

EF+MATH program

Welcome! We will begin shortly.

- ▣ We will begin the webinar around 11:05 a.m. to allow time to log in and join the audio.
- ▣ Audio can only be accessed by phone, so you will need to dial in to hear audio. It may take a few minutes for the operator to connect with you. Please have your name and affiliation ready for them.

Call in toll-free number: 1-844-721-7241

Access code: 480 813 2

- ▣ Music will play on the audio line until we begin.

efmathprogram.org

EF+MATH program Webinar Logistics

- ▣ **The webinar will be recorded.** Slides and recording will be posted on the website.
- ▣ **Audio can only be accessed through phone**, so you will need to dial-in to receive audio.
Information to dial-in is below:
 - Audio Dial-In toll-free number: 1-844-721-7241
 - Access Code: 480 813 2
- ▣ **All participants have been muted.**
- ▣ **If you have questions during the webinar:**
 - Use the Q&A function to ask them. Please direct your questions to “All Panelists.”
 - We will answer as many questions as we can and we will post responses to questions in the FAQs section on our website so everyone has access to the information provided.
 - You may also send questions to ***info@efmathprogram.org*** or through the “Contact” page on the website.

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EF+MATH program

Program Overview

Webcast #1 Aug 26, 2019

SPEAKERS



Melina Uncapher
Director
EF+Math Program



Debbra Lindo
Superintendent In Residence
EF+Math Program



Dana Miller-Cotto
Research Scientist
EF+Math Program



Jeremy Roschelle
Expert Contributor

AGENDA

- ▣ What do we do?
- ▣ What is our focus?
- ▣ What is our approach?
- ▣ Program scope
- ▣ Program components
- ▣ Important dates
- ▣ Ways to get involved
- ▣ Q&A

**We'll host another webinar on 8/29/19 to discuss more details*

info@efmathprogram.org

EF+MATH program

We create approaches to challenge the way people think about how students learn. We want every student to know their innate abilities, know how to use them to take control of their own learning, and be given every opportunity to learn rigorous math.

OUR NORTH STAR



EF+MATH program

WHAT DO WE DO?

We are a five-year program born from thousands of conversations with educators, researchers, and designers/developers

WE FUND

- We fund bold approaches to dramatically improve math outcomes for students in grades 3-8 by building executive functions, with a focus on historically underserved students.

WE HELP BUILD TEAMS

- We create opportunities for multi-disciplinary teams to form and co-create ideas for these bold new approaches.

WE ENSURE EDUCATORS ARE AT THE CENTER

- We ensure educators are at the table and have an elevated voice in the co-design process throughout our ***inclusive R&D*** model.

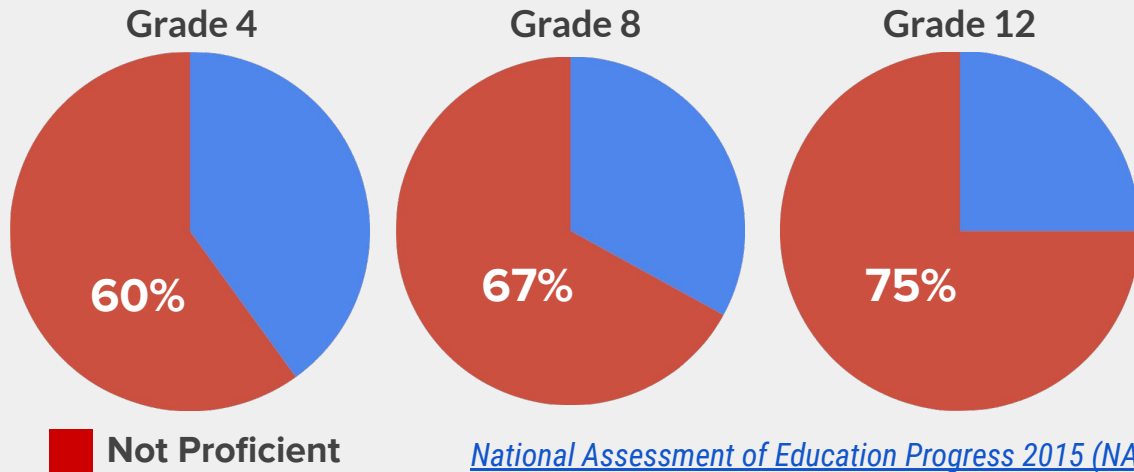
WE COORDINATE THE WORK

- We ensure that the work includes ***equity and privacy by design***, is grounded in the ***science of learning***, is piloted and improved ***in classrooms***, and is ***useful and usable*** to teachers and students.

A NATIONAL CHALLENGE

Math proficiency can open economic and social opportunity, however, most of our students are not proficient in math.

Nation's Report Card: MATH



[National Assessment of Education Progress 2015 \(NAEP\)](#)

This is a failure of our systems, NOT of our students.

ASSET-BASED SOLUTIONS



**Every young person is a powerful learner,
regardless of background or obstacles.**

Every mind is learning, every second of every day.

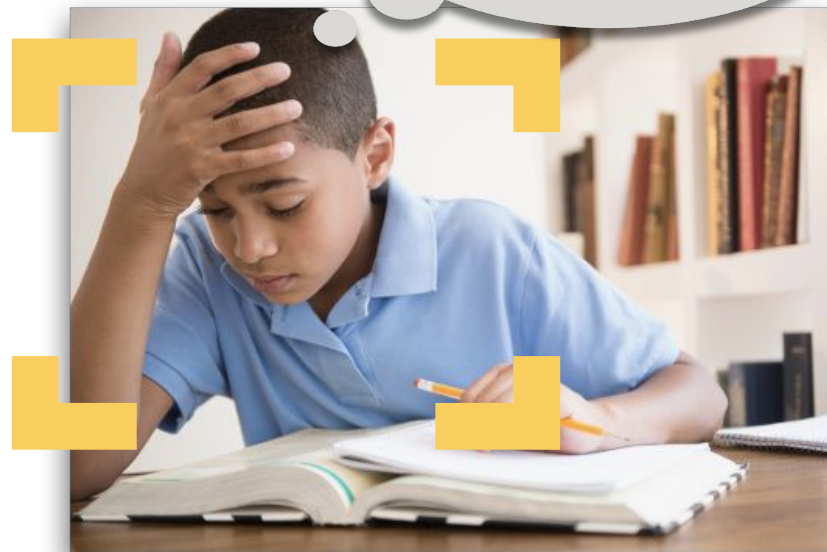
Everyone has the foundational assets necessary for learning:

EXECUTIVE FUNCTIONS.

What are Executive Functions?

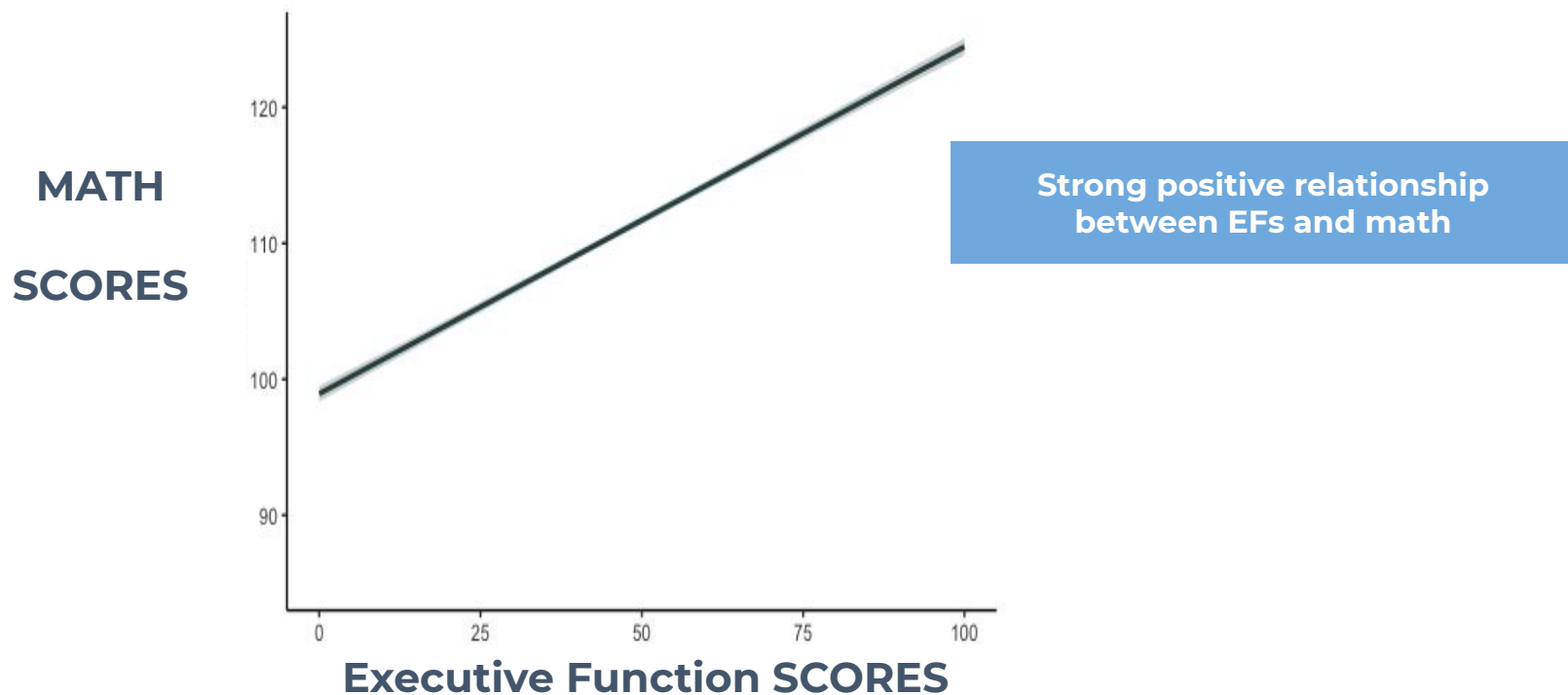
- ▣ ***Air traffic control system of the mind:***
gives agency over our thoughts,
attention, emotion, behavior
- ▣ Foundational for learning
- ▣ Important for school and life:
 - School readiness and achievement
 - Social competence
 - Physical health
 - Socioeconomic position

(e.g., <https://ies.ed.gov/ncер/pubs/20172000/>)

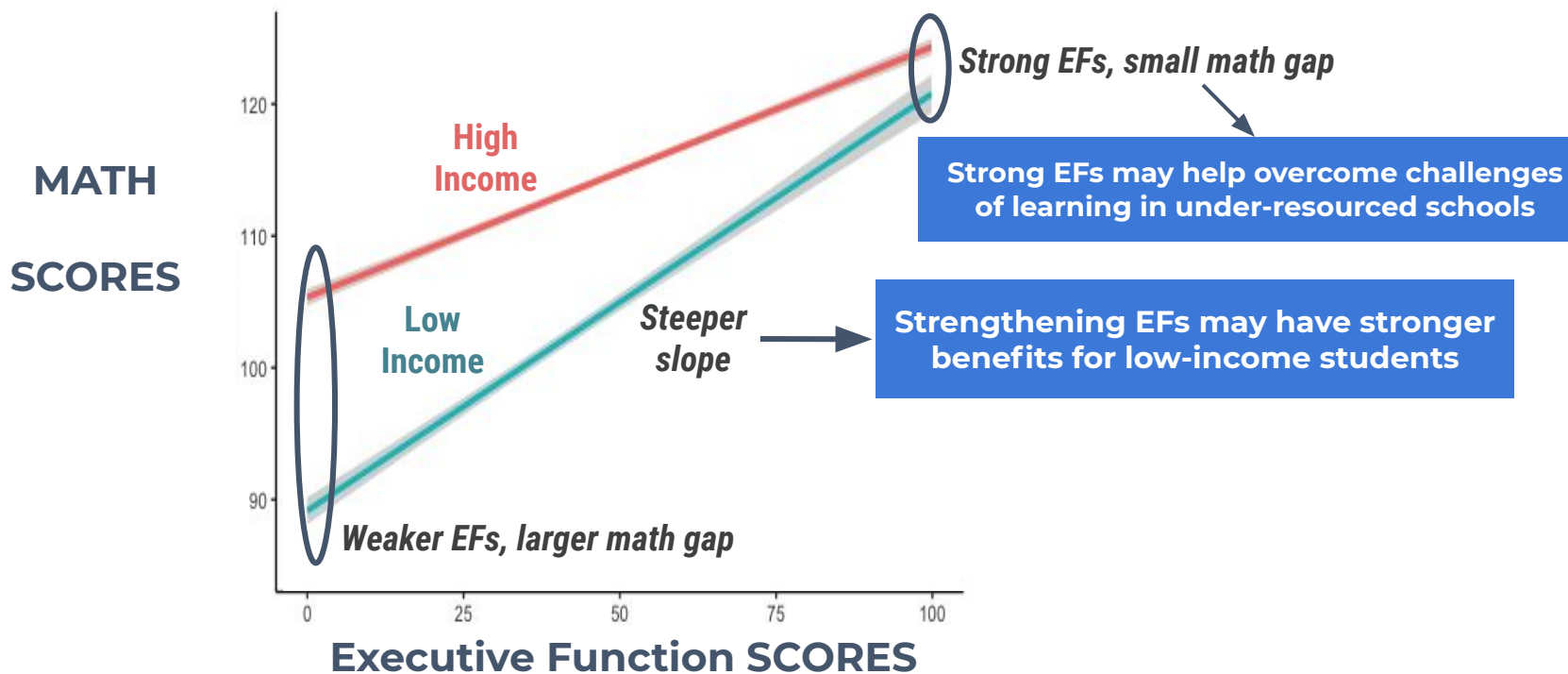


EFs may be an invisible driver for students to have agency over their own learning and life

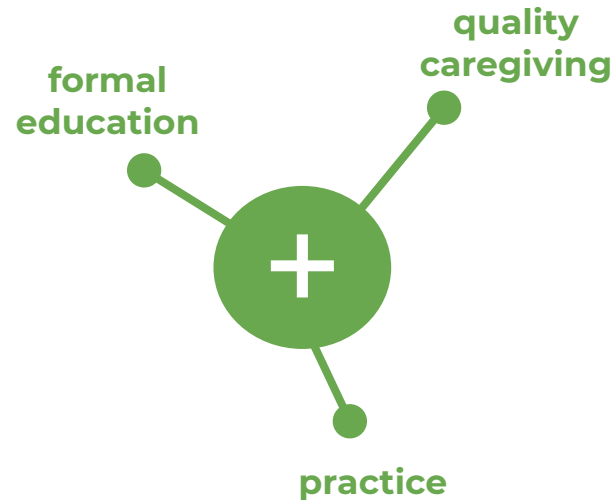
Are Executive Functions important for math?



Are Executive Functions important for math?



Can Executive Functions change?



(e.g., <https://ies.ed.gov/ncер/pubs/20172000/>)

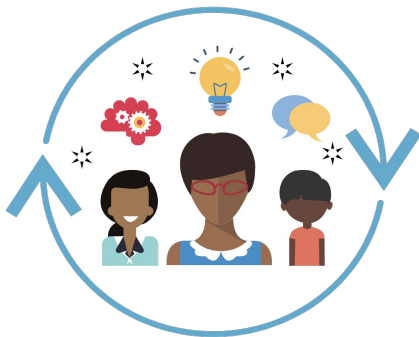
**Evidence suggests that EFs can improve
if exercised in the contexts where they will be used**

EF+MATH program



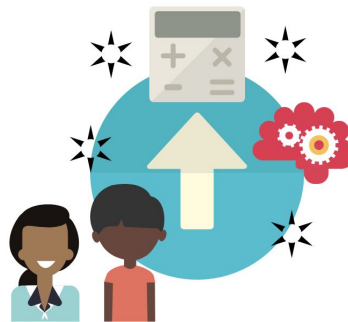
WHAT

*Unlocking the Potential in
Every Student To Be a
Powerful Math Learner*



HOW

Inclusive R&D



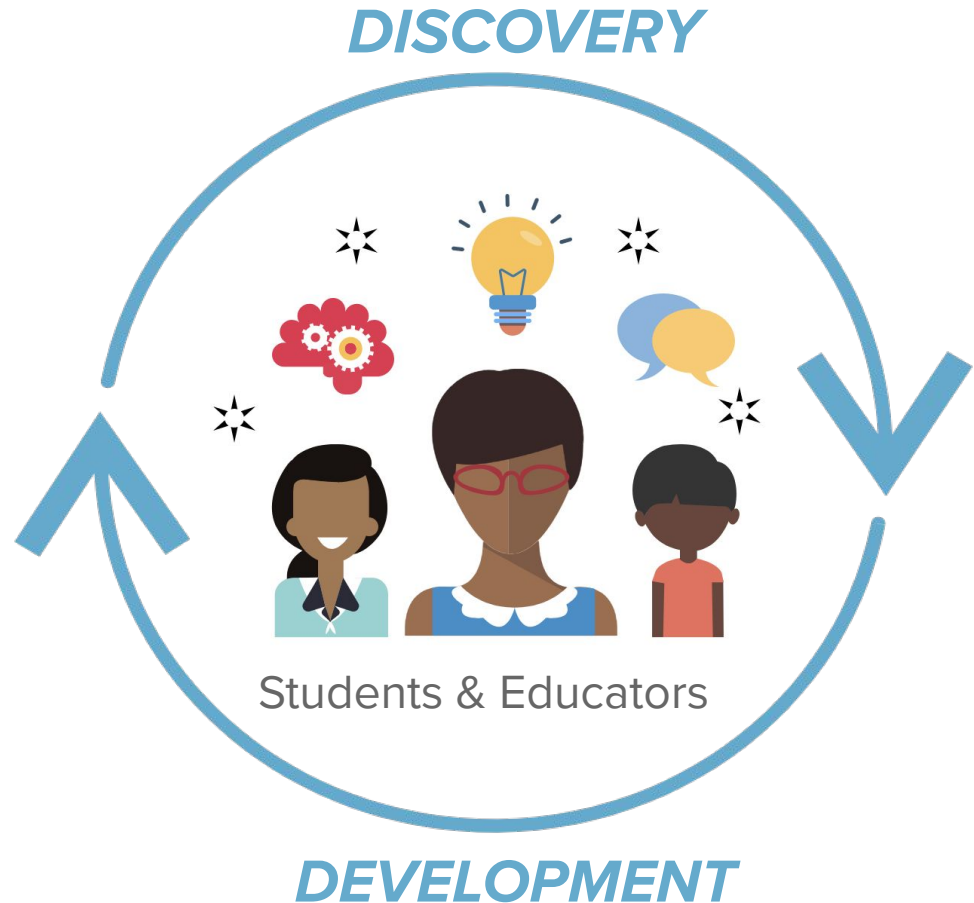
SUCCESS

*Demonstrating Breakthrough
Gains in Math and Executive
Functions for Students in
Grades 3-8 in Traditionally
Under-resourced Schools*

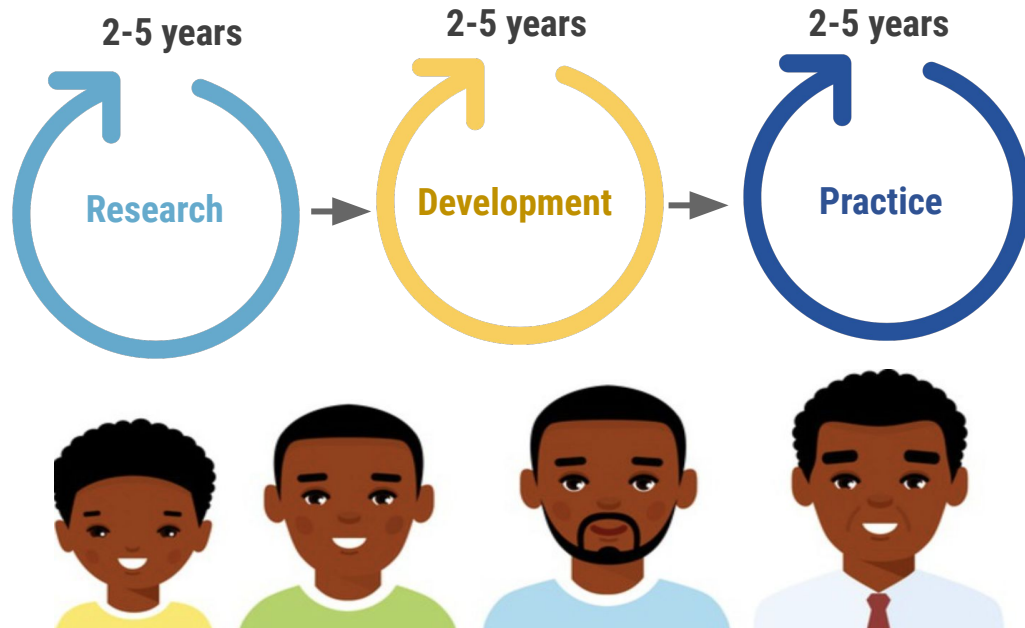
OUR APPROACH

INCLUSIVE R&D

1. **Educators are central** to the entire R&D process, particularly educators in historically under-resourced schools
2. **Design for Equity:** Solutions are **designed for students** who've had many obstacles put in their way, and **designed with educators** who champion these powerful learners.



OUR APPROACH: Inclusive R&D



Inclusive R&D Model:





BIG, BOLD IDEAS

A five-year program to fund and support breakthrough ideas

- Up to \$9M funding in Y1
- Aggressive timeline
- Multi-disciplinary teams
- Rapid-cycle in-school iteration and improvement
- Educators are made central



DEVELOP PROTOTYPE 'LEARNING SYSTEMS'

- Intentionally open-ended
- Guard-rails:
 1. Third through eighth graders in historically under-resourced schools
 2. Build executive functions during math learning
 3. Build conceptual understanding and complex problem solving in math
 4. Privacy and equity by design
 5. Works across many school contexts
 6. Fits in a typical school structure



ACTIVE MANAGEMENT AND SUPPORT

- Not funding basic research or methods to commercialize solutions
- Different program management approach
- Requires multi-disciplinary teams: we will create infrastructure

RESEARCHERS

RESEARCHERS & DEVELOPERS

- EF research
- Math research
- Educational Equity
- Design/development of scalable programs

EDUCATORS

- Individuals
- Districts

EVALUATORS

- Rapid-cycle
- Long-term



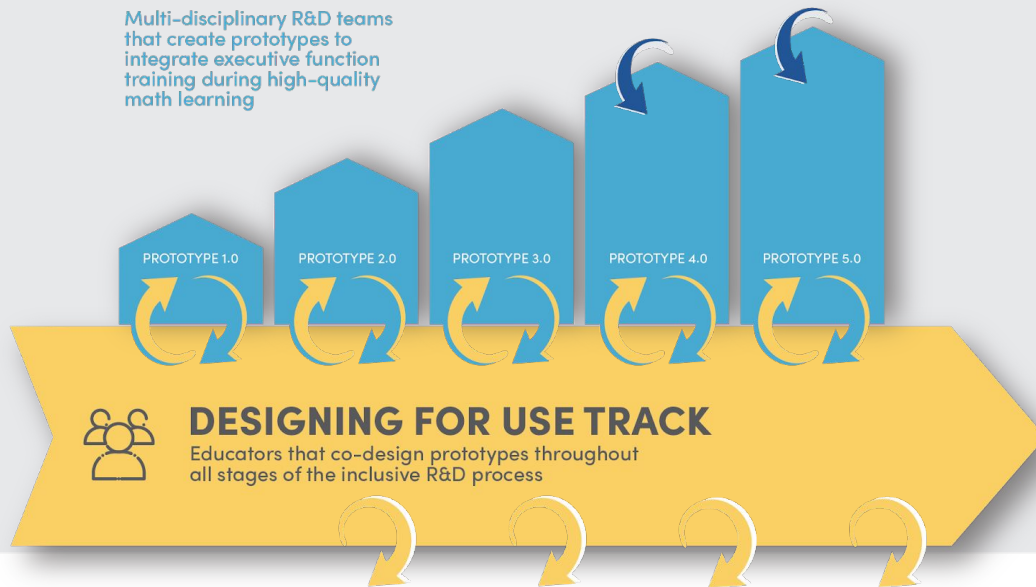
PROTOTYPING TRACK

Multi-disciplinary R&D teams that create prototypes to integrate executive function training during high-quality math learning



APPLIED RESEARCH TRACK

Researchers that develop new capacities that boost prototypes' effectiveness by making student learning visible and actionable



DESIGNING FOR USE TRACK

Educators that co-design prototypes throughout all stages of the inclusive R&D process



EVALUATION TRACK

Independent, third-party evaluators of the prototype learning system



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Educators that co-design prototypes throughout all stages of the inclusive R&D process

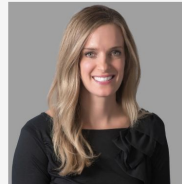
1 Educator Leadership Council

25-30 educators with deep expertise in grades 3-8 math curriculum and instruction, committed to ensuring students from all backgrounds reach their full potential. They advise Prototyping teams, review proposals, and provide ongoing thought leadership to the program.

Current Council members:



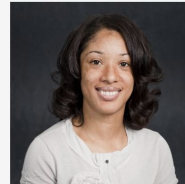
Debra Lindo
Educator Leadership Council
Chair, EF+Math Program



Amy Peterson
Manager of Professional
Learning, LEAP Innovations



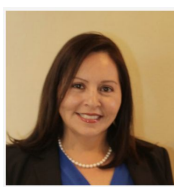
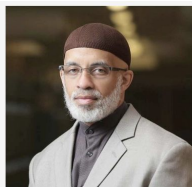
Cheryl James-Ward
High School Principal, San
Diego Unified School District



Jeannette Franklin
6th Grade Math Teacher, New
York City Department of
Education



Jennifer Davis
7th Grade Math
Moines Public S



Applications to join the Council are open 8/22 – 9/19

www.efmathprogram.org/designing-for-use-track



DESIGNING FOR USE TRACK

Educators that co-design prototypes throughout all stages of the inclusive R&D process

1 Educator Leadership Council

25-30 educators with deep expertise in grades 3-8 math curriculum and instruction, committed to ensuring students from all backgrounds reach their full potential. They advise Prototyping teams, review proposals, and provide ongoing thought leadership to the program.

2 District Co-Design Partners

Critical partners to co-create solutions that are useful, usable, equitable, and effective. Co-design districts will collaborate directly with R&D teams. In addition to rapidly evaluating and refining ideas, district partners will co-design for implementation to ensure processes are designed for equitable, effective use.



Applications to be a Co-Design District Partner are open 9/12 – 10/10

www.efmathprogram.org/designing-for-use-track

EF+MATH program

PROTOTYPE LEARNING SYSTEMS

The EF+Math program is a 5 year program to support multi-disciplinary teams to build, test, and improve learning systems that dramatically improve math learning by building executive function.



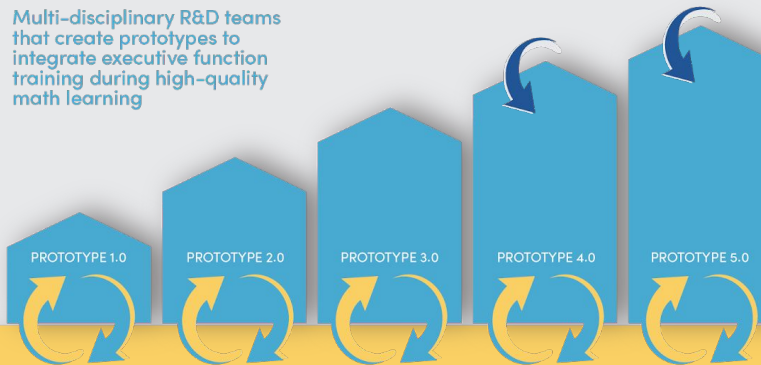
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RESEARCHERS

RESEARCHERS
& DEVELOPERS

EDUCATORS

EVALUATORS

Webinar on
Thursday

Ways to get involved

EDUCATORS

Individual educators:

- Apply for Educator Leadership Council: open 8/22 - 9/19

Districts:

- Apply for District Co-Design Partnership: open 9/12 - 10/10

RESEARCHERS

Interested in Prototyping Track:

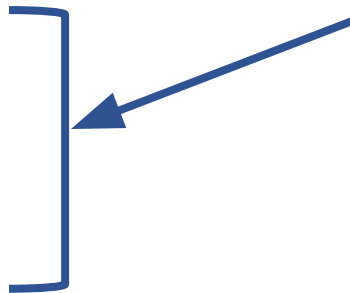
- Submit a Concept Note: open 8/29 - 12/11
- *If want to find team members:* Apply for optional Facilitated Team Development process: open 8/29 - 9/19
- Join the next webinar

Interested in Applied Research Track:

- Submit a Concept Note: open 8/29 - 10/3
- Join the next webinar

DESIGNER/DEVELOPERS

Interested in Prototyping Track:



Why it matters

When our learners know they can have agency over their powerful minds to learn anything...that will

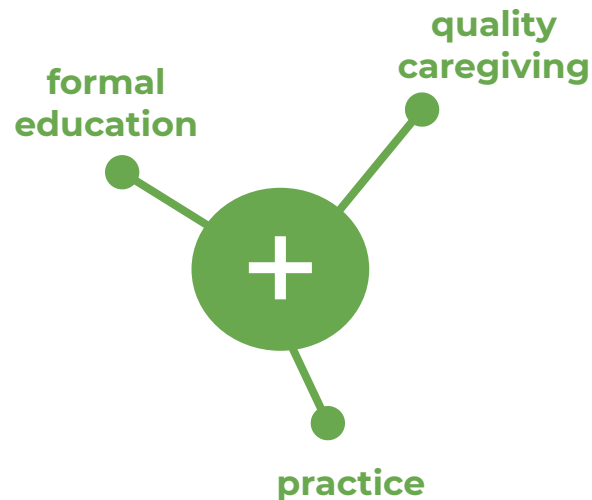
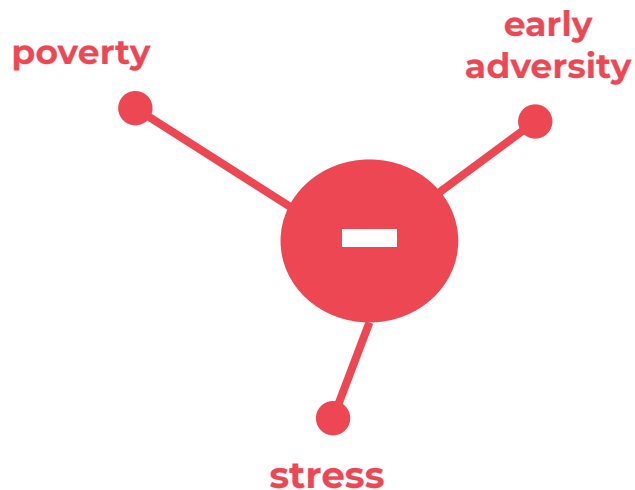
CHANGE WHAT'S POSSIBLE.



Questions?

Thank you!

Can Executive Functions change?



These factors can consume EF capacity,

**Evidence suggests that EFs can improve
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