

SUPPORTING THE IMPLEMENTATION OF HIGH-QUALITY MATH CURRICULA: A PROMISING STRATEGY TO PROMOTE EQUITY



THE CHALLENGE

Math proficiency is a critical precursor to a student's future occupational and economic success (Watts, 2020; Werner, Acs, & Blagg, 2024). Unfortunately, historically disadvantaged groups, including students experiencing poverty and Black, Latino/a, American Indian/Alaska Native, and English Learner-designated students, trail behind their peers in math proficiency (U.S. Department of Education, 2025).



EIC: A POTENTIAL SOLUTION

Schools can promote parity in math proficiency by having teachers:

- Deliver high-quality math curricula,
- To all students,
- In ways that maximize student benefit.

To that end, **The Effective Implementation Cohort (EIC)** supported:

- Implementation of high-quality middle-grade math curricula in 19 U.S. school districts, and
- Application of strategies to ensure that teachers delivered curricula effectively (see box at right).

The National Implementation Research Network (NIRN) supported technical assistance providers, school leaders, administrators, and teachers in carrying out these strategies, using training, coaching, peer learning, and tools and resources. NIRN also collected and analyzed data for districts, schools, teachers, students, and technical assistance providers.



EIC STRATEGIES TO STRENGTHEN CURRICULUM IMPLEMENTATION

- Cultivate relationships, champions, and leadership
- Facilitate curriculum integration
- Engage students and families
- Make data-driven decisions
- Allocate resources and financial incentives
- Set up a structured, system-wide, multi-level, integrated implementation infrastructure
- Offer implementation support opportunities

Districts participating in the EIC Project built implementation capacity, demonstrated strengthened leadership, fostered high-quality instruction, and boosted student engagement in mathematics.



PROMISING FINDINGS FROM THE EIC MODEL

- School district staff reported that the EIC strategies were high-quality and effective.
- School districts' capacity improved over the course of their EIC participation.
- Students' math engagement and achievement grew over the course of EIC.
- When teachers personally approved or liked a curriculum and were confident in their math instruction abilities, their students had better math engagement, confidence, and achievement compared with their peers.



WHAT TYPES OF INVESTMENTS ARE NEEDED TO SUPPORT EFFECTIVE CURRICULUM IMPLEMENTATION?

- **Preparation work** to ensure that districts and schools are ready to adopt new implementation practices, and to assess the fit and feasibility of various curricula
- **Development and execution of implementation plans** using approaches that are evidence-based, tailored, multi-level, system-wide, and actionable
- **Stakeholder engagement** that gives voice and influence to teachers, students, and families
- **Data collection, analysis, and dissemination** so that districts can make data-driven decisions and share the impact of their work
- **Implementation support** through training, coaching, peer-learning, and resources and tools

REFERENCES

Watts, T. W. (2020). Academic achievement and economic attainment: Reexamining associations between test scores and long-run earnings. *AERA Open*, 6(2). <https://doi.org/10.1177/2332858420928985>

Werner, K., Acs, G., & Blagg, K. (2024). *Comparing the long-term impacts of different child well-being improvements*. Urban Institute. https://www.urban.org/sites/default/files/2024-03/Comparing_the_Long-Term_Impacts_of_Different_Child_Well-Being_Improvements.pdf

U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2025). NAEP Report Card: Grade 12 mathematics: Performance by student group. *The Nation's Report Card*. <https://www.nationsreportcard.gov/reports/mathematics/2024/g12/performance-by-student-group/>

For more information on EIC, and about how implementation science can improve outcomes for students and families, visit:

<https://eic.fpg.unc.edu>

<https://sisep-center.shorthandstories.com/eic-final-report/index.html>

<https://implementation.fpg.unc.edu>

<https://nirn.fpg.unc.edu>



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