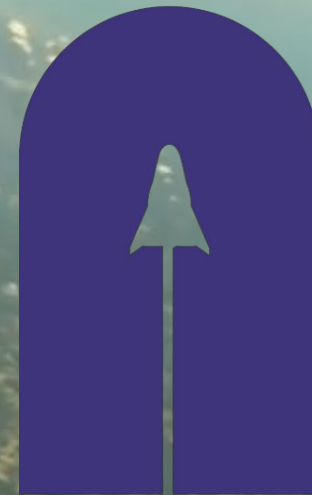
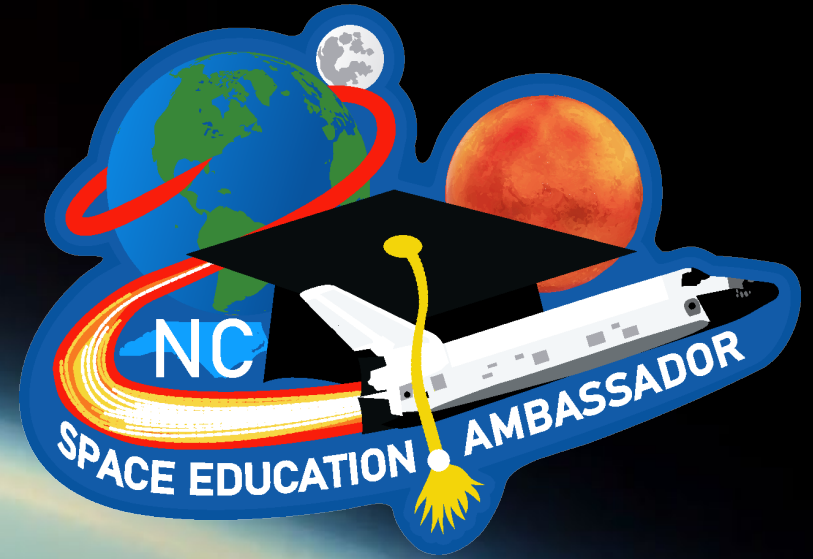


NC Space Education Ambassadors Program

Jobi Cook
NC Space Grant



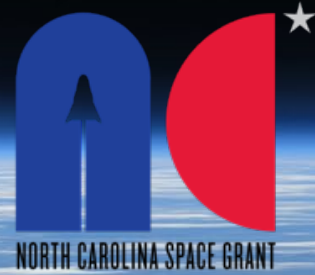
NORTH CAROLINA SPACE GRANT

NCSEA Evolution



- NASA Network of States (NOS) – a collaboration among the 10 NASA centers to build regional networks for educator professional development.
 - Targeted school districts that served populations underrepresented in STEM.
 - Provided PD for teachers and STEM outreach for middle school students.
- NC was NASA Langley’s first stop, followed by KY and SC in the following years (program concluded in 2019).
 - Langley trained 50 teachers in eastern NC in NASA STEM resources
 - Left teachers wanting more ...
- The NC Space Education Ambassadors Program was created in partnership with NASA Langley.

NCSEA Model



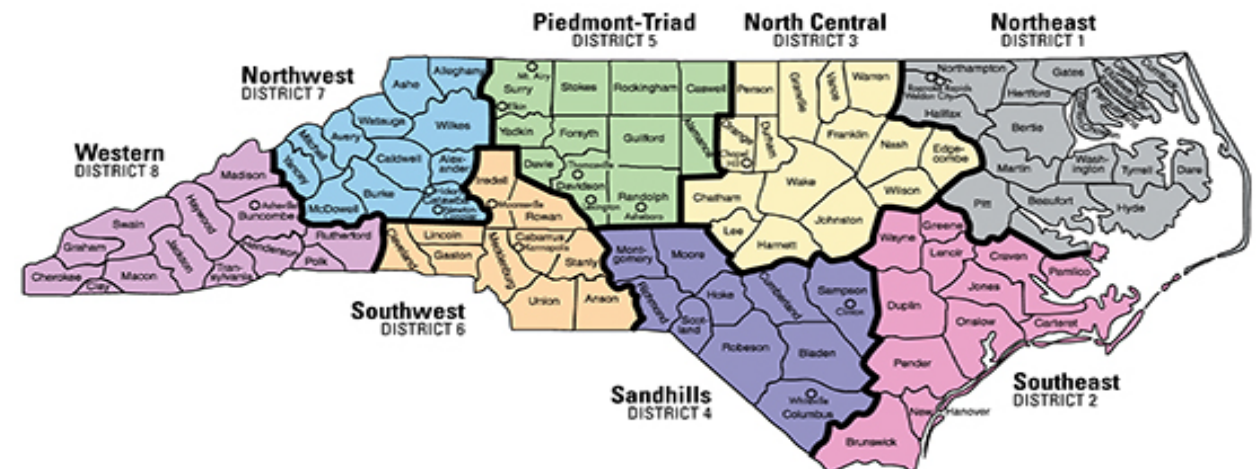
Goal:

To build a statewide network of master teachers who deliver NASA educational content to their local students, schools and communities.

Eligibility Requirements:

- Currently employed as a K-12 classroom teacher or STEM coordinator at any public or private school in the State of NC.
- Minimum 3 years of teaching experience.
- Must be a U.S. citizen or permanent resident.

Up to 12 teachers selected annually, with at least one teacher selected from each education district.



NCSEA Expectations



PROFESSIONAL DEVELOPMENT

DISSEMINATION

NASA LANGLEY EXPERIENCE

NCSEA Expectations



PROFESSIONAL DEVELOPMENT:

- NCSEA are required to participate in 10 virtual webinars that introduce NASA/NASA mission content plus resources to support this content. These virtual sessions will be led by NASA professionals in research and education.
- NCSEA are required to complete lessons after each content session and be prepared to discuss with peers in a share-a-thon session
- All documents and resources are organized via Google Drive.

Webinar Schedule	
All sessions are from 6:00-7:15 pm (unless otherwise noted)	
Activity/Theme:	Date:
Kick Off Webinar	September 12, 2023
NASA Resources	September 19, 2023
Astronomy	October 10, 2023 (content)
	November 7, 2023 (lesson sharing)
Space Exploration (Artemis)	December 12, 2023 (content)
	January 9, 2024 (lesson sharing)
Earth Science	February 6, 2024 (content)
	March 5, 2024 (lesson sharing)
Engineering	March 26, 2024 (content)
	April 30, 2024 (lesson sharing)

NASA Langley Field Trip		
Target Dates:	Location:	Activity:
Week of June 24-27, 2024	NASA Langley Research Center Hampton, VA	Tour research facilities, participate in My NASA Data PD, lesson plan presentations

NCSEA Expectations



DISSEMINATION:

All NCSEA are required to complete two activities to include:

1. One NASA professional development workshop (school, district, conference), and
2. One NASA STEM Engagement opportunity for students.

NCSEA must submit a (simple) participation report after each activity (for NCSG NASA reporting purposes).

NCSEA represent NASA and NCSG at outreach/events/conferences as schedules allow.



Brought to you by the Space Grant.
Based on: <https://www.jpl.nasa.gov/edu/learn/project/make-an-astronaut-lander/>

BUILD AN ASTRONAUT LANDER ACTIVITY – MIDDLE SCHOOL



Build your own Lunar or Mars lander!
An activity for middle school students, with Betty Jo Moore, NC Space Education Ambassador and Science Teacher, Forsyth County Schools.

Brought to you by NC Space Grant.
Based on: <https://www.jpl.nasa.gov/edu/learn/project/make-an-astronaut-lander/>

SCIENCE AT HOME- BACKYARD NAVIGATION

SUPPORT THE MUSEUM WITH A DONATION

DONATE NOW



NCSEA (top L) lead an engineering challenge with UNITE campers (from NC and AL); NCSEA (top R) host booth at the Triangle SciREN Event; NCSEA delivers a pre-recorded engineering activity for NCMNS Astronomy Days (hyperlinked photo)

NCSEA Expectations



NASA LANGLEY EXPERIENCE:

- Attend a group field trip to NASA Langley Research Center for tours of research facilities and additional professional development/sharing.
- NC Space Grant will cover all travel expenses.



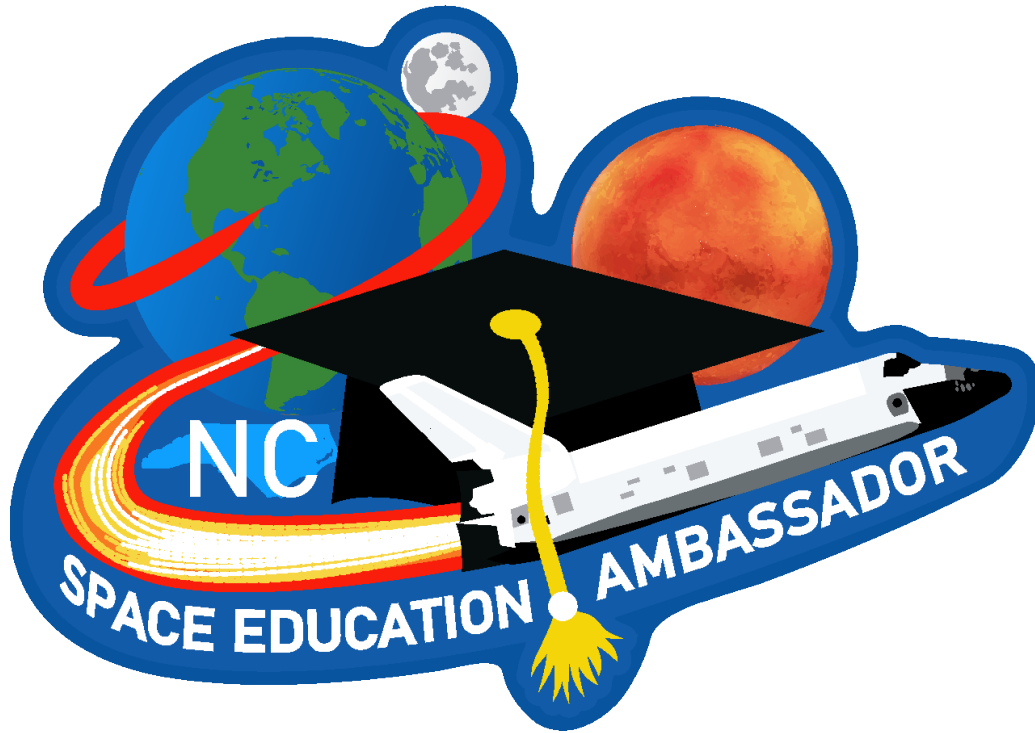
NCSEA Patch – History



Winning design developed by K. Linnane, high school student from East Chapel Hill High School (NCSEA cohort 1)

I looked over every NASA mission patch ever created as inspiration for this patch. I incorporated the Earth, Moon and Mars to represent NASA's current mission objectives. I added the graduation cap to show NCSEA's foundation of education. The trail coming from the rocket ship, a space shuttle due to its iconic imagery, is coming from Kennedy Space Center, the place where NASA first launched astronauts to the moon. The overlay of elements, specifically the graduation cap, is meant to show how education is connected to space and interplanetary travel. Overall, this patch is meant to show the unique nature of the NCSEA program and its values.

NCSEA Patch – Official Logo



Developed in partnership with
A-B Emblem in Weaverville, NC

<https://ncspacegrant.ncsu.edu/2021/08/24/nasa-mission-patches/>



**A-B Emblem sends all
NCSEA space mission
patches to use in their
classrooms**

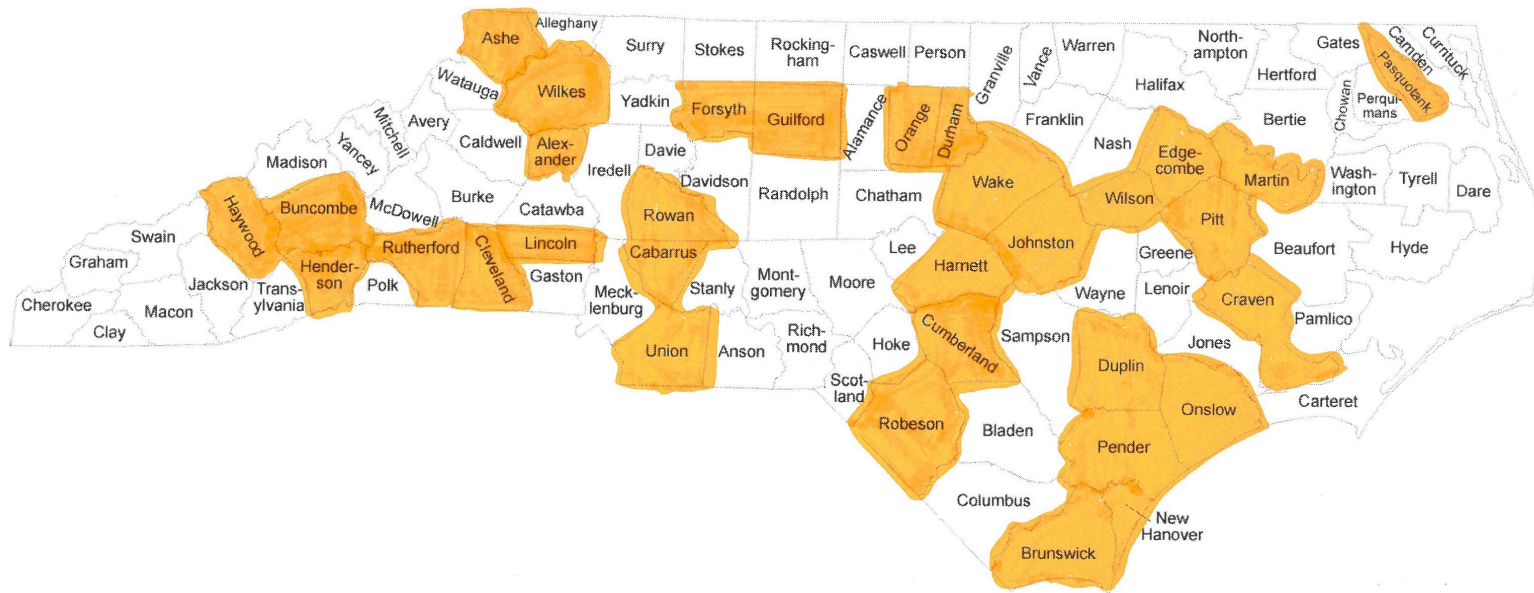
NCSEA Summary



59 teachers trained (over 4 cohorts), representing 32 counties across NC

Since 2020, NCSEA have:

- Trained 875 teachers via PD in their districts or at conferences
- Conducted 315 outreach programs, serving 6,122 precollege students



Questions?

