







Making Family Math a Part of Your Research and Practice Agenda

Thursday, June 13, 2:00 - 3:00 PM ET

Technical Tips

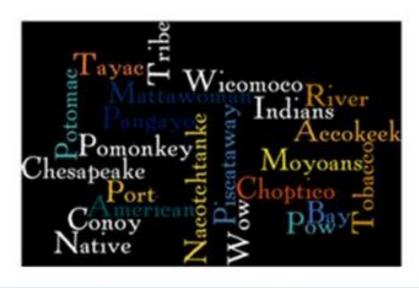
- 1. To comment and access resources to the "Chat".
- 2. Add questions to the "Q&A" feature.
- 3. Adjust your audio to your own personal settings.

This **webinar is being recorded** and will be posted on https://www.communityschools.org/link/join-a-network/research-practice-network/





Land Recognition





https://usdac.us/nativeland #HonorNativeLand Guide





Poll Question: Which of the following role best describes your current role?

☐ I'm a practitioner ☐ I'm a researcher ☐ I'm an administrator or a community school coordinator ☐ I'm a community organizer ☐ I'm a community school partner ☐ I'm a policymaker ☐ I'm a graduate student □ Other

IEL CCS RPN Research Agenda

















Community Schools Research and Impact

Major Themes



Defining and Adapting the Community School Model Further Research and Study of Community Schools

Major Themes









CCS RPN Website





IEL CCS RPN Co-Chairs



Dr. Jessica Knapp

CCS RPN Practitioner Co-Chair;

President & State Director, Communities in Schools of Pennsylvania



Dr. Naorah Rimkunas CCS RPN Researcher Co-Chair; Assistant Professor of Community Schools at Binghamton University













Making Family Math a Part of Your Research and Practice Agenda

Thursday, June 13, 2:00 - 3:00 PM ET



Every Family Counts: Considering Family Math in Research and Practice

IEL Community Schools Research Practice Network
Quarterly Meeting

June 13, 2024











Meet the Presenters



Jennifer McCray
Director, Early Math Collaborative
at Erikson Institute



Holly Kreider
Director, NAFSCE Center
for Family Math











Session objectives:

- Consider family math in your own research agenda
- Support family math in your educational practices
- Understand the landscape of people and resources related to family math





NAFSCE Mission + Vision



Advancing high-impact policies and practices for family, school, and community engagement to promote child development and improve student achievement.



A world where family engagement is universally practiced as an essential strategy for improving children's learning and advancing equity.



Mission

Advancing research, policies, practices, partnerships, and systems that inspire, harness, and amplify the power and love of math through family and community engagement.

Vision

A world where Family Math advances learning and equity for each and every child.











Center Strategic Plan Pillars





National Center for Family Math Vision



Advancing high-impact policies and practices for family, school, and community engagement to promote child development and improve student achievement

A world where Family Math advances learning and equity for each and every child.

Erikson Institute

Early Math Collaborative

Transforming the understanding, teaching, and learning of early mathematics from the ground up

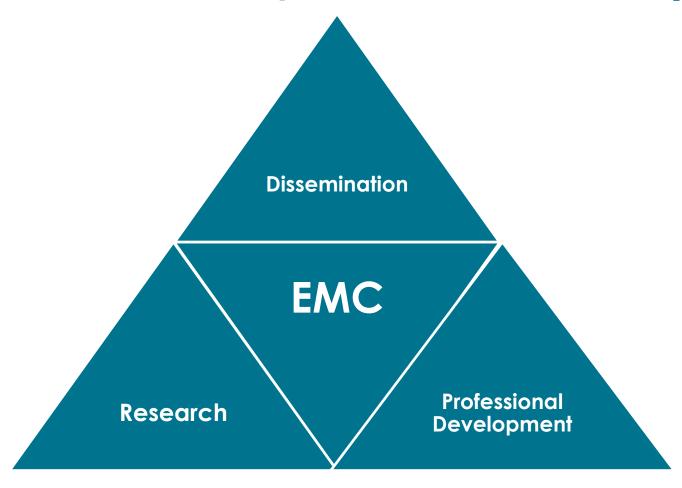




Erikson Institute Early Math Collaborative



Three Foci of the Early Math Collaborative (EMC)





What is Family Math?

Family Math is culturally relevant math concepts and interactions occurring in the everyday activities that families engage in with their children—from the day their children are born to the day they graduate high school. Research shows that everyday math conversations add up, creating better school and life outcomes.





What does the research say about family math?

What do we still need to learn and what should guide our research?





What Do We Know About Family Math?

- It's more than just numbers
- Starts early in life
- Happens everywhere
- Culture and context matter





Why is Family Math Important?

 Predicts students' later academic success

 Unlocks access to advanced classes and college

 Offers 21st Century skills and STEM careers





How Families Make A Difference

 Noticing math and talking about math in the world around us

A rich home learning environment

Holding high expectations

Engaging with school around math



Eason et al (2019)



Family Math Research Agenda: 7 priority areas of study

1: Families in context

2: Families as co-designers

3: Co-created measurement tools

4: Community-based partnerships

5: Home/School connection

6: Family math attitudes

7: Non-number topics





Family Math Research Agenda: Guiding research principles

- Conduct research that centers families
- Engage in research processes that build equity

Resource:

Blog by Family Math dissertation fellows, "Inclusive Inquiry: Centering Families in Family Math Research"





What are some promising family math practices and programs?











Family math programs and approaches

Comprehensive district-level approaches:

Philadelphia Public Schools

DC Public Schools

 Programs that partner with schools and early childhood programs:

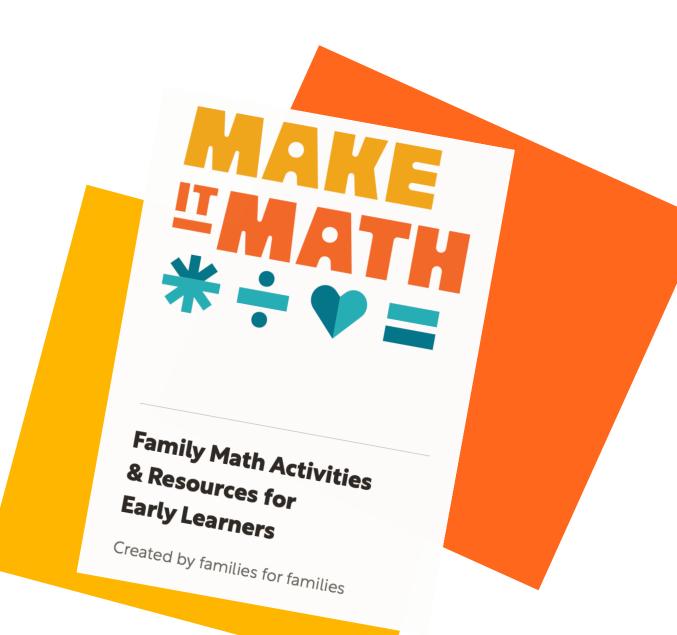
- FASTalk
- MathTalk
- ParentPowered
- PowerMyLearning
- Tandem
- Waterford
- Zeno





Family Math Practices and Resources

- Sharing storybooks
 - Storytelling Math book collection
 - Researcher Herb Ginzburg, Columbia U
- Playing games and puzzles
 - EDC's Young Mathematicians website
- Finding math in everyday activities
 - MakeltMath toolkit
 - Gigliana Melzi, NYU
- Tapping family funds of math knowledge
 - Marta Civil, U of AZ
- Using digital resources
 - Apps Bedtime Math, Measure! Everything!
- Community Math Nights
 - o IEL toolkit





The 8 Standards for Mathematical Practices

Mathematical Practice #1:

I CAN SOLVE PROBLEMS WITHOUT GIVING UP. Mathematical Practice #2:

I CAN THINK
ABOUT NUMBERS IN
MANY WAYS.

2

Mathematical Practice #3:

I CAN EXPLAIN MY
THINKING AND TRY TO
UNDERSTAND OTHERS.

Mathematical Practice #4:

I CAN SHOW MY WORK IN MANY WAYS.

- 4

Mathematical Practice #5:

TOOLS AND EXPLAIN WHY I USED THEM.

Mathematical Practice #6

I CAN WORK
CAREFULLY AND
CHECK MY WORK.

-6

Mathematical Practice #7:

I CAN USE WHAT I KNOW TO SOLVE NEW PROBLEMS. Mathematical Practice #8:

I CAN SOLVE PROBLEMS
BY LOOKING FOR RULES
AND PATTERNS.

7

-8



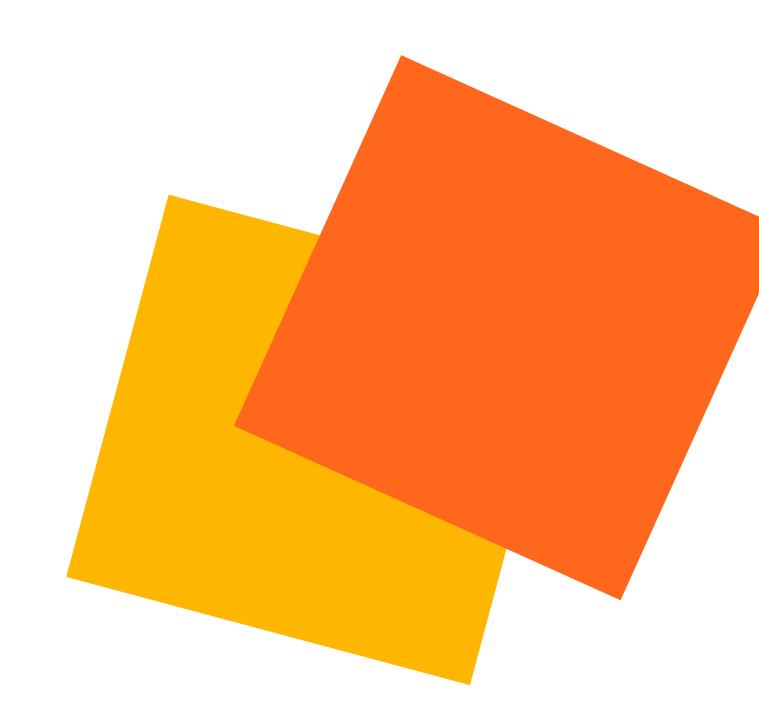
Who is working on family math? What resources exist?





Who is working on family math? Where can I find resources?

- The Center for Family Math and its Family Math Research Consortium www.familymath.org
- The Erikson Institute's Early Math Collaborative www.earlymath.erikson.edu
- The DREME network at Stanford www.dreme.stanford.edu

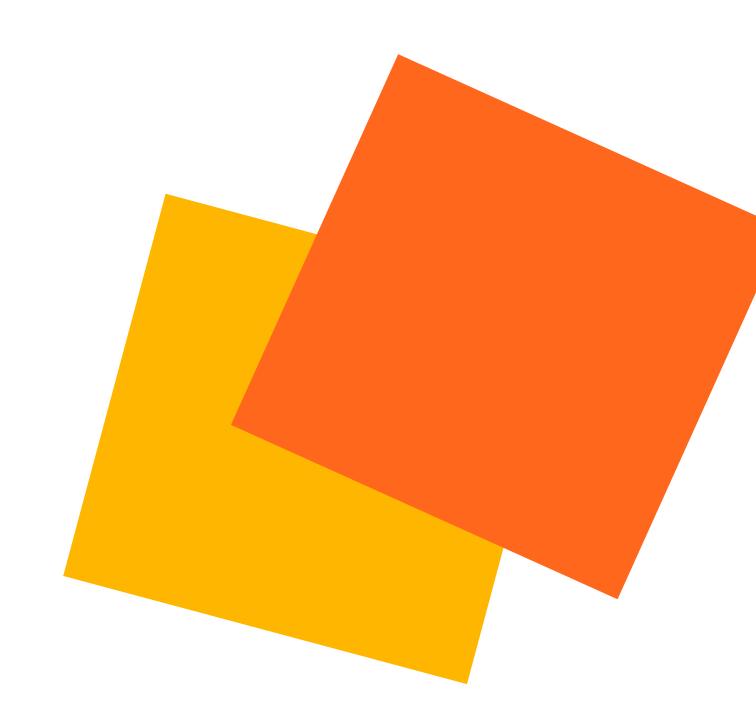




Action Steps!

Researchers

- Read Eason (2019) for FM overview
- Review FM Research Agenda for equity focus
- Add FM to your research inquiry
- School leaders
- Assess and support faculty FM readiness
- Set school-wide culture and mechanisms for parent voice





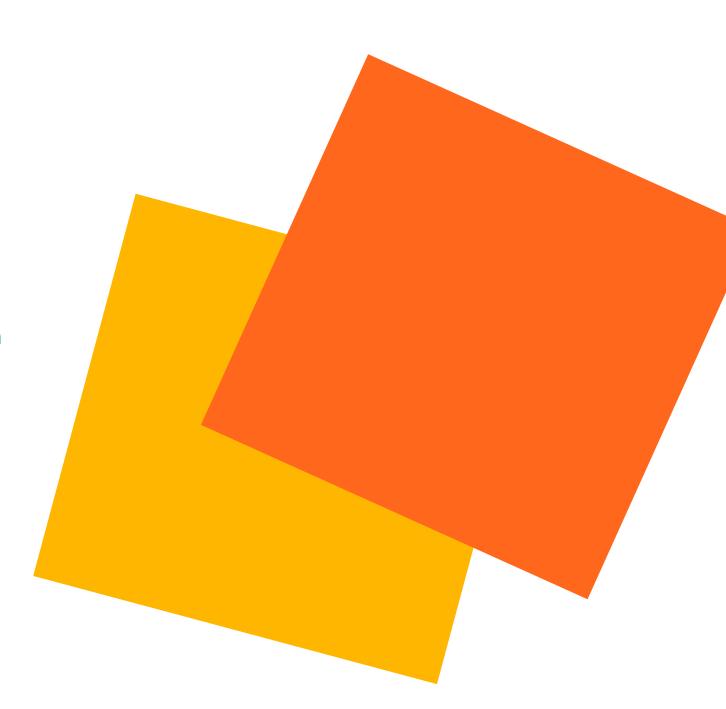
Action Steps!

Classroom educators

- -Reflect on own math attitudes
- -Encourage Family Math at home
- -Bring family expertise into math in classroom

CBOS

- -Consider families in afterschool STEM programming
- -Infuse FM in your own curriculum (FE, STEM, etc)
- -Coordinate/align with schools on FM messages to families







Discussion



Thank you!

Learn more at: familymath.org











Register for the <u>2025 National Community Schools & Family</u> <u>Engagement Conference</u> in Minneapolis, MN from May 28-30.





To view previous webinar recordings, access our research agenda, and the Community Schools Research Clearinghouse, visit

https://www.communityschools.org/link/join-a-network/research-practice-network/





Thank You!

Please fill out this month's feedback form!