Efforts to Scale-Up Make Connections

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AGENDA

- Experience a Make Connections Activity
- Program Goals and Components – what we are trying to scale
- How we scaled
- Implementation Science – Readiness Conditions for Effective Scale
Turn to the person next to you and discuss…
You’ve just traced hands with a 3 year old. What would you talk about as you compare hands?

Exploring math through open-ended questions

Trace an adult hand on construction paper. Trace a child hand inside.

- Your hand is small. My hand is large.
- How are our hands different?
- How are our hands alike?
Exploring math through open-ended questions

Trace an adult hand on construction paper. Trace a child hand inside.

- Your hand is small. My hand is large.
- How are our hands different?
- How are our hands alike?

Lucas, age 5, “We both have five fingers. Yours are longer and wider than mine.”

Key Components of Make Connections You and Me and Math:

- Early Learning Math, Family/Caregiver Program
- Building positive early learning math experiences
- 11 curriculum units, story time connections, take-home resources, training resources
- Emphasis on “math talk” and open-ended “math-talk” questions
Initial Development Sites

- 2014-present, San Jose, CA (12+ sites)
- 2015-present, Merrimack, MA (2 sites) and Elizabeth/Rahway NJ (2 sites)
- 2016-present, SE ME (4 sites) and LA (5 sites)

Open-ended questions

- Help adults uncover children’s mathematical thinking
- Promote children’s mathematical thinking
- Help children learn to verify their ideas for themselves
- Show children that their mathematical thinking matters
Open-ended questions in another Make Connections activity

Take a handful

How can you tell if you have the same amount of red and blue?

And a 3 year old’s responses

Compare amounts

Sofia, age 3.
(about image on left) “This red doesn’t have a partner.”
(about image on right) “This corner doesn’t have a blue pompom.”
Example outcomes

After participating for three to six months in a program using Make Connections...

- 85% of caregivers reported including math conversation at least weekly when doing household chores with children (vs. 35% pre-program)
- 71% of caregivers reported asking their children to explain their math thinking at least weekly (vs. 12% pre-program)
- 100% of caregivers reported that they and their children developed newfound enthusiasm for math

Make Connections Website

- [https://external-wiki.terc.edu/display/makeconnections/](https://external-wiki.terc.edu/display/makeconnections/)
The Scale Process

- Co-Creators
- Early adopters self-identified
- Spoke at national Y conferences
- Website
- Offered training and on-going technical assistance
- Ready to make available to the early learning/family engagement community

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- 2017-present…. 36 unique YMCA regions and counting
Challenges and Successes during scale

Challenges:
• Staff turnover
• YMCA Delivery system restructure

Successes:
• Strong collaboration with TERC
• On-going interest and participation
• Commitment to training & evaluation

Implementation Science – A Framework

Source: Adapted from Maxwell and Richman (2018, 2019) by Mathematica.
What we learned

We did a lot of things intuitively well:
- The program was designed to fit into existing program
- Careful attention to meeting staff and programs where they were
- Fairly well-specified project with well-defined target population
- High level of interest and buy-in

Things to consider as we continue to scale:
- Implementation guide
- Process for monitoring fidelity
- On-going training and support

What’s Next to Think About

- Fidelity vs Adaptability
- Family Engagement Strategy
- Strengthen implementation supports
QUESTIONS?