

Storytelling and Guided Math:
Using Narrative To Strengthen Problem Solving

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In this presentation…

- Research on the connection between storytelling/narrative ability and mathematics
- Change in practice—move beyond word problems with math exchanges that focus on story telling
- Mathematician statements that focus on the story
- Living a rich mathematical life—implications for teachers and students

Storytelling and Math

Is narrative ability important to academic achievement? And, if so, which aspects of narrative ability matter?

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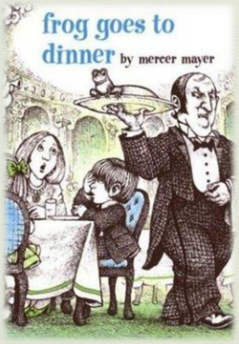
Storytelling and Math

- Event Content
- Conjunction Use
- Perspective Shift
- Mental State References



How We Change

- Facilitate problem solving experiences based on contextually meaningful and mathematically significant problems
- Create a community in which living a rich mathematical life is expected

Math Exchanges

1) Short, focused sessions that bring all mathematical minds together
2) Responsive to the needs of the specific group of mathematicians
3) Designed for meaningful, guided reflection

Counting Collections

- How many do you think you have? How could you figure it out?
- How did you keep track of your elephants when you counted?
- Look how far your cubes have stretched! I wonder how many cubes it would take to stretch across the whole table.
- Do you think you have more elephants than Kyra? How do you know?

Mathematician Statements

Mathematicians statements that focus on the structure of different problem types and understanding what is going on:

"Mathematicians listen to the story and tell it again to figure it out/to figure out the problem."

"Mathematicians think about what is happening in the story. This helps them figure out the problem."

References

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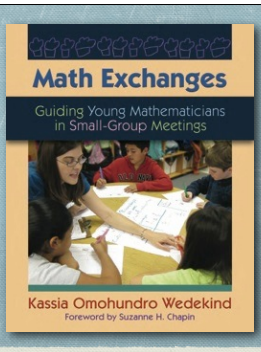

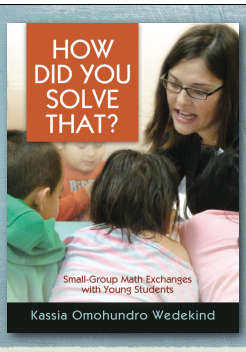

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