (3.1)
Supplemental activities were needed so students at different levels of achievement could increase their understanding of the ideas targeted in each activity	4 (1.0)	25 (2.4)	71 (2.4)

† Only classes of elementary school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit and indicating in Q55 that they "incorporated activities (e.g., problems, investigations, readings) from other sources to supplement what the textbook/program was lacking" at all are included in this analysis.

Table MTQ 57.2
Reasons Why the Textbook/Program Was Supplemented in Middle School Mathematics Classes

	Percent of Classes†		
	Not a Factor	A Minor Factor	A Major Factor
Your pacing guide indicated that you should use supplemental activities	60 (4.2)	25 (3.2)	14 (2.6)
Supplemental activities were needed to prepare students for standardized tests	28 (4.4)	41 (4.1)	31 (3.6)
Supplemental activities were needed to provide students with additional practice	4 (1.1)	30 (3.8)	66 (3.9)
Supplemental activities were needed so students at different levels of achievement could increase their understanding of the ideas targeted in each activity	3 (1.0)	22 (2.8)	75 (3.0)

† Only classes of middle school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit and indicating in Q55 that they "incorporated activities (e.g., problems, investigations, readings) from other sources to supplement what the textbook/program was lacking" at all are included in this analysis.

Table MTQ 57.3
Reasons Why the Textbook/Program Was Supplemented in High School Mathematics Classes

	Percent of Classes[†]		
	Not a Factor	A Minor Factor	A Major Factor
Your pacing guide indicated that you should use supplemental activities	64 (2.1)	28 (2.1)	9 (1.4)
Supplemental activities were needed to prepare students for standardized tests	45 (2.6)	35 (2.6)	20 (1.8)
Supplemental activities were needed to provide students with additional practice	6 (1.3)	26 (2.2)	68 (2.2)
Supplemental activities were needed so students at different levels of achievement could increase their understanding of the ideas targeted in each activity	9 (1.7)	28 (2.2)	63 (2.5)

[†] Only classes of high school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit and indicating in Q55 that they "incorporated activities (e.g., problems, investigations, readings) from other sources to supplement what the textbook/program was lacking" at all are included in this analysis.

Table MTQ 58.1
Elementary School Mathematics Classes Taught by Teachers Feeling Prepared for Each of a Number of Tasks in the Most Recent Unit

	Percent of Classes			
	Not Adequately Prepared	Somewhat Prepared	Fairly Well Prepared	Very Well Prepared
Anticipate difficulties that students will have with particular mathematical ideas and procedures in this unit	1 (0.3)	8 (1.1)	44 (1.8)	46 (1.8)
Find out what students thought or already knew about the key mathematical ideas	1 (0.3)	10 (1.0)	41 (1.7)	48 (1.8)
Implement the mathematics textbook/program to be used during this unit[†]	0 (0.2)	5 (0.8)	32 (2.0)	62 (2.0)
Monitor student understanding during this unit	0 (0.1)	4 (0.6)	34 (1.7)	62 (1.6)
Assess student understanding at the conclusion of this unit	0 (0.2)	3 (0.5)	30 (1.6)	66 (1.7)

[†] Item presented only to elementary school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit.

Table MTQ 58.2
Middle School Mathematics Classes Taught by Teachers
Feeling Prepared for Each of a Number of Tasks in the Most Recent Unit

	Percent of Classes							
	Not Adequately Prepared		Somewhat Prepared		Fairly Well Prepared		Very Well Prepared	
Anticipate difficulties that students will have with particular mathematical ideas and procedures in this unit	0	(0.1)	8	(1.0)	38	(2.2)	54	(2.4)
Find out what students thought or already knew about the key mathematical ideas	1	(0.3)	11	(1.2)	40	(1.9)	49	(2.3)
Implement the mathematics textbook/program to be used during this unit†	0	(0.2)	6	(1.0)	32	(2.4)	63	(2.3)
Monitor student understanding during this unit	0	(0.1)	3	(0.5)	35	(2.2)	62	(2.1)
Assess student understanding at the conclusion of this unit	0	(0.1)	2	(0.4)	27	(2.2)	72	(2.3)

† Item presented only to middle school teachers indicating in Q52/53 that they used commercially-published textbooks/ programs in their most recent unit.

Table MTQ 58.3
High School Mathematics Classes Taught by Teachers
Feeling Prepared for Each of a Number of Tasks in the Most Recent Unit

	Percent of Classes							
	Not Adequately Prepared		Somewhat Prepared		Fairly Well Prepared		Very Well Prepared	
Anticipate difficulties that students will have with particular mathematical ideas and procedures in this unit	0	(0.2)	5	(0.6)	35	(1.5)	60	(1.3)
Find out what students thought or already knew about the key mathematical ideas	1	(0.2)	10	(0.8)	41	(1.5)	48	(1.5)
Implement the mathematics textbook/program to be used during this unit†	0	(0.2)	5	(0.8)	34	(1.7)	61	(1.8)
Monitor student understanding during this unit	0	---‡	2	(0.4)	34	(1.7)	65	(1.7)
Assess student understanding at the conclusion of this unit	0	(0.1)	1	(0.3)	27	(1.5)	72	(1.5)

† Item presented only to high school teachers indicating in Q52/53 that they used commercially-published textbooks/programs in their most recent unit.

‡ No teachers in the sample selected this response option. Thus, it is not possible to calculate the standard error of this estimate.

Table MTQ 59
Mathematics Classes in which Teachers Used Various Assessment Methods in the Most Recent Unit

	Percent of Classes		
	Elementary	Middle	High
Administered an assessment, task, or probe at the beginning of the unit to find out what students thought or already knew about the key mathematical ideas	63 (1.8)	52 (2.2)	42 (1.8)
Questioned individual students during class activities to see if they were "getting it"	97 (0.6)	98 (0.6)	97 (0.5)
Used information from informal assessments of the entire class (e.g., asking for a show of hands, thumbs up/thumbs down, clickers, exit tickets) to see if students were "getting it"	90 (1.1)	88 (1.3)	83 (1.1)
Reviewed student work (e.g., homework, notebooks, journals, portfolios, projects) to see if they were "getting it"	96 (0.7)	95 (0.9)	96 (0.7)
Administered one or more quizzes and/or tests to see if students were "getting it"	73 (1.7)	86 (1.5)	86 (1.4)
Had students use rubrics to examine their own or their classmates' work	10 (1.1)	12 (1.3)	8 (0.7)
Assigned grades to student work (e.g., homework, notebooks, journals, portfolios, projects)	63 (1.9)	85 (1.6)	85 (0.9)
Administered one or more quizzes and/or tests to assign grades	73 (1.6)	88 (1.5)	94 (0.6)
Went over the correct answers to assignments, quizzes, and/or tests with the class as a whole	83 (1.2)	94 (0.9)	92 (0.7)

Table MTQ 60
Duration of the Most Recent Mathematics Lesson

	Average Number of Minutes
Elementary	58.9 (0.9)
Middle	57.1 (1.2)
High	60.7 (0.8)

Table MTQ 61
Time Spent on Different Activities in the Most Recent Mathematics Lesson

	Average Percent of Class Time		
	Elementary	Middle	High
Non-instructional activities (e.g., attendance taking, interruptions)	6 (0.3)	10 (0.2)	9 (0.2)
Whole class activities (e.g., lectures, explanations, discussions)	40 (0.6)	42 (0.8)	48 (0.7)
Small group work	29 (0.8)	24 (0.9)	22 (0.8)
Students working individually (e.g., reading textbooks, completing worksheets, taking a test or quiz)	26 (0.6)	24 (0.7)	22 (0.6)

Table MTQ 62
Mathematics Classes Participating in Various Activities in the Most Recent Lesson

	Percent of Classes		
	Elementary	Middle	High
Teacher explaining a mathematical idea to the whole class	93 (0.9)	93 (1.0)	95 (0.7)
Whole class discussion	89 (1.1)	85 (1.4)	75 (1.3)
Students completing textbook/worksheet problems	80 (1.5)	78 (1.8)	83 (1.0)
Teacher conducting a demonstration while students watched	74 (1.5)	71 (2.0)	65 (1.2)
Students doing hands-on/manipulative activities	77 (1.4)	37 (1.6)	21 (1.3)
Students reading about mathematics	19 (1.3)	23 (1.7)	17 (1.2)
Students using instructional technology	29 (1.7)	31 (1.8)	43 (1.3)
Practicing for standardized tests	14 (1.3)	23 (1.9)	16 (1.1)
Test or quiz	19 (1.3)	19 (1.6)	20 (1.3)
None of the above	0 (0.1)	1 (0.2)	0 (0.2)

Table MTQ 63
Sex of Mathematics Teachers

	Percent of Teachers		
	Elementary	Middle	High
Male	8 (1.0)	24 (1.9)	44 (1.7)
Female	92 (1.0)	76 (1.9)	56 (1.7)

Table MTQ 64
Mathematics Teachers of Hispanic or Latino Origin

	Percent of Teachers
Elementary	9 (1.3)
Middle	5 (0.7)
High	5 (0.6)

Table MTQ 65
Race of Mathematics Teachers

	Percent of Teachers		
	Elementary	Middle	High
American Indian or Alaska Native	1 (0.4)	2 (0.4)	1 (0.4)
Asian	2 (0.4)	4 (1.0)	3 (0.6)
Black or African American	5 (0.9)	6 (0.9)	4 (0.6)
Native Hawaiian or Other Pacific Islander	1 (0.3)	0 (0.2)	0 (0.1)
White	93 (1.0)	90 (1.3)	93 (1.0)

Table MTQ 66
Age of Mathematics Teachers

	Percent of Teachers		
	Elementary	**Middle**	**High**
Less than 31 years old	17 (1.2)	18 (1.3)	17 (1.2)
31–40 years old	26 (1.4)	26 (2.1)	25 (1.3)
41–50 years old	27 (1.6)	30 (2.2)	27 (1.2)
51–60 years old	24 (1.4)	21 (1.7)	20 (1.1)
More than 60 years old	6 (0.9)	5 (0.9)	10 (1.1)