Presidential Awards for Excellence in Mathematics and Science Teaching



2023–2024 Application Packet

K–6th Grade Teachers

Competition Opens: August 1, 2023 Nomination Deadline: January 8, 2024 Application Deadline: February 6, 2024



NATIONAL SCIENCE FOUNDATION DIRECTORATE FOR STEM EDUCATION

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PROGRAM OVERVIEW

Each year through the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST), the President of the United States recognizes outstanding educators from across the country¹ who teach science, technology, engineering, or mathematics (STEM) at either an elementary or secondary grade level.

Recipients of the Presidential Award represent the best of STEM education—demonstrating deep content knowledge of the subjects they teach and the ability to motivate and enable student success. In addition to teaching, awardees may serve as mentors to students and other teachers, advocate for improved access to education, contribute to the development of instructional and assessment resources, participate as writers and reviewers of state and local curricula, and compose books and publish articles, among other endeavors.

More than 5,200 PAEMST awardees have been recognized since the program was established by Congress in 1983. Many awardees continue teaching in their classrooms while others move on to positions in school administration, become involved in preparing future teachers at the university level, or work in teacher professional development. Collectively, they reflect the expertise and dedication of the Nation's STEM teaching corps, and they demonstrate the positive impact of excellent teachers on student achievement.

The PAEMST program is administered by the National Science Foundation (NSF) on behalf of the White House Office of Science and Technology Policy (OSTP).

Awardee Recognition

A total of 110 awards will be given each year (two awardees per state/jurisdiction and one from each of the U.S. Jurisdictions). Each Presidential Awardee receives a certificate signed by the President of the United States, a \$10,000 award from NSF, and an all-expenses paid trip to a recognition event, which includes an award ceremony. Activities at the event may also include professional development opportunities and discussions with policy makers on how to improve STEM education. Awardees join a national cohort of award-winning teachers, providing opportunities to impact teaching on a state and national scale.

Award Categories

Applications are accepted from specific grade levels each year, alternating between primary-level and secondary-level. **In 2023-2024, the PAEMST program will accept applications from Kindergarten through 6**th **grade science, technology, engineering, and mathematics teachers.** Prospective applicants may apply for one of two award categories: **science** or **mathematics**. Applicants that teach computer science, engineering, or technology classes should connect with their State/Jurisdiction coordinators to determine whether to apply as a mathematics or science applicant. Applicants should consider whether the concept selected better aligns to mathematics or science standards, as well as how the course they are teaching is categorized at the school/district/state level. A separate application will open in the fall of 2024 for 7th–12th grade teachers.

¹ Two awards may be given to teachers in each of the 50 states, the Department of Defense Education Activity (DoDEA) schools, the District of Columbia, and Puerto Rico. One award may be given to teachers in each of the U.S. jurisdictions of American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands.

Nomination Process

By completing the nomination form available on the <u>PAEMST website</u>, anyone—principals, teachers, parents, students, or members of the general public—may nominate exceptional individuals who teach in a STEM field. There is no limit on the number of teachers one may nominate.

Nominations must be submitted by January 8th, 2024 for a teacher to be eligible for the 2023-2024 application cycle. Teachers should be nominated as soon as possible to give them ample time to prepare an application.

To submit a nomination, provide the teacher's name, email address, and school name. All nominated teachers will receive an email inviting them to begin the application process. Teachers may also self-nominate by beginning the application process themselves at <u>www.paemst.nsf.gov</u>.

Program Timeline & Deadlines

All application materials must be completed and submitted in the <u>online application portal</u> by **February 6, 2024 at 11:59 PM Eastern Time**. After the application deadline, each state/jurisdiction will select three finalists from the science category and three finalists from the math category, for a total of six finalists per state/jurisdiction.

All applicants will be notified if they are finalists by **March 22, 2024.** Finalists will receive their feedback from state/jurisdiction PAEMST coordinators by March 22, 2024 and will have until March 31, 2024 to respond to the feedback in an <u>optional addendum</u> to their application prior to the start of the national review process. Non-finalists will receive their feedback by April 29, 2024.

National committees will convene in April/May 2024 to review finalists' applications and make their recommendations to NSF program leadership. Awardees will then be announced and recognized at a date to-be-determined by the White House.

January 8, 2024	Nomination Deadline	
February 6, 2024	Application Deadline (11:59 PM Eastern Time)	
March 22, 2024	State/Jurisdiction Results Announced	
March 31, 2024	Application Addendum Due for Finalists	
April/May 2024	National Review Period	
Date To-Be-Determined	Awardees Announced & Recognition Event	

Figure 2. Application Timeline

Eligibility Requirements

Any teacher who wants to apply must meet the following criteria:

- teach science, technology, engineering, or mathematics as part of their contracted teaching responsibilities at the K–6th grade level in a public (including charter) or private school;
- hold at least a bachelor's degree from an accredited institution;
- be a full-time employee of their school or school district as determined by state and district policies, with responsibilities for teaching students no less than 50% of the school's allotted instructional time;
- have at least five years of full-time employment as a K–12 teacher **prior to the 2023–2024 academic school year**, with science, technology, engineering, or mathematics teaching duties;
- teach in one of the 50 states, the Department of Defense Education Activity schools, or the U.S. Jurisdictions of the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands;
- be a U.S. citizen or permanent resident; and
- not have received the PAEMST award at the national level in any prior competition or category.

NSF is committed to expanding the opportunities in STEM to people of all racial, ethnic, geographic and socioeconomic backgrounds, sexual orientations, gender identities and to persons with disabilities. Teachers from underserved communities, who serve students from underserved communities, or who work in high need schools are strongly encouraged to apply. For this competition, high needs schools are defined as those that have 20% or more of the students served coming from low-income families.

Selection Criteria

After eligibility is confirmed and technical specifications are met, applications will be evaluated at the state and national level using the following *Five Dimensions of Outstanding Teaching*.

- Dimension One: Mastery of content appropriate for the grade level taught
- **Dimension Two**: Use of effective instructional methods and strategies that are appropriate for the students in the classroom and that support student learning
- **Dimension Three**: Effective use of student assessment to evaluate, monitor, and improve teaching and student learning
- **Dimension Four**: Reflective practice and lifelong learning to improve teaching and student learning
- Dimension Five: Opportunity, access, and leadership in education inside and outside of the classroom

The application is designed to allow the applicant to provide evidence of deep content knowledge and exemplary pedagogical skills that result in improved student learning. There is no single right way to teach and, therefore, this award is not limited to teachers with a specific teaching style, method, or philosophy. Rather, this award recognizes those teachers who develop and implement a high-quality instructional program that is informed by content knowledge, is appropriate for the students they teach, enhances student learning, and considers real-world applications.

The PAEMST program encourages applications provide evidence of <u>STEM convergence education</u>. STEM convergence education is driven by compelling, complex, real-world problems which engage learners in working across multiple disciplines to create innovative solutions. This approach to STEM teaching engages students at the convergence of STEM disciplines through activities that require initiative and creativity, such as: project-based learning, problem-based learning, and invention challenges, modeling, integrating mathematics and computational thinking into science, analyzing and interpreting data, and designing

solutions. Interdisciplinary STEM teaching is the pedagogical approach by which students learn the interconnectedness of the disciplines of science, technology, engineering, and mathematics.

Review Process

There is a two-tier review process for each application:

STATE/JURISDICTION REVIEW

Coordinators convene selection committees, which may include K-12 administrators, classroom teachers, STEM education researchers, and past awardees. These committees select a total of six finalists per state/jurisdiction (three from each award category) for recognition at the state and jurisdiction level.



NATIONAL REVIEW

NSF convenes national selection committees composed of prominent STEM educators and administrators from the K-12 and university level, as well as past PAEMST awardees and other experts in STEM education. The national committees review state/jurisdiction finalists' applications using the criteria and scoring information presented in this application packet. NSF then recommends two national nominees per state/jurisdiction to OSTP. All finalists recommended to the White House are subject to a Federal Bureau of Investigation background check.

Application Addendum

Prior to the beginning of the national review period, state/jurisdiction finalists will have the opportunity to respond to state/jurisdiction-level review feedback through an optional addendum to their original application. State/jurisdiction finalists can work with a mentor on this addendum, which is limited to five pages: three pages of narrative to respond to state/jurisdiction feedback on the Five Dimensions of Outstanding Teaching and two pages to provide additional supplemental materials.

The optional addendum must be uploaded to the PAEMST portal between **March 23–March 31, 2024**. Finalists will not be able to make any edits to the original application but will be able to add new narrative language for each Dimension.

Application Support & Mentoring

Many tools and resources are available to prospective applicants. The PAEMST team are available throughout the process to provide guidance and support.

Application Webinars

Virtual webinars are offered throughout the application cycle (August 2023–February 2024) to review all the application requirements, provide advice and guidance, and answer applicants' questions during Q&A sessions. Most webinars also include past winners as guest speakers who offer advice from their personal experience going through the PAEMST application process. A schedule of webinars is updated throughout the year and can be found online at https://paemst.nsf.gov/webinar.

Applicant Mentors

Applicants are highly encouraged to work with a mentor. Mentors are a valuable resource to guide and assist applicants throughout the process and provide feedback on their application. Most mentors are past winners and/or past reviewers with expertise in how to submit a strong PAEMST application. Mentors can be requested through the online application portal. Applicants may also identify their own mentor, such as a colleague. Applicants can grant mentors read-only access to their online application in the portal. For more information, applicants should contact their <u>State/Jurisdiction Coordinator</u> or email <u>info@paemst.org</u>.

State Jurisdiction Coordinators

Each state/jurisdiction has a coordinator (SC) who helps administer the PAEMST program at the state/local level. SCs can provide information about local resources and PAEMST events. They can also connect applicants with PAEMST alumni in their area who are available to serve as mentors. A full list of SCs can be found <u>here</u>. Have a question about the application? Looking for application resources? Want to connect with local support? Experiencing a technical issue?

Contact the PAEMST Help Desk!

info@paemst.org 833-673-3273

PAEMST Help Desk

The PAEMST Team is here to support applicants throughout the application process. Any questions, concerns, or technical

issues can be addressed to the PAEMST Help Desk team by emailing <u>info@paemst.org</u> or calling 833-673-3273. A response will be provided within 24 hours.

THE PAEMST APPLICATION

The PAEMST application consists of three sections: administrative components, narrative, and a classroom video. All application components will be completed online in the <u>PAEMST application portal</u>.

Getting Started

When an applicant first logs in to the PAEMST application portal, they will be prompted to complete the following informational components prior to starting their application. Once the applicant has completed all sections (or opted out of optional questions), and has met all eligibility requirements, they will be given access to the rest of the application.

How You Heard About PAEMST: This section collects information on how applicants learned about the PAEMST program. Responses help the PAEMST team improve outreach and recruitment and will not be included in the review process.

Demographic Information Form: Submission of the *optional* Demographic Information Form is voluntary and is not a precondition to receiving an award. Demographic information is not disclosed to review committee members and is only used internally for aggregate analysis and reporting.

Eligibility Form: All applicants must complete the *required* eligibility form prior to starting an application. Applicants are given a checklist of the <u>eligibility criteria</u> and must select "yes" or "no" to confirm they meet each of the criteria. Once an applicant has verified that they meet **all** eligibility criteria, they will be granted access to the PAEMST application.

Administrative Components

The administrative component includes a variety of required materials that will be used in evaluating the application, including a Teacher Information Form, Employment Verification Form, Letters of Recommendation, and a Resume.

Teacher Information Form

The Teacher Information Form summarizes the applicant's teaching background, experience, and school information. On this form, applicants must:

- Provide information about themselves and their school;
- Indicate the award category to which they are applying (mathematics or science);
- Describe their current teaching assignment, including:
 - Grade level(s) and courses taught;
 - A weekly teaching schedule (The schedule will be used to confirm compliance with eligibility criteria);
- Provide contact information for school leadership;
- Provide demographic information for the students in their videotaped class and school;
- Give a brief description of the topic and concept featured in the lesson provided in the narrative and video components of the application.

Employment Verification Form

The Employment Verification Form must be completed online by a school principal (or equivalent position at a private or charter school). Applicant provides the contact information for their principal or equivalent in the online application portal. The principal then receives an email asking them to complete the Employment Verification Form. By completing the form, the principal is confirming that the applicant is in good standing within the school or school district and meets the eligibility requirements for the award.

PLEASE NOTE: If NSF becomes aware that an applicant is no longer in good standing within the school or school district after an application has been submitted but before the time of award, NSF will consider this as grounds for disqualification from the PAEMST award.

Letters of Recommendation

Three letters of recommendation are required from persons who can describe how the applicant's work supports the *Five Dimensions of Outstanding Teaching*. Letters of recommendation can come from administrators, colleagues, parents, former students, or others. Letter writers receive information on the Five Dimensions with instructions that they should reflect on how the applicant's work supports them.

Letter #1 must come from the applicant's principal or instructional supervisor. The principal or instructional supervisor has the option to defer the letter to a different recommender as long as that individual has direct supervisory responsibility for the applicant.

Applicants provide contact information for the three recommenders, who will then receive an email with instructions on completing the recommendation. If needed, applicants and recommenders may reopen letters of recommendation to make edits any time before the application period ends.

All letters of recommendation are restricted to 5,400 characters (approximately 3 pages) and must be received in the PAEMST portal by the application deadline, or the applicants will not be able to submit their applications.

Resume

A resume is required. It must outline the applicant's education, employment history (showing at least five years of K–12 teaching experience **prior to the current school year**), and participation in professional development activities. The applicant may elect to include:

- Membership or leadership roles in professional organizations, informal STEM centers, groups, programs, and/or other similar efforts
- Curriculum written or professional development presented
- References to any articles they may have written for STEM newsletter or journals
- Grants they may have received
- Previous honorific awards received

There are no specific formatting requirements, but the **document may not exceed two pages and must have a legible font size (font size 11 or larger). Applications with a resume longer than two pages are subject to disqualification.**

Narrative Section

The narrative section consists of a written response that addresses the *Five Dimensions of Outstanding Teaching* and any optional supplemental materials, lesson plans and references that the applicant may wish to provide. <u>Details on the *Five Dimensions*</u> are provided later in this application.

Written Response

Applicants must provide a written response for each of the *Five Dimensions of Outstanding Teaching*, along with the subprompts in each of the dimensions. A key component of the written response is discussion of the video recorded lesson. The applicant must select a science, mathematics, engineering, or technology **concept** in the lesson that is both appropriate and important for students to understand at the grade level(s) taught and is related to more advanced concepts that will be learned later. **The applicant needs to explain why they selected the concept and clarify that it is a concept and not a skill.** The concept will be used in the narrative when responding to elements of Dimensions One, Two, Three, and Four related to the video recorded lesson. While the video can show only one lesson, the applicant's written response may cover any teaching strategies and assessments used by the applicant.

Technical Specifications for the Written Response:

- The written response cannot exceed 27,500 characters in total (including spaces).
- Responses can only include plain text. Any special characters or formatting will not display. If special content such as formulas, diagrams, or charts are needed, they should be included in the **supplemental materials** section and referenced in the applicant's written response.
- Applicants are encouraged to save their narrative outside of the portal to ensure work is not lost. Responses can then be pasted in to the portal.

Supplemental Materials

Supplemental materials provide supporting evidence for the narrative responses to the *Five Dimensions of Outstanding Teaching*. This section of the application is limited to five pages and may include materials such as samples of student work, assessment items, or pictures of students engaged in activities. It is highly recommended that all content within the Supplemental Materials be labeled and numbered (ex: SM1, SM2, etc.) and referenced in the Narrative section.

Technical Specifications for Supplemental Materials:

- Materials must be combined into a single file that does not exceed five 8.5x11 inch pages (uploaded as an Adobe PDF file or Microsoft Word document). Applications with supplemental materials exceeding five pages are subject to disqualification.
- Supplemental materials are intended to be visual in nature and cannot include narrative responses, additional letters of recommendation, or resume items.
- Testimonials that provide external evidence (Dimension 3c) to support the application can be used. However, if Testimonials are included, they must not exceed 4 lines of text.
- Links are not allowed and will not be clicked by reviewers.
- Text must be <u>font size 11 or larger.</u>

Lesson Plan

One of the key elements to the application is the lesson featured in the video and the narrative. Applicants are encouraged to share the lesson plan used during the class period featured in the application. Lesson plans may include a breakdown of the lesson, slides used, white board images, sample assessments, and other information related to the lesson. If the video did not provide a clear view of the board, consider including that information in this section. Where applicable, lesson plans can reference state/national standards and benchmarks applicable to the concept selected. A template for the lesson plan is included in the application portal. Submission of a lesson plan is an optional component for applicants but is strongly recommended.

Technical Specifications for Lesson Plan:

- Lesson plans must be submitted as one single file that does not exceed two 8.5x11 inch pages (uploaded as an Adobe PDF file or Microsoft Work document). Applications with lesson plans exceeding two pages are subject to disqualification.
- Images and text must be font size 11 or larger.
- The content included should clearly be part of the lesson plan and not an extension of the narrative.

References Cited

External sources cited within the written responses to the *Five Dimensions of Outstanding Teaching* should be captured in a References Cited document not exceeding one page. References may include books, articles, and/or multimedia that supports the application.

While there is no specific format required for the References Cited document, applicants should follow accepted scholarly practices in providing citations for source materials. In general, each reference should include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If a website address is readily available, that information should be included in the citation.

Technical Specifications for References Cited:

- References must be submitted as one single file that does not exceed one 8.5x11 inch page (uploaded as an Adobe PDF file or Microsoft Work document). Applications with references cited exceeding one page are subject to disqualification.
- Include references to any external sources to attribute work to the correct sources.
- The references cited should not be used to list out the applicant's publications unless they relate to the application.
- Text must be <u>font size 11 or larger.</u>

Classroom Video

Applicants are required to submit a classroom video, showing themselves teaching a mathematics, science, engineering, or technology concept to their students. The video is a central component of the application and will be used as a key piece of evidence by state and national selection committees when evaluating the applicant's performance on the *Five Dimensions of Outstanding Teaching*.

The classroom video is an opportunity for applicants to provide in-depth evidence of their knowledge and abilities. The video should be consistent with the applicant's chosen lesson plan and written narrative and should convey the following:

- **Dimension 1:** depth of content knowledge as demonstrated by the clarity, precision and appropriateness of the explanations provided.
- **Dimension 2:** ability to employ appropriate and effective instructional methods and strategies which may include the use of instructional technology, demonstrations, hands-on activities, and/or collaborative work; ability to engage all students, maintaining their interest in the lesson or activity.
- **Dimension 3:** use of assessment to evaluate, monitor, and improve student learning; improve teaching effectiveness, as demonstrated by the applicant's and the students' asking and answering questions; giving demonstrations; and/or participating in discussions and/or small group work.
- Dimension 4: reflection on practice to determine ways to improve student engagement and learning.

Video Requirements:

In order to be eligible for the award, the applicant's classroom video <u>must</u>:

- Correspond to the concept selected and discussed within the Narrative Written Response
- Be limited to a single class during the 2023-2024 school year
- <u>Not</u> exceed 30 minutes or one class period, whichever is shorter. The video may not span multiple class periods or multiple days
- Be continuous video footage <u>from the same class period</u>, with only one allowed break, and be recorded from a single camera or source
- Show that safety precautions were taken (if applicable to the lesson)
- Adhere to all district or school requirements and guidelines for parental release or student permission related to classroom video recording and sharing of student data
- Be of sufficient quality so that voices are clearly audible and the applicant's face, students' faces, and any relevant board work or seat work are visible (use of a microphone is strongly recommended)

Additional video guidance:

- The applicant uploads and submits the video as a single file to the online application portal. Videos that exceed 30 minutes in duration are automatically cut off to end at 30 minutes. The beginning and end of the video lesson may be trimmed to fit the time constraint.
- The one allowable break is intended to allow applicants to provide evidence of different instructional strategies within the video recorded lesson. For example, an applicant can include the start of the lesson when the concept is discussed and then use the one allowable break to skip to a later part of the lesson that highlights student interaction and concluding remarks. It could also be used if there is a lesson occurring in two separate locations (classroom and outdoors) and the break could occur as students move between locations.
- Whenever the video is referenced in the written responses, a specific time stamp (TS) in minutes and seconds should accompany the written reference for ease of observation (such as TS 13:40).
- The video lesson may **not** contain edits such as: picture collages, split screen view, and special effects.
- It is recommended that videos should be 3GB or smaller.
- It is **recommended** that videos be uploaded in a .mp4 or .mov file format.
- Applicants are highly encouraged to upload the video well in advance of the application deadline to avoid high traffic and slow upload speeds at that time. The application deadline is 11:59 pm (Eastern Time) on February 6, 2024. Applications cannot be submitted until video uploads have been processed and confirmed as complete within the application portal.
- Applicants should review the video in full to ensure video/audio quality and that it meets all of the requirements listed above.

Videos submitted as part of the application <u>will not be released to the public</u>. The video will only be used internally during the PAEMST selection process and will be seen by reviewers, contractors managing the program, and NSF staff.

THE FIVE DIMENSIONS

The *Five Dimensions of Outstanding Teaching* are designed to allow the applicant to provide <u>evidence</u> of deep content knowledge and exemplary pedagogical skills that result in improved teaching outcomes. Each dimension also includes three sub-prompts which must be answered in the narrative. Note that some sub-prompts must specifically address the applicant's video-recorded lesson, while other prompts speak to the applicant's experience beyond the chosen lesson.

Dimension 1

Mastery of content appropriate for the grade level taught

Subprompts:

- 1a [*Video Recorded Lesson*]: Identify a concept within the lesson you chose. Explain your understanding of the concept and why it is important for students to understand the concept. **Be sure you select a concept and not a skill, process or procedure to discuss.**
- 1b [*Video Recorded Lesson*]: Discuss the misconceptions or misunderstandings that students have about this concept and explain how you address them in your chosen lesson.
- 1c [*Beyond Chosen Lesson*]: Describe how this concept relates to future concepts that students will encounter in subsequent lessons, grades, or courses.

Suggested Total Length: 6,500 Characters

Additional Guidance:

The purpose of this dimension is to provide evidence of your understanding of a STEM concept. Focus on explaining your understanding of the concept and how it relates to other concepts in your subject area. If your lesson involves interdisciplinary STEM then you may also discuss: 1a. integrating practices such as modeling, integration of mathematics and technology, or engineering design; 1b. discussion of practices promoting understanding at the convergence of STEM subjects, and 1c. impact on understanding across STEM disciplines.

Dimension 2

Use of effective instructional approaches that are appropriate for the students in the classroom and that support student learning

Subpromts:

- 2a [*Video Recorded Lesson*]: Describe the instructional approaches you used in the lesson and why you chose them to help students understand the concept addressed in Dimension One. Explain how you identified and built on your students' prior knowledge.
- 2b [*Beyond Chosen Lesson*]: Describe indirect, interactive, or experiential instructional approaches you use to engage your students that were not captured and/or reflected in your chosen lesson and video. Select up to three instructional approaches and discuss in more detail the rationale for why you choose a particular approach for a lesson.
- 2c [Individualized Instruction for All Learners]: Discuss up to three additional instructional methods and strategies you use routinely to meet the different learning needs of your students. Wherever appropriate, describe what considerations and accommodations you provide to ensure each students' instructional needs are met.

Suggested Total Length: 6,000 Characters

Additional Guidance:

Discuss the instructional methods used in your teaching, including those demonstrated in your chosen lesson (2a), those not demonstrated in your lesson (2b), and additional strategies focused on diverse learners (2c). For 2b, provide teaching strategies that actively engage students in any of the three instructional methods classifications: indirect instruction methods such as inquiry, problem solving, reflective discussion, concept mapping, or case studies; interactive instruction methods such as co-operative learning, debates, laboratories, peer practice, or role playing; or experiential instruction methods such as field trips, model building, simulations, games, or engineering design. If your lesson involves interdisciplinary STEM, you may discuss instructional methods, such as project-based or place-based learning. If you are teaching students from underserved communities and/or at a high-needs school, you may discuss instructional methods and/or accommodations made to meet the needs of your students.

Dimension 3

Effective use of student assessments to evaluate, monitor, and improve student learning

Subprompts:

- 3a [*Video Recorded Lesson*]: Describe how you assessed student learning for the concept discussed in the chosen lesson. How did you use what you learned from the assessment to improve your teaching?
- 3b [Beyond Chosen Lesson]: Discuss your rationale for your overall cohesive assessment plan.
- 3c [*External Indicators*]: Provide evidence that substantiates your teaching effectiveness using external indicators of student learning and/or achievement. These indicators may be quantitative (state or national assessments) or qualitative (testimonials on your teaching or student outcomes), but not teacher evaluation data.

Suggested Total Length: 5,500 Characters

Additional Guidance:

For 3b, provide a cohesive assessment plan and not just a list of assessment strategies. Your discussion should include what assessment suits a specific purpose and how assessment informs your instruction. Your assessment plan discussion may consider the four assessment goals of: identifying students at risk, monitoring student progress, collecting information on strengths and weaknesses to allow targeting needs, and assessing meeting standards or grade-level expectations. For 3c, external indicators are to focus on student learning not on teacher evaluation. If your lesson involves interdisciplinary STEM, you may discuss assessment of interdisciplinary learning that occurs at the convergence of STEM subject areas. If you are teaching in a high-needs school, you may discuss assessments that provide quality feedback on the students.

Dimension 4

Reflective practice and life-long learning to improve teaching and student learning

Subprompts:

- 4a [*Video Recorded Lesson*]: Discuss the more successful and less successful aspects of the instructional activities shown in the video and describe what you might do differently to improve student learning.
- 4b [*Beyond Chosen Lesson*]: Describe how reflection on your teaching practices helps you improve your classroom instruction and therefore your students learning.
- 4c [*External to School*]: Describe how your participation in a professional development experience has improved your teaching and enhanced your students' learning.

Suggested Total Length: 5,000 Characters

Additional Guidance:

If your lesson involves interdisciplinary STEM, you may discuss reflections on interdisciplinary learning that occurs at the convergence of STEM subject areas. If you are teaching students from underserved communities and or are in a high-needs school, you may discuss reflections that impact the students in your class.

Dimension 5

Opportunity, access, and leadership in education inside and outside of the classroom

Subprompts:

- 5a [School Level and Beyond School]: Describe the actions you have taken to help your students or other learners harness their full potential to succeed inside and or outside of the classroom, ensuring that all students can fully participate in, and contribute to science, technology, engineering and mathematics. Elaborate on the quality, not the quantity, of your contributions. Discuss the impact this has had on you, your students, school, district, community, state/jurisdiction, and or nation.
- 5b [*School Level*]: Describe how you have supported other teachers, student teachers or interns through activities such as induction, mentoring, leading professional development activities, or co-teaching. Discuss the impact this mentoring has had on your teaching practice. Elaborate on the quality, not the quantity, of your contributions.
- 5c [*Beyond School*]: Describe how you contribute to educational excellence at the district, state/jurisdiction, and/or national level. Elaborate on the quality, not the quantity, of your contributions. Discuss the impact this has had on your teaching practice.

Suggested Total Length: 4,500 Characters

Additional Guidance:

Avoid responding to the leadership dimension with a list of activities or accomplishments. It is fine to provide an account of the number of accomplishments you have but select up to three on which you will expound on the impact they had on your professional practice. If your lesson involves interdisciplinary STEM, you may discuss community connections that support interdisciplinary STEM experiences for your students or mentoring you have provided on implementing interdisciplinary teaching within this dimension. If you are teaching students from underserved communities and or are in a high-needs school, you may discuss actions that have supported opportunity, access, and leadership for yourself, your students, and or others inside and outside of the classroom.

Scoring of the Application

Reviewers at the state/jurisdiction and national levels will use the applicant's resume, letters of recommendation, written response, supplemental materials, references cited, and video to score each of the *Five Dimensions of Outstanding Teaching*. The national selection committees will consider the addendum as well. Application components are not scored individually (i.e., the narrative and video do not receive separate scores), rather all components are holistically used to rate the five dimensions.

Each dimension will be rated using the four-point scale and multiplied by the weighting factors provided in Figures 1 & 2 (below). The sum of all the weighted Dimension scores is the total score. A committee of reviewers scores applications and makes award recommendations that are advisory to NSF.

Figure 1. Application Rating Scale

Score	Explanation	
Excellent (4)	The applicant demonstrated outstanding knowledge, skills, or performance in this dimension with no significant errors or limitations.	
Very Good (3)	The applicant demonstrated strong knowledge, skills, or performance in this dimension with no significant errors or limitations.	
Good (2)	The applicant demonstrated limited evidence of knowledge, skills, or performance in this dimension <u>or</u> there were significant errors or weaknesses.	
Fair (1)	The applicant demonstrated limited evidence of knowledge, skills, or performance in this dimension <u>and</u> there were significant errors or weaknesses.	

Figure 2. Score Weighting Factors

Dimension	Weighting Factor	Maximum Score
Dimension 1	x 7	4 x 7 = 28 points
Dimension 2	x 6	4 x 6 = 24 points
Dimension 3	x 5	4 x 5 = 20 points
Dimension 4	x 4	4 x 4 = 16 points
Dimension 5	x 3	4 x 3 = 12 points
Total	·	100 points

All applicants will receive a copy of their dimension scores and state/jurisdiction feedback on the application. State/jurisdiction scores and reviews will be released to all finalists by March 22, 2024 and non-finalists by April 29, 2024. National committee scores and reviews will be released when awardees are announced at a future date (to be determined). Non-winning applicants are highly encouraged to use their feedback to strengthen their application and apply for PAEMST again in future years.

Frequently Asked Questions

GENERAL QUESTIONS

1. How should I approach the application process? Is there a recommended timeline?

After you confirm your eligibility, read through the entire application packet. Then start by planning the lesson you will be addressing in your video and your narrative. Once you have decided on the concept and corresponding lesson, you should work on the video and narrative in parallel, making sure to reflect on the video throughout your narrative response. Submission of the video well in advance of the deadline is highly encouraged to ensure there are no delays that prevent a timely submission of the application. You should also request your letters of recommendation and employment verification requests through the application portal as soon as possible as those items tend to take longer to receive.

2. How can I learn more about the application process?

Please check the PAEMST website at <u>paemst.nsf.gov/webinar</u> for a schedule of application webinars. Invitations are also emailed to nominees and applicants when new webinars are scheduled.

3. I applied in a previous competition but did not receive the award. Can I resubmit any part of my application?

Applicants that did not receive the award are highly encouraged to reapply. Many of our past awardees applied more than once prior to receiving the award. Past applicants may access their prior application in the online application portal. Please note that videos cannot be reused from prior cycles. Applicants can reuse portions of the previously-submitted narrative if they are still applicable to the current prompts and the newly-recorded video lesson. Applicants are also able to use the same letter of recommendation writers and can even download and share their prior letters with them. We do advise repeat applicants to take into consideration feedback from state and national review panels in their resubmission.

4. If I have questions, is there a local contact I can reach?

Local State/Jurisdiction Coordinators (SCs) are available to answer questions about the PAEMST program and provide assistance and mentors to applicants. You can <u>find your SC</u> on the PAEMST website. If you have difficulty contacting them, please contact the PAEMST Team at <u>info@paemst.org</u>.

5. Is there a past awardee who might be able to help me with the application process?

Your SC(s) can help you find a mentor in your state/jurisdiction to assist you with the application process. Many mentors recommended by SCs are past awardees. Mentors may also be requested through the <u>application portal</u> by clicking on the mentor tab after you have logged in.

6. I have submitted my PAEMST application. When will state/jurisdiction finalists and Presidential Awardees be notified?

All applicants who complete an application will be informed of their state/jurisdiction status by **March 22**, **2024**. Up to three candidates from each state/jurisdiction in each award category are forwarded to NSF for national consideration, at which point they will undergo a national review process. The White House Office of Science and Technology Policy (OSTP) announces the awardees.

7. When will Presidential Awardees be announced and honored in Washington, D.C.?

The OSTP is responsible for setting the dates for recognition activities, which depend on administrative scheduling. Awardees will be notified at the earliest possible date.

8. When are applications due?

The application deadline is 11:59pm (Eastern Time) on February 8, 2024.

ELIGIBILITY QUESTIONS

1. Who is eligible for the PAEMST award?

Any teacher who wants to begin an application must meet the following criteria:

- teach science, technology, engineering, or mathematics as part of their contracted teaching responsibilities at the K-6th grade level in a public (including charter) or private school
- hold at least a bachelor's degree from an accredited institution
- be a full-time employee of their school or school district as determined by state and district policies, with responsibilities for teaching students no less than 50% of the school's allotted instructional time
- have at least five years of full-time employment as a K–12 teacher **prior to the 2023–2024 academic school year**, with science, technology, engineering, or mathematics teaching duties
- teach in one of the 50 states, the Department of Defense Education Activity schools, or the U.S. Jurisdictions of the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands
- be a U.S. citizen or permanent resident; and
- not have received the PAEMST award at the national level in any prior competition or category.

2. If I am an engineering, technology, or computer science teacher, may I apply for the PAEMST award?

Yes. If you meet all the eligibility criteria, you may apply. However, applicants that teach computer science, engineering, or technology classes should **connect with their State/Jurisdiction coordinators to determine whether to apply as a mathematics or science applicant**. Applicants should also consider whether the concept selected better aligns to mathematics or science standards, as well as how the course they are teaching is categorized at the school/district/state level.

3. I taught for two years in a private school and three in a public school. Am I eligible?

Yes. If you have five years of full time K–12 teaching experience prior to the current academic year, you are eligible. The five years of teaching does not need to be continuous. You do not need to be at the same school for five continuous years or at your current school for the last five years. You do need to be teaching in the year you apply.

4. I taught at the university for three years and two years in a public school. Am I eligible?

No. You must have completed five years of full time K–12 teaching experience to be eligible to apply.

5. I have taught full-time for seven years but have only taught STEM courses for the last two years. Am I eligible?

No. Based on the eligibility requirements, science, technology, engineering, and/or mathematics, must have been a part of your contracted teaching duties for at least five years.

6. If I spend part of the day teaching 7th grade and part of the day teaching 6th grade, should I compete at the elementary or secondary level?

You may choose the level at which to apply. However, you must select a lesson and video from the grade that matches the current level (during the current K-6 cycle, your video must be from a K-6th grade class).

7. Does student teaching count toward the five-year teaching requirement?

No. Student teaching does not count toward the teaching requirement.

8. I teach my class in Spanish; can I submit my video and application in Spanish?

Yes, you may submit your video and your application in any language. The application will be reviewed by speakers of that language and/or translated for the reviewers.

9. I am a STEM interventionist and coach. Am I eligible?

Yes, as long as you can demonstrate that you are teaching students at least 50% of the school's allotted instructional time, you are eligible for PAEMST.

10. I team-teach. I do not have my own classroom of students. May I apply for this award?

Yes, you may apply as an individual. Teachers who teach in teams are eligible as long as they are full-time school/district employees who teach K–12 grade students at least 50% of the school's allotted instructional time. You must be responsible for developing and delivering science, technology, engineering, and/or mathematics instruction on an on-going basis to the students, and you should be responsible for monitoring the students' progress throughout the school year. **Please note that teachers may only apply as individuals.** The program does not accept team applications. Teachers who teach in teams may not submit identical narratives and/or videos.

11. I am a high school music teacher and I incorporate mathematics concepts into my music lessons. Am I eligible?

No. We expect science, technology, engineering, and/or mathematics instruction and/or the teaching of science, technology, engineering, and mathematics concepts to be a part of a teacher's contracted teaching responsibilities. If your primary responsibility is to teach music and you are the school's music teacher, then you are not eligible.

12. The majority of my day, I teach teachers. However, I do model lessons to students on occasion, and I also teach an afterschool robotics program. Does any of this count towards my 50% teaching (to students) time requirement?

No. Teachers who spend greater than 50% of their time teaching teachers, coaching teachers, or modeling lessons on behalf of teachers are not eligible. Likewise, activities outside of school hours such as afterschool projects, tutoring sessions, or extracurricular math or science-related activities are not part of the allotted 50%-time requirement.

ADMINISTRATIVE QUESTIONS

1. What level of detail do I need to provide in the Teacher Information Form regarding my teaching assignment so that I meet eligibility requirements?

It should be clear from your description that you teach students at least 50% of the school's allotted instructional time. It should be clear what your teaching load is in given week, quarter, and/or year. It should be clear that you are responsible for developing and delivering science, technology, engineer, and/or mathematics instruction on an on-going basis to K–12 students. It also should be clear that you are responsible for assessing/monitoring their learning long-term as well. If you have any responsibilities in addition to classroom teaching, either within or outside of the school, it should be clear you still meet the minimum requirement of providing classroom instruction at least 50% of the school's allocated instructional time.

2. My principal is new. Can I have my assistant principal, or the preceding principal write the first letter of recommendation?

The first letter of recommendation must come from either your principal or your instructional supervisor. Your principal/instructional supervisor can defer the letter of recommendation to someone else who formally supervises you if you have multiple supervisors. The letter cannot be reassigned to another teacher, coach, coordinator, or anyone who informally supervises, mentors, coaches, or supports you in your instruction at the school or district.

NARRATIVE QUESTIONS

1. Does the narrative need to be closely tied to the video?

Yes. The lesson captured in the video must correspond to the concept chosen in Dimension One. However, the narrative responses may address a series of related lessons beyond the single lesson, class, or experience seen in the video.

2. What are the formatting requirements for the narrative?

The narrative only allows plain text. Please be advised that any special characters or formatting such as bolding, underlining, symbols, bulleting, and indenting will disappear when you paste your responses into the text boxes.

3. What is the character limit for the narrative? Does the limit include spaces?

The character limit for your full written response is 27,500 characters, including spaces. Please note that the character counts listed for each dimension are only suggestions, and you are free to exceed those counts so long as the total number of characters in the full narrative submission does not exceed 27,500.

4. Do I need to respond to each prompt or are the prompts just examples of topics to address in my response?

Applicants must respond to each Dimension completely, including responding to each of the prompts within each Dimension. Some prompts include multiple questions so be sure that you address all of them in your response. Past reviewers have noted that some applicants scored lower on certain Dimensions because they did not answer the three prompts completely.

5. Should I focus my response to Dimension One on the concept itself or the method for teaching it?

Applicants should clearly explain the concept they have selected and the reason they chose that concept. Make sure that you are selecting a concept and not just a skill or procedure. The focus of your response to Dimension 1a should be why you selected the concept and why it is important, as well as any connections to other areas of STEM. The response should not include how you will teach the section, what students will do, etc. Dimension Two should be used to explain different teaching strategies for your selected concept.

6. For *Dimension Three*, when I am asked to provide evidence of student learning and/or achievement, must I cite national, state, district, or school-mandated assessments?

No. Any form of assessment that helps you to evaluate student learning may be used and referenced in Dimension 3a and 3b. Dimension 3a is asking for your assessment specific to the concept chosen for this application and Dimension 3b is asking about your overall cohesive assessments plan that you typically use in your classroom to assess student learning. However, for Dimension 3c, the assessments referenced are to be external to you. Please provide evidence or proof (external to something you generated or administered) that speaks to the impact you have had on your students' learning and achievement. Your evidence does not need to be limited to the concept initially shared in the application, to the course discussed, and/or to the current year. We encourage providing items in the supplemental materials that support the narrative.

7. What is meant by "reflective practice" in Dimension Four?

Reflective practice happens after teaching a lesson when you look back and evaluate the effectiveness and success of the classroom experience. You should evaluate what worked particularly well and what did not go exactly as you expected. Consider what kinds of changes you could make to improve the lesson. Discuss what you might implement the next time you teach this same content material to better meet the needs of all students in the class.

8. In Dimension Five, can I just provide a list of my professional development experiences?

No, your resume should provide this. Choose one of your professional development experiences and expand on how it specifically made an impact on your teaching, and how student learning was influenced as a result.

9. In Dimension Five, what if I don't have any national-level leadership experiences to note?

You should indicate what leadership experiences you have, noting those that are the most substantial and impactful, whether they are at the regional, state, or national level. This question is more about the quality of your contributions and not the quantity.

10. Is there a specific format that I need to follow when providing references?

Reference information is required and should be submitted in the Reference Cited section. Applicants should follow accepted scholarly practices in providing citations for source materials relied upon when preparing any portion of the application. In general, each reference should include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If a website address is readily available, it should be included in the citation.

11. Can I use acronyms in the narrative to save characters?

Acronyms are allowed in the narrative. However, applicants should spell out the full term the first time it is mentioned and can then use the acronym when referring to it later.

VIDEO QUESTIONS

1. My class period is only 20 minutes long. Can I use the remaining 10 minutes to provide supplemental materials?

No. The video can capture one class (up to 30 minutes long). If the class is 20 minutes long, then the video can only be up to 20 minutes long. If you elect to only capture 15, 10, or only 5 minutes of that 20-minute class, that is at your discretion.

2. My class period is 45 minutes long. Does my video have to start right at the beginning of class, or can I start 15 minutes into the class in order to show the last 30 minutes?

The video can capture one class (up to 30 minutes long). If your class period is longer than 30 minutes, you will need to decide when to start and end your video during the class. It is helpful to provide some context in the narrative about what occurred before and/or after the video ended. You can also take advantage of the one allowable video break to capture the beginning and the end of the class.

3. Can I make edits to my video, or does it need to be continuous?

Up to **one break is allowed** within the 30-minute video. The allowable break could could be used to show the beginning and ending of a class, transitions from an indoor to outdoor lesson, or remove unintended disruptions from the class. Breaks that span across days or multiple class periods are not allowed and grounds for disqualification.

4. I recorded my video, but I think my camera stopped and restarted during the filming. Will this present a problem?

That is a common occurrence as many cameras have automatic shutoff features or save videos into multiple files. If there is an unintentional break between your video files of less than one second, you will need to combine the files prior to upload, so that it is one file of footage. Once combined, please upload it to your application and send us an email with the time at which the break occurs. We will check the video at the times of the break and let you know if the video break(s) count as your one allowable break. Please let us know as soon as possible if you experience video issues. Video issues reported after the application has closed may not be accepted.

If the break is longer than a few seconds, you may choose to use that as your one allowable break, or you may retake the video or only submit one of the video files. If the portion you submit does not start at the very beginning of class, it is helpful to give some context in the narrative about what occurred before the video started. Likewise, if the video does not show the end of the class, it's helpful to provide some context in the narrative about what occurred after the video ended.

5. Can I create graphics to use at the beginning or end of the video?

Graphics should not be added to the video.

6. Is there a preferred video format or a maximum video size?

We recommend an .mp4 or .mov file type. We also recommend a maximum video file size of three GB. Please be advised that uploading your video can take a long time depending on your internet connection.

7. Do I need to hire a professional to record my video?

No, you do not need to hire a professional. Your videographer can be a colleague, a student from your class, or a tripod that you move about the classroom as needed. If someone does record the video, review the requirements of the video with the videographer. Make certain the videographer is familiar with the equipment and understands the kinds of interactions that should be captured. Remember the video should clearly show the students' faces and their actions and interactions during the lesson.

Historically, the greatest difficulty has been in hearing student-to-student interactions and students' responses to teachers' questions due to excessive background noise. Therefore, use the best technology available to maximize audio and video quality. Try to minimize the distance between the camera and the activities being taped. Consider using multiple microphones.

When you have finished recording a video, review it to be sure the sound is clear and the image is steady. If you make a mistake during the lesson or realize later while watching the video you made a mistake during the lesson, you are welcome to remove that section of the video. You may want to consider completing your recording early in the application process/school year so that if you decide to record a brand-new lesson, you will have time to do so.

8. Since the video should include my students' responses, is there any way I can help them focus on me during the lesson and not the camera?

Consider videotaping a few classes prior to your application lesson to help you and your students get used to having the camera in the classroom. Videotaping your classroom a few times in advance of your application lesson can also help to identify the technical problems (e.g., lighting, sound) involved in capturing a lesson on video.

When capturing your application lesson, consider discussing with your students what you are doing with the lesson ahead of time, so they take some ownership for a successful videotaping session. Discuss cooperation.

9. Besides myself and my students, what else might a reviewer notice in the video?

Reviewers look to see if the correct safety precautions (for example, the use of safety goggles) were taken for all hands-on activities and demonstrations. Failure to take safety precautions may be grounds for disqualification. Reviewers also notice the learning environment in general and whether the classroom environment is appropriate and supportive of student learning.

10. My video is not uploading. What do I do?

We understand that uploading videos can take a long time depending on your computer and internet speeds. If you have tried to upload your video multiple times and keep seeing an error message, please contact us at <u>info@paemst.org</u>.

11. Do I have to capture student participation in hands-on activities for my video?

While lecture may have its place in a classroom, for the application lesson, standing or sitting in front of the classroom and lecturing to students for the full 30 minutes is not recommended. You may not need hands-on activities per se, but you do need to demonstrate student engagement in the video. Be sure your students are actively involved and engaged in the lesson you are videotaping. Students should participate in the learning experience.

Examples of this could include:

- Showing one-to-one teacher-student interaction.
- Showing small group discussions.
- Communicating with students on their physical level.
- Questioning students about what they are doing.
- Providing evidence of student insights and discoveries.
- Showing your passion for teaching.
- Providing evidence of your communication skills and questioning strategies that are likely to engage student thinking.

TECHNICAL QUESTIONS

1. I am working on my Teacher Information Form. Even though it seems that everything is complete, the menu still shows this form as "in progress." Why is my form incomplete?

Open your form and check that all the fields have been filled in and are complete. Fields cannot be left blank. For example, in the percentage section, if a value is zero, you must enter "0". Also, check that percentages total to exactly 100 percent (you must round percentages to the nearest whole number). In addition, a red mark will appear next to fields containing errors. The related error message will provide information to help you complete the item correctly.

2. I have elected not to provide my information on the Demographic Information Form. What do I do to make sure that section of the application is labeled as complete in the application portal?

If you do not wish to provide this information, you may click the checkbox that is labeled "Check here if you do not wish to provide the below information" and then click on Save. This section will now be marked as complete.

3. Does my resume need to follow the formatting guidelines for the Written Response?

The resume, supplemental materials, and letters of recommendation may have different formatting. However, the font size must be 11 or larger and the materials cannot exceed the specified page limits.

4. My letters of recommendation are listed as "pending" on the PAEMST portal, but my writers told me they were uploaded. Are my letters complete?

If your letters are shown as pending, they are not complete. This means that your letter writers have not yet successfully provided their letters in the PAEMST portal. They may have forgotten to sign the letter and/or press the "Submit" button. Recommenders must click on the link they received via email to complete the recommendation.

5. I noticed an issue with the submitted letter of recommendation. How can I fix it?

You are able to click a button to reopen a letter of recommendation. Your letter writers can click the link that they used to complete the letter of recommendation to access it and make updates to the letter. If you have changed your mind and no longer want that letter writer to submit a letter on your behalf, you are able to remove it and enter new information for a different letter writer.

6. I am having trouble uploading files to my online application. What should I do?

If you are unable to upload files, please contact our technical support staff at info@paemst.org.

7. Can I upload five files or five pages of supplemental materials?

Supplemental materials must be uploaded as one single file and may not exceed five total pages.

8. Can I include multiple images on a single page to make better use of the allowable 5 pages?

You are allowed to have multiple images on a single page but the images must be clear to reviewers. There have been instances where multiple images were shrunk and unreadable for reviewers. Reviewers will not zoom in to the supplemental materials page during their reviews. Additionally, font size must be 11 or larger.

9. Can I provide links to articles I have written or examples of student work in the Supplemental Materials or other areas of the application?

Reviewers will not click on any links provided in the application and links should not be included. It is recommended that you provide screenshots instead of providing links.

10. My Supplemental Materials section still says, "not started". How do I indicate that this section is complete?

Click on the Supplemental Materials section. Mark the checkbox at the bottom that says, "I do not intend to include any Supplemental Materials" and then click Save. This section should now be marked as complete.

11. I need technical help, whom can I contact?

Technical assistance is available between 9am and 5pm ET, Monday through Friday. Email: <u>info@paemst.org</u> Phone: 833-673-3273

References Supporting the Five Dimensions

References supporting the Five Dimensions of Outstanding Teaching can be accessed through the PAEMST site.

Additional Agency Information

The White House Office of Science and Technology Policy

The White House Office of Science and Technology Policy (OSTP) was established by the National Science and Technology Policy, Organization, and Priorities Act of 1976. Today, OSTP works to maximize the benefits of science and technology to advance health, prosperity, security, environmental quality, and justice for all Americans. OSTP's mission includes:

- Providing advice to the President and the Executive Office of the President on matters related to science and technology;
- Strengthening and advancing American science and technology;
- Working with federal departments and agencies and with Congress to create bold visions, unified strategies, clear plans, wise policies, and effective, equitable programs for science and technology;
- Engaging with external partners, including industry, academia, philanthropic organizations, and civil society; state, local, Tribal and territorial governments; and other nations; and,
- Ensuring equity, inclusion, and integrity in all aspects of science and technology.

The National Science Foundation

The National Science Foundation (NSF or the Foundation) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations, and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research.

NSF receives approximately 55,000 proposals each year for research, education, and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives thousands of applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels, and Arctic and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

Privacy Act and Public Burden Statements

The information requested on the application materials is solicited under the authority of the National Science Foundation Act of 1950, as amended. It will be used in connection with the selection of qualified applicants and may be disclosed to qualified reviewers and staff assistants as part of the review process; to the institution the nominee, applicant or fellow is attending or is planning to attend or is employed by for the purpose of facilitating review or award decisions, or administering fellowships or awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing data regarding applicants or nominees as part of the proposal review process, or in order to coordinate programs; to congressional officials for the purpose of congratulating awardees; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information from this system may be merged with other computer files to carry out statistical studies the results of which do not identify individuals. Notice of the agency's decision may be given to nominators, and disclosure may be made of awardees' names, home institutions, and fields of study for public information purposes. For fellows or awardees receiving stipends directly from the government, information is transmitted to the Department of the Treasury to make payments. See System of Records, NSF-12, "Fellowships and Other Awards," 79 Federal Register 245 (December 22, 2014). Submission of the information is voluntary; however, failure to provide full and complete information may reduce the possibility of your receiving an award.

Public reporting burden for this collection of information is estimated to average 12 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne H. Plimpton, Reports Clearance Officer; Office of the General Counsel; National Science Foundation; Alexandria, VA 22314.

The National Science Foundation is committed to making all of the information we publish easy to understand. If you have a suggestion about how to improve the clarity of this document or other NSFpublished materials, please contact us at <u>plainlanguage@nsf.gov</u>.

The Catalog of Federal Domestic Assistance number for this program is 47.076, Education and Human Resources.

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