Welcome to NCTM in Washington, DC!

Multi-tiered Systems of Support: Developing Interventions that Engage

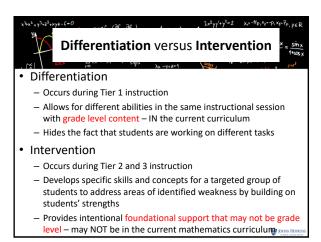
Karen Karp

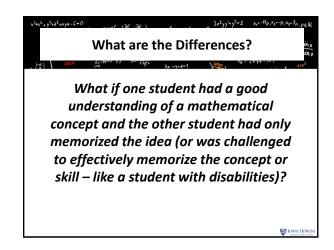
Johns Hopkins University

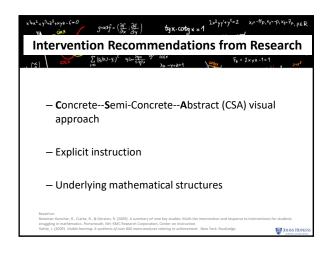
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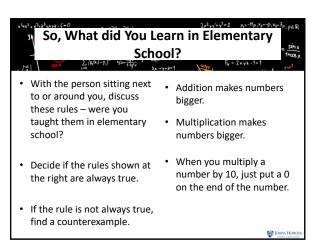


- Brief overview of Rtl Model, one version of a multi-tiered system of support (MTSS)
- What helps students with disabilities build cognitive structures and connections in mathematics? What doesn't help???
- Research based Interventions to try (not buy)
- Diagnostic interviews a way to gather feedback on students' mathematical thinking
- Strategies for teaching math that DON'T EXPIRE!!









Goal — Try to AVOID DEAD ENDS "13 Rules that Expire" (Karp, Bush & Dougherty August 2014 in Teaching Children Mathematics) "12 Math Rules that Expire in the Middle Grades" – Mathematics Teaching in the Middle School. "Circumventing High School Rules that Expire" – Mathematics Teacher November 2017

Another Option - from Magdalene Lampert

- You Start the problem (on your own)
- Y'All Share ideas with peers
- We Share ideas and strategies with the whole class – including misunderstandings (let's not wait for the test to find out what students don't know)

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Can an Intervention Provide time to Discuss Options?

How could students talk about which of the following three options would be the correct answer?

- · The shepherd is 30 years old
- · The shepherd is 125 years old; and
- It is not possible to tell the shepherd's age from the information given in the problem.

Caldwell, Kobett & Karp (2014) Essential understanding of addition and subtraction in practice, grades K-2. NCTN

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