

Building Resilience in Rural Communities through Strong Schools



RiSE Center Programs to Counter Teacher Isolation and Teacher Turnover, and Improve Student Engagement and Learning in the STEM Disciplines

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RiSE Teaching Fellowship

- 85% of program participants have remained at their Maine school for at least 4 four years
- Teachers in the program have gone on to lead initiatives in their own schools and become active community partners
- Brings teachers together to help combat professional isolation in rural areas across the state

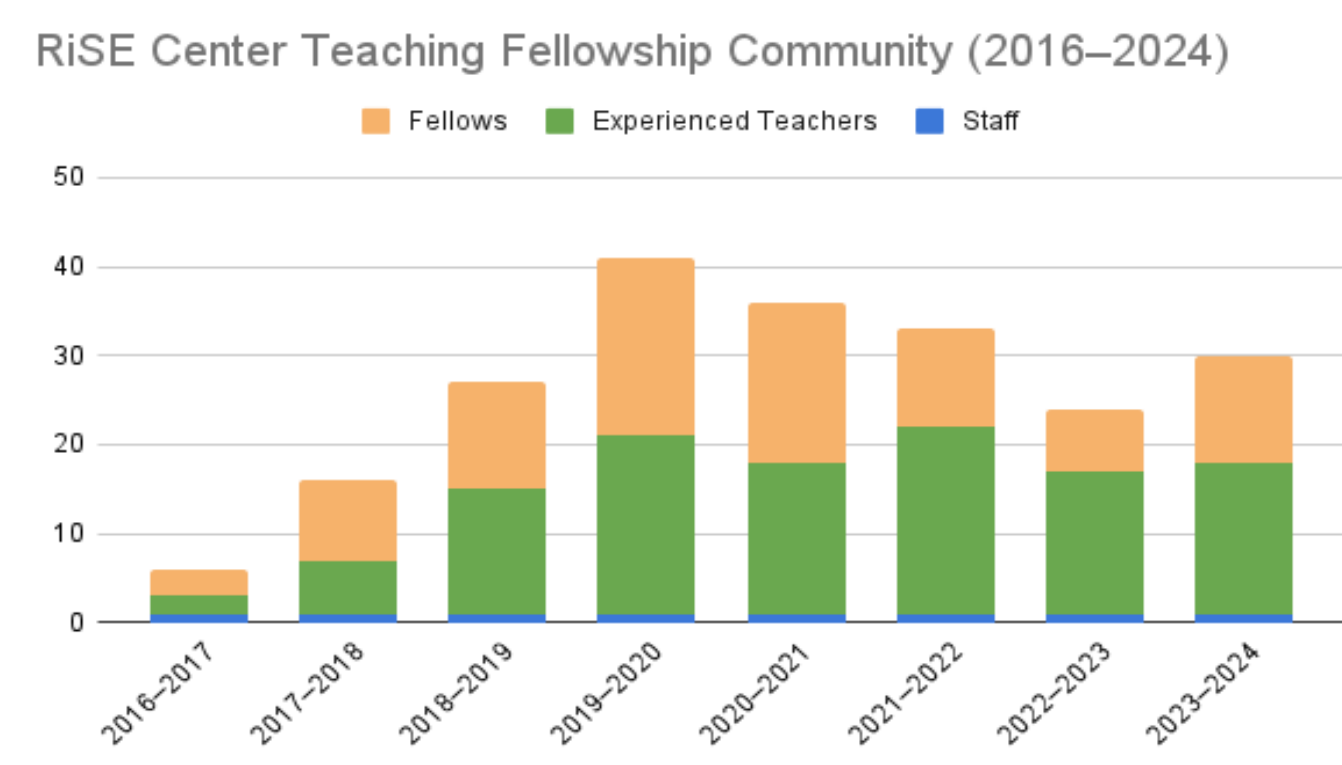


Figure 1. The number of Fellows, experienced teachers, and staff participating each year since 2016, reflecting growth in Fellows and experienced teachers over the first four years of the program, a slight decline in numbers as Fellows completed their commitment, and the addition of five new Fellows in 2023. Most Fellows remained in the community as experienced teachers when they completed their Fellowship requirements. *Note:* Associate Members who joined professional learning activities in Spring 2023 are not shown.

- Began offering professional learning in Spring 2023 to Associate Members, open to all STEM-discipline teachers in Maine with an interest in implementing research-based strategies to improve teaching and student learning.
- Following the end of NSF funding support, the program has continued to add five Fellows in 2023 and two Fellows in 2024 through RiSE fundraising efforts

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Engaging in Efforts to Support Rural Teachers

- Addressing economic challenges by providing affordable resource kits for over 100 teachers, 4,700 students, and 28 different school districts through the RiSE Materials Warehouse
- Keeping University of Maine education graduates teaching in Maine via the RiSE Teaching Fellowship Program
- Continuing to encourage economic stability and community resilience in rural communities via strong school systems
- Providing summer and in-school support for K-8 mathematics teaching and learning post-pandemic



Impacts and Additional RiSE Initiatives

- The Master of Science in Teaching (MST) program has over 100 graduates since its induction
- Our work improves teacher retention and student achievement which in turn supports the vitality and success of rural communities
- The RiSE Center aims to create pathways of conversation to ensure that rural communities have access to resources, professionals, and experiences that bolster K-12 education

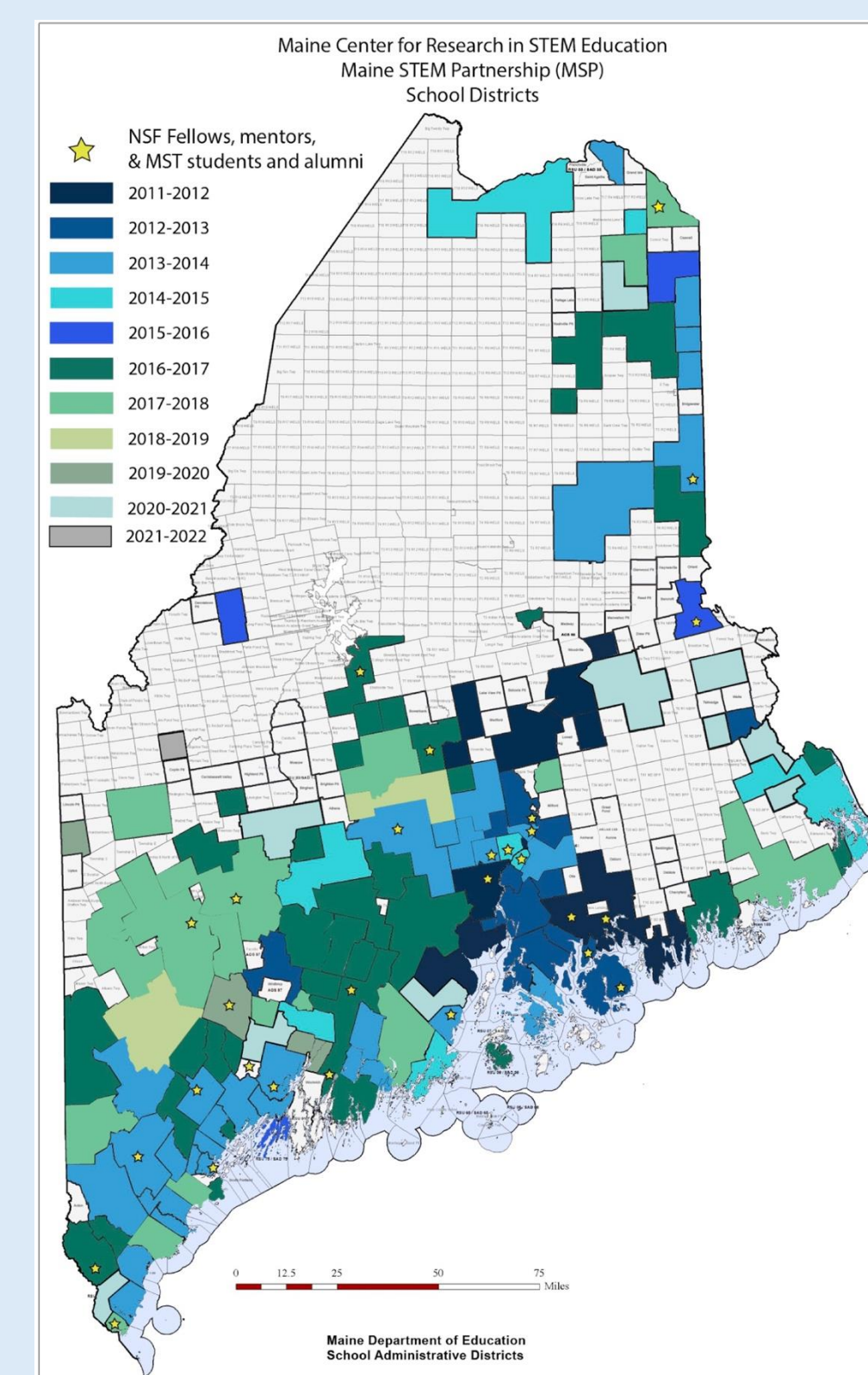


Figure 2. Map of school districts partnering with RiSE through the Maine STEM Partnership. Although new schools were added, no additional districts were added as Maine STEM Partners in FY2023.

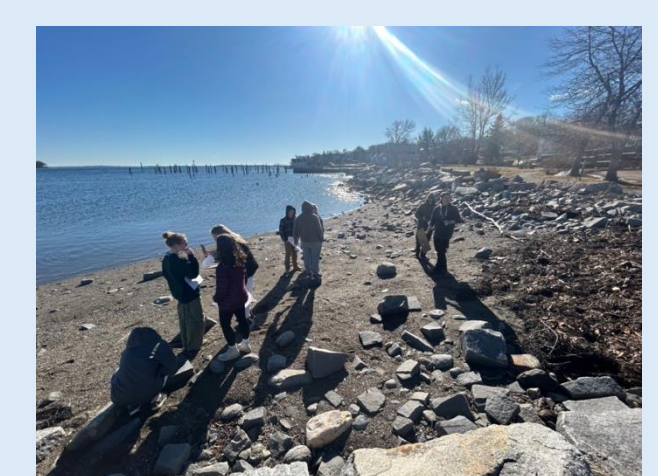
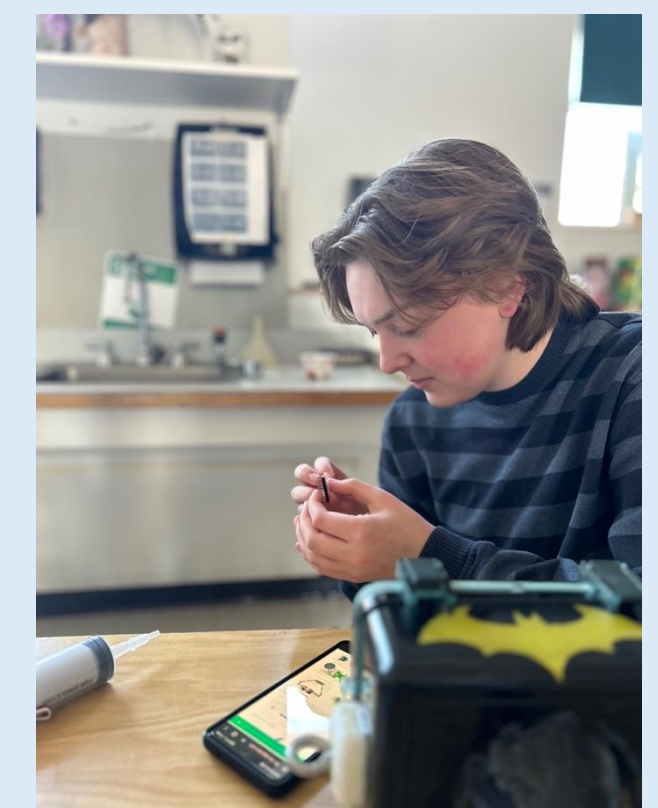


Coastal Tracers

- Over 20 teachers in coastal Maine areas working to increase students' data literacy in a place-based, community-relevant context
- Students demonstrated to researchers and teachers their ability to problem solve in hands-on situations like data collection, engineering, and communicating research to their communities
- Rural communities will come together to talk about research and careers with students at the annual symposium this March

Student Reflections:

"I've always loved science, but like my project, it just made me like, really get into science. Like, **I think this is the most engaged I've ever been in science in a long time**, and you know my freshman year was really hard, because I had a science class that I absolutely hated [...] like you and all the people I met through [this project], it just made me realize that there are people out there who think science is just as cool as I am, and who are not just gonna drone on and make me look at a textbook. Like I can get my hands in this field. I can get my hands dirty, I can do work. I do not have to just sit and write papers. **And that's what made me, you know, rethink: like I love science, and I know that I'm going to do it for college, like I just absolutely have to.**"
 – High school student; Coastal Tracers classroom



Acknowledgments

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- #1842359, Integrating Computation into Science Teaching and Learning in Grades 6-8 (2018-2023)
- #2148520, A Model Program to Engage Students in Authentic, Technology-Infused Coastal Research and Monitoring: Building Student Data Literacy and Career Competency through Partnership (2022-2026)

