

2019 Noyce Summit Agenda for Scholars and Fellows

[@NoyceProgram](#) | [#Noyce2019](#) | [www.nsfnoyce.org](#)
Facebook Group "2019 Noyce Teachers"

Wednesday, July 10, 2019

2:00 pm - 9:00 pm Registration
3:30 pm - 5:30 pm **Orientation/Speed STEMming Event**

5:30 pm - 6:00 pm *(Poster Setup for Session 1)*

6:00 pm - 7:30 pm Opening Plenary
7:30 pm - 9:00 pm Poster Session 1/Networking Reception

Thursday, July 11, 2019

7:45 am - 8:45 am Continental Breakfast, Guided Discussion
7:45 am - 2:45 pm *(Poster Setup for Session 2)*

8:45 am - 10:00 am Plenary Session 2 | Keynote Speakers

10:15 am - 11:25 am Master Teacher Panel Workshop (60 min)
10:15 am - 10:45 am Concurrent Workshops Session 1 (30 min)
10:55 am - 11:25 am Concurrent Workshops Session 2 (30 min)

11:40 am - 12:40 pm Plenary 3 | Voices from the Field Panel
1:00 pm - 2:30 pm Plenary 4 | Working Lunch & Keynote
2:45 pm - 4:15 pm Discussion Sessions

4:30 pm - 5:45 pm Poster Session 2
5:45 pm - 6:00 pm *(Remove Posters)*
6:00 pm Optional: Networking Activities Offsite
Dinner on Your Own

Friday, July 12, 2019

7:45 am - 8:45 am Continental Breakfast, Guided Discussion

9:00 am - 9:30 am Concurrent Workshops Session 3 (30 min)
9:40 am - 10:25 am Concurrent Workshops Session 4 (45 min)
10:35 am - 11:05 am Concurrent Workshops Session 5 (30 min)

11:15 am - 12:30 pm Closing Plenary
12:30 pm - 3:30 pm Museum & Monuments Tours

PASSPORT

for Scholars and Fellows



2019 NOYCE SUMMIT

**The Role of Teacher Preparation
in STEM Teacher Retention
in High-Need School Districts**

This material is based upon work supported by the National Science Foundation (NSF) under Grant No. DUE-1548986.

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This material is based upon work supported by the National Science Foundation (NSF) under Grant No. DUE-1548986. Any opinions, findings, interpretations, conclusions or recommendations expressed in this material are those of its authors and do not represent the views of the National Science Foundation, AAAS Board of Directors, the Council of AAAS, AAAS' membership, or the AEF Program.

2019 NOYCE SUMMIT



The Space Foundation Teacher Liaisons
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

<https://www.spacefoundation.org/what-we-do/education>

Chrys Rheinbolt, Program Manager-Education
SPACE FOUNDATION HEADQUARTERS
 4425 ARROWSWEST DRIVE
 COLORADO SPRINGS, CO 80907 USA
 HQ: +1.719.576.8000 | M: +1.719.337.5688

The Alan Shepard Technology in Education Award
<https://www.amfcse.org/alan-shepard-technology-in-education-award/>

TEACHER LIAISONS
<https://www.discoverspace.org/education/educators/teacher-liaisons>

2019 NOYCE SUMMIT



International Spy Museum
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

<https://www.spymuseum.org/education-programs/>

Lucy Stim
 School and Youth Programs
 Manager

Lstim@spymuseum.org
 202.654.0933



BONUS RESOURCE:

Free STEM Kits as a Civil Air Patrol Education Member
<https://www.gocivilairpatrol.com/programs/aerospace-education/programs/stem-kits>



<https://www.uspto.gov/kids/parents.html>

“**Science of Innovation**” is a multi-part series produced by NBC Learn, the educational arm of NBC News, in partnership with the National Science Foundation (NSF) and the United States Patent and Trademark Office (USPTO). <https://www.uspto.gov/learning-and-resources/outreach-and-education/science-innovation-video-series>



National Summer Teacher Institute | July 28-August 2, 2019
 University of North Carolina at Charlotte.
 NSTI combines experiential training tools, practices, and project-based learning models to support elementary, middle, and high school teachers in increasing their knowledge of making, inventing, and innovation. <https://www.uspto.gov/learning-and-resources/outreach-and-education/national-summer-teacher-institute>

WELCOME to the 2019 Noyce Summit

July 10 - 12, 2019 | Washington, D.C.

[@NoyceProgram](#) | [#Noyce2019](#) | www.nsfnoyce.org

Facebook Group “2019 Noyce Teachers”

Teachers, Noyce Scholars, and Master Teacher Fellows:

Thank you for your commitment to become (or continue as) STEM teachers for students in high-need districts! The Robert Noyce Teacher Scholarship Program would not exist without you - the teachers. We are so happy to have you with us for the next few days.

The **Passport** (new this year) has been designed to help you make the most of your experience at the 2019 Noyce Summit, build a National STEM Network, and assist as you navigate Washington, DC. Participating Organizations will be providing Door Prizes throughout the Summit so keep your eyes and ears open for opportunities to win!

Please use your **Passport** as a guidebook for activities and a central location for notes and contacts. Take advantage of every opportunity to network, network, network. Connecting with other STEM teachers, organizations, and resource centers located throughout the United States will help you build a powerful professional STEM education network that will serve you throughout your career!

The Noyce Summit Passport Challenge

1. Join the Facebook Group **2019 Noyce Teachers**.
2. Tweet **@NoyceProgram** and **#Noyce2019**.
3. Meet and gather contact information from at least 5 Noyce Scholars or Master Teachers from different states.
2. Highlight at least 3 organizations you want to follow-up with from the **Speed STEMming** Event.
3. Attend at least 3 highlighted workshops for teachers.
4. View at least 10 posters from the 2 poster sessions.
5. Join the STEM Teacher Leadership Network.
6. Join a Thursday night optional activity
7. Sign up for a Friday afternoon tour.
8. Attend the **Voices From the Field Panel** 7/11 at 11:40 am.
9. Begin to envision how to incorporate what you learn at the 2019 Noyce Summit into your career pathway as a professional STEM Educator!

Highlighted Workshops for Scholars and Fellows

In response to Scholar and Fellow feedback from previous Noyce Summits we have scheduled workshops likely to be of particular interest to Scholars and Fellows in the same room locations for both Thursday and Friday. These sessions are expected to be engaging and targeting to specifically with topics of interest to teachers. You will have 3 of these workshops to choose from during each Concurrent Session time period.

[You may also attend any of the general workshops offered.]

Concurrent Session Information

Thursday, July 11, 2019

Thursday at 10:15 a.m.

1. Integrating STEM, Culture and Student Identity to Enhance Engagement Community Connections (30 min)
2. **Voices from the Field Master Teachers Panel (60 min)**
3. Reaching and Recognizing our English Language Learners in Math Class (30 min)

Thursday at 10:55 a.m.

1. Puzzles and Pictures (30 min)
2. Voices from the Field Master Teachers Panel (cont.)
3. Using Backward Design for Diverse Classrooms (30 min)



www.loc.gov/teachers

@TeachingLC

Primary Sources | Teacher Resources | Professional Development

The Library of Congress offers classroom materials and professional development to help teachers effectively use primary sources from the Library's vast digital collections in their teaching.

Find Library of Congress lesson plans and more that meet Common Core standards, state content standards, and the standards of national organizations.

Stephen Wessen
wesson@loc.gov

Kaleena Black
kblack@loc.gov

LIBRARY OF CONGRESS
TEACHING WITH PRIMARY SOURCES



<https://www.nasa.gov/stem>

Current Opportunities for Pre-Service Educators

Don't miss out on education opportunities available from NASA. Check this page often for new additions.



<https://www.nasa.gov/audience/foreducators/edu-pre-current-ops.html>

Trena Ferrell, Ph.D.

NASA Goddard Space Flight Center
 Earth Science Division Education and Public Outreach Lead
Trena.M.Ferrell@nasa.gov
 Phone: 301.286.7114/Fax: 301.286.1707

EDUCATOR RESOURCE CENTERS

Providing Free Educator Resources: Serving teachers, informal educators, and pre-service teachers to enable them to integrate NASA unique STEM content into their classrooms.

Professional Development: Free workshops using NASA unique materials to enhance curriculum needs and address content standards in areas such as Earth science, space science, aerospace, technology and engineering. <https://www.nasa.gov/centers/goddard/visitor/home/erc.html>

Concurrent Session Information

Friday, July 12, 2019

Friday at 9:00 a.m.

1. Learning Assistants Become Teachers: A Model for Recruitment and Retention (30 min)
2. Routines for Reasoning (30 min)
3. A phenomenon based lesson demonstrates scaffolding for science knowledge all learners can access (30 min)

Friday at 9:40 a.m.

1. Model-Based Reasoning and Recall using Sketching to Learn and Eyes-Closed Exercises (45 min)
2. Culturally Responsive Science Education in New York City: Collaboration of a Community of Teachers(45 min)
3. Students were not made to be managed: Effective practices to build community and promote inclusivity (45 min)

Friday at 10:35 a.m.

1. Can You List Five Good Reasons for Teaching Mathematics? Science? What are the Big Five? (30 min)
2. Intervention strategies for struggling learners in mathematics (30 min)
3. Promoting Student Agency through Self-Assessment and Rubrics (30 min)

Thursday Evening Optional Activities for Scholars and Fellows

Take a minute and think about the things you do to recharge your batteries

Self care is extremely important when you are spending so much of your time meeting the needs of others (or will be soon). Develop activities and interests that you enjoy outside of and away from your teaching commitment.

Remember:

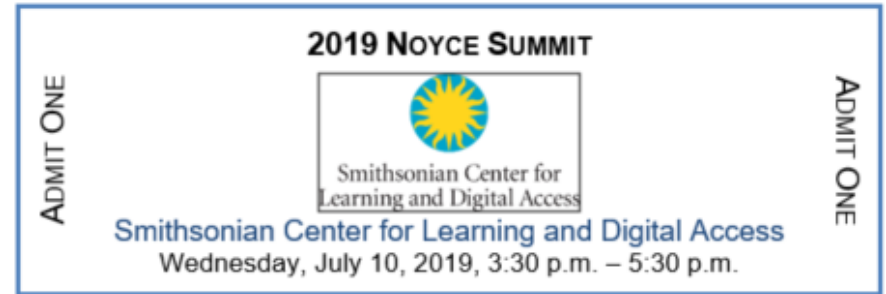
Take time to put your oxygen mask on first, before you try to help others!

Teaching is rewarding and challenging. To be the best you, you can be and to prevent burnout, consider treating yourself to activities like the ones listed below. Search for free or low-cost activities in your area. Don't be afraid to budget in activities to treat yourself.

Make sure you check out the details and sign up sheets for the following activities. Updated information will be posted in the FB Group "2019 Noyce Teachers" throughout the conference and at the registration tables.

- Outdoor Movie
- Live Music
- Comedy
- Escape Room
- Bowling

[There may be fees attached to attend these optional activities, please refer to the information/sign up sheets.]



<https://learninglab.si.edu/about/SmithsonianCenterforLearningandDigitalAccess>

JOURNEY THROUGH AN EXPLODED STAR

The elements that make up nearly all that you are and can see first came from the explosion of a massive star.

Step inside one such explosion and explore the forces that connect each of us to the stars.

Step Inside a Supernova

This interactive experience features research by a team of scientists led by astronomer Kimberly Arcand. Whether you're a budding astrophysicist, tech enthusiast, or teacher looking for cool science content, we've got you covered.

"Journey through an Exploded Star" s.si.edu/supernova

Cody Coltharp
Digital Interactive Designer
Smithsonian Center for Learning and Digital Access
coltharpc@si.edu



<https://www.societyforscience.org/>

THE ADVOCATE GRANT PROGRAM

Providing training, stipends, and year-round support to mentors supporting **underrepresented and low income students in** entering science research competitions. The Advocates, who become a supportive cohort to each other, receive training and support from Society staff, a \$3,000 stipend and a paid trip to Washington, D.C., to meet in person at a weekend-long convening.

<https://www.societyforscience.org/advocate-grant>

RESEARCH TEACHERS CONFERENCE

September 27-29, 2019 in Washington, D.C. Expenses for travel, lodging and meals will be covered by the Society for all attendees. This program is made possible through the generous support of Regeneron.

<https://student.societyforscience.org/research-teachers-conference>

**Meet Your 2019 Noyce Summit
“Voices from the Field” Panelists**

Name: Jonathan Isozaki

College: Loyola Marymount University, CA

Degree: BA in Mathematics and Secondary Education

Teaching: 2 years

Current School: Hawthorne High School in Los Angeles, CA

Subject: Common Core Integrated Mathematics I & II

Name: Maria Crouse

College: Metropolitan State University of Denver, CO

Degree: BA in Mathematics and Minor in Secondary Education

Teaching: 1 year

Current School: Dr. Martin Luther King Jr. Early College, CO

Subject: Integrated Mathematics II & III, Financial Algebra

Name: Keeden M. Hopkins

College: East Carolina University, NC

Degree: BS in Biology and MAT in Secondary Science

Teaching: 1 year

Current School: Innovation Early College High School, NC

Subject: Biology, Earth Science, Physics & Chemistry

Name: Jamie MacDonald

College: Bridgewater State University, MA

Degree: BA in Geology and Elementary Education

Teaching: 1 year

Current School: Hayden McFadden Elementary School, MA

Subject: STEM Teacher for Second through Fifth Grades

Name: Brandon Begay

College: Arizona State University, AZ & San Juan College, NM

Degree: BS in Biochemistry

Teaching: 1 year

Current School: Shiprock High School, NM

Subject: Algebra I & II, Geometry, AP Calculus, Financial Lit.

Name: Maisa Abu-Mallouh

College: Lewis University, IL

Degree: BS in Biology and MEd in Secondary Education

Teaching: 1 year

Current School: Joliet Central High School, IL

Subject: Physics & Biology

Friday Afternoon Tours

for Scholars and Fellows

hosted by

2018-2019 Albert Einstein Distinguished Educator Fellows

United States Botanic Garden

International Spy Museum (\$7 cash only)

National Museum of Natural History

National Mall Monuments and Memorials

National Museum of African American History & Culture

Library of Congress

National Air and Space Museum

If you have not already signed up for a tour, please check the Registration Desk for sign up sheets. You can also learn about tours in the Group "2019 Noyce Teachers" and at www.nsfnoyce.org.
[All tours are free of charge unless otherwise noted.]

Getting Around DC

The Circulator Bus

<https://www.dccirculator.com/>

(Free! begins at Union Station and goes all along the National Mall.)

DC Metro

<https://www.wmata.com/>

(Buy a card at the kiosk at Union Station for about \$12.)

Lyft or Uber

(Download the App. Rides cost around \$10.)

Scooters and Bikes

(Found throughout DC, download the associated App prices vary.)

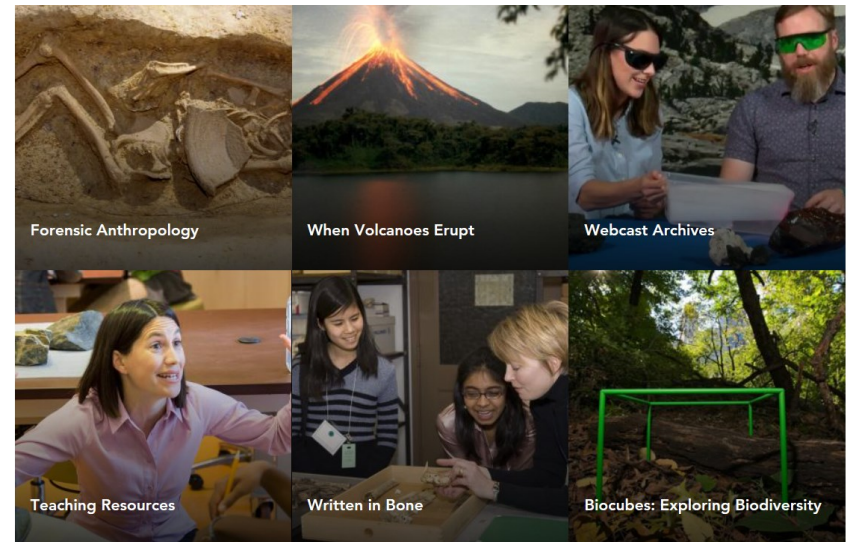
2019 NOYCE SUMMIT



National Museum of Natural History
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

ADMIT ONE



<https://naturalhistory.si.edu/education>


Call 202-633-4039 or email NMNHSchoolPrograms@si.edu.

Nicole Webster

Manager of School and Youth Programs
Office of Education and Outreach

2019 NOYCE SUMMIT

ADMIT ONE



Albert Einstein Distinguished Educator Fellowship
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

<https://science.osti.gov/wdts/einstein>



2019 NOYCE SUMMIT

ADMIT ONE



National Science Bowl
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

<https://science.osti.gov/wdts/nsb>

Speed STEMming Agenda for Scholars and Fellows

As you begin your transition to [or continue on as] a certified STEM educator serving in high-need districts throughout the United States please use this networking opportunity to plan for your future as an accomplished and effective STEM educator.

All of the extraordinary organizations in attendance are excited to speak with you about high quality professional development opportunities, free STEM classroom resources, and pathways for your career advancement as professional STEM educators.

Take advantage of building your national STEM network and create a blueprint for your future as an accomplished and effective professional STEM educator serving our students in high-need districts throughout the United States.

Use the space provided in this passport to make notes for each organization, particularly those opportunities that you would like to explore further!

Wednesday, July 10, 2019

- 3:30 pm - 3:45 pm** Introduction and Icebreaker
- 3:45 pm - 4:00 pm** Welcome Address from **Peggy Brookins**
President and CEO of the National Board for Professional Teaching Standards
- 4:00 pm - 5:30 pm** **Speed STEMming Event**
Scholars and Fellows switch organization tables every 5 minutes (1 minute allowed to transfer).
- 5:30 pm - 6:00 pm** Follow-up conversations with STEMming organizations.
Dismissal for those who need to setup for Poster Session 1.
- 6:00 pm - 7:30 pm** Opening Plenary
- 7:30 pm - 9:00 pm** Poster Session & Networking Reception
Organizations may be in attendance for Follow-up conversations with Scholars and Fellows

2019 NOYCE SUMMIT

NATIONAL BOARD
for Professional Teaching Standards®

National Board for Professional Teaching Standards
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

ADMIT ONE

<https://www.nbpts.org/>

Ms. Peggy Brookins, NBCT

President & CEO

National Board for Professional Teaching Standards

1525 Wilson Boulevard, Suite 700

Arlington, VA 22209

peggy.brookins@nbpts.org

NATIONAL BOARD
for Professional Teaching Standards®

2019 NOYCE SUMMIT

ASCD

STEM by Choice/TeachToLead/Teacher Impact Grants

Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

ADMIT ONE

ADMIT ONE

<http://www.ascd.org/>



Aman Dhanda

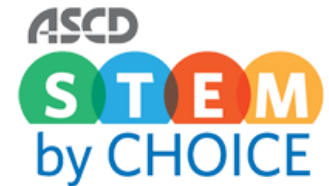
Director of Educator Engagement

Office of Integrated Services,
Programs, and Partnerships

1703 N. Beauregard Street ·
Alexandria, VA 22311-1714

(703) 575-5681

aman.dhanda@ascd.org



2019 NOYCE SUMMIT

ADMIT ONE



114th Partnership Spark 101
 Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

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www.spark101.org

114th Partnership Program Spark 101:

“Finally, resources available to answer the age-old question: ‘how will I use this in the real world?’”

— High school educator, after completing our professional learning program


Our free interactive videos motivate students to persist in STEM coursework by integrating academics with on-the-job tasks from real employers. Companion, educator-developed resources provide the means for teachers to integrate math and science teaching objectives with credible career content.

Russell Brown

Content Design Lead | 114th Partnership | www.114th.org
 240.242.4343 x 103 | 6010 Executive Boulevard . Suite 500 .
 Rockville, MD 20852
 Email: russ.brown@114th.org

2019 NOYCE SUMMIT

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STEM Teacher Leadership Network
 Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

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We invite you to become a member of the STEM Teacher Leadership Network

<https://stemtlnet.org>

A new initiative designed to connect, support and inspire teacher leaders and aspiring leaders to improve schools, effect policy, and re-envision STEM teaching and learning.

- Find funding opportunities, professional development programs, job opportunities and more.
- Learn about conferences, events, webinars, and deadlines related to STEM Teacher Leadership.
- Network with other STEM teacher leaders who want to collaborate, share ideas, knowledge, and passion.
- View videos, articles, presentations, research papers, and other resources of interest to STEM teacher leaders.

2019 NOYCE SUMMIT

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**NATIONAL MUSEUM
OF AFRICAN AMERICAN
HISTORY & CULTURE**

ADMIT ONE

National Museum of African American History & Culture
Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

<https://nmaahc.si.edu/>

STEM website:

<https://nmaahc.si.edu/learn/educators/stem-nmaahc>

Important Dates:

- **Week-long PDSTEM Educator Workshop**
July 29, 2019 – August 2, 2019
- **STEM Master Teacher Fellowship**
Application period opens- August 5, 2019
- **STEM Teacher In-Residence Program**
Application period opens- October 14, 2019



Name: **Christopher Williams**
 Title: STEM Education Specialist
 Email: NMAAHC-STEM@si.edu

2019 NOYCE SUMMIT

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LabX – National Academy of Sciences
 Wednesday, July 10, 2019, 3:30 p.m. – 5:30 p.m.

EXTREME EVENT

extreme-event.org

A Fun, Role-Playing Game for Building Disaster Resilience!



Players make decisions and solve problems in a
FAST PACED DISASTER SIMULATION

Three versions
HURRICANE • EARTHQUAKE • FLOOD

Three ways to play
DIY • RENT IT • FULLY FACILITATED

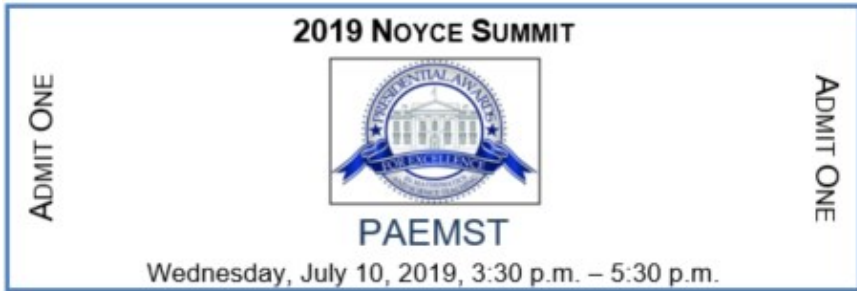
contact us: labx@nas.edu



#ExtremeEventGame

[@labxNAS](https://twitter.com/labxNAS)





<https://www.paemst.org/>

The **Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)** are the highest honors bestowed by the United States government specifically for K–12 science, technology, engineering, mathematics, and/or computer science teaching.

Awardees serve as models for their colleagues, inspiration to their communities, and leaders in the improvement of STEM education. Since 1983, more than 4,800 teachers have been recognized for their contributions to STEM education. Up to 108 teachers are recognized each year. Presidential Awardees receive:

- A **citation** signed by the President of the United States
- A **trip to Washington, D.C.** to attend a series of recognition events and professional development opportunities
- A **\$10,000 award** from the National Science Foundation



<https://www.knowlesteachers.org/>

The Knowles Teaching Fellows Program is an intensive and cohesive, five-year program that supports early-career, high school mathematics and science teachers in their efforts to develop teaching expertise and lead from the classroom.

Applications for the 2020 Knowles Teaching Fellowships are due December 1, 2019.

There is no cost and no catch to be part of this program. Visit [knowlesteachers.org/apply](https://www.knowlesteachers.org/apply) to learn more, check your eligibility, and start an application.

Knowles Teaching Fellow benefits include:

- **Financial Support:** Access to \$9000 in annual funding for professional development, classroom materials, and stipends
- **Coaching & Mentoring:** Support from experienced teachers who assist with a wide range of personal and professional challenges faced by beginning teachers
- **Community Membership:** Tap into a national network of more than 300 teachers who support one another in their efforts to improve education



<https://www.nationalgeographic.org/education/>

At National Geographic, we are committed to teaching students about the world and how it works, ultimately empowering the next generation of change makers. Our Educator Network connects pre-K-12 formal and informal educators committed to inspiring the next generation. Learn more about our professional development, students experiences, and classroom resources at NatGeoEd.org.

JT Hardin
 Sr. Manager, Education Leadership Programs
 t. [202-807-3158](tel:202-807-3158)

NATIONAL GEOGRAPHIC
 1145 17th St., NW, Washington, DC 20036



<https://spacecenter.org/education-programs/>



Gateway to Achieve
February 6 – 8 2020

<https://spacecenter.org/educator-resources/teachers-seec/>

Phyllis Friello
 Education Manger
pfriello@spacecenter.org

Space Exploration Educator Crew
<https://spacecenter.org/educator-resources/space-exploration-educator-crew/>