

Don't miss this dynamic opportunity to learn with Northeast Ohio's distinguished mathematics instructional leaders! With nine powerful, inspiring sessions to choose from, these workshops offer an affordable, convenience way to keep current with effective mathematics pedagogy and deepen understanding of content and practices. What a great way to earn continuing education contact hours while networking and planning ahead for next school year.

Sponsors: Educational Service Center of Cuyahoga County, NEOMS, GCCTM, and Ashland University are proud partners in providing this professional development for Northeast Ohio mathematics educators.

Cost: \$100 per session payable to the ESC-CC. Lunch is on your own.

Register by May 30 to reserve your spot! Each session is limited to a **maximum of 30** participants. To register, go to www.esc-cc.org. Select Professional Development/Calendar of Events. Click on the event and follow the prompts to complete registration.

Graduate Credit Option: You may choose to purchase **1 graduate credit hour** for an additional **\$200** through Ashland University for each session attended. No additional assignments will be required. More information will be provided at each session.

Continue the Learning: Many of our offerings will be extended into the 2016-2017 academic year through GCCTM's *Deep Learning Series*, a hybrid of online and face-to-face sessions.

LOCATIONS

ESC-CC, 6393 Oak Tree Blvd., Independence, OH 44131

Aurora HS, 109 W Pioneer Trail, Aurora, OH 44202

Parma Hts. Branch Library, 6206 Pearl Road, Parma Hts., OH 44130

Parma Branch Library, 6996 Powers Blvd., Parma, OH 44129

PRESENTERS

Heather Canzullo, Math Coach, Parma City School District
(canzurloh@parmacityschools.org)

Dan Clapper, 3rd Grade Math Teacher, Aurora City Schools (dclapper@aurora-schools.org)

Linda Gojak, Independent Mathematics Instructional Consultant and Past President of NCTM (lgojak@icloud.com)

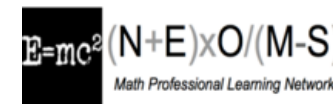
Sara Good, Math Coach, Parma City School District and President of GCCTM
(goods@parmacityschools.org)

Mike Lipnos, K-5 Math Specialist and Coach, Aurora City Schools (mlipnos@aurora-schools.org)

Erika Poston, K-12 Mathematics Specialist, Stow-Munroe Falls City Schools
(st_poston@SMFCSD.org)

Kim Yoak, Independent Mathematics Specialist, Summit Mathematics Education Enterprises ([kimyoak.math@gmail.com](mailto:kimy oak.math@gmail.com))

Questions? Contact Tracy Murphy at Tracy.murphy@esc-cc.org or 216-901-4229.



Summer Math Workshops

Join us for impactful mathematics teaching & learning sessions!

Quality Summer Math PD
Brought to You by:

Educational Service Center of Cuyahoga County

Northeast Ohio Mathematics Specialists

Greater Cleveland Council of Teachers of Mathematics

Ashland University

WORKSHOP SESSIONS

Conceptual Place Value (K-2)

June 6-7, 2016, 9:00 AM – 4:00 PM

Location: ESC-CC

Presented by: Mike Lipnos

In this session, participants will understand the difference between understanding place value positionally versus conceptually. Participants will learn to work with tools properly and provide the proper situations to deepen place value understanding (Arrow Cards, Digit Cards, Number Cards, Computational Situations, Patterns and Relationships).

Conceptual Place Value & Quantifying Fractions and Decimals (3-5)

June 8-9, 2016, 9:00 AM – 4:00 PM

Location: ESC-CC

Presented by: Mike Lipnos

In this session, participants will extend their conceptual place value understanding to quantify decimals. We will also work on classroom Strategies to help students gain a deep understanding of fractions, which will also support quantifying decimals (extending early place value concepts and tools to truly understand decimals through quantity rather than working through procedures).

Number Talks (K-3)

June 8-9, 2016, 9:00 AM – 4:00 PM

Location: ESC-CC

Presented by: Dan Clapper

In this session, participants will learn how to implement number talks into their daily math lessons for the purpose of developing greater conceptual understand and number sense. Participants will explore creating and using slides for daily number talks.

Number Talks (3-6)

June 13-14, 2016, 9:00 AM – 4:00 PM

Location: Aurora HS

Presented by: Linda Gojak

What is a number talk? How do I implement them in my mathematics instruction? Let's unpack the potential of number talks in developing rigor (conceptual understanding, procedural skill and applications) and assessing student understanding. This session will focus on whole number operations, fractions and decimals.

Math Technology: Engage, Motivate, and Differentiate (K-8)

June 13-14, 2016, 9:15 AM – 4:15 PM

Location: Parma Library, Large Mtg. Rm. B

Presented by: Heather Canzurlo

Leverage the power of technology to inspire all students to connect with mathematics. **Bring your tablet or computer** for a dynamic exploration of select free, high-quality digital resources. Participants will learn how to:

- Find respected sources for math tasks, lessons, and interactive games
- Integrate technology in ways that enhance, rather than detract from the mathematics
- Personalize instruction to meet individual needs
- Use technology to develop the Mathematical Practices and critical thinking skills
- Foster student accountability for digital learning

Creating the Curious, Collaborative Classroom (3-8)

June 15-16, 2016, 9:15 AM – 4:15 PM

Location: Parma Hts. Library, Mtg. Rm. A

Presented by: Sara Good

What does a curious and collaborative classroom look and sound like? How do we cultivate such an environment? NCTM's Math Teaching Practices serve as our compass.

Engage in mathematics through collaborative structures. Experience instructional strategies that move the curiosity needle. Reason through routines that differentiate instruction. Leave ready to create the curious, collaborative classroom next fall with resources that are sure to nurture, engage and empower *all* mathematicians!



Math Talk: Tips, Tools, and Techniques (K-8)

June 15-16, 2016, 9:15 AM – 4:15 PM

Location: Parma Library, Large Mtg. Rm. A

Presented by: Heather Canzurlo

Transform your classroom into a student-centered learning community characterized by mathematical discourse. Participants will learn how to:

- Relate math talk to issues of equity and access
- Establish classroom norms for effective communication
- Design discourse-rich, engaging instruction
- Execute teacher talk moves that don't take over student thinking
- Motivate students to meaningfully contribute
- Pose purposeful questions and promote productive struggle
- Uncover student strategies, understanding, and misconceptions
- Troubleshoot common challenges

Cognition Based Assessment (K-5+)

June 21, 22, 23, 2016, 9:00 AM – 2:00 PM

Location: ESC-CC

Presented by: Kim Yoak and Erika Poston

Cognition Based Assessment, developed by Dr. Michael Battista, allows teachers to learn much more about students' mathematical understanding than ever before. Learn how to assess your students' thinking (to determine a "level of sophistication") and how to move your students forward through higher levels. This approach can be taken with any textbook series and is useful for all teachers working with K-5 mathematics content. **Please pack for a working lunch!**

Conceptual Fact Fluency (K-3)

June 22-23, 2016, 9:00 AM – 4:00 PM

Location: Aurora HS

Presented by: Linda Gojak

If they only knew their basic facts! In this session, we will examine instructional strategies for helping students develop fact fluency (efficiency, flexible thinking, and accuracy). We will begin with modeling to understand the meaning of each operation, connect to using meaningful strategies to learn the facts, and conclude with activities for assessing student fluency that are better than time tests!