

MATH PROFESSIONAL DEVELOPMENT IMPACT STUDY

SPRING 2008

TEACHER SURVEY



Paperwork Burden Statement

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Dear Teacher:

The Mathematics Professional Development Impact Study is a groundbreaking national study designed to test innovative models of professional development for mathematics instruction in the seventh grade. Your participation is important and appreciated, but you do have the right to skip any question that you do not wish to answer. Below are answers to some general questions concerning your participation.

What is the purpose of this survey?

The purpose of this survey is to obtain information on the professional development experiences in mathematics for teachers participating in the study.

Who is conducting this survey?

The Mathematics PD Impact Study was commissioned by the Department of Education's Institute of Education Sciences, and is administered by AIR, MDRC, REDA International, and Westat.

Why should you participate in this survey?

Policymakers and educational leaders rely on findings from studies like the Mathematics PD Impact Study to inform their decisions. The current study will fill a critical gap in the math and professional development research literature as to what is effective for improving seventh grade math achievement.

Will your responses be kept confidential?

Your responses are protected from disclosure by federal statute (P.L. 107-279, Title I, Part E, Sec.183). All responses that relate to or describe identifiable characteristics of individuals may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purposes, unless otherwise compelled by law.

How will your information be reported?

The information you provide will be combined with the information provided by others in statistical reports. No individual data that link your name, address, or telephone number with your responses will be included in the statistical reports.

Where should you return your completed survey?

Please place your completed survey in the enclosed envelope and follow the return instructions provided by REDA International, Inc.

Thank you for your cooperation in this very important effort!

Professional Development Experiences Related to Mathematics and Mathematics Education

In answering the following items, consider ALL the professional development activities related to MATHEMATICS OR MATHEMATICS INSTRUCTION in which you have participated DURING THE 2007-2008 SCHOOL YEAR.

Professional development refers to a variety of activities intended to enhance your professional knowledge and skills, including workshops, institutes, college courses, coaching, mentoring, teacher networks, and committee work.

1. Did you participate in any professional development related to MATHEMATICS OR MATHEMATICS INSTRUCTION during the 2007-2008 SCHOOL YEAR?

⇒ **Please do NOT include activities that took place before the first instructional day of the school year.**

Yes → Go to Question 2.

No → Skip to Question 8.

2. During the 2007-2008 SCHOOL YEAR, what is the total number of hours you spent in each of the following MATHEMATICS or MATHEMATICS INSTRUCTION professional development activities?

⇒ **For each activity, write the total number of HOURS you spent.**

⇒ **Round up to the nearest whole hour.**

⇒ **Mark '0' if you participated in none.**

⇒ **Please do NOT count the same hours in more than one row.**

| | School Year 2007-2008 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| | Number of hours |
| a. Attended short, stand-alone training or workshop(s) in mathematics or mathematics instruction (each one half-day or less). | [] |
| b. Attended longer institute(s) or workshop(s) in mathematics or mathematics instruction (more than half-day). | [] |
| c. Attended mathematics or mathematics education course(s), such as a college course(s), that extended over several weeks. | [] |
| d. Received coaching or mentoring in your school related to mathematics instruction. | [] |
| e. Acted as a coach or mentor in your school related to mathematics instruction | [] |
| f. Other (e.g., participated in teacher study groups, networks or collaborations supporting PD in mathematics, participated in committees or task forces related to mathematics, observed mathematics instruction in other schools) | [] |

3. During the 2007-2008 SCHOOL YEAR, how much did the mathematics professional development in which you participated emphasize the following each of the following topics? (Circle one number in each row.)

| Topic | Not an emphasis | Minor emphasis | Moderate emphasis | Major emphasis |
|-------------------------------------------------------------------------------------------|-----------------|----------------|-------------------|----------------|
| a. Whole numbers | 1 | 2 | 3 | 4 |
| b. Fractions | 1 | 2 | 3 | 4 |
| c. Decimals | 1 | 2 | 3 | 4 |
| d. Percents | 1 | 2 | 3 | 4 |
| e. Ratios, rates and proportional reasoning | 1 | 2 | 3 | 4 |
| f. Algebra | 1 | 2 | 3 | 4 |
| g. Geometry | 1 | 2 | 3 | 4 |
| h. Probability and statistics | 1 | 2 | 3 | 4 |
| i. How students think about and learn mathematics (including common student difficulties) | 1 | 2 | 3 | 4 |
| j. How to use your mathematics curriculum/textbook | 1 | 2 | 3 | 4 |
| k. How to interpret and use assessment data to guide instruction | 1 | 2 | 3 | 4 |
| l. How to organize and manage a classroom | 1 | 2 | 3 | 4 |
| m. How to teach students with diverse needs | 1 | 2 | 3 | 4 |
| n. How to use technology in mathematics instruction | 1 | 2 | 3 | 4 |
| o. Other (specify) _____ | 1 | 2 | 3 | 4 |

4. Next, we would like to ask specifically about LONGER INSTITUTES OR WORKSHOPS (more than half day) during the 2007-2008 SCHOOL YEAR. In question 2 (row b), did you report any professional development hours for longer institutes or workshops related to mathematics or mathematics instruction?

- Yes → Go to Question 5.
- No → Skip to Question 8.

5. Over ALL of your 2007-2008 SCHOOL YEAR INSTITUTE/WORKSHOP HOURS related to mathematics, how often did you do the following? (Circle one number in each row.)

| Occurrence | | Never | Rarely | Sometimes | Often |
|------------|---------------------------------------------------------------------------------------------|-------|--------|-----------|-------|
| a. | Observe demonstrations of teaching techniques (either video taped or modeled by presenters) | 1 | 2 | 3 | 4 |
| b. | Practice what you learned and received feedback | 1 | 2 | 3 | 4 |
| c. | Lead group discussions | 1 | 2 | 3 | 4 |
| d. | Conduct a demonstration of a lesson, unit or skill | 1 | 2 | 3 | 4 |
| e. | Develop and practice using student materials | 1 | 2 | 3 | 4 |
| f. | Review student work or score assessments | 1 | 2 | 3 | 4 |
| g. | Develop lesson plans | 1 | 2 | 3 | 4 |
| h. | Work in pairs or small groups with other teachers | 1 | 2 | 3 | 4 |

6. In your 2007-2008 SCHOOL YEAR INSTITUTE/WORKSHOP HOURS, did you participate with most or all of the mathematics teachers from your department or grade level?

- Yes, most of the time
 Yes, some of the time
 No

7. In your 2007-2008 SCHOOL YEAR INSTITUTE/WORKSHOP HOURS related to mathematics instruction, how often was your professional development experience... (Circle one number in each row.)

| | | Never | Rarely | Sometimes | Often |
|----|--------------------------------------------------------------------------------------------------------------------------|-------|--------|-----------|-------|
| a. | Consistent with your own goals for your professional development | 1 | 2 | 3 | 4 |
| b. | Aligned with state or district standards and/or assessments | 1 | 2 | 3 | 4 |
| | Supportive of the use of district-adopted curricular materials | 1 | 2 | 3 | 4 |
| d. | Supportive of your school's improvement efforts | 1 | 2 | 3 | 4 |
| e. | Relevant to the mathematics you have been teaching this year | 1 | 2 | 3 | 4 |
| | Focused on material at the right level of difficulty, given your prior knowledge of mathematics and mathematics teaching | 1 | 2 | 3 | 4 |
| g. | Logically connected from one day or session to the next | 1 | 2 | 3 | 4 |
| h. | Clear about what you would learn and what you should expect to take away from the experience | 1 | 2 | 3 | 4 |

Impact of Professional Development on Your Teaching This Year

8. Think about ALL of the professional development related to mathematics instruction that you participated in during the SUMMER OF 2007 and the 2007-08 SCHOOL YEAR, including workshops, institutes, college

courses, coaching, mentoring, teacher networks, and committee work. Overall, how useful were these activities to you?

- Not useful
- Somewhat useful
- Useful
- Very useful

9. Have you tried to introduce changes in your teaching as a result of your participation in these professional development activities?

- Yes → *Go to Question 10.*
- No → *Skip to Question 12*

10. Have you faced any of the following issues in trying to introduce the changes? (Circle one number in each row.)

| | Issue did not arise | Issue arose minor problem | Issue arose moderate problem | Issue arose major problem |
|---------------------------------------------------------------------------------------|---------------------|---------------------------|------------------------------|---------------------------|
| a. Insufficient planning time | 0 | 1 | 2 | 3 |
| b. Class size too large to implement changes | 0 | 1 | 2 | 3 |
| d. Lack of consistency between changes and state or district standards or assessments | 0 | 1 | 2 | 3 |
| e. Lack of consistency between changes and district adopted curriculum materials | 0 | 1 | 2 | 3 |
| f. Insufficient opportunity to practice new skills | 0 | 1 | 2 | 3 |
| g. Other (please specify) _____ | 0 | 1 | 2 | 3 |

11. To what extent have you made changes in any of the following aspects of your teaching practice as a result of your participation in professional development activities during the SUMMER OF 2007 and the 2007-08 SCHOOL YEAR? (Circle one number in each row.)

| | No Change | Minor change | Moderate change | Significant change |
|--------------------------------------------------------|-----------|--------------|-----------------|--------------------|
| a. The mathematics content you covered during the year | 0 | 1 | 2 | 3 |
| b. The instructional methods you employed | 0 | 1 | 2 | 3 |
| c. The ways in which you evaluated student learning | 0 | 1 | 2 | 3 |
| d. The approach you used to planning lessons | 0 | 1 | 2 | 3 |

Chapter [Unit] Coverage

[NOTE: There are three forms of this single question, one form for each textbook/curriculum, distributed based on school classification.]

12. We would like to learn how much time you spend addressing various topics in mathematics. To complete the following table, please think about the regular seventh grade mathematics class you teach using [NOTE: insert text name]. Your TARGET CLASS SECTION is the first regular section of this seventh grade mathematics class that you taught this week. (Do not count honors or remedial sections)

Has your TARGET CLASS SECTION started any of the following chapters [units] in your textbook [curriculum] since January 1, 2008?

- ⇒ *In the table below, write in the month and day on which your target class section started working on each chapter [unit].*
- ⇒ *If your target class section did not begin a particular chapter [unit] between January 1, 2008 and the current date (or the last day of the school year), check the “N/A” box for that chapter [unit].*
- ⇒ *If your target class section started any chapters [units] not on the list, please use the rows marked “Other” to identify the chapter(s) [unit(s)] and enter the date(s) started.*

[For Connected Mathematics (CMP)]

| Unit | Unit Title | Date your target class started the unit | | |
|-------|-------------------------|-----------------------------------------|-------|------------------------------|
| VP | Variables & Patterns | / | /2008 | <input type="checkbox"/> N/A |
| SS | Stretching & Shrinking | / | /2008 | <input type="checkbox"/> N/A |
| CS | Comparing & Scaling | / | /2008 | <input type="checkbox"/> N/A |
| AN | Accentuate the Negative | / | /2008 | <input type="checkbox"/> N/A |
| FW | Filling & Wrapping | / | /2008 | <input type="checkbox"/> N/A |
| MS | Moving Straight Ahead | / | /2008 | <input type="checkbox"/> N/A |
| WE | What Do You Expect? | / | /2008 | <input type="checkbox"/> N/A |
| DD | Data Distributions | / | /2008 | <input type="checkbox"/> N/A |
| OTHER | Please fill in _____ | / | /2008 | <input type="checkbox"/> N/A |
| OTHER | Please fill in _____ | / | /2008 | <input type="checkbox"/> N/A |

[For Glencoe Applications and Concepts]

| Chapter | Chapter Title | Date your target class started the chapter | | |
|----------------|-----------------------------------------------|---------------------------------------------------|-------|------------------------------|
| 1 | Decimal Patterns & Algebra | / | /2008 | <input type="checkbox"/> N/A |
| 2 | Statistics: Analyzing Data | / | /2008 | <input type="checkbox"/> N/A |
| 3 | Algebra: Integers | / | /2008 | <input type="checkbox"/> N/A |
| 4 | Algebra: Linear Equations & Functions | / | /2008 | <input type="checkbox"/> N/A |
| 5 | Fractions, Decimals & Percents | / | /2008 | <input type="checkbox"/> N/A |
| 6 | Applying Fractions | / | /2008 | <input type="checkbox"/> N/A |
| 7 | Ratios & Proportions | / | /2008 | <input type="checkbox"/> N/A |
| 8 | Applying Percent | / | /2008 | <input type="checkbox"/> N/A |
| 9 | Probability | / | /2008 | <input type="checkbox"/> N/A |
| 10 | Geometry | / | /2008 | <input type="checkbox"/> N/A |
| 11 | Geometry: Measuring Two-Dimensional Figures | / | /2008 | <input type="checkbox"/> N/A |
| 12 | Geometry: Measuring Three-Dimensional Figures | / | /2008 | <input type="checkbox"/> N/A |
| OTHER | Please fill in _____ | / | /2008 | <input type="checkbox"/> N/A |
| OTHER | Please fill in _____ | / | /2008 | <input type="checkbox"/> N/A |

[For Prentice Hall Mathematics]

| Chapter | Chapter Title | Date your target class started the chapter | | |
|---------|----------------------------------|--------------------------------------------|-------|------------------------------|
| 1 | Decimals & Integers | / | /2008 | <input type="checkbox"/> N/A |
| 2 | Equations & Inequalities | / | /2008 | <input type="checkbox"/> N/A |
| 3 | Exponents, Factors & Fractions | / | /2008 | <input type="checkbox"/> N/A |
| 4 | Operations with Fractions | / | /2008 | <input type="checkbox"/> N/A |
| 5 | Ratios, Rates, and Proportions | / | /2008 | <input type="checkbox"/> N/A |
| 6 | Percents | / | /2008 | <input type="checkbox"/> N/A |
| 7 | Geometry | / | /2008 | <input type="checkbox"/> N/A |
| 8 | Geometry & Measurement | / | /2008 | <input type="checkbox"/> N/A |
| 9 | Patterns & Rules | / | /2008 | <input type="checkbox"/> N/A |
| 10 | Graphing in the Coordinate Plane | / | /2008 | <input type="checkbox"/> N/A |
| 11 | Displaying & Analyzing Data | / | /2008 | <input type="checkbox"/> N/A |
| 12 | Using Probability | / | /2008 | <input type="checkbox"/> N/A |
| OTHER | Please fill in _____ | / | /2008 | <input type="checkbox"/> N/A |
| OTHER | Please fill in _____ | / | /2008 | <input type="checkbox"/> N/A |

You are done with the survey. Thank you.