RURAL MATHEMATICS EDUCATION LANDSCAPE

University of Idaho | WARNER SCHOOL OF EDUCATION UNIVERSITY of ROCHESTER | horizon RESEARCH, INC. | NSF

An Opportunity for 5th – 9th Grade Mathematics Teachers and Instructional Leaders Who Wish to Enhance their Mathematics Instruction

An Opportunity for 5th – 9th Grade Mathematics Teachers and Instructional Leaders Invested in Enhancing Their Instruction and Increasing Student Participation in Meaningful Classroom Discussions

The University of Rochester, the University of Idaho, and Horizon Research are preparing for the first year of a research project funded by the National Science Foundation (NSF) to provide two years of professional learning to 5th – 9th grade mathematics teachers and instructional leaders in rural schools.

Project Goal

The primary purpose of this NSF funded project is to better understand the *Rural Mathematics Education Landscape.* To understand the Rural Mathematics Landscape we will implement, and study an innovative online mathematics professional learning model designed to create high-impact growth opportunities for teachers in rural districts.

Teacher and Leader Participation

Mathematics teacher and instructional leader participants will engage in an online professional learning course, online video teaching labs, surveys and interviews. Additionally teachers will participate in one-on-one online video coaching cycles.

Project Component Dates and Times

- **Teacher and Leader Recruitment** - May - July 2025
- Online Information Sessions for Interested Teachers/Leaders (optional):
  - 07/17/2025 1pm-2pm EST / 10am-11am PST
  - 08/20/2025 1pm-2pm EST / 10am-11am PST
  - 09/9/2025 7pm-8pm EST / 4pm-5pm PST

  If you are interested in attending one of the sessions above, and would like more information please contact Cyndi Carson at ccarson@warner.rochester.edu
- **Teacher Commitments Due** - 09/16/2025
- **Online Project Kickoff Meeting**
  - 09/30/2025 7pm-8pm EST / 4pm-5pm PST
- **Online Professional Learning Course**

  All sessions will take place at 7:00-9:00 pm EST , 4:00-6:00 pm PST
  - Year One:
    - 10/7/2025
    - 10/14/2025
    - 01/27/2026
    - 02/3/2026
  - Year Two:
    - Dates TBD Between 09/2026 - 05/2027
- **Online Video Teaching Labs**

  All video clubs will take place at 7:00-9:00 pm EST , 4:00-6:00 pm PST
  - Year One
    - 10/21/2025
    - 02/10/2026
  - Year Two
    - Dates TBD Between 09/2026 - 05/2027
- **Online Video Coaching Cycles for Teachers**

  (participants and their coaches will determine specific dates and times for each coaching cycle)
  - Year One:
    - 10/21/2025 - 01/27/2026
    - 02/10/2026 - 04/28/2026
  - Year Two:
    - Dates TBD Between 09/2026 - 05/2027

CORE COMPONENTS AND BENEFITS TO PARTICIPATION

Online Professional Learning Course

- Consists of eight synchronous online sessions (two hours per session), aimed at orienting participants toward high leverage discourse practices that facilitate productive classroom discussions.
- Each session will consist of participants engaging in rich mathematical tasks and discussions using the text *5 Practices for Orchestrating Productive Mathematical Discussions* (Smith & Stein, 2018).
- Between each synchronous online session, participants will engage in asynchronous activities such as readings and journal reflections. Asynchronous activities will take approximately 45 minutes 1 hour of time between each synchronous session.

Online Video Teaching Labs

- Each participant will take part in four online video teaching labs that focus on productive mathematical discourse in mathematics classrooms.
- Each video teaching lab will be led by project personnel to review a lesson plan around a cognitively demanding task. Participants will view video of project personnel implementing the lesson in a 5-9 mathematics classroom. While watching the video, participants will gather evidence of student thinking and learning to engage in a reflective conversation about content and pedagogy.

1-on-1 Online Video Coaching Cycles for Teachers

- Teachers will take part in four online video coaching cycles that involve synchronous and asynchronous components with the goal of engaging participants in reflective practice. Online video coaching will involve video recording of participants' classroom practice (equipment provided by the project).
- Teachers will be encouraged to implement ideas from the online professional learning course and teaching labs into the lessons they utilize for online video coaching cycles.

Research Activities

- Consists of participant surveys and interviews about beliefs of mathematics teaching and learning, recordings of online course participation and online coaching sessions, and recordings of five mathematics lessons completed by teachers over two years.

Participant Stipend & District Professional Learning Stipend

- Participants will receive $2,000 for completing all components of the project.

Questions? Please contact:

Dr. Cynthia Carson (Project Coordinator) at ccarson@warner.rochester.edu

If interested in learning more about this project, click here to complete the Interest Form.

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