

Improving Discourse in the Classroom – Fractions and Measurement

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Agenda

- Overview of “5 Practices for Orchestrating Production Mathematics Discussions”
- Story Time – “The Wishing Club: A Story About Fractions” by Donna Jo Napoli and Anna Currey
- Solving the Problem
- Sharing and Discussing
- Conclusion

Overview of “5 Practices”

- Anticipating – determining and exploring the approaches students are likely to employ
- Monitoring – intentionally watching and listening while students grapple with the problem
- Selecting – purposefully choosing particular approaches to share with the whole group
- Sequencing – purposefully planning an order in which to share approaches selected
- Connecting – making ties between different approaches and with key mathematics in the problem

Smith, M. S., & Stein, M. K. (2011). *5 Practices for orchestrating productive mathematics discussions*.
Reston, VA: The National Council of Teachers of Mathematics, Inc.

Monitoring, Selecting, & Sequencing Worksheet

Strategy	Who and What	Order
Fraction equation – solving with common denominators		
Fraction bars		
Fraction circles		
Measuring cups		
Measuring with rulers		
Graph Paper		
Other		

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Conclusion

- Connecting – what are some of the ways we did or could connect the strategies shared? How are these connected with the key mathematical ideas from the problem?
- How can you use the *5 Practices* in your classroom?
- What ideas do you have for extending the *Wishing Club* problem?

Thank you for participating today!

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Available at the NCTM Bookstore:

Smith, M. S., & Stein, M. K. (2011). *5 Practices for orchestrating productive mathematics discussions*. Reston, VA: The National Council of Teachers of Mathematics, Inc.

Available from Amazon.com or other book sellers:

Napoli, D. J., & Currey, A. (2007). *The wishing club: A story about fractions*. New York: Henry Holt & Co., Inc.