

---

---

# Presidential Awards for Excellence in Mathematics and Science Teaching

*Recognizing and Rewarding Excellence in Teaching*

## 2013-2014 Application Packet

**Nomination Deadline:  
April 1, 2014**

**Application Deadline:  
May 1, 2014**

### Table of Contents

2013-2014 Program Information .....	2
Application Outline/Submission Checklist .....	4
Application Components .....	5
The Five Dimensions of Outstanding Teaching – Narrative Prompts .....	6
Scoring of the Application.....	9
APPENDICES .....	10
Applicant Frequently Asked Questions.....	11
PAEMST Application Tips.....	16
PAEMST Teacher Information Form .....	19
PAEMST Employment Verification Form.....	22
PAEMST Demographic Information Form.....	23

**NATIONAL SCIENCE FOUNDATION**  
DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES

---

---

# Presidential Awards for Excellence in Mathematics and Science Teaching

## 2013-2014 Application Packet for Elementary Teachers (Grades K-6)

Each year, the President of the United States recognizes outstanding kindergarten through 6<sup>th</sup> grade or 7<sup>th</sup> through 12<sup>th</sup> grade mathematics and science (including computer science) teachers by bestowing upon them the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST). Awards are given to teachers in each state and four U.S. jurisdictions, including Washington D.C.; Puerto Rico; Department of Defense Education Activity schools; and the U.S. territories as a group (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands). The PAEMST program is administered by the National Science Foundation (NSF) on behalf of the White House Office of Science and Technology Policy (OSTP). **In 2013-2014, the PAEMST program will accept applications from K-6 grade mathematics and science (including computer science) teachers.**

The more than 4,200 awardees selected since the program's inception in 1983 are a premier group of teachers who have both deep content knowledge of the subjects they teach and the ability to motivate and enable students to be successful in those areas. While many awardees return to their classrooms, others move on to positions in school administration, become involved in preparing future teachers at the college level, or work in teacher professional development. They remain professionally active in a variety of ways. In addition to teaching, they contribute to the development of instructional and assessment resources, serve as mentors to students and other teachers, participate as writers and reviewers of state and local curricula, and author books and publish articles, among other endeavors. Collectively, they reflect the expertise and dedication of the Nation's teaching corps, and they demonstrate the positive impact of excellent teachers on student achievement.

---

### 2013-2014 Program Information

---

#### Nomination and Application

Anyone--principals, teachers, parents, students, or members of the general public--may nominate exceptional mathematics and science (including computer science) teachers by completing the nomination form available on the PAEMST website at <http://www.paemst.org>. To submit a nomination, the form requires the teacher's name, email address and school contact information. If a person knows more than one teacher worthy of this award, more than one nomination may be submitted. Nominated teachers will receive an invitation to begin the application process. The invitation will include a user name and password for accessing the online application system. Teachers may also initiate the application process themselves at <http://www.paemst.org>.

#### **Nomination Deadline: April 1, 2014**

This date gives the nominated teacher time to prepare an application prior to the application deadline.

#### **Application Deadline: May 1, 2014**

All application materials must be submitted online.

### **Eligibility**

An applicant must:

- Teach mathematics or science (including computer science) at the K-6 grade level in a public or private school.
- Hold at least a Bachelor's degree from an accredited institution.
- Be a full-time employee of the school or school district as determined by state and district policies, and teach K-12 students at least 50% of the time.
- Have at least five years of full-time, K-12 mathematics or science (including computer science) teaching experience prior to the 2013-2014 academic school year.
- Teach in one of the 50 states or the four U.S. jurisdictions. The jurisdictions are Washington, D.C., Puerto Rico, Department of Defense Education Activity schools, and the U.S. territories as a group (American Samoa, Guam, Commonwealth of the Northern Mariana Islands, and U.S. Virgin Islands).
- Be a U.S. citizen or permanent resident.
- Not have received the PAEMST award at the national level in any prior competition or category.

### **Review Criteria**

After eligibility is confirmed and technical specifications are met, each application will be evaluated using the following *Five Dimensions of Outstanding Teaching*:

- Dimension One: Mastery of mathematics or science (including computer science) content knowledge appropriate for the grade level taught.
- Dimension Two: Use of instructional methods and strategies that are appropriate for the students in the classroom and that support student learning.
- Dimension Three: Effective use of assessment strategies to evaluate, monitor, and improve student learning.
- Dimension Four: Reflective practice and life-long learning to improve teaching and student learning.
- Dimension Five: Leadership in education outside the classroom.

### **Review Process**

There is a two-tier review:

- **At the state level**, coordinators convene selection committees, which include prominent mathematicians, scientists, mathematics/science educators, district level personnel, and classroom teachers. These committees select up to five finalists from each discipline (mathematics or science) for recognition at the state level and forward these applications to NSF for national review. To ensure consistency across the country, all state selection committees will score their applications using the review criteria and scoring information presented in this application packet.
- **At the national level**, NSF convenes a national selection committee composed of prominent mathematicians, scientists, mathematics/science/computer science educators, district level personnel, and classroom teachers who are identified separately from the state-level review activity. The national committee reviews state finalists' applications and recommends to NSF up to two finalists in mathematics or science (including computer science) from each state or jurisdiction. The Director of NSF then submits the recommendations to the Director of OSTP. All finalists will be subject to a Federal Bureau of Investigation (FBI) background check.

### **Recognition**

PAEMST winners are announced and honored the year following receipt of the application. Each awardee receives a certificate signed by the President of the United States and a \$10,000 award from NSF.

Awardees and their guests are honored during events that take place in Washington, D.C. These events

include an award ceremony, celebratory receptions, professional development programs, and discussions with policy-makers on how to improve mathematics and science education.

---

## **Application Outline/Submission Checklist**

---

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 or wrong 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, and enhances student learning. The PAEMST application consists of three components: Administrative, Narrative, and Video.

### **ADMINISTRATIVE COMPONENT**

*The administrative component includes a teacher information form, employment verification form, letters of recommendation, résumé, and a voluntary demographic information form.*

- Teacher Information and Demographic Information (Optional) Form**  
Complete form online.
- Employment Verification Form**  
Download and print form, obtain appropriate signature, then scan and upload signed and dated form into online application.
- Letters of Recommendation**  
Scan and upload up to three signed and dated letters of recommendation into online application.
- Résumé**  
Scan and upload file into online application. (2 page limit)

### **NARRATIVE COMPONENT**

*The narrative component consists of a written response and supplemental materials. The applicant must select a science or mathematics topic or concept that will be used in the written response to the Five Dimensions of Outstanding Teaching.*

- Written Response**  
Download template. Upload completed file into online application. (12 page limit)
- Supplemental Materials**  
Upload files into online application. (10 page limit)

### **VIDEO COMPONENT**

*The video component consists of a videotaped classroom lesson that corresponds to the important topic or concept chosen and discussed in the written response to Dimensions One, Two, and Three of the Five Dimensions of Outstanding Teaching.*

- Video**  
Upload file into PAEMST online application.

*Please note: Videos submitted as part of the application will be used throughout the PAEMST selection process and will be seen by reviewers, contractors managing the program, and NSF staff. Applicants will not have access to the online application, including the video, after submission and should keep a copy for their own records.*

# Application Deadline: May 1, 2014

Form Approved

OMB NO: 3145-0058

---

---

## Application Components

---

---

### ADMINISTRATIVE COMPONENT

The administrative component includes a teacher information form, employment verification form, letters of recommendation, résumé, and a voluntary demographic information form. These materials will be used in evaluating the application, with the exception of the demographic information form.

#### Teacher Information and Demographic Information Form

The *Teacher Information Form* must be completed using the PAEMST online form. A sample form is available at the end of the application packet. Submission of the *demographic information form* is voluntary and is not a precondition to receiving an award. The information will not be disclosed to external peer reviewers. If the applicant does not wish to provide this information, he or she may click the checkbox that is labeled “Check here if you do not wish to provide the below information.” A sample form is available at the end of the application packet.

#### Employment Verification Form

The *Employment Verification Form* is available online for download. The form must be signed and dated by a school principal or school district official. A sample form is available at the end of the application packet.

#### Letters of Recommendation

Three signed and dated letters of recommendation are required from administrators, colleagues, parents, students, or others who can describe how the applicant’s work has had a positive impact on student learning of mathematics or science (including computer science). One of these three letters must be from a school principal or school district official. There is no page limit for letters of recommendation. A letter with multiple pages must be uploaded as one file.

#### Résumé

A résumé is required that outlines the applicant’s education, employment history, and participation in professional development activities. The document may **not** exceed two pages.

### NARRATIVE COMPONENT

The narrative component consists of a written response that addresses the *Five Dimensions of Outstanding Teaching* and supplemental materials.

## Written Response

Before the applicant writes the narrative response, he or she must select a science or mathematics topic or concept that is difficult for students to understand at the grade taught, is important for students to learn at that grade level, and is related to more advanced concepts that will be learned later. The topic or concept will be used in the narrative when responding to Dimensions One, Two and Three and when choosing a classroom lesson to video. While the video may show only one lesson, the applicant's written response may cover teaching strategies and assessments used in a series of related lessons.

## Supplemental Materials

Supplemental materials provide supporting evidence for the narrative responses to the *Five Dimensions of Outstanding Teaching*. The application may include supplemental materials such as lesson plans, samples of student work, assessment items or publications (your own, or those you wish to cite in support of your written narrative).

---

## The Five Dimensions of Outstanding Teaching – Narrative Prompts

---

### **Dimension One: Mastery of mathematics or science content appropriate for the grade level taught.**

*The narrative for Dimension One should be about three pages.*

- 1a. Discuss the mathematical or scientific ideas that are fundamental to understanding the chosen topic or concept.
- 1b. Explain why this topic or concept is important for students to learn and how it relates to more complex concepts that students will encounter in subsequent lessons, grades, or courses.
- 1c. Discuss the misconceptions or misunderstandings that students typically have with regard to this topic or concept.

### **Dimension Two: Use of instructional methods and strategies that are appropriate for the students in the class and that support student learning.**

*The narrative for Dimension Two should be about three pages.*

- 2a. Describe the instructional approaches you used in the video to help students understand the topic or concept chosen in Dimension One.
- 2b. Explain how you identify and build on students' prior knowledge, and how this knowledge is addressed in your video and in your general teaching strategies.
- 2c. Discuss the instructional strategies and techniques you use to meet the learning needs of all students, challenging those with stronger knowledge while ensuring learning for less accomplished students.

### **Dimension Three: Effective use of student assessments to evaluate, monitor, and improve student learning.**

*The narrative for Dimension Three should be about three pages.*

- 3a. Describe how you assessed student learning and achievement for the topic discussed in Dimension One and shown on the video, and how you use what you learned from the assessment to improve your teaching.
- 3b. Discuss other specific ways that you routinely assess and guide student learning. You may include examples of formative or summative techniques, including student presentations, projects, quizzes, unit exams, or other methods.
- 3c. Provide evidence of your teaching effectiveness as measured by student achievement on school, district or state assessments, or other external indicators of student learning or achievement.

#### **Dimension Four: Reflective practice and life-long learning to improve teaching and student learning.**

*The narrative for Dimension Four should be about two pages.*

- 4a. 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. Describe how reflection on your teaching practices helps you improve your classroom instruction. You may provide examples of lessons or activities you revised based on this reflection.
- 4c. Using one or two of the professional development experiences cited in your résumé, describe how your participation in these activities has improved your teaching and enhanced student learning.

#### **Dimension Five: Leadership in education outside the classroom.**

*The narrative for Dimension Five should be about one page.*

- 5a. Describe how you have supported other teachers, student teachers or interns through activities such as induction, mentoring, leading professional development activities, or co-teaching.
- 5b. Describe how you contribute to educational excellence at the school, district, state or national level.

---

#### **Technical Specifications for the Narrative Component**

It is important that each of the *Five Dimensions of Outstanding Teaching* prompts be discussed in the order in which they are presented in this application and that each dimension prompt is answered separately. Use of the online *Dimensions of Outstanding Teaching Template* is highly recommended to ensure the required formatting is followed.

The written response to the *Five Dimensions of Outstanding Teaching* must:

- have the appropriate *Dimension* prompt before each *Dimension* response.
- be formatted for 8.5 by 11-inch paper with 1-inch margins on all 4 sides.
- have 12-point font.
- be double-spaced, except for the Dimension prompt which should be single spaced.
- include in the bottom margin of each page: applicant name, Teacher ID, and page number.
- **not** exceed 12 pages.
- be saved as a single file and uploaded into the online application.

Supplemental materials:

- should be noted within the written response.
- should include a list of citations or references if any research articles or materials are discussed in the written response.
- must be labeled with applicant name, Teacher ID, and display page numbers.
- may **not** exceed 10 pages when all materials are printed by a reviewer
- may be submitted in the following formats: Adobe Portable Document Format (.pdf), Microsoft Word (.doc or .docx), Rich Text Files (.rtf), or Image Files (.gif, .jpeg, .jpg, .png).

#### **VIDEO COMPONENT**

The video will be used as evidence by state and national selection committees when evaluating the applicant's performance on the *Five Dimensions of Outstanding Teaching*. The video must match the applicant's narrative and should convey the applicant's:

- depth of content knowledge as demonstrated by the clarity, precision and appropriateness of the explanations provided.
- ability to employ appropriate instructional methods, which may include the use of lecture, instructional technology, demonstrations, hands-on activities, and group assignments.

- ability to engage all students, maintain their interest in the lesson or activity, and assess student learning, as demonstrated by the applicant's and the students' asking and answering questions, giving demonstrations, or participating in discussions or small group work.

---

### **Technical Specifications for the Video Component**

In order to provide in-depth evidence of the applicant's knowledge and abilities, the video must:

- correspond to the important topic or concept chosen and discussed in Dimension One.
- be of a single class, lesson or experience (e.g., field trip) during the 2013-2014 school year.
- be of sufficient quality so that the applicant's face and the students' faces are visible and voices are audible.
- adhere to all district or school requirements and guidelines for parental release or student permission related to classroom video recording.
- **be continuous footage, unedited and devoid of any stopping and restarting of the camera.**
- **not** be more than 45 minutes or one class period, whichever is shorter.
- be an .mp4 file with H.264 video and AAC audio.
- be labeled and uploaded with the file name "PAEMST-AY1314" along with the applicant's first name, last name, and Teacher ID (teacher IDs are emailed to applicants once they begin the application process.)

No other supplementary video materials may be submitted. If a video is longer than 45 minutes, reviewers will be instructed to stop watching the video at the 45-minute mark. An applicant may resubmit the video from his or her 2011-2012 application if allowable by local school and district usage policies. **Whenever the video is referenced in the written responses, a specific counter reference (minutes and seconds elapsed) should be provided.** The applicant will upload and submit the video-recorded lesson online.

If you are unsure of how to produce the video file in the correct format or if you have any questions, please reference the Tips for the Video under PAEMST Application Tips on page 18, or call (855) 723-6780 to discuss options. Also, uploading your video may take a long time depending on your Internet connection. Please be prepared for the wait.



---

---

## Scoring of the Application

---

---

Reviewers will use all of the applicant's materials (résumé, letters of recommendation, narrative, supplemental materials and video) to score each of the *Five Dimensions of Outstanding Teaching*. Each dimension will be rated using a four-point scale and multiplied by a weighting factor. The sum of all of the weighted Dimension scores is the total score.

**The four-point scale is as follows:**

- 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 or there were significant errors or weaknesses.
- Fair (1):** The applicant demonstrated limited evidence of knowledge, skills, or performance in this dimension and there were significant errors or weaknesses.

**Maximum possible score for each Dimension:**

Dimension One	Weighting factor = 7	4 x 7 = 28 points
Dimension Two	Weighting factor = 7	4 x 7 = 28 points
Dimension Three	Weighting factor = 6	4 x 6 = 24 points
Dimension Four	Weighting factor = 3	4 x 3 = 12 points
Dimension Five	Weighting factor = 2	4 x 2 = <u>8 points</u>

**Maximum possible total score** **100 points**

---

## APPENDICES

---

- ✓ Applicant Frequently Asked Questions
- ✓ PAEMST Checklist for Applicants
- ✓ PAEMST Application Tips
- ✓ PAEMST Teacher Information Form
- ✓ PAEMST Employment Verification Form
- ✓ PAEMST Demographic Information Form

---

---

## Applicant Frequently Asked Questions

---

### Eligibility

1. I taught for two years in a private school and three in a public school. Am I eligible?  
**A:** Yes, if you have five years of full time K-12 teaching experience prior to this academic year, you are eligible.
2. I taught at the university for three years and two years in a public school. Am I eligible?  
**A:** No, you must have completed five years of full time K-12 teaching experience to be eligible to apply.
3. If I spend part of the day teaching grade seven and part of the day teaching grade six, should I compete at the elementary or secondary level?  
**A:** You may choose the level at which to apply.
4. I coach other teachers for part of the day and teach students for part of the day; am I eligible to apply?  
**A:** You must teach K-12 students for at least 50 percent of the academic day in order to be eligible.
5. Does student teaching count toward the five year teaching requirement?  
**A:** No, student teaching does not count toward the teaching requirement.
6. I teach my class in Spanish, can I submit my video and application in Spanish?  
**A:** Yes, you may submit your video and your application in Spanish.
7. I am an engineering or technology teacher; may I apply for the PAEMST award?  
**A:** If you meet all of the other teaching criteria, and you are teaching a lesson that can be classified as a science or mathematics lesson, you may apply in that category.
8. I team-teach several children in several classrooms throughout the day within my district. I do not have my own classroom full of students. May I apply for this award?  
**A:** In order to be eligible, you must teach K-12 students for at least 50 percent of the academic day.

## Administrative

1. Do the letters of recommendation need to be signed and dated?

**A:** Yes, the letters of recommendation must be signed and dated. Typed signatures are not accepted. If you are unable to scan the letters or upload them to your online application, you can e-mail them to [application@paemst.org](mailto:application@paemst.org). We will upload them to your online application and send you an e-mail confirmation once they have been uploaded.

2. Do the letters of recommendation have a page limit?

**A:** There is no page limit for letters of recommendation. A letter with multiple pages must be uploaded as one file. If you are unable to combine multiple pages into one file, you can e-mail them to [application@paemst.org](mailto:application@paemst.org). We will combine the pages into one file, upload it to your online application, and send you an e-mail confirmation once it has been uploaded.

## Narrative

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

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

2. Do I need to respond to the *Dimensions* questions in the order in which they appear?

**A:** Yes, you should respond to the *Dimensions* questions in the order in which they appear, and each question must be answered individually. The easiest way to ensure your responses are correctly formatted is to download and use the *Dimensions of Outstanding Teaching Template* provided.

3. What is meant by “reflective practice” in *Dimension Four*?

**A:** 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.

4. For *Dimension Three* when I am asked to provide evidence for students’ success, must I only cite national assessments?

**A:** No, any form of assessment that helps you to evaluate student learning may be used. However, try to be as quantitative and detailed as possible. Provide the results and how you analyze the results to help you determine student success.

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

**A:** No, your résumé should provide this. Choose one or two of your professional development experiences and expand on how each specifically impacted your teaching and how student learning was influenced as a result.

6. If I use my 2011-2012 *Written Response*, do I need to edit my narrative to match the new 12 page limit?

**A:** Yes, you must edit your 2011-2012 *Written Response* so that it is 12 pages or less to meet the requirements of the 2013-2014 *Written Response*.

## Video

1. My class period is only 30 minutes long. Can I use the remaining 15 minutes to provide supplemental material?

**A:** No, the video must be a single, continuous recording of one class. If your class period is less than 45 minutes, you may not use the remaining time for other purposes. If your class period is longer than 45 minutes, you will need to decide when to start your video during the class, but regardless, the video may not be longer than 45 minutes.

2. I have a classroom video from a previous competition cycle. Can I use that one for this application?

**A:** An applicant may resubmit the video from the previous competition round in his/her grade level if allowed by local school district usage policies-- you are still required to submit a new teacher information form, employment verification form, letters of recommendation, and resume. As a reminder, to resubmit, the video must still adhere to all district or school requirements and guidelines for parental release or student permission related to classroom videotaping. Videos from applications **more than one** competition removed cannot be used again.

## 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?

**A:** 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. Does my résumé need to follow the formatting guidelines for the *Written Response*?  
**A:** No, the résumé, supplemental materials, and letters of recommendation may have different formatting. However, the font used must be easy for reviewers to read, and the materials should not exceed the specified page limits.
3. Can I upload each of the *Dimension* responses separately?  
**A:** No, your responses to all of the *Five Dimensions of Outstanding Teaching* must be saved as a single file and uploaded under the *Written Response* section on your online application.
4. I began working on the *Written Response* template, uploaded the file, and clicked on the **Save** button. It is now telling me that I have "completed" the *Written Response* on the My Application screen, but I still need to edit it. How do I access my *Written Response* after it has been marked as complete?  
**A:** You may still make changes to your *Written Response* document. When you upload a file to your application, the status will change to "completed." However, your application will not be submitted until you click on **Submit Application**. As you continue to work on your application, you may delete documents and upload revised versions to your application.
5. Is there a preferred video format?  
**A:** Our system requires that uploaded videos be encoded in the following format: H.264 Video and AAC Audio contained in an .mp4 container file. If you are unsure of how to produce the video file in the correct format or if you have any questions please have the person who is making your video email [application@paemst.org](mailto:application@paemst.org), or call us at (855) 723-6780. We will gladly discuss options for creating the video in the correct format. Uploading your video can take a long time depending on your Internet connection. Please be prepared for the wait.
6. Can I upload 10 *files* or 10 *pages* of supplemental materials?  
**A:** You may submit a total of 10 pages of supplemental materials. When the reviewer prints out these materials, he or she should have 10 pages or fewer of supplemental materials for your application. Any additional pages that you provide will not be reviewed.
7. I am having trouble uploading my files to my online application. What should I do?  
**A:** Your files may be too large to upload to the system. If you are unable to reduce the size of the file, e-mail your materials to our technical support staff at [application@paemst.org](mailto:application@paemst.org).
8. My *Supplemental Materials* section still says "not started" or "in progress." How do I indicate that this section is complete?

**A:** Click on the *Supplemental Materials* section. Mark the checkbox at the bottom that says, "This is all I intend to include for my Supplemental Materials" and then click on **Save**. This section should now be marked as complete.

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

**A:** Assistance is available between the hours of 9 a.m. and 5 p.m. EST, Monday through Friday.

E-mail: [application@paemst.org](mailto:application@paemst.org)

Toll-free phone: (855) 723-6780

## **Timeline**

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

**A:** After you confirm your eligibility, you should read through the entire application packet and review the entire online teacher portal. Plan the lesson or series of lessons you will be addressing in your video and your narrative. Once you have decided on the topic, you should work on the video and narrative in parallel, making sure to reflect on the video throughout your narrative response.

2. I have submitted my PAEMST application. When will state finalists and presidential awardees be notified?

**A:** Each state determines when state finalists are recognized. All applicants who completed an application should be informed of their state level status at least by January. Up to five candidates from each state in each discipline are forwarded to the NSF for national consideration, where they will undergo a separate review process. The announcement of the presidential awardees occurs sometime in late spring or early summer, the year following submission of the application.

3. When will presidential awardees be honored in Washington, D.C.?

**A:** The White House OSTP is responsible for setting the dates for recognition activities, and it depends on administrative scheduling. Awardees will be notified at the earliest possible date.

---

---

## PAEMST Application Tips

---

The following are recommendations from past awardees. If you have questions, your state coordinator, a past awardee, or your mentor should be able to assist you. You may also contact a PAEMST team member at [info@paemst.org](mailto:info@paemst.org).

### **Tips for the Applicant's Employment Verification Form, Letters of Recommendation, and Résumé**

- Make sure the Employment Verification Form is signed by the applicant and a school principal or district official.
- Use the online Employment Verification Form in its original format. Do not alter the form.
- Submit three distinct Letters of Recommendation written by three different individuals. Make sure at least one letter is from a school or district official in a supervisory position.
- Make sure all Letters of Recommendation are signed and dated. Typed signatures are not accepted.
- Note the two-page limit for the Résumé.
- In the Résumé, cite memberships in state and national science, mathematics, and/or educational organizations. Include memberships in informal science/mathematics centers, groups, programs, and other similar efforts. If you are active in these organizations, cite your responsibilities.
- Cite references for any articles you have written for state or national science/mathematics newsletters or journals in the Résumé. Most of the editors of publications connected with state-level science/mathematics organizations are in need of articles.
- List any grants that you have received in the Résumé. Many local school districts and foundations offer grant money.
- Cite any graduate courses or continuing education units you have taken that demonstrate your efforts to stay current in your profession in the Résumé.
- Cite leadership positions you have taken in your school system, your state, and with national organizations in the Résumé.
- Cite presentations you have given at state and/or national conferences for science and mathematics in the Résumé.
- List all forms of recognition that you have received for your profession. Include school system awards and state and national recognition in the Résumé.

### **Tips for the *Five Dimensions of Outstanding Teaching* Narrative and Supplemental Materials**

- Use the *Dimensions of Outstanding Teaching Template* (available online) to make sure the narrative meets the technical specifications.
- Submit supplemental materials. This is a good place to include a list of the references you used in preparing your lesson and classroom activities. You may also want to use one of the pages to provide background information about the placement of the chosen lesson within a larger conceptual unit to explain what the students have already learned and where they will be heading subsequently. Correct grammar, spelling, punctuation, and the appearance of the written application are all key components of a successful application. Be sure to ask someone you trust to critique your written application.
- Reference the video and supplemental documents throughout your narrative response.



## Tips for the Video

- The video **must** be continuous and uninterrupted. Do not stop the filming during the 45-minute lesson.
- Follow correct safety precautions for all hands-on activities and demonstrations.
- Be sure the video meets the technical specifications. The video must be no larger than 400 MB and encoded in the following format: H.264 Video and AAC Audio contained in an .mp4 container file.
- Be sure to submit the video online and label with the file name —PAEMST-AY1314 along with the applicant’s first name, last name, and Teacher ID.
- Be sure the video matches the lesson you write about and that it shows students engaged in the mathematics or science (including computer science) activity.
- Discuss with students what you are doing with the lesson ahead of time so that they take some ownership for a successful videotaping session. Discuss cooperation.
- Consider videotaping many classes prior to your application lesson to help you and your students get used to having the camera in the classroom.
- Be sure students are actively involved in the lesson you are videotaping. Students should participate in the learning experience. Show one-to-one teacher-student interaction. Show small group discussions.
- While demonstrations have their place in a classroom, for the PAEMST lesson, standing or sitting in front of the classroom and lecturing to students for the full 45 minutes is not recommended.
- Communicate with students on their physical level. Bend down to talk with them about the lesson. Question students about what they are doing. Provide evidence of student insights and discoveries.
- Show your passion for teaching during the recorded lesson. Provide evidence of your communication skills and questioning strategies that are likely to engage student thinking.
- Judges notice the learning environment. Be sure your classroom environment is appropriate and supportive of learning (bulletin boards, items hanging from the ceiling, overall appearance of the classroom).
- If you make a mistake during a lesson, do not attempt to edit the video; rather, address the error in your narrative. Explain how you will/or did address the error in future classes.
- Your videographer can be a professional, a colleague, a student from your class, or a tripod that you move about the classroom as needed. Do your best to capture teacher-student interactions and conversations. Try to minimize the distance between the camera and the activities being taped.
- When you have completed the taping, review the video to be sure the sound is clear, the camera is steady, and the lesson is continuous (without any breaks or stops). Breaks in videotaping will cause your application to be disqualified.
- Complete the recording as early in the application process as possible so that if the recording needs to be redone, you will have time to do so. Consider targeting a lesson that takes place earlier rather than later in the school year.
- Professional appearance and demeanor are important.
- Use the best technology available to maximize audio and video quality. If you have access to a digital video camera, use it to record your lesson.
- Review the requirements of the video with the camera operator. Make certain the camera operator is familiar with the equipment and understands the kinds of interactions that

should be captured. Remember the video frame should clearly show the students' faces and their actions and interactions during the lesson.

- Practice videotaping your classroom several times to help identify the technical problems (e.g., lighting, sound) involved in capturing a lesson on video and to allow your students to become accustomed to having the camera in the room.
- Consider using multiple microphones for the teacher and students. Historically, the greatest difficulty has been in hearing student-to-student interactions and students' responses to teachers' questions due to excessive background noise.

*This is a sample Teacher Information Form.  
The actual form must be completed and submitted online.*

---

---

**PAEMST Teacher Information Form**

---

---

**Award Category:**     Grades K-6 Mathematics  
                               Grades K-6 Science

*Although some teachers teach both mathematics and science, for the purpose of the PAEMST award, the applicant must indicate for which of the two subjects he or she would like to be considered. Do **not** check both categories.*

**Legal First Name:** \_\_\_\_\_    **Legal Middle Name(s):** \_\_\_\_\_    **Legal Last Name:** \_\_\_\_\_  
**Preferred First name/ Nickname** (optional): \_\_\_\_\_

**E-mail Address:** \_\_\_\_\_    **Alternative E-mail Address:** \_\_\_\_\_  
*Most correspondence will be sent to the applicant's email. We recommend a school e-mail address and a personal e-mail address.*

**Home Address:** \_\_\_\_\_  
**City:** \_\_\_\_\_    **State:** \_\_\_\_\_    **ZIP:** \_\_\_\_\_

**Home Phone:** \_\_\_\_\_  
**Cell Phone:** \_\_\_\_\_

**Official School Name:** \_\_\_\_\_

**School Address:** \_\_\_\_\_  
**City:** \_\_\_\_\_    **State:** \_\_\_\_\_    **ZIP:** \_\_\_\_\_

**School Phone:** \_\_\_\_\_

**School Fax:** \_\_\_\_\_

**Backup Contact Person\***

**First Name:** \_\_\_\_\_    **Middle Name(s):** \_\_\_\_\_    **Last Name:** \_\_\_\_\_

**E-mail Address:** \_\_\_\_\_    **Alternative E-mail Address:** \_\_\_\_\_

**Home Phone:** \_\_\_\_\_

\*If NSF is not able to reach an applicant directly, NSF will attempt to get in contact with the backup contact person.

---

**Degrees from Accredited Institution (Degree/Major/Institution/Year Awarded):**

---

**Area(s) of State Licensure /Certification:** \_\_\_\_\_

**Number of Academic/School Years of Teaching Experience in Mathematics/Science at the K-12 level prior to the start of 2013–2014 Academic School Year:** \_\_\_\_\_

**Number of Years in Current Position:** \_\_\_\_\_

**Describe current teaching assignment, including grade level(s), courses taught, and weekly teaching schedule.**

**School Data:** School Enrollment: \_\_\_\_\_ Grades: \_\_\_\_\_ District Enrollment: \_\_\_\_\_

Check One:  Public  Private  Charter

Check One:  Urban  Suburban  Rural

**Indicate student population percentages in your school and class video:**

**Ethnicity:**

Hispanic or Latino: School: \_\_\_\_\_%; Class Video: \_\_\_\_\_%

Not Hispanic or Latino: School: \_\_\_\_\_%; Class Video: \_\_\_\_\_%

Do not know: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

**Race:**

American Indian or Alaska Native: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

Asian: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

Black or African American: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

Native Hawaiian or Other Pacific Islander: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

White: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

More than one race reported: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

Do not know: School: \_\_\_\_\_%, Class Video: \_\_\_\_\_%

**Free- and reduced-price lunch, if known: School \_\_\_\_\_%**

---

**Provide the following information about the class video:**

Length of the video:

**In 100 or less characters, indicate the topic or concept discussed in the narrative and featured on the video:**

---

Grade Level of Students: \_\_\_\_\_ Number of Students: \_\_\_\_\_ Subject of the Class: \_\_\_\_\_

**How did you hear about PAEMST (select all that apply):**

- Conversation with/Phone call from:
  - superintendent/district level official or principal/school level official teacher from same school/district
  - PAEMST State Coordinator
  - former PAEMST Awardee or State Finalist
  - other; please describe: \_\_\_\_\_
- E-mail Announcements from:
  - superintendent/district level official or principal/school level official
  - teacher from same school/district
  - PAEMST State Coordinator

- former PAEMST Awardee or State Finalist
  - other; please describe: \_\_\_\_\_
- Mailing from:
  - superintendent/district level official principal/school level official
  - teacher from same school/district
  - PAEMST State Coordinator
  - former PAEMST Awardee or State Finalist
  - other; please describe: \_\_\_\_\_
- Website; Name of Website(s): \_\_\_\_\_
- Advertisement on a listserv, an e-newsletter, or other electronic media; please describe:  
\_\_\_\_\_
- Advertisement in a newspaper, a magazine, or other printed media; please describe:  
\_\_\_\_\_
- PAEMST “business” card, brochure, flyer, or other printed material
- Conference presentation; Name of Conference(s): \_\_\_\_\_
- Other; please describe: \_\_\_\_\_

NSF Form 1381 (9/12)

*This is a sample Employment Verification Form.  
The actual form must be completed and submitted online.*

---

---

**PAEMST Employment Verification Form**

---

---

Teacher ID: \_\_\_\_\_ State: \_\_\_\_\_  
Applicant First Name: \_\_\_\_\_ Middle Name(s): \_\_\_\_\_ Last Name: \_\_\_\_\_  
Award Category: \_\_\_ K-6 Mathematics \_\_\_\_\_ K-6 Science

---

District Name: \_\_\_\_\_  
School Name: \_\_\_\_\_  
School Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

**Please certify the following**

The applicant holds at least a Bachelor's degree from an accredited institution.

Yes \_\_\_\_\_

The applicant is a full-time employee of the school or school district and teaches K-12 students at least 50% of the time.

Yes \_\_\_\_\_

The applicant has at least five years of full-time, K-12 mathematics or science (including computer science) teaching experience prior to the 2013-2014 academic school year.

Yes \_\_\_\_\_

The applicant is a teacher of good standing within the school or school district.

Yes \_\_\_\_\_

**School Principal or School District Official**

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

I certify that the information provided above and within my application is correct and that if the information is misrepresented or falsified, my application may be disqualified.

**Applicant Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

NSF Form 1383 (9/12)

---

*This is a sample Demographic Information Form.  
The actual form must be completed and submitted online.*

---

---

## PAEMST Demographic Information Form

---

---

### Information about Candidates for Presidential Awards for Excellence in Mathematics and Science Teaching

Submit **ONE** copy of this form with your application packet. Submission of this information is voluntary and is not a precondition of award. The information will not be disclosed to external peer reviewers. **THIS FORM SHOULD NOT BE ATTACHED TO ANY OTHER DOCUMENT IN YOUR APPLICATION PACKET AS THIS MAY COMPROMISE THE CONFIDENTIALITY OF THE INFORMATION.**

**Candidate's Name:**

**Gender:**

Male  Female

**Ethnicity:** (Choose one)

Hispanic or Latino  Not Hispanic or Latino

**Race:** (Select one or more)

American Indian or Alaska Native  
 Asian  
 Black or African American  
 Native Hawaiian or Other Pacific Islander  
 White

**Disability Status:** (Select one or more)

Hearing Impairment  
 Visual Impairment  
 Mobility/Orthopedic Impairment  
 Other: \_\_\_\_\_  
 None

**Citizenship:** (Choose one)

U.S. Citizen  
 Permanent Resident  
 Other Non-U.S. Citizen

**Check here if you do not wish to provide the above information (excluding candidate's name):**

**Ethnicity Definition:**

**Hispanic or Latino**—A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race

**Race Definitions:**

**American Indian or Alaska Native**—A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment

**Asian**—A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam

**Black or African American**—A person having origins in any of the black racial groups of Africa

**Native Hawaiian or Other Pacific Islander**—A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands

**White**—A person having origins in any of the original peoples of Europe, the Middle East, or North Africa

#### WHY THIS INFORMATION IS BEING REQUESTED

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed candidates for Presidential Awards for Excellence in Mathematics and Science Teaching. To gather information needed for this important task, the candidate should submit a single copy of this form with his or her application materials. Submission of the requested information is voluntary and will not affect the candidate's eligibility for an award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. (The exception is the candidate's name.) Collection of this information is authorized by the NSF Act of 1950, as amended, 42 U.S.C. 1861, et seq. Demographic data allow us to gauge whether our programs and other opportunities in science and technology are fairly reaching and benefiting everyone regardless of demographic category and to ensure that those in underrepresented groups have the same knowledge of and access to programs, meetings, vacancies, and other research and educational opportunities as everyone else. The information will be held closely. Information from the system may be merged with other computer files in order to carry out statistical studies. Disclosure may be made for this purpose to NSF contractors and collaborating researchers, other Government agencies, and qualified research institutions and their staffs. The results of such studies are statistical in nature and do not identify individuals. The information will be added to the NSF Fellowships and Other Awards File, which covers individuals applying or nominated for and/or receiving NSF support, either individually or through an academic institution, including fellowships or awards of various types. See System of Records, NSF-12, "Fellowships and Other Awards," 63 Federal Register 265 (January 5, 1998).

NSF Form 1225 (10/99)

## Privacy Act and Public Burden Statements

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to your institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or administration of awards; to government contractors, experts, volunteers, and researchers and educators as necessary to complete assigned work; to other Government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the Government is a party. Information about principal investigators may be added to the reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See System of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of your receiving an award.

**Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor and a person is not required to respond to an information collection unless it displays a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 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 Plimpton, Reports Clearance Officer, Information Dissemination Branch, Division of Administrative Services, National Science Foundation, Arlington, VA 22230, or to Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation (3145-0058), 725 17th Street, NW, Room 10235, Washington, DC 20503.**