



# Math for All: High-Quality Mathematics Education to Support All Students

Board of Education Meeting – May 17, 2021

# Math for All: A Grant-Supported Professional Learning Research Opportunity for D90



Funded through the Education Innovation and Research Program



Research study supported by the Education Development Center, Bank Street College of Education, and Teachers College (Columbia University, NY)



Two-year research program for grades K-2 and 3-5

# What is Math for All?



Professional learning program to help make standards-based K-5 math instruction accessible to all students



Supports teacher planning process to better understand individual learning profiles and demands of mathematical tasks



Facilitates collaborative lesson planning and lesson adaptations to identify and remove barriers to learning



It is NOT a new math curriculum

## **Why Participate in Math for All Research?**

Consistently high student math achievement masks students who struggle or achieve at lower levels

Disaggregated student achievement data (MAP, IAR) revealed disparity between groups of students

Supports D90 Universal Design for Learning, Standards-Based Learning, and equitable and inclusive classrooms

Math for All Framework can also be applied to planning in other content areas

# Alignment with Current D90 Initiatives

## Universal Design For Learning & Standards-Based Learning

Maintains rigor and integrity of mathematics standards

Facilitates proactive planning for diverse learners in each classroom

Increases access to learning



## Equitable and Inclusive Classrooms

Acknowledges diversity of learning profiles in each classroom

Provides lesson adaptation to support student learning needs

Recognizes variability in student understanding

# Math for All Lesson Planning

Collaboration between general and specialized teachers



Mathematics goals remain rigorous, instruction is adapted



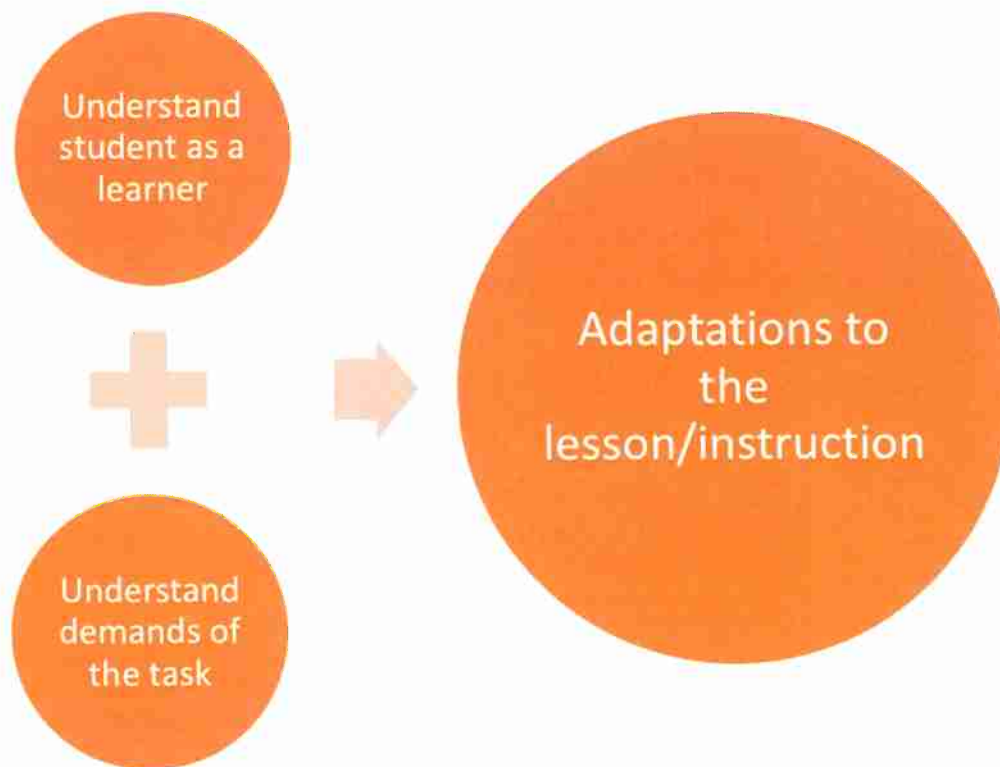
Focus in on students' strengths as well as challenges



Adaptations facilitate increased learning access for struggling students

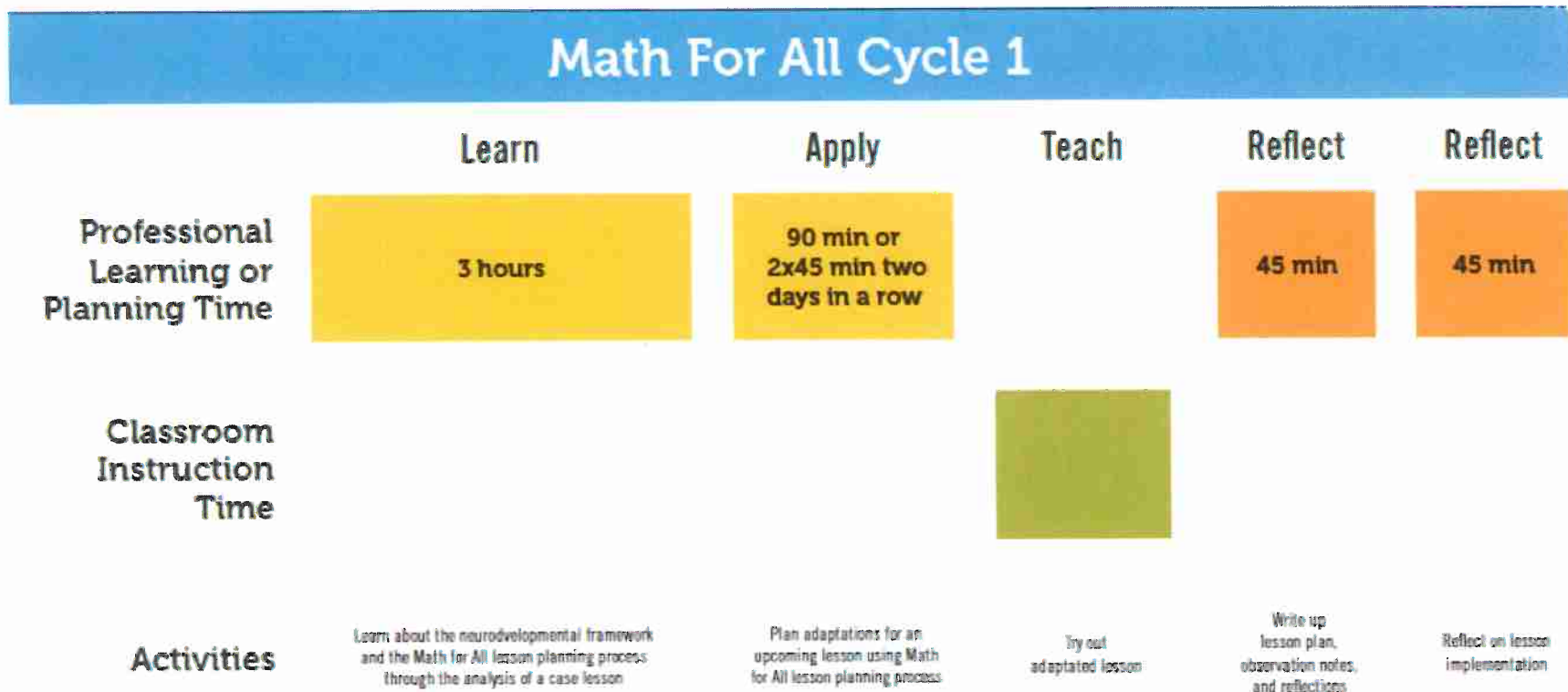


# Tools: The Neurodevelopmental Framework



# Format of Math for All

5 workshops/cycles and related assignments, 40 hours total





# Benefits of Program Participation



Professional learning embedded during D90 Institute Days and School Improvement Half-Days



Enhances teachers' capacity to plan and implement mathematics lessons that are accessible to all students



Builds local capacity to implement and sustain training



Analyzes student data to determine impact of training and implementation



Provides cost-effective professional learning

Questions?



# High-Quality Mathematics Instruction for ALL K–5 Students!

## Does your school or district want to...

- » Increase mathematics achievement for students in grades K–5?
- » Reduce the opportunity gaps between general and special education students?
- » Improve teachers' ability to support students struggling in mathematics?

## PARTICIPATE IN MATH FOR ALL A Grant-Supported Professional Development Program



### What is Math for All?

Math for All is a professional development (PD) program designed to assist schools in implementing high-quality, standards-based mathematics education for a wide range of students, including those with disabilities. It is NOT a mathematics curriculum, nor is it tied to any specific K–5 mathematics program. Rather, it helps teachers use and adapt their existing materials to make them more accessible to a wide range of learners.

Math for All helps schools build a foundation for collaboration among general and special education teachers as they work to implement student-centered approaches for rigorous mathematics instruction. While our focus is on mathematics, **the skills that teachers learn will be valuable for other content areas as well.** School leaders will ensure the long-term impact of this program by working alongside their teachers—an essential part of the program.

Math for All is aligned with initiatives such as Multi-Tiered Systems of Support, standards-based mathematics instruction for all students, and standards for professional learning. Extensive research in urban, suburban, and rural school districts across the U.S. has shown that the program has a positive impact on teacher and student outcomes. Math for All is currently funded by the Education Innovation and Research program of the U.S. Department of Education to conduct a large-scale research study in Illinois. Schools that agree to participate in the research study will receive the Math for All PD at no cost.

### What will schools gain from participation?

- Receive Math for All PD provided by trained local facilitators during the 2021-2022 and 2022-2023 school years.
- Build your and your staff's capacity to facilitate professional learning and ongoing collaborative lesson planning to improve mathematics learning for all students.
- Enhance your teachers' capacity to (a) assess individual students' strengths and challenges, (b) identify possible barriers to students' engagement with mathematics learning experiences, and (c) implement a variety of instructional strategies and teaching practices that draw on students' strengths and interests to help them overcome obstacles and provide access to mathematical concepts and skills.
- Advance the collaborative culture in your school, particularly among general and special education teachers and other specialists.
- Improve the mathematics achievement of low-performing student subgroups as well as the ISBE summative designation on your school report card.



# Proven to Enhance the Mathematics Achievement of ALL Students

## What is the format of Math for All?

Math for All consists of 40 hours of PD over two years. Across these two years, participants engage in 5 cycles of learning content, applying this learning to planning adaptations for a lesson, followed by implementing the adapted lesson and reflecting on its success. The implementation schedule and delivery (in-person, blended, or online) will vary based on school context, including COVID-19 guidelines.

## What are the requirements for participating schools?

- **Select two staff members (a coach, specialist, or teacher leader) from your school, network, or district office to be trained to serve as co-facilitators of the PD.** We recommend that one facilitator has a strong mathematics background and that the other facilitator has experience working with special student populations. Facilitators will participate in a 40-hour facilitator institute and receive ongoing support to prepare them for leading the PD.
- **Recruit general and special education teachers who teach math within the K–2 and 3–5 grade spans.** Note: Priority will be given to schools who have all teachers in these grade spans participate.
- **Be prepared for a phased implementation.** The design of our study requires that schools will be randomly assigned to receive the Math for All PD for teachers in grades K–2 or grades 3–5 first.
- **Utilize school improvement days or provide release time for teachers to participate in 20 hours of PD per year during the 2021-2022 and 2022-2023 school years.**
- **Have at least one school leader participate in the PD for at least 16 hours per school year.**
- **Provide common lesson planning time for teachers participating in the PD as part of their regular school schedule.**

## What is the duration of participation?

We are currently recruiting schools and school districts for the 2021-2022 and 2022-2023 school years. Schools must commit to participating for both years.

## What will teachers be expected to do?

- Teachers will participate in 20 hours of PD sessions in each of the two school years—2021-2022 and 2022-2023. Sessions will be held at regular intervals throughout each school year and be led by trained, local facilitators. Teachers will receive ISBE clock hours.
- As part of the PD sessions each year, teachers will work in teams to plan adaptations for mathematics lessons from their curriculum, implement the adapted lessons in their classrooms, and record their adaptations, observations, and reflections to document their work.
- **ALL** teachers in grades K–5 will be expected to participate in research activities (i.e., surveys, logs) totaling about three hours per year. These activities come with a stipend and are an important tool for the ongoing improvement of mathematics PD.

## What will school leaders be expected to do?

- At least one leader per school will participate in a minimum of 16 hours of PD sessions for each of the two school years—2021-2022 and 2022-2023.
- School leaders will connect with teachers about their planning and implementation of adapted mathematics lessons, for example: attend planning meetings, review a sample of the adapted lesson plans, check in with teachers about the progress of individual children, and/ or observe a sample of the adapted lessons and debrief with teachers.
- School leaders will be expected to participate in research activities (i.e., interviews, surveys) for approximately two hours per year. They will receive a stipend for their participation in these activities.



**HURRY—OPENINGS ARE LIMITED**

To apply, visit our website: <http://mathforall.cct.edc.org/pd-information/> or contact **Dr. Babette Moeller** ([bmoeller@edc.org](mailto:bmoeller@edc.org), 212-807-4205)

