



North Carolina Science Teachers Association

Editor: Dr. Mary Ellen Durham

PDI 2025

Winter 2025

EXPANDED ISSUE



Velasco Honored

NCSTA has recognized many outstanding educators who demonstrate excellence in the science classroom. After a number of years, many of these gifted teachers opt to advance their careers by moving into post-secondary instruction or administration. However, there are a few exceptions to this pattern. Rarely, an extraordinary educator with unwavering commitment to his/her students, chooses to remain in the K-12 classroom. Mrs. Patricia Velasco is this exceptional science teacher and inspiration for NCSTA's newest award, the 30+ Years in the K-12 Classroom Medal. Now in her 35th year in the classroom, she continues to inspire and mentally challenge her students at Goldsboro High School.

Ms. Velasco creatively fosters critical thinking, real-world applications, and character development through her interactive, differentiated approach. Her instructional strategies (laboratories, kinesthetic activities, interactive notebooking, and games) insure student engagement and enhanced learning. Described as an "elite teacher" whose students consistently obtain superior Biology EOC scores, Ms. Velasco also mentors beginning teachers and conducts professional development workshops for Wayne County educators. She has taught Biology, Chemistry, Physiology, Earth and Physical Sciences and is an NCSTA Distinguished Science Teacher awardee.

During the 2025 NCSTA Awards Ceremony Mrs. Velasco was recognized and presented the first ever 30+ Years in the K-12 Classroom Medal. This moment was the pinnacle of the entire program.

Congratulations



President's Message



Reflecting on the 2025 PDI, I am filled with gratitude, excitement, and pride. Becoming NCSTA President is an honor and the atmosphere at the conference affirmed the power of our science education community. The enthusiasm, dedication, and passion displayed by every attendee was inspiring, illustrating why our work matters—why North Carolina leads the way in science education.

The tireless work of the **NCSTA board**, the behind the scenes detailed planning, organizing, and coordinating made the conference a success. I appreciate their leadership, teamwork, and unwavering belief in the mission of NCSTA. They are the backbone of this organization. Our incredible **presenters** crafted dynamic, hands-on, meaningful sessions that ensured attendees left with fresh ideas, powerful strategies and renewed inspirations. The presenters' willingness to share their expertise elevated the PDI experience and showcased our science community's strength. Our **exhibitors and vendors** are greatly appreciated. They brought high-quality products, innovative resources, and a commitment to help us reach every student. Their partnership played a vital role in the success of the PDI. However, it is **YOU**, the science educator, that ensures PDIs thrive. Your energy, curiosity and commitment breathe life into the conference. You attend ready to network, learn, and professionally grow. The PDI is for you: every session, conversation and shared idea is focused on empowering you as a science educator. As president, I will continue celebrating the amazing things North Carolina science educators do for our students. In my acceptance as president, I spoke of how a tiny seed becomes a giant redwood. That metaphor reflects how your lessons, encouragement and passion are planting and nurturing seeds that will grow the future of science. Our students will stand tall because of the roots you help develop. My love for the PDI and NCSTA runs deep. Like a forest, our strength comes from the entire community, not one individual. I am proud to grow with you, serve, and continue cultivating science education in North Carolina.

Brad Rhew



Science Classroom Super heroes

AMAZING

Following the presentation of the 30+ Years in the K-12 Classroom Medal to Patricia Velasco, those science educators present at the Awards Ceremony with 30 years or more in the K-12 science classroom were asked to approach the stage. Having been the first to receive the award, Mrs. Velasco then paid it forward by presenting medals to six of her colleagues. A standing ovation was given to the following classroom superheroes: Cynthia L. Day (32 years, retired), Robert Gotwals (40 years, NCSSM), Dr. Dorothy Holley (30 years, West Johnston High School), Beverly Lyons (31 years, retired), Peter Panico (31 years, Steele Creek Elementary School), Jean Pelezo, (38 years, Van Story Elementary School). Collectively, with Mrs. Velasco, these remarkable educators have taught in the K-12 science classroom 237 years!



2025 Distinguished Service in Science Teaching Awards

The Distinguished Service in Science Teaching awards are presented by NCSA to recognize excellence in personal contributions and service to science education in the individual's school, school system, NCSA district and throughout North Carolina. These individuals are the 2025 recipients of this honor.

Jo Duckett Wallace Elementary School Distinguished Service Award:

Chad Campbell, Brevard Academy



Ann Watkins Middle School Distinguished Service Award:

Julie Hahn, Kannapolis Middle School

Nancy Wynne High School Distinguished Service Award:

Robert Gotswals, North Carolina School of Science and Mathematics



Ann and Bill Palmer Administrator Distinguished Service Award:

Valerie Sellars, Chapel Hill-Carrboro City Schools

Don Bailey College/University Distinguished Service Award:

Dr. Matt Reynolds, North Carolina State University



Commercial Distinguished Service Award:

Plasma Games

Non-School Setting Distinguished Service Award:

Pepper Hill, Science Alliance of North Carolina



CONGRATULATIONS





Level Up Science Learning

- with -

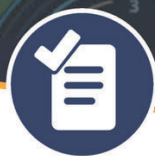
Game-Based Engagement



Excite Students



Save Time



See Results

Engage your students with Plasma Games' interactive, game-based learning platform. By combining foundational science concepts with digital activities, Plasma Games boosts student motivation, understanding, and confidence. The platform is designed to help teachers save time and accelerate learning with access to over 600 state-aligned, high-quality resources for middle school science, high school chemistry, and high school physical science courses.



Learn More About Plasma Games: play.plasma.games



The 2025 Outstanding Student Teaching Awards

Elementary School Student Teacher: Elizabeth Woodruff, North Belmont Elementary



High School Student Teacher: Amirah Clark, Cedar Ridge High School



District Outstanding Science Teacher Awards

District 1

Elementary: Patrila Hardy, Lakeforest Elementary

Middle School: Michele Swinney, Perquimans County Middle School

Middle School: Kaley Kiffner, First Flight Middle School

High School: Kenyatta Ward, Hertford County Early College

District 2

Elementary Award: Kristina Jones, Moss Hill Elementary

District 3

Elementary Award: Sonja Hayes, Frederick Douglass Elementary

Middle School: Karen Parker, Githens Middle School

High School: Janice West, West Johnston High School

District 4

Elementary: Julia Smajdek, Baldwin Elementary

Middle School: Amy Braren, Sanlee Middle School

High School: Tanya Pierce, Scotland Early College

District 5

Elementary: Jessica Trent, Summerfield Elementary

Middle School: Morgan May Hogan, Culbreth Middle School

High School: Stephanie Lemons, Morehead High School

District 6

Elementary: Erin Espinoza, Coltrane-Webb STEM Elementary

High School: David Schouweiler, Rowan County Early College

District 7

Elementary: Lynn Lawson, Salem Elementary

Middle School: Janet Brooks, Granite Falls Middle School

High School: Tiffany Rowe, West Iredell High School

District 8

Elementary: Tara Hammond, Hillandale Elementary

Middle School: Tony Campbell, Flat Rock Middle School

High School: Amy Zalevskiy, West Henderson High School





Spin-a-Wheel

It was not quite Las Vegas, but Lady Luck smiled on many PDI participants. Throughout the conference, attendees collected valuable Spin-a-Wheel tickets at the general sessions, the exhibit hall and other events. Each ticket provided an opportunity for the holder to win outstanding instructional resources and fabulous prizes. Spin-A-Wheel drawings were held periodically each day. With each “spin” the ticket holder instantly won the prize indicated on the wheel. Prizes included, but were not limited to, classroom resources, models, texts, virtual field trips and gift certificates. Each turn of the wheel generated fun, excitement and the chance to win an unexpected prize.



the winner is!



www.vernier.com

Pre-Conference Field Trip to Pilot Mountain



The Schools in Parks Collaborative provided a unique pre-conference field trip to Pilot Mountain State Park for PDI attendees. (The Collaborative is a state-wide initiative that connects teachers with the North Carolina state parks in order to develop outdoor learning experiences for students.) Partners from the UNC Institute for the Environment and North Carolina State Parks transported participants from Winston-Salem to Pilot Mountain on the evening before the conference where they participated in a naturalist guided walk across the mountain summit, learned about resource management, visited the park's exhibit hall and conducted a geologic exploration. A buffet dinner was provided, as well as opportunities for those on the field trip to learn about professional development programs, student outings, and curriculum resources offered by the Collaborative.



Registration

Excitement was in the air at the NCSTA PDI registration booth. NCSTA Board members, “the registration crew”, warmly greeted conference participants as they checked in to receive their name badges and conference materials. Frequent bursts of laughter rang out as first time attendees were presented special ribbons for their name tags and welcomed by a rousing NCSTA “hands above your head WHOOOOO dance.” Collegiality abounded as old friends reunited and new relationships were formed. NCSTA wishes to thank sponsors American Book Company, Stile, and AACT for their lanyards and totes contributions.

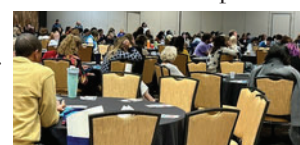
Day I General Session



Dr. Brad Rhew opened the 56th annual NCSTA members meeting by welcoming the PDI attendees and assuring the membership that the Association's mission to promote excellence in science teaching and learning in North Carolina remains strong. The NCSTA Board was introduced, the Association's past presidents acknowledged, and first time PDI attendees recognized. Tom Savage, the 2025 PDI Committee Chair, then provided a brief overview of the conference.

Carolina Biological Supply Company (CBSC) sponsored the keynote address. CBSC representative, Atiya Merchant introduced Dr. Amy D'Amico, Division Director of Professional Services Smithsonian Science Education Center (SSEC). In her live-stream address Dr. D'Amico, who oversees the Center's professional development and leadership initiatives, identified opportunities for SSEC to partner with agents in North Carolina to transform K-12 education and articulated the goals of SSEC as educational innovation, inclusion and sustainability. Partnership options that were described included the March 2026 Smithsonian Science Leadership Summit which will focus on building educator networks and action plans to address the shortage of STEM teachers, and Smithsonian Science Global Goals, which is a free, inquiry-based curriculum based on the United Nations Sustainable Development Goals. <https://ssec.si.edu/global-goals>

Referring to her use of the Teach to Lead Model, Dr. D'Amico endorsed this professional development approach citing that it enables educators to build on their classroom experiences, enrich their teaching skills and content knowledge, and facilitates their emergence as STEM leaders in their communities. <http://teachtolead.org/>. Lastly, Dr. D'Amico reported on the Strategic Planning program 2019-2024, noting that teacher professional development, in conjunction with curriculum implementation, resulted in a positive increase in student learning with all trial groups including underrepresented cadres.



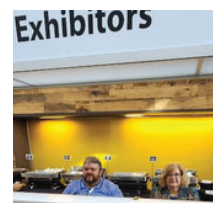
"We had such a blast with you at the NCSTA Professional Development Institute this year. Interested in learning more about the only complete middle school science curriculum approved by the NCDPI? Learn more at StileEducation.com."



STILE



Extraordinary Resources on Exhibit



Attendees had the incredible opportunity to examine, test and evaluate a vast array of cutting edge, contemporary science education resources. Within an energized environment, conference goers strolled through the Benton Convention Center lobby and exhibit hall, stopping to interact with the 60+ exhibitors present at the 2025 NCSTA Professional Development Institute. Science educators were able to peruse texts, planning guides, worksheets, activities sheets and other printed materials. Labware, optics, measuring devices and scientific instruments were evaluated and instructional software, visuals aids, and digital models were assessed. Conference participants examined classroom sets, specimens, assessment programs and a myriad of other science instructional resources. Additionally, science-related agencies were on hand to share information regarding professional development, field trips, camps, and guest speaker options.



Past Presidents' Luncheon

In recognition of their service to the Association and on-going dedication to the advancement of science teaching and learning, NCSTA's former presidents were celebrated on the first day of the PDI at a luncheon held at Tulum Bar and Grill. Nestled in the heart of downtown Winston-Salem, Tulum offered these NCSTA veterans the perfect atmosphere for reminiscing and discussing their views on contemporary science education. Conversations were lively and laughter plentiful as these former leaders enjoyed delicious Mexican cuisine and shared their favorite NCSTA experiences. Those attending the luncheon were former presidents Angela Adams, Mark Case, Cliff Hudson, Beverly Lyons, Carol Maidon, Ann McClung, Manley Midgett, Pat Shane, Ira Trollinger, as well as special guests Clinton L. (Jake) Brown and Nancy Trollinger.



Share-a-thons

Two Share-a-thons were scheduled on the first day of the PDI, providing attendees convenient venues to discover innovative instructional ideas and engaging learning activities that were endorsed and used by their instructional peers.

Conference participants attending the Elementary Share-a-thon were able to circulate the meeting room, stopping at the various tables to interact one-on-one with the presenter, ask questions and collect activity/lesson related handouts.

The Middle/High Share-a-thon was held on a “drop-by basis” spanning three hours on Thursday afternoon. Tables, identified by the respective science disciplines were positioned throughout the Benton Lobby providing a casual environment for collaboration and idea sharing. At each table, copies of instructional activities and/or a related web link were available for attendees. The individual presenters were present at their tables at posted times during the three-hour period to chat and answer questions.

The Share-a-thons not only provided a venue for science educators to showcase their favorite, most effective lessons, but also promoted professional networking and collaboration.





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

**Find Upcoming
Workshops**

Concurrent Sessions

The 2025 PDI, themed ‘Science Is Phenomenal’, provided a remarkable showcase of innovative instructional approaches, educational ideas, and effective strategies. Attendees were able to build a conference schedule that was personally relevant and beneficial to their specific needs by selecting from 123 concurrent sessions. Each presentation shared teaching tips, instructional techniques, and ideas for resources, as well as promoted interactive discussion. The sessions were categorized by grade level and science content and focused on one of these three strands:

- Examining and presenting phenomenon-based science through modeling,
- Student-centered learning using the N.C. Standards, and
- Nobody wins unless everybody wins! STEM for all!



2025 PDI May Your Wish Be Granted

Science educators are frequently able to design engaging lessons that meet the needs and interests of their students, but the implementation of these activities is hindered due to the lack of appropriate instructional materials. Far too often that dream lesson has to wait, or is eliminated because budgets are tight and funds to purchase resources are limited. The NCSTA \$200.00 mini-grant program, May Your Wish Be Granted, serves to help classroom science teachers acquire the resources needed to conduct that perfect learning experience for their students. The following Individuals are the 2025 NCSTA PDI May Your Wish Be Granted winners.

Dr. Carrie Jones, Dillard Drive Magnet Middle School, Raleigh, N.C. - District 3. Gardening Gloves, gardening tools, bird seed, flower seeds and Rapitest soil test kits

Chrissy William, Rocky River Elementary School, Concord, N.C. - District 6. Resource: Carolina Biological STC™ Living Shipment: Algae Mix & STC™ Living Materials Order Sheet, Ecosystems, Shipment

Christy J. Hall, Alexander Early College, Concord, N.C. - District 7. Resource: Carolina Biological Modeling DNA to Protein 8 Station Kit for 10th Grade

Jennifer Griffin, Swansboro High School, Swansboro, N.C. - District 2. Resource: miniPCR bio Viewit Illumination Kit, Bandit STEM Electrophoresis Kit & USB-C Power Supply

Steven Roman, Lee County High School, Sanford, N.C. - District 4. Resource: Carolina Biological Earth Systems and Climate Change



Photo Booth

The force field surrounding the NCSTA photo booth was quite strong during the PDI. Individuals, PDI BFFs, and groups of conference attendees were drawn to the backdrop and props. Whether visitors were capturing selfies or group shots, the booth produced smiles and many photographs to serve as remembrances of an outstanding conference.



NC PUBLIC HEALTH + SCIENCE = A HEALTHIER NORTH CAROLINA!

Catch us at the NC Science Teachers Association Conference

Stop by our two booths:

NCDHHS Division of Public Health

NC State Laboratory of Public Health

Explore how science powers real-world public health every day – from tracking outbreaks to keeping our water safe and screening newborns across the state for possible health issues.

Why visit us?

- ✓ Hands-on science connections to rewarding careers
- ✓ FREE classroom experiment handout
- ✓ Info on our *Virtual Field Trip* to the Public Health Lab (perfect for middle & high school science)
- ✓ Meet public health scientists and educators.

Don't miss the Lab's Virtual Field Trip!

Go behind the scenes of the NC State Lab and show students how their science lessons apply in the real world.

- ✓ Ask for details at our booth.
- ✓ Science builds healthy communities – join our mission!

CLASSROOM SCIENCE EXPERIMENT

! Sneeze Zone!

“How far will a sneeze travel?”

Let's experiment

1. Stand at the edge of a sheet of paper.
2. Squeeze the “sneeze bottle” over the paper (not at people).
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



Reality Check

Those beginning their career as science educators face multiple challenges. They must master science content, and instructional skills, define a classroom management style, determine assessment strategies and navigate their way through the complicated licensure and hiring processes. Committed to providing support and assistance to those just beginning their careers as science classroom teachers, NCSTA offered a special session, Reality Check, on the first day of the 2025 PDI.

Dr. Dorothy Holley, serving as NCSTA's hostess, greeted the pre-service teachers as they entered the event and invited them to enjoy the pizza buffet and soft drink bar. Executive officer, Dr. Brad Rhew officially welcomed the attendees to the PDI as special name tag ribbons identifying the participants as beginning science educators were distributed. Dr. Mary Ellen Durham then shared information regarding the benefits of NCSTA membership followed by Dr. Carrie Jones who discussed National Science Teaching Association membership options. NCSTA board members Brad Woodard, Kristen Kane, Tom Savage, and Kelli McDermott shared personal experiences and told how participation in NCSTA PDIs and association membership had facilitated their careers. These candid, sincere and often humorous remarks promoted spirited discussions. Middle school science teacher, Michael Giddens, briefly shared his career story. He related how several years ago he had been a nervous pre-service teacher sitting in Reality Check and explained how the information he had gleaned and the professional connections he made through NCSTA proved to be a strong support as he started teaching. Leading a rousing cheer of "SCIENCE IS COOL" from the attendees, Mr. Giddens ended the session.



Lunch and Learns

On Thursday morning, a PDI attendee with an overflowing tote bag was overheard to say, "this is terrific! I want to get to as many sessions as possible and was wondering where I could fit in a few minutes to grab a bite to eat. There are LUNCH AND LEARNS! Hmmm, which to go to?"

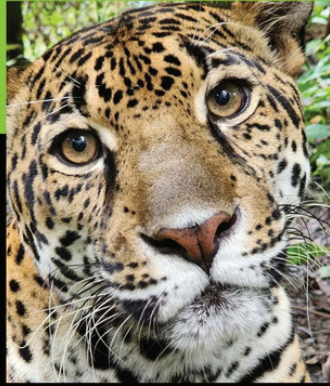
On the first day of the conference, exhibitors SAVVAS, Accelerate Learning and ExploreLearning sponsored casual, midday sessions that provided opportunities for conference participants to gather, share ideas and explore instructional resources while enjoying a complimentary lunch. These convenient events served to increase the attendees' knowledge and boosted collaboration.



Inspire EdVentures



SCAN ME



Into the Jungle Science Toolkits

Make STEM Fun!

- Grade-level specific (K-2 & 3-5)
- Hands-on, age-appropriate activities
- Ready-to-use lesson plans & printables
- Connect wildlife stories to science standards

NCSTA Grants

The North Carolina Sciences Teacher Association supports professional growth and enhanced instructional practices through its grant program. Members who wish to create a learning experience that involves their students in a unique manner may apply for funding to cover costs for supplies, materials, equipment, printing, travel and other expenses related to a creative curriculum project. Innovative Curriculum Support Grants are awarded based on innovativeness, need, ability to replicate, the number of students benefiting and a realistic action plan.

A grant opportunity (NCSTA Study Grant) exists for NCSTA members who are taking study classes, attending conferences or participating in professional development workshops. Grant winners must submit an article in the Association's newsletter and make a presentation at the yearly PDI. The following individuals have recently received NCSTA grants.

\$500.00 NCSTA Study Grant: Annie Crawford "Participation in the Ecology Project International (EPI) trip to the Galapagos, 2026".

\$200.00 Innovative Curriculum Grant: Janice West "Expanding Hands-on Field Investigations of the Pond and Wooded Ecosystems on Our School Campus".

\$1000.00 Innovative Curriculum Grant: Carrie Jones "Kitchen Chemistry: Food is Where the Science Magic Happens".

The Fantastic Spirit of Walkertown Marching Band



The rousing cadence of a drumline outside of the Benton Convention Center on Thursday evening signaled to the PDI attendees that something truly special was about to occur. With seamless precision, the Spirit of Walkertown Marching Band, clad in red and black uniforms, entered the Benton Center and assembled at the front of the Winston Ballroom. Anticipation filled the room as the band opened their performance with a beautiful rendition of America, followed by a medley of movie theme songs, collegiate pep tunes, and several contemporary musical hits. The performance ended with a second playing of America followed by cheers and a standing ovation from the PDI participants. These talented student musicians energized the audience and generated an atmosphere of excitement for the ensuing Awards Ceremony.

The Spirit of Walkertown Marching Band (SWMB) is comprised of students (grades 7 through 12) enrolled in Walkertown Middle and High Schools. All are volunteers and receive no grades or academic credit for their participation. There are no formal auditions, yet these young musicians are a stunning musical ensemble. Their cohesive, impressive sound comes from their shared passion for music, hard work and mutual respect. Band members attend a 2-week camp during the summer and rehearse twice a week after school for 2 hours August through October. As the marching Band is a subset of the Symphonic Band, these students also attend those daily rehearsals throughout the academic year. Since its inception in 2011, the Walkertown High and Middle School Bands have earned the highest possible state rating of "Superior" 15 times at the annual NC Bandmasters Association Music Performance Adjudication!

Student leaders cultivate a respectful environment in which talent can thrive and are credited with the group's seamless performances. David Olmedo was selected as drum major by his bandmates due to his dedication and passion for music. He attended a 2-week drum major camp at Western Carolina this past summer returning to lead the group through the football and parade season. Other student leaders are Hayden Marsh (Assistant Drum Major), Lane Vanhoy (Woodwind Section Captain and 3-time NC All-State Band Member), Lilyana Reed (Woodwind Section Leader), Michael Edwards (Trumpet and Mellophone Section Captain), David Olmedo (Low Brass Section Captain), and Brody Pennington (Drum Line Section Captain).

SWMB has enthusiastic support from school administrators, Dr. Adreian Pitts and Mrs. Monica Comer and is a source of pride for the entire school community. The Walkertown Music Department and former students Sofi Gerringer and Caleb Foote are committed to advancing the band members' talents. Mr. Quincy Lundy directs SWMB and is in his 14th year as the director of bands at Walkertown Schools. He has received the Walkertown Middle School Teacher of the Year and the Winston-Salem Forsyth County Schools Band Director of the Year awards. Mr. Lundy was recently inducted into the prestigious American Schools Band Directors Association. Prior to teaching Mr. Lundy performed as a clarinetist in the United States Marine Corps Band at Camp Lejeune, NC. In 2001, he was awarded the Navy/Marine Corps Achievement Medal for composing an arrangement of *God Bless the USA* for the Paris Island Marine Band.





A Special Thank You from NCSTA



On behalf of the North Carolina Science Teachers Association (NCSTA), we wish to thank The Spirit of Walkertown Marching Band and Band Director Quincy Lundy for bringing so much joy and energy to our 2025 Professional Development Institute. It was an incredible performance, and we sincerely appreciate your willingness to share your talents with us. Your hard work, passion for music and talent were on full display.

It is apparent that Mr. Lundy believes in his students' potential and is dedicated to making sure all are able to express their love of music and achieve success. NCSTA also commends school principals, Dr. Adreian Pitts and Mrs. Monica Comer, as well as the Walkertown Music Department for supporting these incredible young musicians. The Spirit of Walkertown Marching Band is an inspiring group and are wonderful ambassadors for their schools. The band's performance was deeply appreciated and NCSTA wishes these amazing students continued success as they continue their musical journey.

Dr. Brad Rhew
President NCSTA

Brad Rhew



Tom Savage
NCSTA 2025 PDI Chair

Tom Savage

Reception and Awards Ceremony

After a day filled with concurrent sessions and other conference events, the first day of the PDI culminated in a reception. This dedicated event, designed to celebrate the state's science teachers, provided opportunities for conference participants to connect and interact with one another. Attendees were able to socialize and enjoy a bountiful buffet of heavy hors d'oeuvres and drinks from the beverage bar. Following the reception the 2025 NCSTA Awards Ceremony was opened with the ceremonial passing of the Association's gavel to Dr. Brad Rhew. Dr. Rhew's compelling opening address reminded all present of the worthiness of the teaching profession and the important role science educators play in the growth and development of North Carolina's youth.

Dr. Jennifer Redfearn, NCSTA Awards Chair, then took the stage to recognize the 2025 Outstanding and Distinguished science educator awardees, announce the Grant-a-Wish winners and emcee the exciting raffle prize giveaways. Ann McClung, representing the North Carolina Science Leadership Association, announced Howard Ginsburg as the winner of the 2025 Herman and Emma Gatling Award for Outstanding Science Education Leadership in North Carolina. The finalists and winners of the Presidential Awards for Excellence in Math and Science teaching were announced by Alexis Wood.

In what was the highlight of the ceremony, the newest NCSTA award, the 30+ Years Medal, was announced by Tom Savage (NCSTA PDI Committee Chair). This inaugural award serves to honor those who have dedicated 30 or more years of their professional career to teaching science in the K-12 classroom setting. Applause erupted in the ballroom as seven veteran science educators were called to the stage to receive their medals.

Highlights of the Reception and Awards Ceremony





Friday Breakfast and Second Keynote Address

On Friday morning a breakfast buffet was enjoyed by PDI attendees prior to the featured keynote address. The keynote speaker, Pamela C. Silva Diaz, was sponsored by National Geographic Learning / Cengage and was introduced by sponsor representative, Zane Johnson. As an entrepreneur and mechanical engineer, Ms. Diaz focuses on fostering community resilience and environmental sustainability through hardware technology development and local innovation. Through PamLab Design and Engineering, her business, she provides engineering services and facilitates community involvement in resolving sustainability concerns.

Ms. Diaz shared that the devastating impact of Hurricane Maria on Puerto Rico, her home, created a personal awareness of the repercussions of severe weather events and the need to facilitate community involvement in fostering sustainability. To assist people, particularly those residing in rural, economically challenged areas, she has transformed her company to function as an intersection of climate impact, innovation, technology, community-based actions and sustainability. Ms. Diaz cites education, innovation, low-cost affordability and robust community engagement as the necessary foundational elements that lead to effective solutions to climate-based problems. She emphasized that students need to engage in lessons that inform them about the environment, weather, and climate issues, followed by opportunities to creatively problem-solve and actually participate in sustainability projects. She cited Youth Designing Climate Action, a project designed with teachers that promotes student learning as they engage in sustainability programs, as an example of an effective sustainability curriculum. She also referred to educational programs that engaged students in developing recovery ideas following the California wildfires and citizen science projects that had students participate in collecting soil data in mangrove wetlands.

Preparing communities to lead their own response and adaptations to climate impact is a central goal for PamLab. Ms. Daiz noted that a critical component of her company's approach is helping populations determine how technology can support their missions. She shared several innovative examples of how impacted communities designed and implemented sustainable projects. These included the development of mobile vertical gardens in flood prone areas, portable battery charging stations where electrical grids were damaged and the use of old defunct machine parts to create functioning manufacturing equipment. She ended her remarks by identifying her future projects that will focus on developing machines for agriculture and methods to convert waste into useful products.



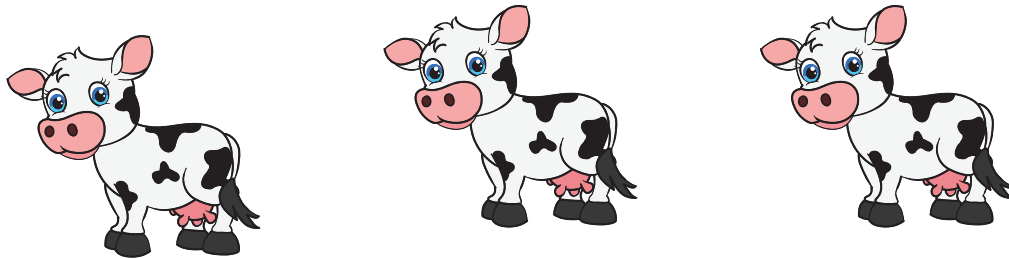
Dairy Alliance Lunch and Learn

On Friday of the PDI, the Dairy Alliance sponsored a lunch and learn. Funded by dairy farm families of the southeast, this nonprofit works with schools, health professionals, state leaders, the public and media to promote dairy foods and knowledge about the dairy industry. The Alliance provides the public with accurate information regarding the health benefits of dairy products and how dairy foods are made. However, the Alliance does not limit its educational outreach to food awareness; it also focuses on animal welfare and sustainable agriculture.

As PDI attendees enjoyed a pizza buffet, the Alliance guided them on a real-time, virtual tour of an actual dairy farm. While on the tour participants learned of cow nutrition, breeding, and health care; were introduced to the technology, machinery and business management associated with the industry; and were made aware of the environmental impact of dairy farms.

The commitment to sustainability and focus on curtailing environmental impact was emphasized. Effluent management and waste disposal, water pollution techniques, biogas capturing and reduction of greenhouse gases were discussed.

This engaging virtual tour instilled a clearer understanding of milk farming and the industry's impact on our health, economy, and environment. Participants also received information on the Alliance's educational programs and outreach for schools. The conclusion of the session left an undeniable positive impression as all attendees were treated to ICE CREAM!



RECAP PDI 2025 DAY 1



Benton Convention Center



Registration



Elementary Share-a-Thon



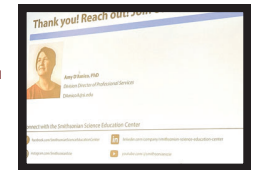
General Session and
Keynote



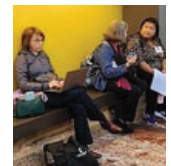
Spin-a-Wheel



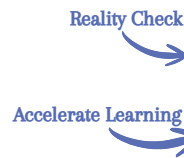
Exhibit Hall



Concurrent Sessions



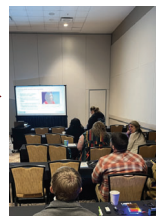
SCHED Check



Lunch and Learn



Middle and High School Share-a-Thon



Concurrent Sessions



Spin-a-Wheel



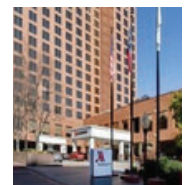
Band Concert



Awards Ceremony and Prize Give Away



Exhibit Hall



Return to the Marriott
for the night

RECAP PDI 2025 DAY 2



Breakfast



Keynote Address



Photo Booth



Concurrent Sessions

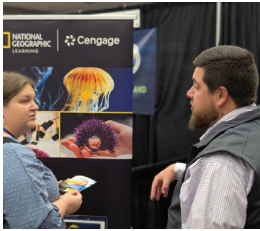


Exhibit Hall



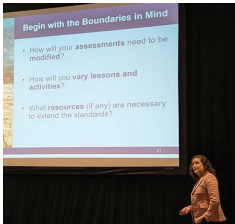
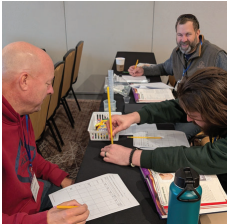
Tired but Happy



Spin-a-Wheel

Exhibit Hall

Dairy Alliance Lunch and Learn



Concurrent Sessions

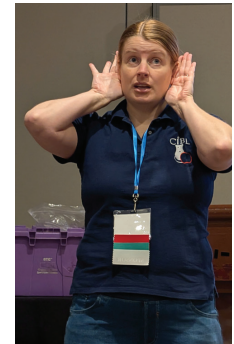


Revitalized Science Teachers post PDI 2025



Final Gift Give Away

Special PDI Memories



Dear NCSTA Community,

As I reflect on our November Professional Development Institute, I am filled with immense gratitude. Serving as your Conference Chair this year was a privilege, but the success of the event belongs to all of you. I appreciate the invaluable contributions made by all our presenters and share-a-thon contributors. The ideas and innovations shared through these presentations enriched the PDI experience. I also extend a strong thank you to all the vendors for creating such an excellent exhibit hall. The exhibit hall was buzzing with innovation; your efforts in providing science educators a rich experience exploring the newest in science instructional resources was invaluable.

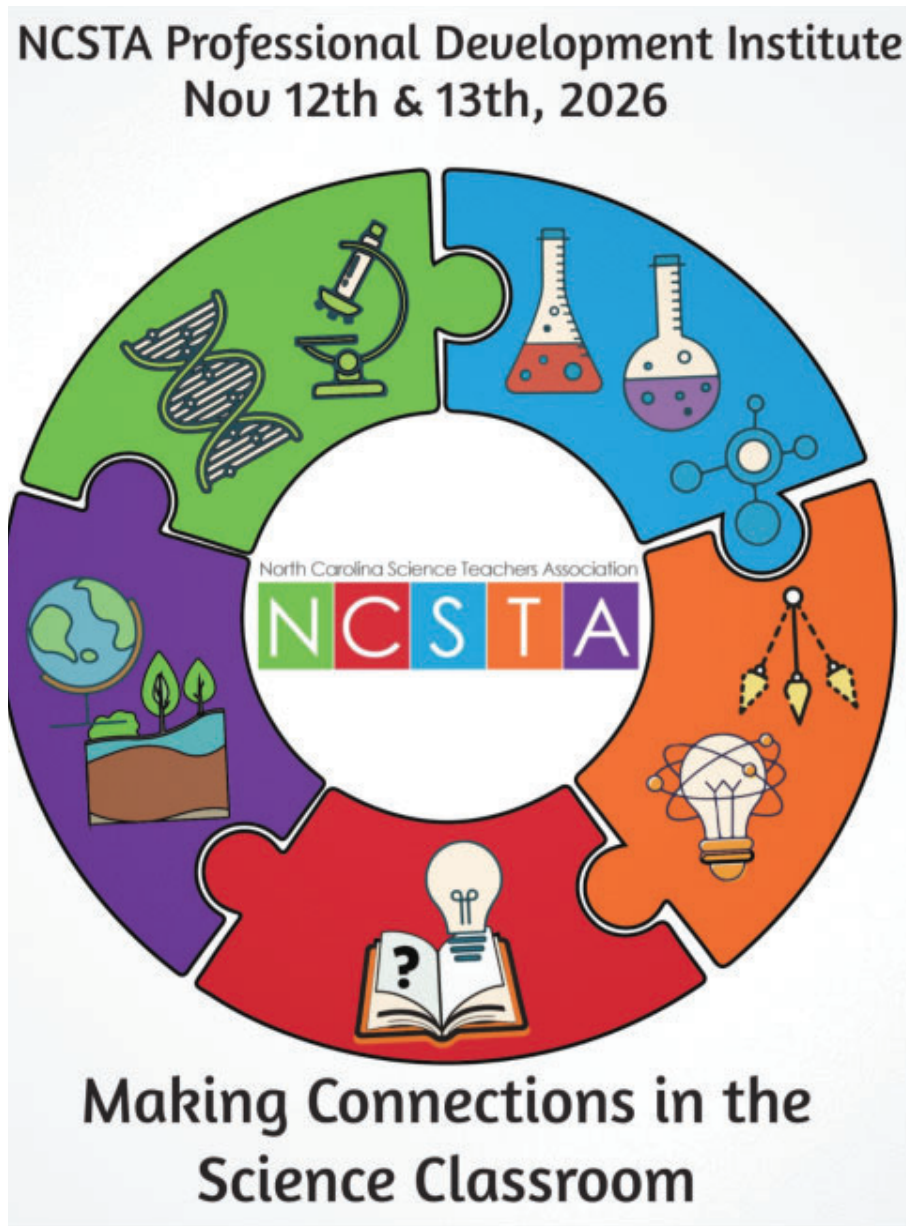
Most importantly, I would like to thank all of the PDI attendees & board members. Your energy, interest and enthusiasm created an atmosphere of collaboration and learning. NCSTA is dedicated to advancing science teaching and learning throughout the state and your engagement with the PDI demonstrated your personal commitment to that goal. May you have a rewarding 2026 academic year and I sincerely hope to see all of you return to Winston Salem for next year's PDI. I am so excited for the conference in 2026!

With gratitude,

Tom Savage



**MARK YOUR CALENDARS! MEET YOUR NCSTA FAMILY ON
NOVEMBER 12-13, 2026, AT THE BENTON CONVENTION CENTER,
WINSTON-SALEM, NORTH CAROLINA, FOR PDI 2026**



SEE YOU IN WINSTON-SALEM 2026!!!