Student Success in Mathematics Partnership Meeting

May 5, 2020

Student Success in Mathematics partnership: REL AP staff

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Welcome and Meeting Overview

Dr. Pam Buffington, SSM partnership lead

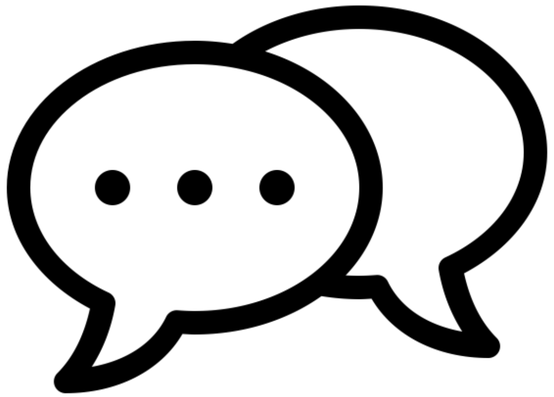
Meeting agenda

- Welcome and meeting overview
- Cross-division discussions of strategies and immediate needs related to mathematics learning and instruction
- Next steps related to the March 3 presentation, *Improving Mathematics Instruction for Students with Disabilities and Difficulties*
- Closing

Sharing Strategies and Discussing Immediate Needs

Dr. Pam Buffington, SSM partnership lead
Dr. Jill Neumayer DePiper, SSM partnership staff

Cross-division discussions



- What strategies has your division used for continuity of learning and facilitating teacher professional learning?
- What key learnings do you have to share with others?
- What questions do you have for other divisions?

REL resources

- REL Northeast and Islands FAQs: Resources for Schools and Districts Responding to the COVID-19 Crisis
- REL Southeast Literacy Resources
- REL Midwest on Early Math Instruction
- REL Appalachia Identifying and Addressing Symptoms of Trauma in Students

Next Steps Related to the March 3 Presentation *Improving Mathematics Instruction for Students with Disabilities and Difficulties*

Dr. Pam Buffington, SSM partnership lead

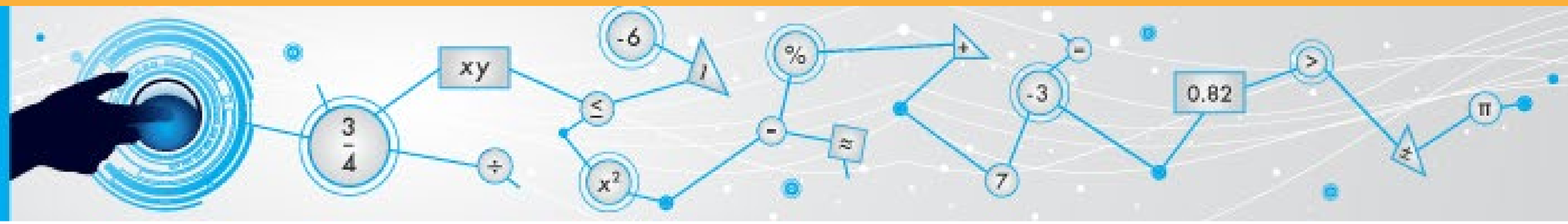
March 3 presentation topics

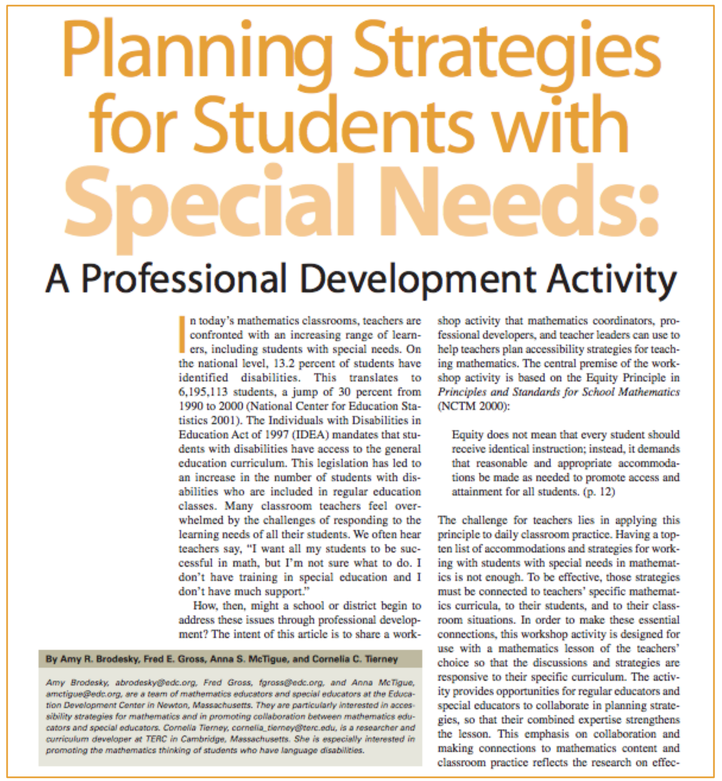
1. Students with mathematics disabilities and difficulties

2. Tier 1: High-quality, accessible mathematics instruction
   - 2A. Recommended instructional practices
   - 2B. Student communication and participation

3. Professional collaboration

ADDRESSING ACCESSIBILITY IN MATHEMATICS





Planning Strategies for Students with Special Needs:

A Professional Development Activity

In today's mathematics classrooms, teachers are confronted with an increasing range of learners, including students with special needs. On the national level, 13.2 percent of students have identified disabilities. This translates to 6,195,113 students, a jump of 30 percent from 1990 to 2000 (National Center for Education Statistics 2001). The Individuals with Disabilities in Education Act of 1997 (IDEA) mandates that students with disabilities have access to the general education curriculum. This legislation has led to an increase in the number of students with disabilities who are included in regular education classes. Many classroom teachers feel overwhelmed by the challenges of responding to the learning needs of all their students. We often hear teachers say, "I want all my students to be successful in math, but I'm not sure what to do. I don't have training in special education and I don't have much support."

How, then, might a school or district begin to address these issues through professional development? The intent of this article is to share a workshop activity that mathematics coordinators, professional developers, and teacher leaders can use to help teachers plan accessibility strategies for teaching mathematics. The central premise of the workshop activity is based on the Equity Principle in *Principles and Standards for School Mathematics* (NCTM 2000):

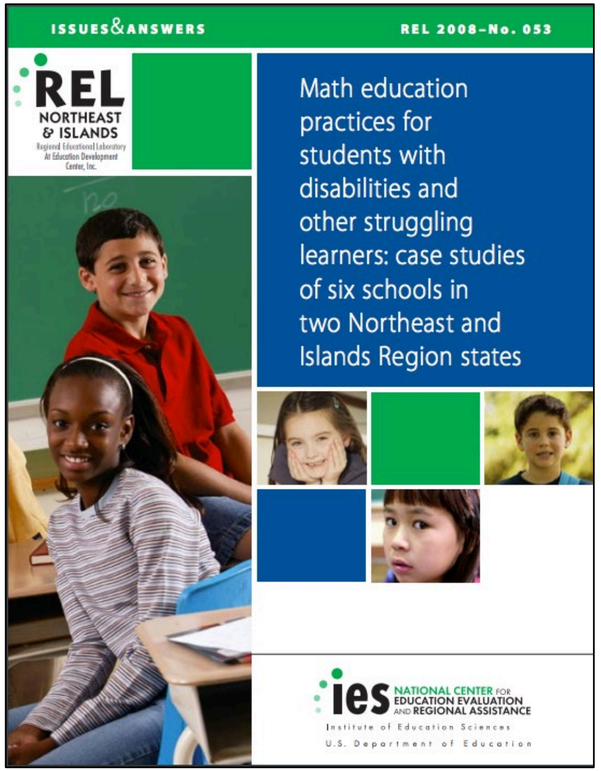
> Equity does not mean that every student should receive identical instruction; instead, it demands that reasonable and appropriate accommodations be made as needed to promote access and attainment for all students. (p. 12)

The challenge for teachers lies in applying this principle to daily classroom practice. Having a top-ten list of accommodations and strategies for working with students with special needs in mathematics is not enough. To be effective, those strategies must be connected to teachers' specific mathematics curricula, to their students, and to their classroom situations. In order to make these essential connections, this workshop activity is designed for use with a mathematics lesson of the teachers' choice so that the discussions and strategies are responsive to their specific curriculum. The activity provides opportunities for regular educators and special educators to collaborate in planning strategies, so that their combined expertise strengthens the lesson. This emphasis on collaboration and making connections to mathematics content and classroom practice reflects the research on effec-

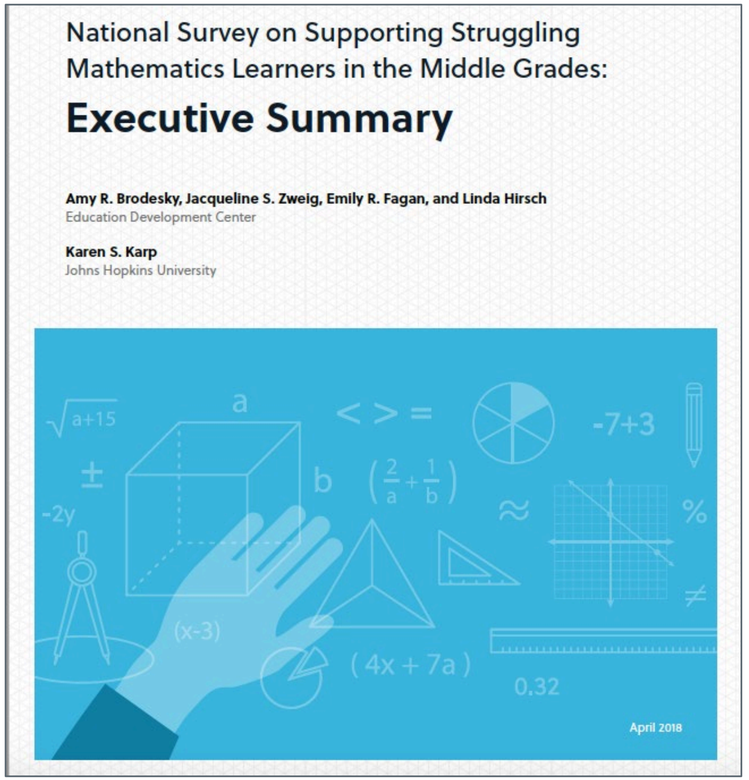
By Amy R. Brodesky, Fred E. Gross, Anna S. McTigue, and Cornelia C. Tierney

Amy Brodesky, abrodesky@edc.org, Fred Gross, fgross@edc.org, and Anna McTigue, amctigue@edc.org, are a team of mathematics educators and special educators at the Education Development Center in Newton, Massachusetts. They are particularly interested in accessibility strategies for mathematics and in promoting collaboration between mathematics educators and special educators. Cornelia Tierney, cornelia_tierney@terc.edu, is a researcher and curriculum developer at TERC in Cambridge, Massachusetts. She is especially interested in promoting the mathematics thinking of students who have language disabilities.

Professional Learning



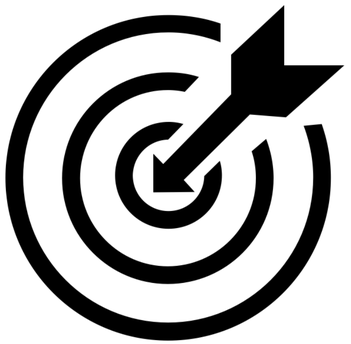
Research



Math Instruction & Intervention

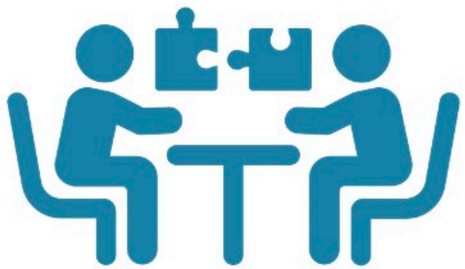
March 3 Presentation Goals

- Learn about recommended instructional practices for students who have mathematics disabilities and difficulties.
- Use a process for planning high-quality, accessible mathematics lessons.
- Explore ways to strengthen professional collaboration.
- Experience examples of professional learning activities.
- Leave with ideas to apply in your district.



If you were present on March 3, what was one of your key learnings?

Next Steps

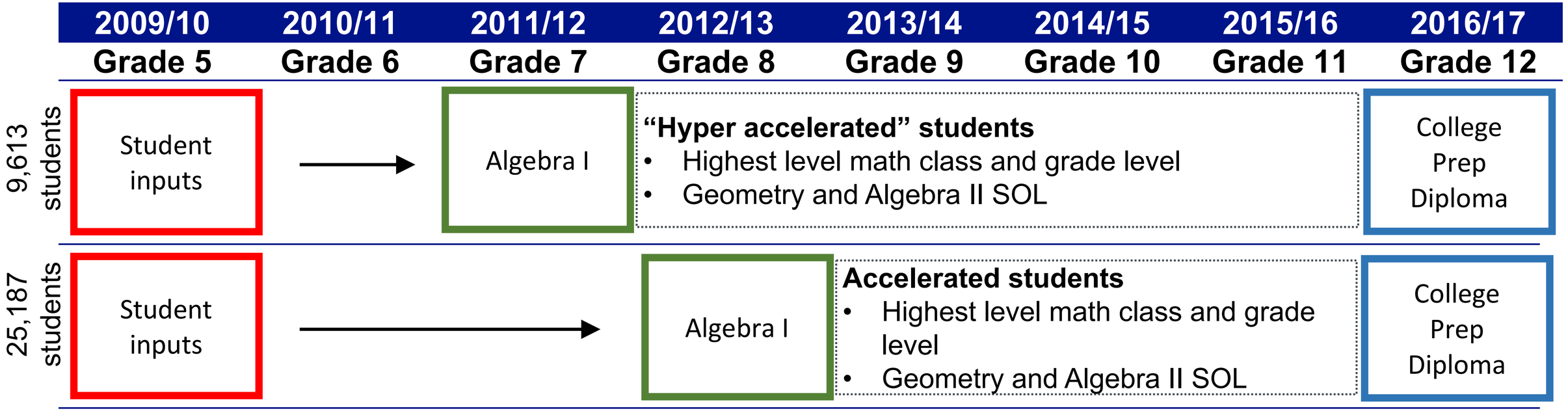


- Webinar?
- Late summer/early fall face-to-face professional learning?
- Handouts or materials to share?

Closing

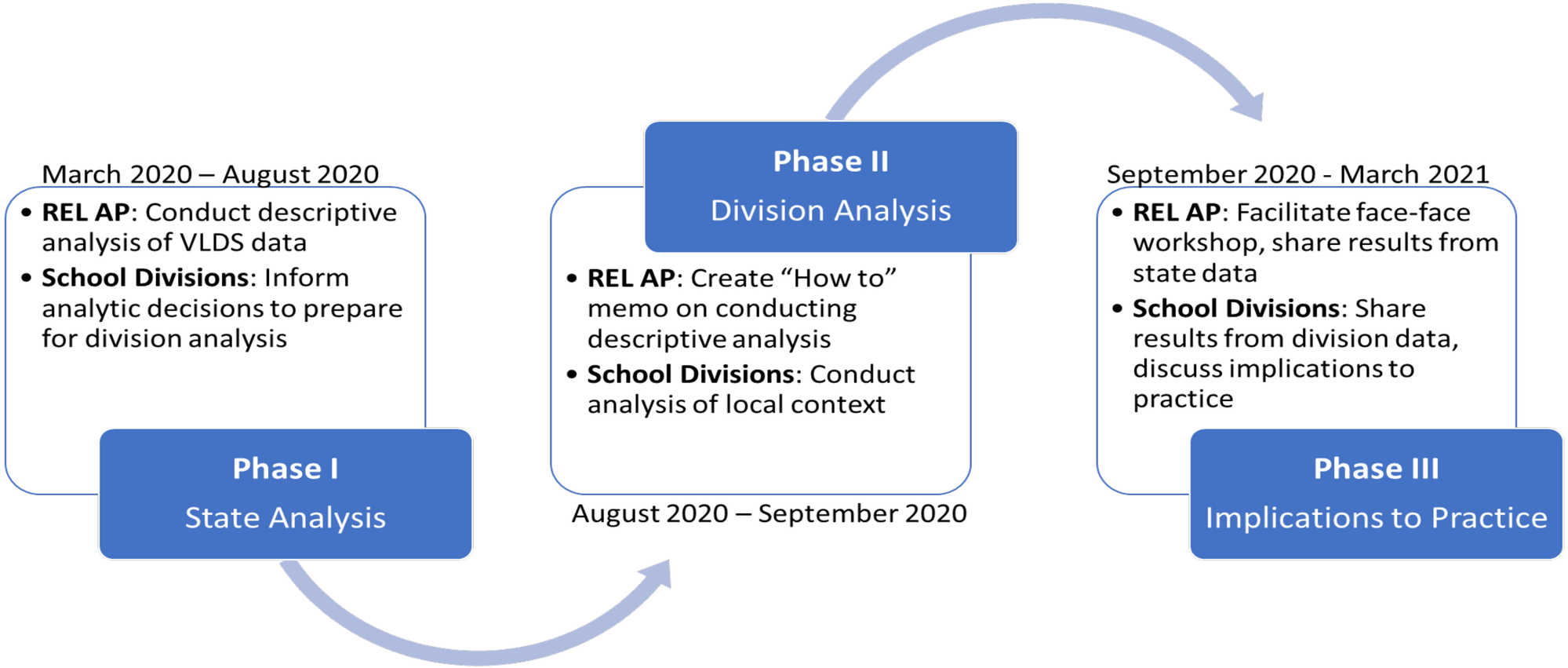
Dr. Jill Neumayer DePiper, SSM partnership staff

Building capacity of school divisions to use their data: Focus on "hyper acceleration" of Algebra I



Completed Algebra I in	Grade 7	Grade 8
English learner	2%	4%
Economically disadvantaged	24%	29%
Gifted and talented education	49%	29%
Grade 5 mathematics advanced proficient	93%	75%
Grade 5 mathematics proficient	7%	23%
Grade 5 mathematics below proficient	<1	3%

Coaching project on data analysis and implications to practice



Closing

- Please write down and prepare to share:
  - One takeaway from today's meeting
  - One wondering or question
- Upcoming calls

Please contact us

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