

FY2026 Funding Opportunities

Division of Research on Learning in Formal & Informal Settings National Science Foundation

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Webinar overview

- 1. Welcome
- 2. FY2026 DRL funding opportunities
- 3. Introducing the NSF STEM K-12 funding program
- 4. Frequently asked questions
- 5. Open Q&A session



FY2026 DRL funding programs

FY2026 DRL funding programs:

- Research on Innovative Technologies for Enhanced Learning (RITEL)
- Innovative Technology Experiences for Students and Teachers (ITEST)
- NSF STEM K-12 (STEM K-12) New!
 - Investigators who typically submit to AISL, DRK-12, CS4All, and Translation and Diffusion are encouraged to consider NSF STEM K-12.



FY2026 DRL funding programs

The following DRL solicitations have been archived:

- Advancing Informal STEM Learning (AISL)
- Computer Science for All (CSforAll)
- Discovery Research PreK-12 (DRK-12)
- Translation and Diffusion (TD)



For PIs who typically submit to ECR

- Several divisions contribute to the ECR program including DUE (undergraduate education), DGE (graduate education) and DRL (PreK-12 formal and informal education)
- The portion of ECR that funds fundamental research relevant to STEM PreK-12 education (DRL) has been moved and included in the new STEM K-12 Program
- If your project is focused on improving PreK-12 STEM education, you will apply to the STEM K-12 program





NSF STEM K-12 synopsis

The NSF STEM K-12 funding program (NSF 25-545)

- Supports fundamental, applied, and translational research that advances STEM teaching and learning and improves understanding of education across the human lifespan and a range of formal and informal settings.
- Encourages innovative, multidisciplinary, and potentially transformative projects that build theory, generate new knowledge, and inform education practices in a rapidly evolving technological landscape with advances in emerging technologies including artificial intelligence (AI).



Program goals

- Promote innovative and exploratory projects that contribute to theory, generate new knowledge, and inform STEM education practices.
- Identify and address issues involved in translating research into educational practice as well as projects that leverage insights from educational practice to drive fundamental research.
- Promote the development of collaborative and multidisciplinary research in STEM education across adjacent fields.
- Promote innovation and advancement related to emerging technologies (e.g., AI, machine learning) and their potential to improve STEM teaching and learning for all learners.



Areas of focus

- Learning or instruction in any field(s) of science, technology, engineering, or mathematics (STEM)
- Formal education (preK-12) and/or informal learning environments
- Learners of all ages from early childhood through adulthood
- Artificial intelligence and other emerging technologies that may be leveraged to study and enhance STEM teaching and learning



STEM K-12 encourages

- Multidisciplinary collaborations that bring together expertise and approaches from various disciplines and fields
- Partnerships that integrate perspectives from research, practice, and industry
- Perspectives of and input from learners and other critical stakeholders to benefit from the work
- Quantitative, qualitative, and mixed method approaches



STEM K-12 encourages

- Research and/or development efforts that might have formerly been supported by the AISL, CS4All, DRK12, ECR, and Translation & Diffusion programs
 - Despite the program title, proposals that focus on learning outside of K-12 contexts are welcome, as are proposals that study learning at all stages of the lifespan
 - Investigators who typically submit to ECR for research in K-12 and informal settings are encouraged to apply to STEM K-12
 - Check the <u>STEM K-12 web page</u> for info on additional webinars and resources on how STEM K-12 might apply to the archived programs' interests



Possible projects

- Foundational studies that advance theory or build new conceptual frameworks related to STEM learning and teaching
- Design-based research that iteratively develops and refines learning environments, instructional models, systems, or approaches
- Projects aimed at cultivating the skills, dispositions, and knowledge needed to succeed in computer science, AI pathways, and technology careers, and more generally build capacity in the STEM workforce
- Development and study of innovations for teaching and learning (e.g., curricula, assessments, professional learning resources, technologies, media, etc.) for any STEM field



Possible projects

- Investigations of teaching and learning processes, including cognitive, motivational, or social aspects of learning;
- Development and use of advanced research methods and analytical frameworks and tools, such as data science methods and machine learning, to study learning at scale or in complex learning environments;
- The adaptation, extension, development and testing of translational models reciprocally spanning the breadth of fundamental research through application in context <u>specifically serving the field of education</u>; and
- The study of deeper learning and more effective teaching to create opportunities for learners.



Award amounts and durations

Suggested ranges:

- Research and/or development proposals: \$350,000 to \$750,000 with a duration of 2 to 3 years
- Conference proposals: \$25,000 to \$99,000 with a duration of up to 2 years
 - Conference proposals, investigators must contact a cognizant STEM K-12 Program Director prior to submission and follow the guidance for Conference proposals contained in the PAPPG Chapter II.F.8.
- CAREER awards: \$500,000 to \$750,000 with a duration of 5 years
 - CAREER proposals must be submitted to the NSF-wide <u>CAREER</u> solicitation (NSF 22-586) for the annual deadline.

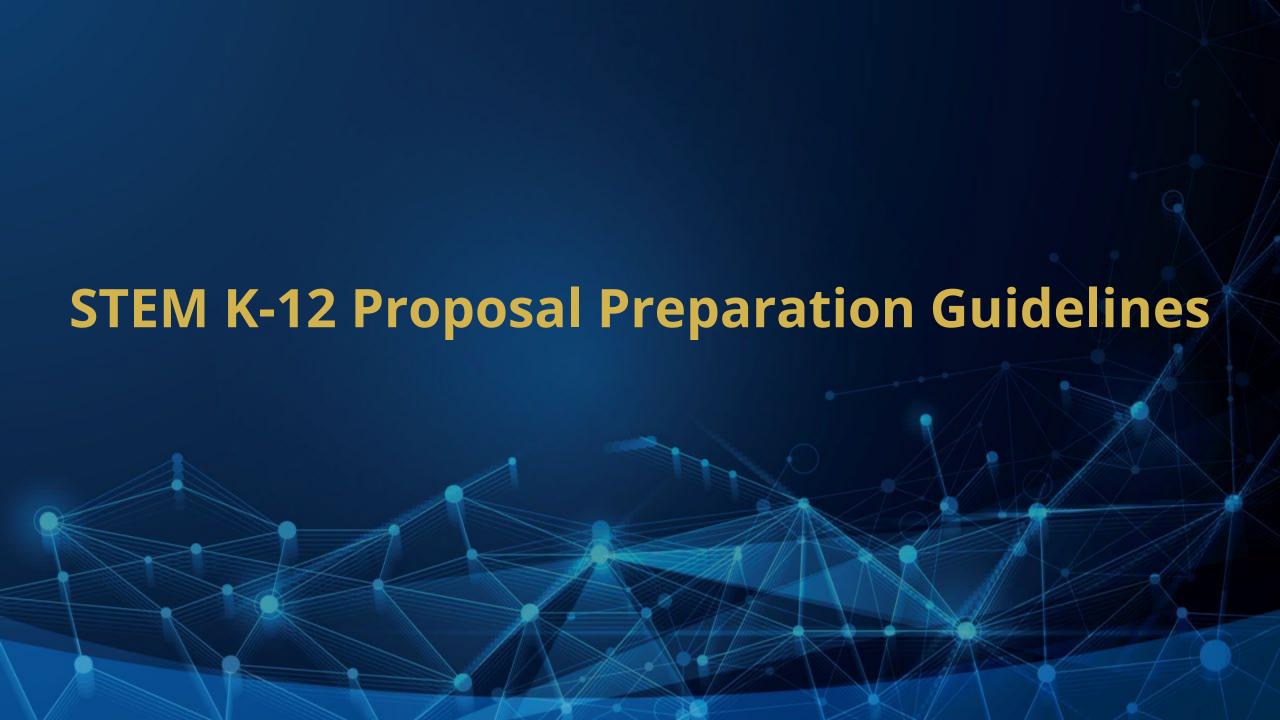
Proposals that contain budgets significantly beyond these ranges may be returned without review.



Deadlines

There are no deadlines—more on this later.





Eligibility information

Who may apply:

- Institutions of higher education: Two- and four-year colleges and universities
- Nonprofit, non-academic organizations: Museums, libraries, research labs, professional societies, and other education or research organizations
- For-profit organizations: U.S.-based commercial organizations, including small businesses
- State and local governments: School districts, parks, and other public institutions
- Tribal nations: American Indian or Alaska Native tribe, band, nation, pueblo, village, or community



Proposal preparation basics

- Read the NSF STEM K-12 solicitation (NSF 25-545) closely
- Proposals should follow the <u>Proposal Preparation Instructions</u> section of the NSF Proposal & Award Policies & Procedures Guide (PAPPG) (<u>NSF 24-1</u>)
- Submit through Research.gov or Grants.gov
- If your organization has never applied for a federal grant before, request a Unique Entity ID (UEI) at SAM.gov; UEIs can take several months to receive



STEM K-12-specific instructions

- The Project Summary should include 5 keywords that describe the project
- A list of All Project Personnel should be included as a Supplemental Document

See the NSF STEM K-12 solicitation for more information. Proposals that do not include these elements may be returned without review.



STEM K-12 proposal components

Proposals submitted to the program should, as appropriate:

- Be grounded in relevant theories and frameworks that inform the project's research focus and design
- Exhibit coherence across research questions, design, analysis, and interpretation
- Employ **rigorous methodologies** that align strategies for data collection and analysis to the study's context, aims, and guiding research questions
- Describe how the chosen research method(s) will yield trustworthy findings and recommendations that may advance future research and/or contribute to practices in STEM learning and teaching
- Consider a translational process that includes plans for uptake and targeted dissemination to specific communities who could directly continue the translation of the findings toward educational practice while motivating further scientific progress.



What is the no-deadline approach?

- Proposals are accepted year-round instead of on fixed due dates.
- Review, decision-making, and funding are conducted on a rolling or periodic basis.

How will proposals be reviewed?

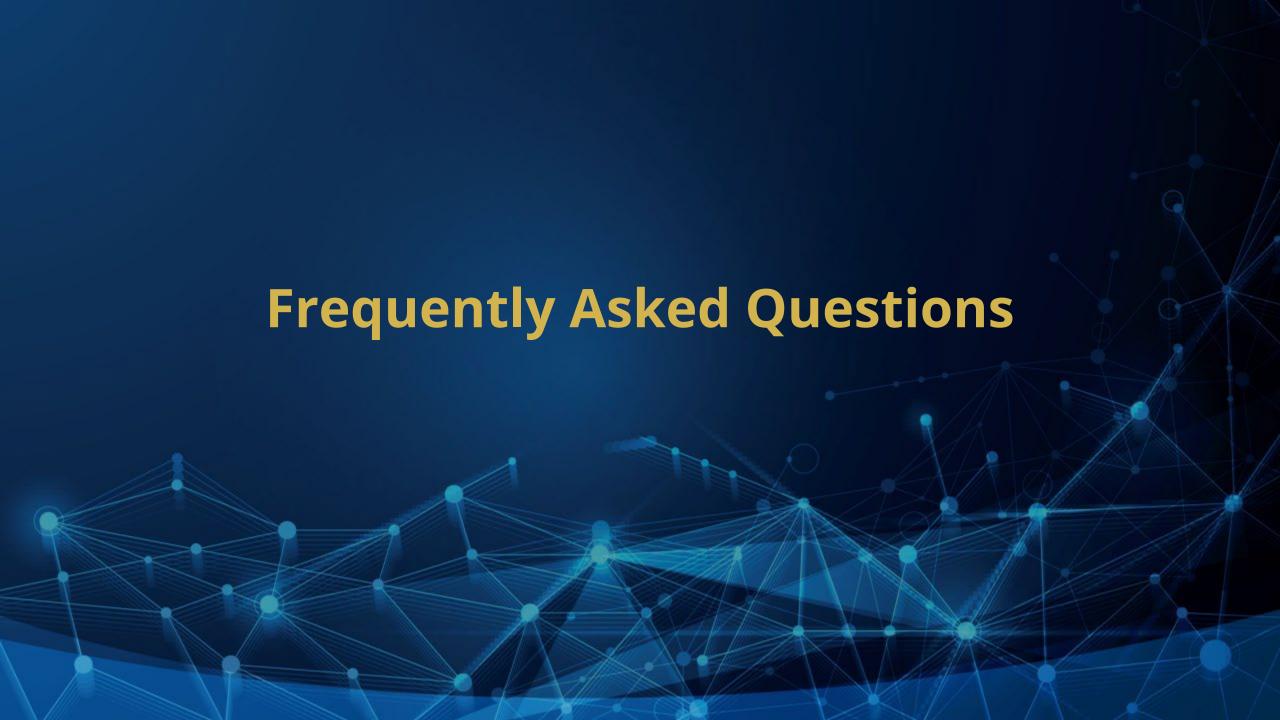
Proposals will be reviewed using NSF's merit review process.



Proposal resubmission

- Proposals submitted to this program description and declined may not be resubmitted for six months from the declination date
- Proposals must be substantially revised to be reconsidered for funding; investigators are encouraged to carefully consider reviewers' feedback when revising
- Proposals that are not substantially revised will be returned without review, as outlined in the NSF Proposal & Award Policies and Procedures Guide (PAPPG), Chapter IV.E





How will I know if my proposal idea is a good fit for STEM K-12?

- For updates on the NSF STEM K-12 program, visit
 https://www.nsf.gov/funding/opportunities/stem-k-12-nsf-stem-k-12
- For general questions about STEM K-12, email <u>STEMK12@nsf.gov</u>
- Submit a 1-page concept paper to <u>STEMK12@nsf.gov</u> to set up time to discuss with a DRL program officer
- The concept paper should include a Project Overview as well as sections on Intellectual Merit and Broader Impacts



Frequently Asked Questions

- 1. Do all STEM K-12 projects have to focus on emerging technologies and AI?
- 2. Can PIs who study learning in informal settings apply to STEM K-12?
- 3. How can I find my research interests in this new program?
- 4. Even if there are no deadlines, should I submit my proposal at a certain time of year?
- 5. What will the total budget be for the STEM K-12 program?
- 6. How does STEM K-12 differ from RITEL and ITEST? How do I choose between the three programs?



Research on Innovative Technologies for Enhanced Learning (RITEL)

- Research must synergistically advance both the learning sciences and computer sciences
 - For **learning sciences**: Research should generate basic knowledge about learning/teaching (principles, processes and mechanisms)
 - This research must lead to **generalizable** knowledge about learning that is beyond a specific system, application or intervention.
 - For **computer science**: Research could include advancements in algorithmic techniques, data structures, computational methods; in fields such as artificial intelligence (machine learning, human language technology, computer vision) or human-computer interaction (user interface/interaction design, multimodal sensing/communication)
 - Please note that projects that simply use existing technologies (e.g., LLMs) without contributing to advances in computer science are **not** responsive to this program
- Projects must be exploratory, future-oriented, ideally take risks
 - See the RITEL solicitation for more details: NSF 23-624

Innovative Technology Experiences for Students and Teachers (ITEST)

- ITEST is an <u>applied research and development program</u> designed to advance the integration of technology in the learning and teaching of STEM from pre-kindergarten through high school within and across formal and informal settings.
- ITEST is responsive to societal needs and emerging areas of STEM and related careers. Emerging critical areas include, but not limited to, <u>artificial intelligence</u>, <u>quantum computing</u>, <u>blockchain</u>, <u>cybersecurity</u>, <u>data science</u>, <u>semiconductors and microelectronics</u>, etc.
- ITEST welcomes proposals with well-designed strategies to integrate these emerging areas into effective learning and pedagogical innovations.
- ITEST supports three types of research projects: exploratory studies, projects focused on developing and testing innovations, and projects focused on strategic expansion of innovations. To extend the reach of ITEST research investments, ITEST also supports synthesis studies and conferences or workshops.
- Status: Waiting for new publication

How does STEM K-12 differ from RITEL and ITEST?

Dimension	STEM K-12 (25-545)	ITEST (22-585) awaiting new solicitation	RITEL (23-624)
Primary aim	Broad STEM learning research (fundamental → translational) in pre- K–12 & informal; tech (incl. AI) welcome, not required	Applied R&D that uses technology to prepare pre-K–12 students for a highly skilled future STEM workforce	Early-stage research on emerging tech for teaching/learning; must advance research in both learning/teaching and computer science
Required emphases	Rigorous, theory-grounded designs; Al/emerging tech encouraged	TBD	Dual-advance requirement (learning/teaching + tech); authentic contexts; cross-disciplinary
Project types & sizes	Research/Development: typical \$350k–\$750k, 2–3 yrs; Conferences: \$25k–\$99k (up to 2 yrs); over-range may be returned w/o review	TBD	Up to \$900k/3 yrs
Due dates	Anytime	Annual, TBD	Nov 4, 2025
Typical fit	Generalizable K-12 learning research; former DRK-12/AISL/CSforAll/TD-style ideas		Novel tech (e.g., AI algorithmic development, robotics, HCI), feasibility/proof-of-concept with research contributions to both sides



