NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 23-078

Dear Colleague Letter: Supporting Knowledge Mobilization for PreK-12 and Informal STEM Learning and Teaching

March 31, 2023

Dear Colleagues:

The National Science Foundation (NSF) supports collaborations and partnerships among education researchers and practitioners to advance science, technology, engineering and mathematics (STEM) education for all Americans. Such collaborations address pressing needs in the Nation's diverse preK-12 schools, including students, teachers, and families, as well as informal learning institutions where professional educators, youth, and their families are engaged (e.g., science museums, media, and community organizations). Recent findings and recommendations by National Academies of Science, Engineering, and Medicine have highlighted the benefits of mobilizing relevant knowledge between the education research and practice communities.

This Dear Colleague Letter (DCL) encourages submissions to programs within the Directorate for STEM Education's (EDU) Division of Research on Learning in Informal and Formal Settings (DRL) for new proposals (research and other proposal types described in Chapter II.F of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) such as planning, conference, etc.) addressing grand challenges of knowledge mobilization within and across domains, levels of analyses, and across research and education contexts. This DCL also calls for supplemental funding requests from current awardees to engage practitioners and education leaders as partners in the development and deployment of innovative strategies and approaches for disseminating and applying education research findings, including in under-resourced urban and rural learning spaces and communities. NSF seeks to amplify the impact and usability of STEM education research for all while advancing the integrity of the science that supports it.

BACKGROUND

STEM education researchers from a variety of disciplines have amassed an impressive amount of knowledge related to human development, teaching, and learning. There is

immense potential to mobilize research results addressing the needs and interests of educational practitioners and other stakeholders. Mobilization has at least three potential benefits. First, intentional efforts to synthesize and mobilize relevant STEM education knowledge reciprocally between research and practice has potential to benefit educators by ensuring that research knowledge is genuinely designed for, and integrated into, educational practice. Second, the integration of practice knowledge has potential to inform the questions and agendas pursued by STEM educational research. Third, conducting research in authentic teaching and learning contexts promises to enrich models and theory-building. Mobilizing knowledge and findings of STEM education research in a way that is usable and impactful in both research and education contexts is vital to the Nation's prosperity, health, security, and competitiveness.

This opportunity is open only to proposals in the following programs:

1. Advancing Informal STEM Learning (AISL)
2. Discovery Research PreK-12 (DRK-12)
3. EDU Core Research (ECR) (projects situated in informal and preK-12 settings)
4. Innovative Technology Experiences for Students and Teachers (ITEST)

PREPARATION AND SUBMISSION INSTRUCTIONS

Full proposals to standing programs should be submitted to the relevant program each year by the program's annual submission due date. Please read the solicitation for the prospective program carefully. Proposers are strongly encouraged to contact a program and cognizant program officer listed at end of this DCL to discuss the fit of ideas to funding opportunities.

Supplemental funding requests should follow the technical guidance provided below and must be submitted via Research.gov. If submitting a supplemental funding request, the original award must be in one of the above four programs. Supplemental funding requests should not exceed 20% of the original award size or $200,000, whichever is smaller. Funded supplements will provide support for periods of up to two years. Supplemental funding requests should be submitted to the original program associated with the active research award. If the original award expires within a year after the start date of the proposed supplemental activity, the principal investigator should provide this information at the time of submission to DRLknowledge@nsf.gov and the cognizant program officer for the original award.

Each supplemental funding request must follow the guidance specified in Chapter VI.E.5 of the PAPPG and must address the following areas in no more than five pages:

- Summary of the active award, including original research vision, goals, activities, and accomplishments, spanning Intellectual Merit and Broader Impacts;

- Compelling summary of the proposed work;
- Justification for the proposed supplemental work;
- Work plan describing the supplemental activities, along with the related goals, milestones, and predicted outcomes;
- A plan to assess the processes and outcomes of the proposed supplemental activities.

Supplemental funding requests should be submitted by Thursday, June 8, 2023. After the submission of the supplemental funding request, PIs should alert the cognizant program officers by sending an email to DRLknowledge@nsf.gov with the proposal number assigned to the submission of the supplemental request. Supplemental funding requests submitted in response to this DCL will be subject to internal NSF review only, unless they require external review as mandated by the PAPPG.

Questions about this DCL should be directed to DRLknowledge@nsf.gov.

Sincerely,

James L. Moore III
Assistant Director
Directorate for STEM Education

POINTS OF CONTACT IN PARTICIPATING PROGRAMS

AISL, Lynn Tran, ltran@nsf.gov (703) 292-2141
DRK12, Joan Walker, jowalker@nsf.gov (703) 292-4814
ECR, David Daniel, ddaniel@nsf.gov (703) 292-8037
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