Community for Advancing Discovery Research in Education

THINGS TO LOOK FOR IN THE NEW DRK-12 SOLICITATION

With the new DRK-12 solicitation available, those who have submitted proposals to this program before may be curious what exactly has changed. Below we have put together a quick comparison of funding levels and due dates between this and the last solicitation (out in 2015). We have also included some new and/or revised text within the solicitation that you might find helpful.

2015 (OLD SOLICITATION)	2017 (CURRENT)
35 to 45 awards	**20-31 awards**
10-15 Level I	8-13 Level I
15-20 Level II	5-8 Level II
5-10 Level lll	1-4 Level III
5 Conference/Synthesis	5 Conference/Synthesis
	1 Resource Center
$100 million available	$57 million
1st Monday of December (Dec. 5)	2nd Wednesday of November (Nov. 14)

Introduction
The program encourages proposals from a range of institution types and categories including minority-serving institutions (e.g., HBCUs, Tribal Colleges, Hispanic Serving Institutions, Alaska Native-Serving Institutions, and Native Hawaiian-Serving Institutions), primarily undergraduate institutions and other organizations focused on preK-12 STEM Education. The DRK-12 Program especially welcomes proposals that are consistent with the goal of developing STEM talent and workforce from all sectors and groups in our society. Collaborations are encouraged between DRK-12 proposals and existing NSF INCLUDES projects, provided the collaboration strengthens both projects.

Program Description
DRK-12's contributions to the knowledge base in education differ from the EHR Core Research program (ECR). The focus of DRK-12 research is on the translation of foundational and early stage research into research and designs of STEM education innovations or approaches, studies of their efficacy or effectiveness, and implementation research that allows for understanding of adaptation and use. DRK-12 differs from the ECR in its focus on the research and development of products and processes that have ultimate use in PreK-12 schools and pre- and in-service teacher preparation and professional development settings.

Clarification of Assessment Strand
Quality proposals in the assessment strand should carefully specify the STEM constructs being assessed, the people being assessed (students, teachers, individuals or groups.), and which stakeholders the assessment results can validly inform (e.g., districts, parents, policy makers, schools, students, or teachers). Proposals should address the potential benefits and weaknesses of the chosen strategy or strategies, including a careful articulation in the context of the system of learning, instruction and assessment under study.

When multiple strategies are suggested, demonstration of their additional value should be provided. Proposals to this strand should explicitly recognize and address the role the proposed research and development effort

plays in furthering an aligned system of assessment, learning and teaching. Proposals in the Assessment strand may focus on one grade level or across levels. STEM content and practice foci may be within a discipline or across disciplines. Assessment research and development efforts in the attitudinal and affective domains should align with a chosen disciplinary domain.

The DRK-12 program encourages proposals that address STEM assessment questions facing the field including, but not limited to, the following:

    a) How does assessment information move across levels of the educational system and with what degree of validity?

    b) How are assessment frameworks related to theories of learning, and in what ways do the resulting assessment innovations or approaches inform and advance the field conceptually?

    c) How do users of STEM assessments (e.g., students, teachers, administrators, districts, parents) interact with, perceive, respond to, and make sense of assessment information?

    d) How are disciplinary learning progressions and trajectories informing and being informed by and through assessment?

    e) What are effective ways to build capacity in the field for the design, development, implementation, interpretation, and use of assessment in STEM learning settings?

    f) What roles and opportunities do emergent technologies have related to assessment?

Clarification of Learning Strand

The DRK-12 program encourages proposals that address important questions facing the learning of STEM including, but not limited to, the following:

    a) How does the innovation or approach challenge and improve upon current practices and standards?

    b) How does the innovation or approach focus on emerging STEM concepts and practices that reimagine or transform existing school curricula?

    c) How is the innovation or approach likely to be transformative for STEM teaching and learning?

    d) How does the innovation or approach increase broader participation in STEM by targeting underserved or disadvantaged groups of learners, such as English language learners, underrepresented minorities, or students with disabilities?

Clarification of Teaching Strand

The DRK-12 program encourages proposals that address important questions facing STEM teaching including, but not limited to, the following:

    a) How does the innovation or approach improve instructional practices and increase students' learning and outcomes?

    b) How does the innovation or approach recruit, certify, induct, and prepare STEM teachers better than existing practice?

    c) How do pre- or in-service teachers develop STEM content knowledge and pedagogical content knowledge in ways that improve their instructional practice?

    d) How can teaching expertise and teacher leadership be developed within schools, districts, and across the broader national teacher community?

    e) How can we assist teachers in making data-driven instructional decisions to meet the needs of all learners?

    f) How can teachers' capacity and willingness to customize instructional approaches be developed to meet standards and the needs of diverse student populations?

    g) What are effective methods for developing, applying, and testing effective models of professional development that improve STEM teaching and learning?

Clarification of Syntheses and Conference Proposals
Applicants are strongly encouraged to contact a program officer before submitting one of these proposals.
        Syntheses: up to $300,000 over 2 years
        Conference: up to $100,000 for 1 year

Resource Center
The DRK-12 program intends to fund one Resource Center to provide technical support for all DRK-12 projects, to organize meetings and topical webinars, to facilitate national dissemination of project outcomes, and to further develop the expertise in the preK-12 STEM education research and development community to enhance the learning and teaching of preK-12 STEM. The Resource Center should engage the multiple communities that both carry out the STEM education research funded in the DRK-12 program and that benefit from products and outcomes of DRK-12 projects.

The primary goal of the Resource Center is to advance research and development activities that have the potential to improve the rigor and quality of research in STEM education. These activities include but are not limited to promoting innovations in STEM teaching and learning, knowledge building and dissemination, and networking within the STEM education research community.

Supplementary Documents
The requirements have not changed in this section, but the wording has been updated to better reflect what is found in the PAPPG. Also, applicants should include current, accurate information for all personnel and institutions involved in the project. NSF staff will use this information in the merit review process to manage reviewer selection. The list should include all PIs, co-PIs, senior personnel, paid/unpaid consultants or collaborators, subawardees, postdoctoral researchers (if known), project evaluators and project-level advisory committee members. This list should be numbered and include (in this order) Full name, Organization(s), and Role in the project, with each item separated by a semi-colon. Each person listed should start a new numbered line.

Collaborators and Other Affiliations
NSF is now requesting that the list of collaborators, which was once the last section of applicants biosketches, be removed from biosketches and added to an Excel template (one file per senior staff person), available here: https://nsf.gov/bfa/dias/policy/coa.jsp