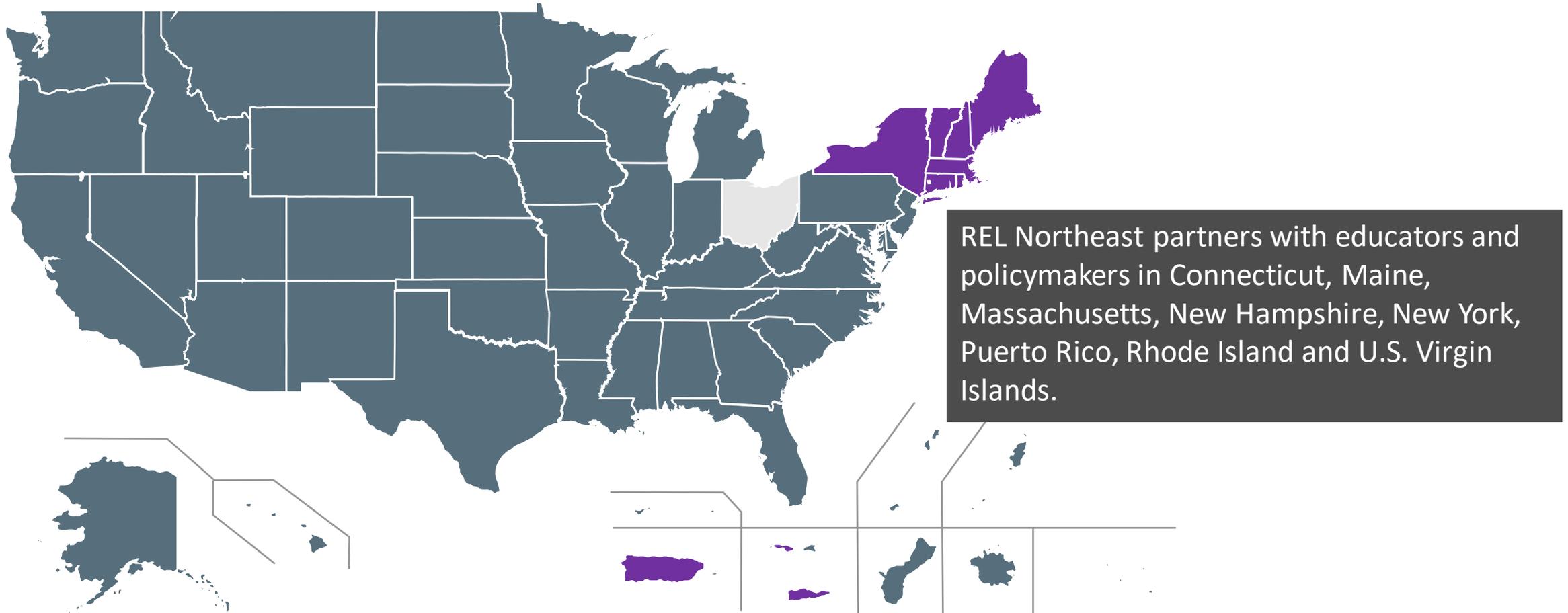


STEM Interventions in REL Northeast & Islands: Impact and Scale from a Systems Perspective

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REL Northeast & Islands



REL Levers for Facilitate Impact and Scale

- Governing Board with cross-section of regional representatives
- Partnerships with each state/jurisdiction in our region
- Cross-REL working groups on high leverage topics

Partnerships

REL-NEI Partnership Model: Facilitating Impact & Scale



- Identify an actionable need in a state or jurisdiction
- Form partnerships within each state that include different representative groups
- Develop and use logic models
- Monitor progress on attainment of outcomes

REL NEI Partnerships

Connecticut
Partnership to
Support
Multilingual
Learner
Mathematics
Outcomes

Maine
Partnership to
Support Innovative
and Equitable
Educational
Opportunities

Massachusetts
Partnership to
Support Student
Learning through
Math Intervention

New Hampshire
Partnership to
Increase Early
Learning Outcomes
through Play

New York
Partnership to
Strengthen
Personalized
Learning for Equity

Puerto Rico
Partnership to
Engage Families in
Data Use

Rhode Island
Partnership to
Support Early
College
Opportunities

U.S Virgin Islands
Partnership to
Strengthen the
Early Childhood
Workforce

Vermont
Partnership to
Strengthen Flexible
Pathways for
College and Career
Success

Connecticut Partnership to Support Multilingual Learner Mathematics Outcomes



Coaching and technical assistance to support implementation:

Building capacity for middle grade mathematics leaders to support MLLs



Research study to understand impact and support scale:

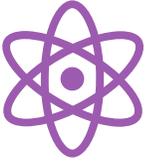
Impact of a teacher professional learning program for MLLs and other students



The Intervention: Visual Access to Mathematics

- Addresses need for resources **specific to mathematics and to students who are English learners/multilingual learners** (ELs/MLs)
- Focuses on **critical middle grades math content**—ratios and proportions
- Provides evidence-based **strategies for ELs/MLs** that can be **integrated into mathematics** lessons and **benefit all students**
- Designed to **work with teachers' current mathematics curricula**
- Supports **CT Common Core of Teaching (CCT) professional standards**

Partnership Members: Supporting Implementation & Scale



- CT State Department of Education (CSDE)
- Association of Mathematics Teacher Educators of CT (AMTEC)
- CT Association of Latino Administrators and Superintendents (CALAS)
- CT Administrators of Programs for English Language Learners (CAPELL)
- Associated Teachers of Mathematics in CT (ATOMIC)
- CT Council of Leaders of Mathematics (CCLM)
- Hartford Public Schools

Massachusetts Partnership to Support Student Learning through Math Intervention



Toolkit to support implementation of evidence-based math intervention strategies:

Based on the WWC Practice Guide, *Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades* (2021).



Testing and Research to understand impact and support scale-up:

To maximize the usability of the toolkit, we will conduct usability testing to evaluate the quality of participants' experiences with the PD course to inform revisions, and then conduct a rigorous research study to assess the efficacy of the toolkit resources.

Importance of Intervention in the Elementary Grades



Issue: As students move through the grades, low performing students may fall further behind higher performing peers, widening the opportunity gap.

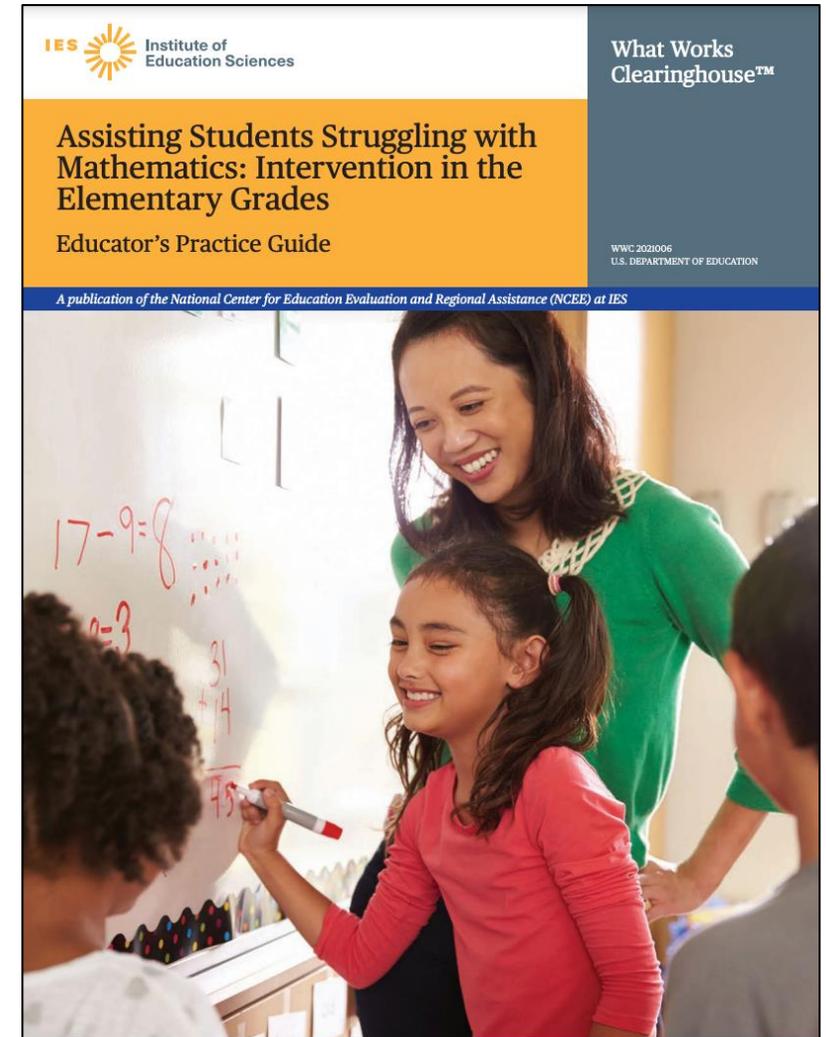
Providing intervention is important for building a strong foundation to support students' current and future success with mathematics.

Central Questions:

- What are effective strategies to support students struggling with math?
- How can teachers make the most of math intervention to improve student learning?

Toolkit PD Course Goals

- Build knowledge of the *What Works Clearinghouse (WWC) Practice Guide's recommendations* for supporting students struggling with mathematics
- Build knowledge of how to implement evidence-based strategies effectively
- Plan and implement strategies with students
- Support each other in using strategies, sharing successes/challenges, and strengthening implementation



Key Questions for Each Recommendation

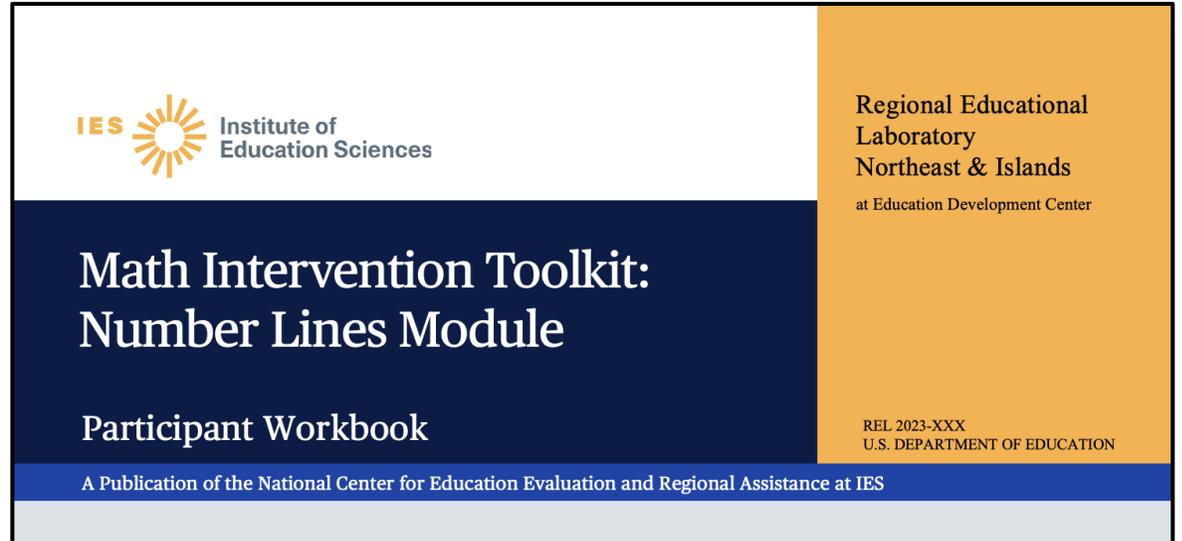


Each module explores these questions:

- **What** is the WWC Guide's recommendation?
- **Why** is it important for student learning?
- What are **strategies** for **how to implement** the recommendation?
- What are **ways to apply** the recommended strategies with your students?
- What are **potential challenges** and ways to address them?

Participant, Facilitator, and Leader Resources

- Participant Workbook
- Routine Teaching Guide
- Facilitator Guide
- Slides with presenter notes
- Agendas
- Planning Tools
- Diagnostic and Monitoring Tools



Cross-REL Working Group

Equitable Opportunities for Learning in STEM

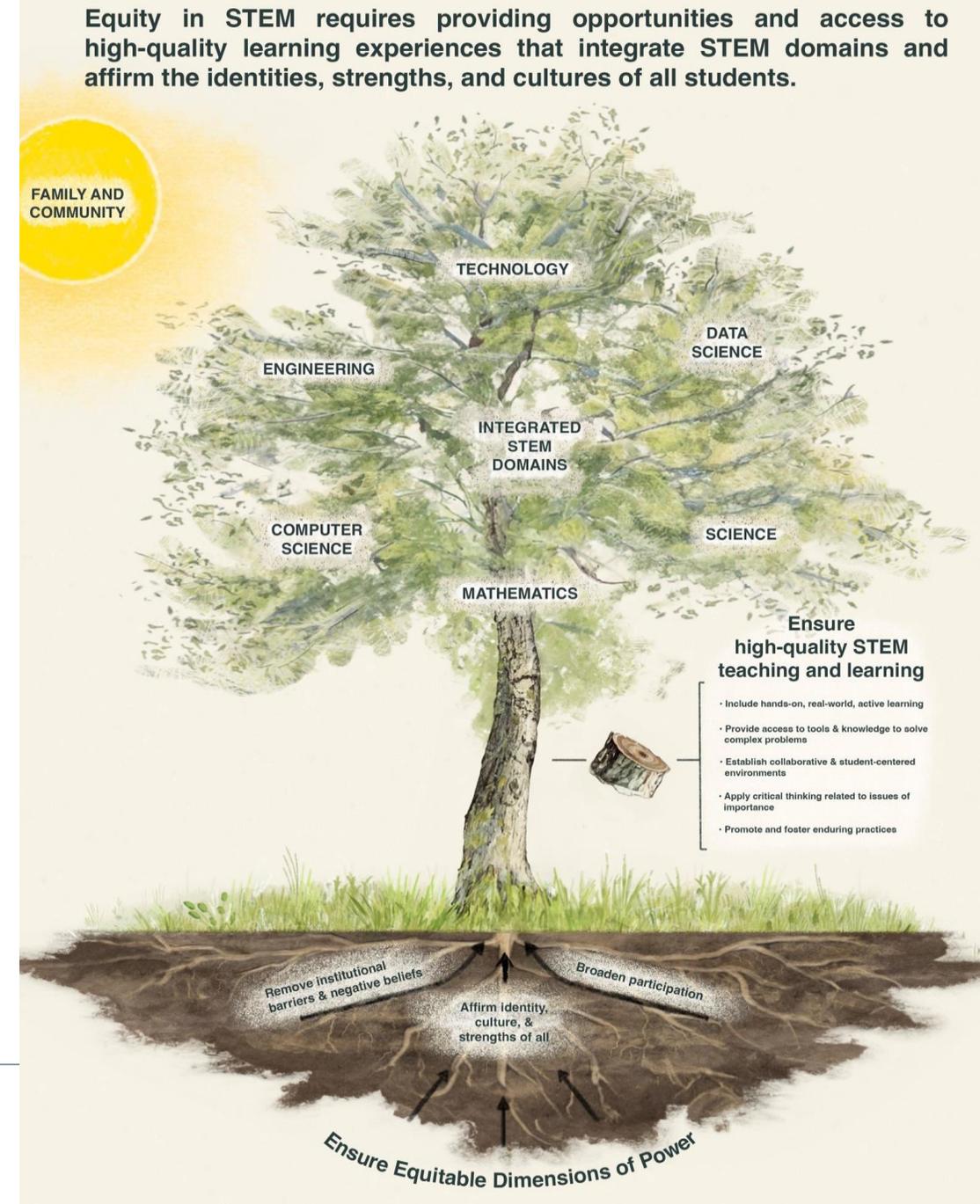
Overview: Equitable Opportunities to Learn in STEM

Through reviews of research and resources, and connecting with other federal TA centers, this leadership area will:

- Identify and prioritize programs, strategies, and models that are providing equitable STEM education opportunities, experiences and outcome
- Share and disseminate research, TA, evidence-based strategies and more
- Transform information into actionable materials, strategies, and mechanisms useable and useful to schools, districts, and/or policy makers.

STEM Equity Framework

- Foundational underpinnings for equity
- Essential characteristics for learning
- STEM domain research and resources
- Essential family and community supports



Thank you!

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