

The Reflector

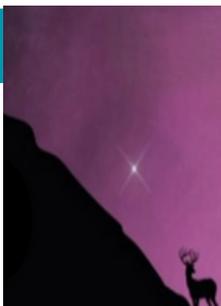


Editor: Dr. Mary Ellen Durham

Fall 2025

NCSTA 2025 PDI Science is Phenomenal

NCSTA's 2025 Professional Development Institute (PDI) will be held November 6 and 7, 2025 at the Benton Convention Center, Winston-Salem, North Carolina. This year's PDI offers a dynamic atmosphere in which participants will have opportunities to enhance their instructional skills and become acquainted with innovative science lessons. Attendees will be able to explore cutting edge resources, examine the latest trends in emerging technologies, make new professional connections, and network with other science educators.



Anticipate an empowering event featuring keynote addresses by two nationally recognized science educators. Dr. Amy D'Amico (Division Director of Professional Services Smithsonian Science Education Center) will be the featured speaker on the first day of the conference followed Pamela C. Silva Diaz (National Geographic Explorer) who will deliver the keynote address on Friday. Expand your professional expertise and engage in relevant concurrent sessions. (Over 120 vibrant sessions will be offered over the two days of the conference). Immerse yourself in the latest instructional resources displayed in the extensive exhibit hall. Attendees will have opportunities to win mini-grants and prizes. All are encouraged to attend the annual awards ceremony and reception. A pre-conference field trip to Pilot Mountain State Park including dinner is also planned.

Don't delay. Be inspired, expand your instructional skills, enhance your professional knowledge, and collaborate with other science educators. [Register](#) for the 2025 PDI.

Remember, up to 1.2 CEU credits can be earned during the two-day conference. Register today.



2025 President's Message: A Year of Growth and Gratitude



Dear NCSTA Colleagues,

As my term as your NCSTA President approaches its end, I am filled with gratitude and pride. It has been such an honor to serve in this role. Join me in this moment as I reflect on our collective journey, celebrate our successes, and look forward to the exciting path ahead.

This year witnessed a strengthening of our NCSTA community and professional collaboration. The impact of our newsletter has deepened, becoming a vibrant showcase for the amazing science instruction occurring in classrooms across all districts. Through *The Reflector* we have cheered for the winners of statewide competitions, congratulated students on their scientific achievements and publicly commended teachers for their exceptional innovations. The use of our social media, (Facebook, Instagram and Twitter) served as another vehicle for membership sharing.

NCSTA has recognized the bright promise of our novice "rising stars" and the profound, lasting accomplishments of our veteran teachers. We have supported effective teaching through our study and curriculum grants, empowering educators to pursue new knowledge and bring innovative lessons to their students. NCSTA continues to offer *May Your Wish Be Granted* (mini grants) to help fund creative classroom projects). This momentum is leading us to the highlight of 2025, the Professional Development Institute (PDI). Your NCSTA Board and planning committees have prepared a terrific PDI, packed with an incredible lineup of speakers, engaging sessions, and valuable resources designed to inspire and re-energize you for the work ahead!

The dedicated NCSTA Board of Directors and committee members have my heartfelt appreciation for their tireless, behind the scenes work. More importantly, I thank you, the membership. Your passion, your expertise, and your unwavering dedication to your students are the heart of this organization. Thank you for the honor of serving you. The future of science education in North Carolina is bright because of all of you.

Sincerely

Adrienne Evans



Bow Ties and Tid-Bits: Not All Heroes Wear Capes (or Labcoats)

Submitted Dr. Brad Rhew (NCSTA president elect)



Greetings, fellow science educators!

Yes, it is true. There IS something that I enjoy as much as my bowtie collection! It is learning about how you inspire students in your classes and celebrating North Carolina's science educators who are truly making a difference in students' lives.

Every day in classrooms across North Carolina, science educators are quietly shaping the future. They are sparking curiosity, fueling excitement, and building the foundation for students to see themselves as future scientists, engineers, and innovators. These educators spend countless hours designing engaging lessons, preparing hands-on labs, and creating learning opportunities where every student feels included in the story of science.

What often goes unnoticed is the depth of commitment it takes to make this happen. Science teachers are not only teaching content; they are designing meaningful experiences. Long after the final bell rings, many teachers are still in their classrooms—refining lessons, setting up tomorrow's lab, or searching for a creative way to reach that one student who needs a little more encouragement. They track down grants for classroom materials, write proposals for laboratory equipment, and build partnerships with local businesses or universities to give students real-world STEM experiences. They differentiate instruction so that every learner, from the reluctant scientist to the budding engineer, feels capable of contributing. Their work extends beyond the curriculum; it's about cultivating belonging, building confidence, and preparing students to see science not as something abstract, but as something they can do.

Incredible things are happening in science classrooms each day—yet much of it goes unnoticed outside the school walls. Teachers are often too humble to seek the spotlight. For many, excellence is simply part of who they are, and they carry out this work not for recognition, but for the joy of seeing students discover and grow.

That's what makes the North Carolina Science Teachers Association (NCSTA) awards so meaningful. These awards are not about outside accolades; they are about peers—those who truly understand the dedication, innovation, and persistence it takes to make science come alive in the classroom. A nomination from a fellow educator carries weight because it comes from someone who has seen firsthand the extraordinary work that so often goes unnoticed.

Over the years, NCSTA has worked to highlight these unsung heroes in our community. Through stories in the Reflector and other platforms, we've tried to shine a light on the countless educators who transform lives through their passion and commitment. But there are always more voices and stories waiting to be told. If you know an amazing science educator, consider nominating them for an NCSTA award. It is one of the best ways we can celebrate those who inspire students to dream bigger, embrace challenges, and see themselves as future leaders in STEM fields. By lifting up these educators, we not only honor their work, but we also remind our communities just how powerful great teaching can be. Behind every student who chooses a STEM career, there's often a teacher who first showed them the wonder of science. Let's make sure those teachers—our unsung science heroes—get the recognition they so richly deserve.

Scientifically Yours -

Brad Rhew



Prepare to Party!!!



On Thursday evening November 6, 2025, the NCSTA Board, along with our PDI sponsors will host the annual reception and awards ceremony. PDI participants are invited to attend this fun-filled celebration. Savor a wide array of heavy hors d'oeuvres (Cash wine, beer, and beverage bar will be available.) Enjoy the live musical entertainment. Make new connections with science educators from across the state, collaborate, and reconnect with former colleagues.

Immediately following the reception will be the annual awards ceremony. NCSTA will announce Grant-Me-a-Wish winners and recognize statewide and district-level awardees for their roles in promoting excellence in science education. Bring your lucky charm, as prize winners will be announced throughout the ceremony.

Join the festivities! Party like you don't have to teach in the morning! Come to the reception and Awards Ceremony.



PDI Lunch and Learn Sessions

Efficiently use your conference time and join fellow attendees in one of the following **Lunch and Learn** options at the November 2025 PDI. Enjoy a session and meal sponsored by one of our exhibitors.

Lunch and Learn options scheduled for Thursday, November 6, 2025, are:

- **ExploreLearning, Salem 1C**
- **Savvas, Winston 3B** and
- **Accelerate Learning, Winston 3C.**

- Join the Friday **Lunch and Learn** for a live virtual dairy farm tour
- **The Dairy Alliance, Winston Ballroom**

PDI attendees should refer to **SCHED** for more information regarding the **Lunch and Learn** sessions.





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2025 PDI Spectacular Prize Giveaway

Conference attendees, do not miss your chance to win a fantastic prize! You just might be one of our lucky winners. Valuable raffle tickets will be distributed throughout the conference (registration, general sessions, exhibit hall, and at the awards ceremony). Collect and save these prize tickets as you participate in the various events PDI events.

Exciting prize giveaways are scheduled over the course of the Award Ceremony, so be sure to bring your tickets as you join the NCSTA Board at the annual celebration for our award-winning science educators. (Please note that to win and receive a prize, winning ticket holders must attend the Awards Ceremony). To view the fantastic prize options awaiting our lucky winners click the following address.

[NCSTA Giveaway Prizes](#)



Special Music Presentation

PDI participants attending the NCSTA reception on November 6, 2025, will be treated to a special performance provided by the very talented student musicians from the Walkertown Middle/High School bands. The Walkertown Bands are known for their excellence, as evidenced by their combined 11 superior and 2 excellent ratings at the NCMEA Music Performance Adjudication. The musicians will be directed by Mr. Quincy Lundy, a Winston-Salem Forsyth County Schools Band Director of the Year and inductee into the prestigious American Schools Band Directors Association.



NC Science Educator is a Fulbright Teacher for Global Classrooms

Dr. Dorothy Holley, West Johnston High School chemistry teacher, (Johnston County Public Schools) recently visited Africa, through the [Fulbright Teachers for Global Classrooms Program](#). As part of its mission to promote peace and mutual understanding throughout the world, this prestigious program provides United States educators opportunities to travel abroad and study

international education systems. Upon returning to their home schools, program participants are to share their newly acquired global perspectives with their classes.

Dr. Holley and 20 other American educators were chosen to visit Senegal, which is the westernmost country of all of Africa. It is a primarily Islamic, French-speaking country. Although Senegal is economically poor, its citizens highly value the teaching and learning process. During her global experience, Dr. Holley was assigned to a host teacher who is an English instructor. In addition to assisting her host with classroom activities, Dr. Holley was to help the Senegalese students understand the culture of the United States. Upon learning that her host's students were 10th and 12th graders and had studied her science discipline, she integrated chemistry into English lessons using a periodic table that was created with input from her West Johnston High School classes. This unique periodic table included facts about North Carolina colleges and universities, as well as information regarding West Johnston High (courses, clubs, sports, and programs). Using this chart, Dr. Holley shared information about North Carolina and the daily activities of her Johnston County students with their Senegalese counterparts.

Her experiences in Senegal provided Dr. Holley a newfound world view and understanding of global competence. Global competence is the ability to respect different perspectives and cultures, understand various viewpoints and act effectively on significant global issues. She is networking with international educators and other Fulbright teachers to develop lessons that promote global competency within American classrooms. She also intends to attend meetings and conferences designed to expand her expertise in global competency instruction.

Holley is a 30-year veteran educator who has taught chemistry for 25 years. She received her undergraduate degree from Wake Forest University, earned a Master of Environmental Science from Montreat College, and a Ph.D. in Science, Technology, Engineering, and Mathematics from North Carolina State University. She is a former Einstein Distinguished Education Fellow and winner of the NCSTA 2023 District 3 High School Level Outstanding Science Educator Award. Dr. Holley currently serves as the Chair of the Curriculum and Study Grants Committee on the North Carolina Science Teacher Association Board. NCSTA commends Dr. Holley for her continued efforts to enhance science education.

Congratulations!

Pilot Mountain Sunset Tour and Dinner



Join the Schools In Parks team for a science enrichment field trip of outdoor wonder, warm food and friendship at Pilot Mountain State Park on Wednesday, November 5, 2025. Transportation will be provided from the NCSTA conference, meeting outside the main entrance Winston-Salem Marriott downtown. Enjoy an evening stroll atop the summit with a naturalist, headlamps provided. We will explore the unique geology and learn about the park's natural resource management work. A catered dinner will be provided in the visitor center with time for networking and exploring the park's exhibit hall. Meet partners from UNC-Institute for the Environment and North Carolina State Parks. Network with fellow science educators in a state park, after hours.

Agenda 5:00 PM. Vans depart the main entrance (valet areas) of the Winston-Salem Marriott-downtown for Van transportation. (If you plan to meet us in your own vehicle at the Pilot Mountain summit, please share that in the registration). **5:45 PM.** Naturalist guided stroll at the Pilot Mountain summit with headlamps provided. Natural resource management and geology exploration. **6:30 PM.** Vans Depart the Summit for the Visitor Center. **6:45 PM.** Buffet dinner, networking and exhibit hall exploration. **7:45 PM.** Vans Depart the Park to Return to Winston-Salem. **8:30 PM.** Arrive back at Marriott Downtown.

Registration Fee is \$20 and will be limited to 25 participants. Meal information on our website.





Share-a-thons

Share-a-thons are a convenient venue for PDI attendees to network and discover innovative instructional ideas.

The **Elementary Share-a-thon** is scheduled for 8:30 AM on Thursday morning. Presenters will be stationed at tables around the room for an hour, allowing attendees to circulate the room, interact with presenters and collect informational handouts.

The **Middle/High Share-a-thon** will be Thursday afternoon 1:30 PM to 4:30 PM. Tables, identified by the respective science disciplines, will be positioned throughout the Benton Lobby. At each table, copies of instructional activities and/or a related web link will be available for attendees. The individual presenters will be at their tables at various times during the three-hour period to chat and answer questions. These face-to-face interaction times will be posted on each table.

If you would like to showcase your favorite instructional activity, there is still time for you to register as a Share-a-Thon presenter. Submit your **Elementary Share-a-Thon information here**. If you need more information or have questions, contact **Angela Adams** or **Brad Rhew**. Submit your **Middle/High Share-a-thon information here**. For more information about the Middle/High Share-a-thon, contact **Kristen Kane**.

Share-a-Thon presenters will be listed in the PDI program and must be registered for the PDI.

Outstanding Exhibit Hall Planned for 2025 PDI



The extensive exhibit hall planned for the 2025 PDI promises a dynamic atmosphere in which the latest in science-based instructional resources will be displayed. The hall will be filled with exhibitors, providing an interactive platform for discovery and product review. Conference attendees are encouraged to visit each booth to examine contemporary, high-quality, branded resources and services that are designed to support and enrich science teaching and learning.

Feel free to test the displayed touchscreens, critique the multi-media options, peruse the texts, watch the demonstrations, and inspect the labware, specimens, and classroom kits. There will be ample time to engage with the exhibitors and assess the instructional benefits of a wide range of resources.

While in the exhibit hall remember to listen for Spin-a-Wheel announcements and chances to win valuable prizes. Enhance your conference attendance through multiple visits to the 2025 PDI exhibit hall!



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Amy Ross Explores South Africa

When asked, “what did you do over the summer?” many reply, “Went to the beach, camped in the mountains, or fished at the lake”. However, **Amy Ross**, science teacher at East Rutherford High School, (Rutherford County Schools) excitedly states **“I engaged in an amazing learning experience in the Republic of South Africa!”**. Following a rigorous application process, Amy was selected for the North Carolina Museum of Natural Science’s Educators of Excellence Institute. In this program, she joined a cadre of 12 North Carolina educators and members of the museum staff on an immersive experience where she studied the history, culture, biologic diversity and unique environmental features of the African country. Accompanying the group were Vakasha tour guide, Andrew Torlage, native naturalist, David Nkosi and South African teachers, Noma Shabalala and Zinhle Sabalala.

A visit to the noted Sakhile Center for Learning (funded by its rural community) provided insight into the country’s educational system, and the challenges faced in acquiring instructional resources and adequate facilities. Amy was most impressed with the many eco-friendly initiatives found at the off-grid Sakhile Center which included the use of solar power, bio-mass fuels, composting facilities, and low impact construction. Personal interactions with the two South African educators, Norma and Zinhle, revealed cultural nuances such as deep respect for elders, appreciation for nature, and a love of dancing.

Amy delved into current and historical issues that impact the country. While in Kruger National Park she actually encountered dignitaries attending the 2025 G-20 Summit where heads of state discussed pressing global problems. She learned firsthand how cultural practices and human subsistence clash with ecological pressure in addressing wildlife poaching. While hiking through the rugged Tugela Gorge through the Drakenberg Mountains she learned of South African history, and later, at the Bushman Paintings Historical Site, she examined original rock paintings created by the “lost” stone age Sans people, indigenous South African hunter-gathers who failed to meet the challenges of European colonization and the Boer War.

Most impactful for Amy was the opportunity to explore South Africa’s wildlife and diverse ecosystems. At iSimangaliso Wetlands she traveled through 8 different environments teeming with hippopotamuses and other wildlife. She marveled at the plant specimens at Kirstenbosch Gardens. Exploring Kruger National Park provided Amy and her fellow teachers once-in-a-lifetime animal encounters. While on a bush walk, they came upon a massive herd of cape buffalo. Their game drive came to a standstill for a parade of elephants. Magically, they witnessed a pack of elusive and very rare painted wolves devouring a fresh kill! Throughout her adventure Amy collected weather data, conducted a species census, noted bird sightings on the Merlin App and engaged in bat identification using an echo meter.

Amy will use her experiences to develop engaging and innovative lessons for her classes and will enter them into the National Geographic’s lessons bank for other educators. Instructional topics will include comparisons of South Africa’s ecological footprint with that of the United States, food chains, how symbiotic relationships can become hazardous due to disease and parasite transmission, the impact of evasive species on insects and pollination, and how an all-female team of South African women are fighting wildlife poaching.

Amy holds a B.S in Biological Science from SUNY-Binghamton and has completed several graduate courses. She holds a N.C. secondary-level comprehensive science teaching licensure and has earned additional instructional certifications. She participated in Earth Watch while in Australia and in the NC Museum of Natural Science’s Treks for Educators program in which she studied the state’s elk population and learned about the restoration of red wolves' initiative.



Amy Ross



Sans Rock Painting



Protea,
Kirstenbosch Garden



Tugelo Gorge Hike



South African
Penguin and chicks



Elephant Parade,
Kruger N.P.



Painted wolves
with Impala Kill,
Kruger N.P.

Dr. Harrell Named North Carolina Space Education Ambassador



Dr. Stephanie Harrell, Lenoir County Public Schools STEM Coordinator, has always been fascinated with space. As a child she eagerly watched shuttle launches on television and when older, took every available opportunity to see launches in person. Her passion for space exploration has now advanced to a higher level, as Dr. Harrell is one of fifteen educators statewide who were selected for the 2025-2026 North Carolina Space Education Ambassadors Program. This prestigious, NASA-affiliated initiative is housed at North Carolina State University through the North Carolina Space Grant.

The mission of this program is to combine information gathered through NASA regarding space and earth sciences with the North Carolina science standards and classroom instruction. Dr. Harrell was selected for the program based on her lengthy teaching career, interest in promoting space and earth science, and an implementation plan for incorporating what she learns into classroom practice.

During her year-long ambassadorship, Dr. Harrell will be provided access to NASA resources, training from space science experts, and a toolkit of curriculum-aligned materials. In this role she will also engage in community outreach activities and work with other educators to promote interest in and to enhance STEM education.

Dr. Harrell is entering her 27th year as an educator and third year as STEM Coordinator for Lenoir County Public schools. Having spent the majority of her career working within Lenoir County she possesses a unique understanding of the community's resources and student needs. She hopes to partner her outreach activities with the Lenoir Community College's aviation program and the Global TransPark. She sees her role as expanding STEM-based learning opportunities for students in rural schools and creating for them an awareness of work opportunities in aviation, earth science and atmospheric/space science. NCSTA congratulates Dr. Harrell upon her selection for this program.

NCSTA Spotlight



The Reflector spotlight for Fall 2025 is on John Reinhold, science teacher and wrestling coach at Chowan Middle School, (Edenton - Chowan Public Schools) Mr. Reinhold's passion for science and

"knack" for transferring his love and excitement for the discipline makes him a favorite teacher among Chowan Middle School students. He is committed to providing engaging, hands-on learning experiences and is an advocate for science instruction beyond the classroom walls. In addition to providing science-focused field trips for his classes, he regularly hosts guest speakers so his students can have authentic experiences with scientists. He intentionally develops lessons that incorporate demonstrations, discrepant events, and guided experimentation to provide opportunities for his students to critically think. Mr. Reinhold creates nurturing environments in which his students are supported and encouraged to assume ownership of their learning. He challenges each child to set goals, monitor his/her own progress, and develop the skills needed to succeed personally and academically. NCSTA commends John Reinhold for his commitment to science instruction.

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The Importance of Student Discourse in the Science Classroom

Submitted by Dr. Jennifer Redfern (NCSTA Awards Committee Chair)

Student discourse is essential for deep learning in science. When students talk through scientific ideas, they engage in reasoning, clarify their thinking, and learn to communicate effectively. Discourse transforms the classroom into a collaborative space where students construct knowledge together rather than passively receive it.

In science, where inquiry and evidence-based reasoning are central, discourse allows students to hypothesize, critique models, and argue from evidence. This mirrors the practices of real scientists and helps students develop scientific literacy. Moreover, discourse supports equity by giving all students a voice, encouraging diverse perspectives, and fostering a safe environment for intellectual risk-taking. To promote productive discourse, teachers must intentionally design opportunities for students to “talk science.” The *Discourse Primer* from Ambitious Science Teaching outlines several effective strategies:

- **Talk Moves:** These include probing student thinking (“Can you say more about that?”), pressing for evidence, re-voicing ideas to clarify or validate, and encouraging peer-to-peer talk.
- **Managing Silence:** Allowing “think time” before students respond helps them formulate deeper ideas and supports participation from more students.
- **Using Sentence Frames:** Providing structured ways for students to agree, disagree, or build on ideas helps those unfamiliar with academic discourse participate more confidently.
- **Four Types of Conversations:** Teachers can plan discourse around specific goals—eliciting hypotheses, making sense of data, connecting activities to big ideas, and constructing evidence-based explanations.

Additionally, incorporating visual models, anchor charts, and student-generated questions can further enrich classroom conversations. When students are encouraged to reflect on their own thinking and respond to peers, they build metacognitive skills and a deeper understanding of scientific concepts. By fostering a culture of respectful and purposeful talk, educators empower students to become active participants in their learning. Discourse is not just a teaching strategy—it’s a pathway to scientific thinking and understanding.

Credit: A Discourse Primer for Science Teachers, Ambitious Science Teaching <https://ambitiousscienceteaching.org/wp-content/uploads/2014/09/Discourse-Primer.pdf>

Come visit
NC Project Learning Tree
in the NCSTA PDI exhibit hall
(booth 109) to explore all
our PreK-12 resources

Find Upcoming
Workshops



Alfred Mays wins 2025 Friday Medal

The Friday Institute for Educational Innovation has named Alfred Mays as the winner of the 2025 Friday Medal Award. The Friday Medal is given annually to the individual who has made significant, distinguished and enduring contributions to education through advocating for innovation, advancing education and imparting inspiration. Mays is a

strategist and senior program officer at the Burroughs Wellcome Fund where he leads multiple competitive and strategic grant programs that support kindergarten to career pathways, STEM career development and STEM enrichment. Prior to working with the Burroughs Wellcome Fund, he served as the assistant director of the Collaborative Project, where he was responsible for the development and management of information resources. Mays also was a staff advisor to the North Carolina’s eLearning Commission. His other professional experiences include his roles as regional director for the North Carolina Model Teacher Education Consortium and state program director with the North Carolina State Department of Public Instruction.

Krista Glazewski, Executive Director of the Friday Institute, described Mays as an individual “with vision and unwavering commitment. He has built sustainable partnerships with educators and organizations, elevated STEM education and strengthened public education systems.”

NCSTA congratulates Alfred Mays for this honor.



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“How far will a sneeze travel?”



Let's experiment

1. Stand at the edge of a sheet of paper.
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3. Measure the distance of the farthest droplet.
4. Record the sneeze distance on the data log.

Make Conclusions

Things we cannot see might make us sick. That's why it's important to wash your hands well or sometimes to wear a mask to prevent the spread of germs.



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health



dph.ncdhhs.gov

Caniah Lentz Attends IDEASS Workshop



Middle school science teacher, Caniah Lentz received a grant from the Space Grant Consortia-North Carolina, South Carolina and North Dakota, which supported her participation in the Innovative Differentiated Exploration Activities in Space Science (IDEASS) workshop at the University of Alaska, Fairbanks, Alaska. As the mission of the consortia is to assist educators in efforts to integrate accessible activities for nonverbal and visual or hearing-impaired learners, Ms. Lentz was provided opportunities to explore how different learning modalities impact the efficacy of instructional activities involving STEM subjects. The experience also allowed her to become familiar with and to practice strategies that enhance science learning for students with differentiated needs.

Ms. Lentz is an energetic teacher with an incredible passion for science and science education. Having dealt with dyslexia herself as she matriculated through school, Ms. Lentz is sensitive to the various instructional needs of middle school students. She credits her own middle school science teacher for awaking her love of the subject, empowering her toward academic success and the desire to teach others.

A graduate of North Carolina Central University, Ms. Lentz has worked at the Oceanographic Institution Marine Policy Center in Woods Hole, Massachusetts, and in a toxicology laboratory research program in Chapel Hill, North Carolina. She now teaches science at Wiley Magnet Middle School (Winston-Salem/Forsyth County Public Schools). NCSTA commends Ms. Lentz for her efforts to enhance science instruction.



Dennis Kubasko Wins Gatling Award



Dr. Dennis Kubasko, Associate Professor of Secondary Science Education at University of North Carolina-Wilmington (UNCW), has received the 2025 Herman and Emma Gatling Award for Outstanding Science Education Leadership in North Carolina. Given by the North Carolina Science Leadership Association (NCSLA), this honor recognizes Dr. Kubasko for his service to science education at the district, regional, and state levels. He has worked to advance science education through the National Science Teachers Association, North Carolina Science Teachers Association, North Carolina Science Leadership Association and the North Carolina Association for Biomedical Research's Bridging the Gap STEM initiative.

As a member of the UNC-W faculty, Dr. Kubasko has taught numerous courses including Island Ecology for Educators. This summer program for graduate and undergraduate students combines environmental science with science education. He has served as Director of the UNC-W's Center for Education in Science, Technology, Engineering and Mathematics and as Director of the Southeast Regional Science Olympiad competition.

NCSTA congratulates Dr. Kubasko upon receiving this honor.

District Highlights

District 1: Director, Kelli McDermott

A Time for Science STEM EXPO 2025 was held on September 27, 2025, in Greenville, N.C. This free community event offered hands-on activities, live demonstrations and science inspired crafts. Participants were able to interact with scientists, educators, business owners, and innovators and to explore the world of STEM

A K-5 Teacher Professional Development activity, **Exploring Inquiry in the Elementary Classroom** was held at the Kathy Taft Center for Excellence and Leadership in Education, Greenville, N.C. on September 15, 2025. This event focused on using inquiry-based, hands-on activities to teach science in ways that align with the new science standards.

Virtual Environmental Lecture Series: Professional and graduate students serve as presenters in this free environmental lecture series that occurs every 2nd Monday of the month beginning on October 13, 2025, 7 PM to 8 PM. One hour of criteria III EE credit is offered. Event Phone: 919-996-3141 Event Link: <http://reclink.raleighnc.gov/>

Regeneron Science Talent Search 2026 Application is now open. Application & Recommendation Deadline: November 6, 2025, at 8pm ET Customer Support Deadline: November 5, 2025, at 8pm ET Regeneron Application

Stephanie Harrell (Lenoir County Schools) and Rick Lange (Camden County Schools) named 2025-2026 **Space Ambassadors**.

District 2: Director, Michelle Hafey

Science Olympiad Registration is underway and division B/C rules are now available to download on the National Science Olympiad website.

Teacher Professional Development: UNCW CESTEM is continuing to offer PD in the Fall Semester. Onslow County Schools is completing the final year for their STEM grant with three scheduled PD sessions in 2025-2026 school year.

CESTEM PK-12 STEM Education Conference - Soar into STEM - was held June 24, 2025, Registration maxed out with 140 attending. Manley Midgett with NCSTA presented a session and had vendor booth.

Colleen Graham (Wayne County Schools), and Emily Lahr (Greene County Schools) named 2025-2026 **Space Ambassadors**.

District 3: Director, Lotti Peppers

NC State Board of Education recognition: 2025 **North Carolina finalists for the Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST):**

- Alexandra Boyd-Apex Friendship High (Wake County Public School System)-7-12 Science
- Amantha Bryant-Willow Springs High (Wake County Public School System)-7-12 Mathematics

STEM Schools or Programs of Distinction:

- Athens Drive Magnet High (Wake County Public School System)-Model STEM School of Distinction
- Wake Early College of Information and Biotechnologies (Wake County Public School System)-Model STEM School of Distinction

Technology Training: Summer STEM trained WCPSS teachers in PBL with community business partners.

Mikaela Brown (Eastern NC School for the Deaf), Bryan Holley (Halifax County Schools), Milton Lima Jr. (Vance County Schools), Dianne Ripollone (Cardinal Gibbons High Schools) and Rustina Sharpe (Durham County Schools) named 2025-2026 **Space Ambassadors**.

District 4: Director, Angela Adams

April Brady (Cumberland County Schools) and Julia Smajdek (Cumberland County Schools) named 2025-2026 **Space Ambassadors**

District Highlights continued...

District 5: Director, Dearing Blankmann

Stephanie Jeffries (Orange County Schools) named 2025-2026 **Space Ambassador**.

District 6: Director, Carie Fugle

The Monarch Butterfly Celebration, City of Charlotte was held at Reedy Creek Nature Preserve on September 20, 2025. This public Monarch education program celebrated the migration of the butterflies and provided information regarding the insect's role as a pollinator and ways to protect their habitats.

The School Garden Summer Institute, hosted by NC State Plants for Human Health Institute was held June 23-24, 2025, at Catawba College, Salisbury, N.C. Mr. Bryce Lane (horticulture educator, NC State) provided the keynote address. The event included breakout sessions which focused on novice to experienced school/community gardens, methods to integrate gardens into core subject areas, and hands-on sessions for educators wanting to explore ways to bring gardens into curriculum areas.

Teacher Appreciation Day, Schiele Museum of Natural History was held on July 28, 2025, at the museum in Gastonia. Information on field trips and hands-on demonstrations for the classroom were provided, as well as free admission to the museum and planetarium for teachers and their families.

Jessica Cash (Cabarrus County Schools) named 2025-2026 **Space Ambassador**.

District 7: Director, Gina Barrier

Teach for Summer Accelerator in 2026 – Call for Proposals (NCSSM-Morganton and Durham, Online, NCCET-Hickory) The NC School of Science and Mathematics is now accepting course proposals for Summer Accelerator 2026 Programs! Instructors plan and teach a week-long Early Accelerator (rising 5-6th Graders) course which is a day program on the NCSSM-Morganton and Durham campuses and at the NC Center for Engineering Technologies (NCCET) in Hickory. Middle School instructors plan and teach a 1-week course on our NCSSM-Morganton or Durham campuses or online. High School instructors plan and teach a 3-Week course (2 weeks asynchronous virtual learning and 1 week on either campus) or 3 weeks online. Contact Gina Barrier at gina.barrier@ncssm.edu for more information.

NCSSM Summer Staff Positions Available for Summer 2026

NCSSM is searching for summer staff. Positions range in education requirements from a high school diploma to a bachelor's degree. Employees receive a free room on campus and 3 meals/day for 5 days. [Apply Here](#). Contact Gina Barrier at gina.barrier@ncssm.edu for more information.

STEM West Free Foldscope Workshops

Stem West sponsored the free Foldscope workshops on September 16, 2025, and October 7, 2025, at the Foothills Higher Education Center in Morganton. Participants received CEU credit and a set of teaching materials valued at over \$100 that included a Foldscope Mini Classroom Kit and an Explorer Kit. Learn more about Foldscoptes at foldscope.com.

Candice Hayes (Surry County Schools) named 2025-2026 **Space Ambassador**.

District 8: Director, Jill Francis

The Western Carolina University 3rd Annual STEM Outreach Day was held September 26, 2025, in the Apodaca Science and Stillwell Building on the WCU campus. Designed to support regional teachers, the event provided opportunities for teachers and students to experience real science, engineering and mathematics at work.

The Science House (Mountain Satellite Office) offered **STEM to Your Doorstop Workshop** on September 15, 2025, for K-12 science educators. Participants engaged in a day of training presented by the Science House of NC State University and used MacBooks, LabQuests and various probes to explore science and mathematics concepts.

A WRESA Workshop, "Digging into New 5th Grade Science Standards"; first session was held October 9, 2025. Second session is scheduled for January 14, 2026.



Respect Their Space!

Every autumn North Carolinians are drawn to the Great Smokey Mountains and the bordering countryside of Haywood, Jackson and Swain counties to enjoy the stunning vistas of colorful foliage. Fall is also the rut, or mating season (mid-September to early November) for elk. It is common for elk to be seen wandering near townships, breaks within the forest and along roadways. These movements result in making elk accessible to people.

It is important to remember that wild elk are truly wild and can exhibit unpredictable behaviors. Males (bulls) can weigh over 700 pounds, stand over 8 feet tall at the shoulder and carry antlers that span up to five feet in length. Females (cows) can weigh close to 600 pounds and stand up to 5 feet at the shoulder. The North Carolina Wildlife Commission cautions visitors to the mountains to be cautious. No matter how strongly one might want to approach an elk, even if to get a perfect camera shot, **do not**. Close proximity to an elk can jeopardize the person, as well as the animal. The Commission advises that to maintain safety:

- Drive alertly, particularly at dawn and dusk. Give elk the right of way,
- Keep your pets leashed and away from the elk,
- Stay at least 75 yards away from elk,
- Never try to feed or touch an elk, and
- Back quietly and slowly away if you suddenly encounter an elk or if it approaches you.

Dear Colleagues,

As NCSTA's past president, and Chair of the 2025 PDI committee, I am very excited about the Association's upcoming conference. I personally encourage North Carolina's science educators to attend the 2025 PDI.

This year's Professional Development Institute offers something for everyone: practice-relevant concurrent sessions, outstanding keynote addresses, idea exchanges through share-a-thons, an engaging exhibit hall, chances to win valuable prizes and a wonderful reception and awards celebration. Additionally, the PDI committee has incorporated some fun-filled surprises to the conference schedule. Each conference event is designed to spark your curiosity, enhance your classroom practice, expand your professional knowledge and connect you with other energetic science educators. I look forward to seeing each of you in Winston-Salem, N.C. at the November at the NCSTA Professional Development Institute.

Regards,

Tom Savage



There is Still Time! Register for the PDI

The 2025 PDI will be held at the Benton Convention Center, 301 West Fifth Street Winston-Salem, NC on November 6-7, 2025. The preregistration deadline is October 24, 2025 for those paying with checks and November 2, 2024, for credit card payments. Information regarding conference fees is listed at [PDI Registration Fees - NCSTA](#). Click here to register.

CEU Credits

Up to 1.2 CEU credits may be earned for participating in the two-day Professional Development Institute (PDI). Following the conference, registered attendees will receive, by email, a CEU verification form. It is the attendee's responsibility to complete this form, noting the time actual spent engaged in PDI sessions and events. **When completed, the attendee is to follow their district's procedures for processing CEU credits.**

PDI Schedule

A PDI [schedule](#) may be found on the NCSTA website.

Conference App SCHED

This year we are using the conference APP SCHED. We encourage you to use it for the latest updates to our conference sessions and activities. To access SCHED from your computer, use this [link](#).

To access SCHED on your phone or tablet:

1. Download and install the SCHED app. You may create a free account. If you create an account, you can add sessions to your personal schedule.
2. Search for 'NCSTA PDI 2025' and our event should appear.
3. Tap on any listing for more details. Explore the screen for filter options and the strand information guide. If you created an account, you can add sessions to your personal schedule.

Attendees - for more information on how to use SCHED:

<https://sched.com/support/section/guide-for-attendees/>

Presenters - for more information on how to use SCHED:

<https://sched.com/support/section/speaker-tools/>



PDI Parking Reimbursement

NCSTA will pay up to \$15 (total, not per day) toward parking for registered attendees of the PDI (no vendors please), limited to one parking receipt per day. Please download and fill out the [Parking Reimbursement Form](#), put your name on your parking receipt(s), and either mail or email the form and receipts to us before Dec. 1, 2025. Instructions are on the form. You will receive a check in the mail after the conference.

