

Interviews with District Mathematics Leaders
January 2008
MIST WEBSITE

Before turning the tape recorder on:

1. Explain the purpose of the interview.

Thank you for taking the time to meet with me today. In this interview I am going to be asking you questions about your role in the district, the current middle school math initiative(s), to whom you are accountable and for what, how the different units in the district office work, about coaches, and what you believe are the necessary supports in order for the district's initiatives to be successful in middle school mathematics.

2. Consent Process: Please be sure to consent the participant if s/he has not consented before (see Interview Process document). In all cases, tell the participant:

Before we begin the interview, I want to remind you that participating in this study is voluntary and your responses are completely confidential. At any point during the interview, if you would like me to turn off the recorder, just tell me to do so. Do you have any questions about the study before we begin?

Background

1. Please tell me about your current position in the district.
 - a. What are your current job responsibilities?
 - d. How many years have you been in this position?
2. What did you do prior to this position?
 - a. Have you ever taught in the classroom?
 - b. *If so*, what subject(s)?
 - c. What grade levels?

Current District Plan for Middle School Mathematics Instruction

I'd like to ask you about the district's current plans for improving middle school mathematics instruction.

3. What are the district's current plans for improving mathematics instruction in middle schools?
 - a. Who or what has been influential in creating the district plan for mathematics?
 1. District initiatives?
 2. Curriculum adoption?
 3. Curriculum frameworks?
 4. Coaching?
 5. State policies?
 6. National/federal policies (i.e., NCTM Standards & NCLB)
 7. Achievement gaps in mathematics
 8. Test scores in general

- b. Can you walk me through the concrete steps your office took as part of developing this plan?
 - c. Can you walk me through the concrete steps your office is taking as part of implementing this plan?
4. I would like to ask you how these mathematics initiatives are being received?
- a. Did you support this initiative?
 - b. Did the middle school math teachers?
 - c. Principals?
5. Could you describe the gaps in mathematics achievement between various groups of students?
- a. In your view, what are the sources of the gaps in mathematics achievement between these groups of students?
6. (*Only ask if the achievement gap was not described as part of the plan the District Math Leader described in Q3.*) What approaches is the District taking to address the achievement gaps in mathematics, particularly in the middle grades?
- a. What role does your office play in this plan?
 - b. Can you walk me through the concrete steps your office is taking as part of this plan?
7. In your view, do the current middle school math initiatives conflict with any other initiatives in the district?
- i. How are these conflicts being dealt with?

General Information about the Organization of Mathematics Teaching

I'd like to ask you a few questions about how middle school mathematics instruction is organized in your district.

8. What courses are middle schools expected to offer in mathematics? (e.g., 8th grade algebra)
9. What is the district's policy on skill-level grouping in middle school mathematics?
- a. How does your office enforce this policy?
 - b. What happens if your office finds out that a school is not adhering to this policy?

Supports and Resources (Principals and Teachers)

Now I would like to ask you about supports and resources that have been provided to you to carry out these initiatives as well as your views on what counts as high-quality leadership and instruction.

10. We are interested in knowing your view of what counts as high quality instructional leadership in mathematics. For example, if you were to go into a middle school, how would you know if the principal was providing high quality instructional leadership?

11. What is the role of middle school principals and/or assistant principals in the math initiatives you described earlier?

a. What do principals and/or assistant principals need to know and be able to do in order to carry out this role effectively?

12. What support do you, or your office, offer to principals and/or assistant principals in middle schools as they implement this initiative?

a. Professional Development

i. What are the goals of the professional development for principals and/or assistant principals in middle school mathematics?

ii. Are you involved in principal and/or assistant principal professional development? *If so*, What is your role?

iii. How effective do you think PD is for principals and/or assistant principals?

1. Why?

b. Do you offer any specific supports (e.g., professional development, supplementary math programs, etc.) to principals and/or assistant principals in order to address the achievement gap in mathematics (*reference the interviewee's response about the achievement gap*)?

i. Can you describe those supports to me?

ii. What has been the response of principals and/or assistant principals?

c. What sorts of materials are principals and/or assistant principals expected to use? (e.g., *curriculum frameworks, Standards, Pacing Guides, etc.*)

i. How are principals and/or assistant principals expected to use the materials?

ii. Do you know if the materials have been useful to principals and/or assistant principals?

1. If so, in what ways?

d. Other supports?

13. *Notes to interviewer:

- Probe on **depth/specificity** of response until you understand what the participant describes (e.g., *If a teacher says "student engagement," ask "Engaged in what?"*).
- Keep the **form/function** distinction in mind. Ask participants why they think ___ is important (e.g., *Why do you think it's important for kids to work in groups? Why do you think it's important to hold a whole class discussion?*).
- If the interviewee talks about the **structure of discourse** (who's talking to whom and when) probe on **content** (and vice versa). If the interviewee says, "Teachers (or students) should be asking questions," probe to find out the kinds of questions the teacher (or students) should ask and for what purpose, as well as whether they conceive of discussion as happening in whole class settings and/or in small groups alone.

If you were asked to observe a teacher's math classroom for one or more lessons, what would you look for to decide whether the mathematics instruction is high quality?

- a. What are some of the things you would expect to find the teacher actually doing in the classroom for instruction to be of high quality?
- b. What kinds of problems or mathematical tasks would you expect to see the students working on for instruction to be of high quality?
 - i. Can you please describe a _____ [use the word or phrase—e.g., “task” or “problem”— that the participant used for “task”] that you would consider to be of high quality?
- c. Can you please describe what classroom discussion would look and sound like if instruction were of high quality?
 - i. Would you expect to see the entire class participating in a single discussion, or would students be talking primarily small groups?
- d. Is there anything else you would look for?
 - i. *If so*, what?
 - ii. Why?

- a. (*Only ask if interviewee has told you that schools group students by skill levels in mathematics*) What are your expectations for how math teachers should adjust their instruction *across* the different classes they teach?
- b. What are your expectations regarding how math teachers should adjust their instruction *within* classes?

14. What do middle school math teachers need to know and be able to do in order to effectively implement these reform initiatives?

15. What are some of the challenges that teachers face in developing high-quality instruction in middle school mathematics?

16. What would you consider high quality professional development for middle school mathematics teachers?

- a. What would the focus of the PD be?
- b. What are some of the barriers to providing the types of PD that would be most valuable (e.g., union contract, site-based decision making, inadequate time in school day, not enough coaches, etc.)?

17. What resources do you, or your office, offer to assist middle school math teachers in implementing this initiative?

- a. What sorts of professional development in mathematics does the district offer for middle school teachers?
 - i. Workshops?
 1. If so, what are the goals of the workshops?
 2. Who plans the workshops?
 3. Who leads the workshops?
 4. How often are they held?

5. *(Only ask if interviewee has not led a workshop)* Have you attended PD sessions?
 6. *(Only ask if interviewee has been present at PD)* Can you please describe to me the focus of the PD sessions?
 - A. Math content?
 - B. Instructional practices?
 - C. Using materials (e.g., frameworks, pacing guides, curriculum)?
 - D. Use of student work?
 7. Is there any professional development for math teachers targeted at meeting the needs of struggling groups of students (ELLs, African American students)?
 - A. Can you describe the content of that PD to me?
- ii. Study groups?
 1. *If so*, what are the goals of the study groups?
 2. Can you describe how a typical study group works? Is it school-based?
 3. How often do study groups meet?
 4. What are the incentives for teachers to participate?
 - iii. Is there any follow-up at the building level to monitor whether the PD is being implemented?
- b. What sorts of materials have been developed for teachers? (*curriculum frameworks, Standards, Pacing Guides, etc.*)
 - i. How are teachers expected to use them?
 - c. What additional support do teachers get in their classrooms?
 - i. Coaches?
 - ii. Other supports?

Math Coaches

I would like to ask you some specific questions about math coaching at the middle school level in the district.

19. Can you please describe the selection process for middle school math coaches?
20. What are the math coach's responsibilities?
21. Who are math coaches accountable to?
 - a. Principals?
 - b. District Math Leaders?
 - c. Anyone else?
22. What are math coaches held accountable for?

23. If you go into a middle school, how do you know if the coaching is of high quality?

24. What do you think math coaches need to know and be able to do in order to be effective in relation to what you described as their responsibilities?

25. What resources do you, or your office, offer to assist middle school math coaches in their work?

a. What kinds of professional development does the district offer math coaches?

i. What is your involvement in training / supporting coaches' development?

ii. How often is PD held? Have you attended any of the sessions?

iii. *If the DML does not plan the PD, ask Who plans the PD?*

iii. *If the DML does not lead the PD, ask Who leads the PD?*

iv. *If the DML has attended PD, ask Can you please describe to me the focus of the PD sessions?*

Anticipated responses:

1. *Math content*

2. *Instructional practices*

3. *Using materials (e.g., frameworks, pacing guides, curriculum)*

4. *Use of student work*

5. *How to work with teachers*

6. *How to build a good relationship with teachers*

v. Who typically attends? (e.g., principals too? District leaders? District Math Leader?)

vi. Has there been any professional development for middle school math coaches targeted at meeting the mathematics needs of struggling groups of students (e.g., ELLs, African American students)?

A. Can you describe the content of this PD?

vii. In your professional judgment, has the coach PD been effective?

A. Why or why not?

b. Have any materials been developed to assist coaches in their work?

i. *If so, can you please describe them and/or provide a copy for me to see?*

26. Do you observe coaches at work?

a. *If so, in what contexts do you observe them?*

c. What do you expect coaches and teachers to talk about formally? Informally?

d. What do you envision as the ideal relationship between a coach and teacher?

27. What do you envision as a productive relationship between a coach and principal?

a. What sort of working relationship do you expect them to have?

Relationships with other District Units and Meetings with Others

Now I'd like to ask you a few questions about the relationships between units of the District Office as they relate to math instruction and about your contact with different groups of people in the district.

28. To whom do you report?
 - a. On what criteria are you evaluated?

29. How would you describe the working relationship between your office and other district units?
 - a. Curriculum and Instruction (*Do not ask if DML is housed in this unit*)
 - b. Leadership
 - c. Research, Evaluation, and Assessment
 - d. Special Education
 - e. Office of English Language Learners

30. Which units in the District are most influential in making decisions regarding middle school mathematics instruction?
 - a. *For each unit listed, ask the following:* In your view, what is their agenda regarding middle school math instruction?
 - b. Are you generally “on the same page” as the other units regarding decisions about middle school math instruction and instructional leadership?
 - i. Why or why not?

31. To whom do you turn to for help or advice regarding issues of instructional leadership in middle school mathematics?

32. Do you participate in regularly scheduled meetings with:
 - a. members of other district units?
 1. How often do you have these meetings?
 2. What types of issues are typically addressed at these meetings?
 3. What materials do you use in these meetings to help communicate expectations for instructional leadership or math instruction? (e.g., *curriculum framework, standards, student achievement data*)
 - i. *If they do use these materials, ask,* Do you generally find that you are interpreting and using these materials in similar ways?
 1. *If not,* can you give an example to help me understand how you were using _____ in different ways?
 2. Were you able to resolve these differences?
 - A. *If so,* how did you do so?
 - b. principals and/or assistant principals?
 1. How often do you have these meetings?
 2. What types of issues are typically addressed at these meetings?
 3. What materials do you use in these meetings to help communicate expectations for instructional leadership or math instruction? (e.g., *curriculum framework, standards, student achievement data*)

i. *If they do use these materials, ask*, Do you generally find that you are interpreting and using these tools in similar ways?

1. *If not*, can you give an example to help me understand how you were using _____ in different ways?

2. Were you able to resolve these differences?

A. *If so*, how did you do so?

c. math coaches? (*Other than PD sessions for coaches*)

1. How often do you have these meetings?

2. What types of issues are typically addressed at these meetings?

3. What materials do you use in these meetings to help communicate expectations for instructional leadership or math instruction? (e.g., *curriculum framework, standards, student achievement data*)

i. *If they do use these materials, ask*, Do you generally find that you are interpreting and using these tools in similar ways?

1. *If not*, can you give an example to help me understand how you were using _____ in different ways?

2. Were you able to resolve these differences?

A. *If so*, how did you do so?

d. groups of math teachers? (*Other than PD sessions for teachers*)

1. How often do you have these meetings?

2. What types of issues are typically addressed at these meetings?

3. What materials do you use in these meetings to help communicate expectations for instructional leadership or math instruction? (e.g., *curriculum framework, standards, student achievement data*)

i. *If they do use these materials, ask*, Do you generally find that you are interpreting and using these tools in similar ways?

1. *If not*, can you give an example to help me understand how you were using _____ in different ways?

2. Were you able to resolve these differences?

A. *If so*, how did you do so?

33. In addition to meetings, how do you typically communicate with other District Leaders or Offices?

a. Coaches?

b. Principals and/or assistant principals?

c. Teachers?

34. Have you had any communication with parents or the larger community about the middle school math initiative and/or textbook adoption in the district?

a. *If so*, can you please describe the communication? (e.g., meetings with parents, flyers, etc.)

b. What has been the general reaction of the parents to the middle school math initiative and/or the textbook adoption?

Closing Questions

In closing, I'd like to ask you how you will know when the goals for middle school math instruction are being achieved.

35. How will you know when the goals for improvement of mathematics teaching and learning in middle schools have been achieved?

- a. At the district level?
- b. At a school level?
- c. At the classroom level?

36. Is there anything that I have not asked that would help me better understand your role in the district, the current math initiative(s), coaches, to whom you are accountable and for what, and what you believe are the necessary supports in order for the district's initiatives to be successful in middle school mathematics?