

# Education Innovation and Research Program (EIR) Project Abstract

**Applicant Name:** The 21<sup>st</sup> Century Partnership for STEM Education

**Project Title:** Math Empowerment through Standards-based Grading (ME-SBG)

**Type of Grant Requested:** (select one)  Early-Phase  Mid-Phase  Expansion

**Absolute Priorities the Project Addresses:** (select all that apply)

- Absolute Priority 1-- Demonstrate a Rationale (Early), Moderate (Mid), Strong (Expansion)
- Absolute Priority 2-- Field-Initiated Innovations—General
- Absolute Priority 3-- Promoting STEM Education
- Absolute Priority 4-- Meeting Student Social, Emotional, and Academic Needs
- Absolute Priority 5-- Educator Recruitment and Retention

**Competitive Preference Priorities the Project Addresses:** (select all that apply)

- Competitive Preference Priority 1— Promoting Equity in Student Access to Educational Resources and Opportunities: Implementers and Partners
- Competitive Preference Priority 2— Addressing the Impact of COVID–19 on Students, Educators, and Faculty

**Total number of students to be served by the project:** 14,000

**Grade level(s) to be served by the project:** 6,7,8, 9

**Definition of high-need students:** students from historically underserved groups; specifically, students of color or members of federally recognized Indian tribes.

**Brief description of project activities:** We will design the supports needed to make ME-SBG easy for teachers to implement; then test intervention effects in a Cluster RCT; then implement the intervention in sites that were formerly control schools while widely disseminating results.

**Summary of project objectives and expected outcomes:** Objective 1: Develop supports to overcome adoption barriers for ME-SBG in Grades 6-9 math and Algebra I. Objective 2: Implement ME-SBG and evaluate its effectiveness. Objective 3: Broaden the project's impact through dissemination and further implementation. Short term Outcomes: Students learn more mathematics each year.

**Summary of how the project is innovative:** We provide the supports needed to implement “reassessment for full credit after further study.” This is the key feature of our system that enables it to accomplish what other standards-based grading programs have not: student empowerment, self-regulation, and increased learning.

**Other studies related to the proposed project:** [REDACTED], et al.. (2023). The Impacts of a Standards-based Grading System Emphasizing Formative Assessment, Feedback, and Re-assessment: A Mixed Methods, Cluster Randomized Control Trial in Ninth Grade Mathematics Classroom

**Proposed implementation sites:** Porland, Oregon; Interboro School District, Pennsylvania; Jim Thorpe School District, Pennsylvania; Additional Pennsylvania sites; additional sites identified by the Aurora Institute.

**Organizations partnering with this project:** Westat; Portland Public Schools; Aurora Institute,;Lincoln Intermediate Unit, PA; Jim Thorpe Public Schools; Interboro Public Schools