

Building a System of Tens

Directions for the Pedagogy and Instructional Practices Survey

Welcome!

We would like to hear your thoughts on pedagogy and instructional practices in math. This survey contains 32 questions arranged in 3 sections. We estimate that this survey will take 15 minutes to complete. Please do not use the forward or backward buttons of your browser window as doing so may cause you to lose your responses. You must hit the submit button after each page. This ensures that your data have been saved.

Thank you!

Pedagogy Survey Section - 1 of 3

1. I am confident in my ability to use students' math work to gain insight into student thinking.

Strongly Agree Agree Disagree Strongly Disagree

2. I am confident in my ability to teach **the base ten number system**.

Strongly Agree Agree Disagree Strongly Disagree

3. I am confident in my ability to select math activities that address my students' weaknesses.

Strongly Agree Agree Disagree Strongly Disagree

4. I am confident in my ability to select mathematical objectives for my students.

Strongly Agree Agree Disagree Strongly Disagree

5. I am confident in my ability to facilitate student discussions about their math solutions.

Strongly Agree Agree Disagree Strongly Disagree

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6. I am confident in my ability to ask students about their solution methods.
- Strongly Agree Agree Disagree Strongly Disagree
7. I am confident in my ability to ask questions that require students to recall information discussed in class.
- Strongly Agree Agree Disagree Strongly Disagree
8. I am confident in my ability to understand how learning styles of my students may influence their problem solving strategies.
- Strongly Agree Agree Disagree Strongly Disagree
9. I am confident in my ability to probe students as they explain an answer or a solution method for a particular problem.
- Strongly Agree Agree Disagree Strongly Disagree

Pedagogy Survey Section - 2 of 3

10. I am confident in my ability to ask questions that require students to go beyond what we covered in class.
- Strongly Agree Agree Disagree Strongly Disagree
11. I am confident in my ability to ask students questions that focus on their specific misconceptions of the **base ten number system**.
- Strongly Agree Agree Disagree Strongly Disagree
12. When students are confused, I try to understand their approach to the solution in order to provide guidance.
- Strongly Agree Agree Disagree Strongly Disagree

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13. When teaching a new concept, using the intuition of students as a starting point is an effective way to develop learning.

Strongly Agree Agree Disagree Strongly Disagree

14. To understand a new concept in math, students should first be shown completed examples.

Strongly Agree Agree Disagree Strongly Disagree

15. The most important part of instruction is that it encourages 'sense-making' or thinking among students. Content is much less important.

Strongly Agree Agree Disagree Strongly Disagree

16. How much students learn depends on how much background knowledge they have. That is why teaching facts is so necessary.

Strongly Agree Agree Disagree Strongly Disagree

17. I mainly see my role as a facilitator. I try to provide opportunities for my students to share and discuss their thinking and to help them relate their thinking to formal mathematical concepts.

Strongly Agree Agree Disagree Strongly Disagree

18. In order to meet the curriculum requirements for my grade level, it is important to adhere to established timeframes for various topics.

Strongly Agree Agree Disagree Strongly Disagree

19. When students are confused about a problem, teachers should show how to solve that problem.

Strongly Agree Agree Disagree Strongly Disagree

20. Students must learn basic skills before progressing on to more complex content.

Strongly Agree Agree Disagree Strongly Disagree

21. The most important part of instruction is the content of the curriculum. That content is what students need to be able to know and do.

- Strongly Agree Agree Disagree Strongly Disagree

22. It is important to take more or less time on a topic depending on students' responses.

- Strongly Agree Agree Disagree Strongly Disagree

Pedagogy Survey Section - 3 of 3

23. How often do you ask students to explain an answer or solution method for a particular problem?

- Daily
 Every other day
 Weekly
 Monthly
 A few times per school year
 Never/Almost Never

24. How often do you ask students to discuss different ways to solve a particular problem?

- Daily
 Every other day
 Weekly
 Monthly
 A few times per school year
 Never/Almost Never

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25. How often do you ask students to demonstrate or explain their work to the class (individually or in a small group)?

- Daily
- Every other day
- Weekly
- Monthly
- A few times per school year
- Never/Almost Never

26. How often do you ask students to work on problems for which there is no immediately obvious method of solution?

- Daily
- Every other day
- Weekly
- Monthly
- A few times per school year
- Never/Almost Never

27. How often do you ask students to verbally communicate their solutions and reasoning to solving math problems?

- Daily
- Every other day
- Weekly
- Monthly
- A few times per school year
- Never/Almost Never

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28. How often do you have students respond to one another or share ideas?

- Daily
- Every other day
- Weekly
- Monthly
- A few times per school year
- Never/Almost Never

29. How often do you collect and reflect on students' work for the purpose of informing your instruction?

- Daily
- Every other day
- Weekly
- Monthly
- A few times per school year
- Never/Almost Never

30. How often do you collect and reflect on students' work for the purpose of evaluation?

- Daily
- Every other day
- Weekly
- Monthly
- A few times per school year
- Never/Almost Never

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Pedagogy Assessment, Year III

Please rate items 31-32 according to the following:

1. I need help developing knowledge and skills in this area
2. I feel confident but occasionally seek guidance from others
3. I feel confident with a little guidance from others (I don't see much difference between 2 and 3, can you make them more different?)
4. I feel fully confident in my knowledge and skills

31. Identifying common student misconceptions

1 2 3 4

32. Recognizing different ways students may interpret the base ten number system

1 2 3 4

END