NSTI application form

PTO/NSTI/001 OMB Control No. 0651-0077 Expiration Date: XX/XX/XXXX

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. All fields are required to complete the National Summer Teacher Institute (NSTI) application. For more information, please see the **PRA Statement of Burden**.

Personal Information

1. First name:
2. Last name:
3. Street:
4. City:
5. State or U.S. territory:
LLS Militan/DoDEA Schools
6. Zip code:
7. Telephone (where you can be reached this summer):
(xxx-xxx-xxxx)
8. E-mail address (that you have access to this summer):

8a. Have you submitted a previous application to the USPTO NSTI Program? Yes, No

Commitment and Experience

9. If selected for participation for NSTI, I commit to attending all sessions during the week of July 16-July 21, 2024, and will make reasonable efforts, where applicable, to incorporate the lessons learned during NSTI in my classroom or school district during the 2023-2024 academic year. Yes No

9a: After attending NSTI, I will make reasonable efforts to share my experiences and outcomes with other teachers I met at NSTI and with the Office of Education at the United States Patent and Trademark Office (USPTO): (Examples include sharing phots of

my students and/or colleagues using the resources or strategies I learned at NSTI) $^{\bigcirc}$ Yes $^{\bigcirc}$ No

Teaching Experience

10. I have been employed as a full-time/part-time, licensed or certified teacher/instructional specialist or coach in an elementary, middle or high school (public

or private) in the United States for at least three years: $^{f O}$ Yes $^{f O}$ No

If "No," please specify other and provide details:

11. I have a strong desire to incorporate "making," inventing, or innovation into the

learning environment as a means for enhancing student interest in STEM learning: ⁽⁷⁾ 5 - Strongly agree ⁽⁷⁾ 4 - Agree ⁽⁷⁾ 3 - Neutral ⁽⁷⁾ 2 - Disagree ⁽⁷⁾ 1 - Strongly disagree

12. I have an interest in increasing student knowledge and understanding of the concepts of intellectual property, including the creation and protection of intellectual

property (patents, trademarks, copyrights, and trade secrets): 5 - Strongly

agree \bigcirc 4 - Agree \bigcirc 3 - Neutral \bigcirc 2 - Disagree \bigcirc 1 - Strongly disagree

Courses

13. Please check all STEM or STEM-related* courses you have taught during the 2023-2024 academic year: (STEM is defined as any course in the area of science, technology, engineering, or mathematics. *STEM-related applies broadly to any content area course that involves the use or application of any field of science, technology, engineering or mathematics or any combination thereof): (*Check all that apply*)

Mathematics: Algebra, Calculus, Geometry, Trigonometry, Other Math Courses

Science: Biology, Chemistry, Physics, Botany, Materials Science

Technology: Computer Science, Computer-Aided Design, Technology, Graphic Design, Industrial Design, Rapid Prototyping

Career and Technical Education

Engineering: Engineering, Mechanics, Robotics, Design Thinking

Business or Entrepreneurship

If Other: Please specify any other STEM or STEM-related courses you have taught during the specified academic year.

14. Please check all STEM or STEM-related* courses you will teach during the 2024-2025 academic year: (STEM is defined as any course in the area of science, technology, engineering, or mathematics. *STEM-related applies broadly to any content area course that involves the use or application of any field of science, technology, engineering or mathematics or any combination thereof): (Check all that apply)

Mathematics: Algebra, Calculus, Geometry, Trigonometry, Other Math Courses

Science: Biology, Chemistry, Physics, Botany, Materials Science

Technology: Computer Science, Computer-Aided Design, Technology, Graphic Design, Industrial Design, Rapid Prototyping

Career and Technical Education

Engineering: Engineering, Mechanics, Robotics, Design Thinking

Business or Entrepreneurship

If Other: Please specify any other STEM or STEM-related courses you have taught during the specified academic year.

15. Please check examples of either informal or formal educational programs where you have taught or mentored students in areas related to one or more of the following: Invention, Innovation, Making, or Entrepreneurship. *(Check all that apply)*

Computer Science Club

Entrepreneurship Club

	Invention Competitions	
	Inventors Club	
\square	Making/Design/Do-It-Yourself (DIY) projects	
	Robotics Programs	
\Box	Science Research/Citizen Science Programs	
\Box	Science Fair Projects	
\Box	Scouting	
\Box	4-H	
	Other	
if other provide details:		
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Teaching Philosophy

16. I have a strong desire to improve teaching and learning in either formal or informal environments and especially as it relates to the fields of STEM, innovation, or intellectual property: ^C 5 - Strongly agree ^C 4 - Agree ^C 3 - Neutral ^C 2 - Disagree ^C 1 - Strongly disagree

17. Identify what forms of pedagogy you have utilized in your classroom practice that may benefit other educators at NSTI: *(Check all that apply)*

Project-based learning: Teaching approach where students actively explore realworld problems and challenges, often working collaboratively to develop solutions and complete a project.

Problem-based learning: Instructional method where students learn through solving complex, authentic problems, fostering critical thinking and problem-solving skills.

Engineering design processes: Utilization of engineering principles and methodologies to engage students in hands-on design projects, encouraging creativity and innovation.

Project Lead the Way: Integration of Project Lead the Way (PLTW) curriculum, which emphasizes hands-on learning experiences in science, technology, engineering, and mathematics (STEM).

Case-based learning: Instructional strategy where students analyze real or hypothetical cases to apply theoretical concepts and develop decision-making skills.

Collaborative learning: Pedagogical approach where students work together in groups to achieve common learning goals, fostering teamwork and communication skills.

Invention Education: Incorporation of invention education principles, promoting creativity, problem-solving, and entrepreneurship through the invention process.

Genius Hour: Implementation of Genius Hour or 20% Time, allowing students to pursue self-directed learning projects based on their interests and passions.

5 E (or 7 E) approach to learning: Adoption of the 5E or 7E instructional model (Engage, Explore, Explain, Elaborate, Evaluate) to guide student-centered inquiry-based learning experiences.

Culturally responsive instruction: Tailoring teaching practices to meet the diverse cultural and linguistic needs of students, fostering inclusivity and equity in the classroom.

Maker education: Integration of maker-centered learning experiences, where students engage in hands-on, creative problem-solving activities using various tools and materials.

Other: Please specify any other teaching philosophies or methodologies you have utilized in your classroom practice that may benefit other educators at NSTI

18. Identify any past awards or training programs that you have participated in: *(Check all that apply)*

- National Science Teachers Association (regional or national)
- State professional association conferences (relevant content)
- □ International Society for Technology in Education
- □ International Technology and Engineering Educators Association
- □ Research Experience for Teachers
- □ Lemelson-MIT Invention Programs
- Invention Convention
- □ Science Congress
- Discovery Education STAR Educator Program
- Albert Einstein Distinguished Educator Fellowship
- Department of Education Fellowship Program

- Presidential Award for Math and Science Teachers Program
- Henry Ford Teacher Innovator
- Master Teacher Explain:
- Other If other provide details:

Integration and Application

19. Were you able to take any of your knowledge from past programs back to your students or classroom? \bigcirc Yes \bigcirc No

If yes, please explain with specific examples:

20. Please share any additional information that may be relevant to your interest in participating in the USPTO National Summer Teacher Institute, which will take place during the week of July 21-July 26, 2024. (Please limit your response to 250 words or less). Please include your interests, experiences, and motivation for applying to NSTI and consider sharing how you have taken knowledge from past training experiences and incorporated into classroom instruction. For more information, please visit our **NSTI FAQ** page:



Essay Response

- 21. Please share your thoughts on any one of the following topics:
- Your approach to teaching and student engagement
- □ Why you are interested in attending NSTI
- How you engage students in a creative learning environment

How you plan to use what you learn about invention and intellectual property education and how this will add value to your classroom Explain (Please limit your response to 250 words or less)



Your school's information

22. School name:
23. School district or county:
24. School website:
25. Street:
26. City:
27. State or U.S. territory:
State Selector
State Selector
28. Zip code:
29. Name of approving principal or administrator:
30. Contact number of approving principal or administrator:
(xxx-xxx)
31. Email address of approving principal or administrator:
32. My school principal or administrator has endorsed my application to the USPTO National Summer Teacher Institute. Endorsement means my principal or administrator is aware of my application to this program and has agreed to support my efforts to take the lessons learned through my participation in NSTI back to the classroom or to my school district. This also includes support by the principal or administrator to make
reasonable efforts in sharing learning experiences and outcomes with other teachers at

NSTI and with the USPTO: \bigcirc Yes \bigcirc No

33. I acknowledge that if I am selected to participate in this program the USPTO may contact my principal or school administrator to verify their endorsement: $^{f Q}$ Yes $^{f Q}$ No

How You Heard About Us

34.	How did you learn about this program? (Check all that apply)
	USPTO website
	Social Media (e.g., Facebook, Twitter, LinkedIn) Identify the social media page:
	Office of Education Webinar Eventbrite
	Email announcement
	Master Teacher of Invention and Intellectual Property Education Program (MTIP)
	National Summer Teacher Institute (NSTI) Alumni
	PAEMST Network
	Albert Einstein Distinguished Educator Network
	Government Agency Identify program or agency:
	Teacher Conference Identify conference and session speaker or topic:
	Attendance at a previous USPTO event
	Other (please specify)

<u>S</u>ubmit

PRA Statement of Burden

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a valid OMB Control Number. The OMB Control Number for this information collection is 0651-0077. Public burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Office of the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov.

Privacy Act Statement

The authority for the collection of this information is 5 U.S.C. § 301, 35 U.S.C. § 2, and E.O. 12862. The information you provide will be used to verify your identity and administer participation in the National Summer Teacher Institute. The information you provide is protected from disclosure to third parties in accordance with the Privacy Act. However, routine uses of this information may include disclosure to the following:

Congressional offices; Federal, state, local or foreign agencies; a court, magistrate or administrative tribunal; law enforcement; agents or contractors; the Department of Justice; the National Archives and Records Administration; and agency customers in the course of distributing patent and trademark business information. Disclosure of the information by you is voluntary; however, failure to provide any part of the requested information may result in our inability to enroll you in the program. The applicable Privacy Act System of Records Notice for this information request is Commerce PAT/TM-19, Dissemination Events and Registrations, available

at https://www.uspto.gov/uspto-systems-records-notices.