# The Reflector



# North Carolina Science Teachers Association

Editor Dr. Mary Ellen Durham

**Summer 2023** 



# SPECIAL EDITION NOVEMBER 2023 PDI



2023 PDI
Putting It All Together
and Moving Beyond
New Standards,
New Ideas,
New Directions



The North Carolina Science Teachers Association will host its annual Professional Development Institute (PDI) on November 2-3 of this year at the Benton Convention Center in Winston-Salem, NC.

This year's conference promises to provide a vibrant atmosphere for professional collaboration and learning. Running for two days, PDI includes practice-relevant concurrent sessions, a general meeting highlighted by an outstanding keynote address, an engaging exhibit hall filled with vendors and other fun-filled educational activities. 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. Additionally, a workshop is available on Friday for skills-seeking teachers.

Remember, up to 1.2 CEU credits can be earned during the two-day conference. Boost your creativity and amplify your professional practice. <u>Register</u> and Join other like-minded Science Teachers next November at the PDI!

# **Awards Ceremony**



Get ready to celebrate! On Thursday evening NCSTA will host its annual awards ceremony where statewide and district-level winning nominees will be recognized for their excellence in promoting science education. All PDI attendees are invited to attend this important event. This year's ceremony promises to be fun filled and exciting. Not only will our awardees be acknowledged, but Grant a Wish winners will be announced. There will be multiple other opportunities for attendees to win valuable prizes and classroom resources.

Friday Workshop: Diverse Learners & Early Career Educators



A unique event, designed to address the needs of novice educators, lateral-entry teachers and long-term substitutes will be offered as a workshop during the 2023 PDI.

This event will address: How to Teach Effective Science Inquiry Lesson, Classroom Management Tips for the Science Classroom and Labs, Dos and Don'ts of Science Demonstrations, Measuring Understanding of Science Concepts, Practicing Safe Science, Planning to Meet the New Science Standards, 5E+ Science Lesson Cycles, and Tech Tools for Science Educators.

On day one of the PDI, registrants can take advantage of many resources and strategies to enhance their teaching; concurrent sessions are offered throughout the day along with exhibits and a keynote speaker. The workshop will be provided on the second day of the conference.

Full PDI registration is required to attend the Friday Workshop. When registering for the PDI, you must click on four selection boxes: 1. Membership; 2. Upcoming Events; 3. Register; and 4. Workshop(s) - click on 'Teaching Skills Workshop' in the Workshop(s) selection box. If you decide to attend the Friday Workshop, the workshop fee is \$45 in addition to your PDI registration fee.

## Spin-A-Wheel Win, Win, Win!

Via Spin-A-Wheel drawings, opportunities to win outstanding instructional resources and fabulous prizes will occur frequently throughout both days of the PDI. As attendees visit registration, the exhibit hall, and the general session they may collect valuable Spin-a Wheel tickets. Stay on the alert for Spin-A-Wheel drawings. If you hold the ticket with the number that is called, you will instantly win the prize indicated on the Wheel!



## PDI Keynote Speaker Dr. Laura Bottomley

Dr. Laura Bottomley, an Associate Teaching Professor in the Colleges of Engineering and Education at North Carolina University serves as the administrator for the Engineering Place K-20 Outreach and is the current

Director of Women in Engineering. With 35+ years of experience teaching STEM across the globe at the pre-K through graduate levels, she is widely known for her instructional expertise and innovative educational practices.

Referred to as Dr. B by her students, she brings engaging STEM activities to learners in the United States, Rwanda, Puerto Rico and other locations. Among her recognitions are two Presidential Awards for Excellence in Mathematics, Science and Engineering Mentoring Awards (PAESMEM) from the White House (one programmatic and one individual) and an Informal Education Award from IEEE. She was inducted into the YWCA Academy of Women for her contributions to eliminating racism and empowering women, and, in 2012, was named one of 125 Transformational Women at NC State. In 2021, she was named a semi-finalist for the Robert Foster Cherry Award for excellence in Teaching by Baylor University. She was selected as a TEDx speaker in 2022. Bottomley calculates that she has influenced over 1 million students in her career and possibly reached over one hundred million viewers with her educational messaging when she recently starred in a Superbowl commercial called, "Doing Good with STEM."

# Concurrent Sessions for the 2023 PDI Putting It All Together and Moving Beyond- New Standards, New Ideas, New Directions

Do you need clarification of the new standards, want a better way to promote student inquiry, or wonder how to best address climate change? Well, the 2023 DPI has a strand for that! This year's conference addresses contemporary issues and explores progressive, innovative practices in the science classroom. Concurrent sessions will be presented by exemplary science educators focusing on relevant topics, effective strategies and innovative practices.

One strand of concurrent sessions, <u>Tools and Ideas for Embracing, Navigating and Implementing the New Standards</u> will include opportunities for conference participants to examine the standards at various grade levels/spans, will provide clarifications regarding the standards' impact on science teachers and student learning, and will offer suggestions for planning and implementation.

Concurrent sessions in the <u>Creative and Innovative Strategies for Elevating Teaching, Learning, Engagement, and Relevance through Inquiry-Based Approaches</u> strand are designed to empower learners and teachers through data analysis, effective communication and the determination of supportable conclusions. Presentations will illustrate the enhancement of STEM lessons and critical thinking skills through the use of inquiry, case studies and authentic data.

Another strand of presentations, <u>STEM Lessons and Ideas to address contemporary Current Events and Emerging Science Topics</u>, will investigate effective methods and strategies that prepare students for the future with the skills needed to apply and analyze hot button topics in the news, as well as instructional ideas for addressing emerging scientific knowledge and practices.



## **Reality Check**



NCSTA recognizes that supporting and providing an opportunity for future and novice educators to interact with accomplished teachers helps to ensure quality science instruction in the future. In addition to offering a special <u>registration rate for students</u>, NCSTA will host Reality Check, a pizza party and informal networking session, exclusively for student teachers and their advisors, university students majoring in education, and preservice educators on the first day of the conference. University advisors and cooperating teachers are asked to encourage and facilitate our emerging science educators' attendance at the 2023 PDI.



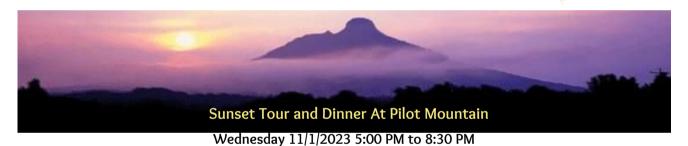
Do you ever wish you had enough supplies to teach that "perfect lesson" Do you want to provide a terrific learning experience, but are hindered by the lack of resources? Perhaps the NCSTA "fairy godmother" will grant your wish at the 2023 PDI. Submit your wish list for the chance to receive up to \$200 worth of classroom materials. All wishes meeting the mini-grant proposal

chance to receive up to \$200 worth of classroom materials. All wishes meeting the mini-grant proposal requirements will be considered. Selections will be based on: Feasibility (how likely will grant materials be used), Sustainability (will materials be used more than once), Value (how does grant request align to current science standards), and the number of students affected.

Although you are not required to select from our vender list, please consider the goods and services of our <u>participating vendors</u> when making your wish. This vendor list will be updated frequently, and don't forget to account for sales tax and shipping in your grant proposal.

Attendance at the 2023 PDI is mandatory to receive a mini grant. For your proposal to be selected <u>you must apply</u> by October 7th, 2023, and your PDI registration MUST BE PAID by October 7, 2023. (A registration is not considered paid until we receive a check or credit card payment: if your school is using a PO, the PO must be paid by the October 7, 2023 payment deadline.

Remember all grant requests will be reviewed using the aforementioned criteria and will be in competition with all other 2023 PDI Grant a Wish proposals. Please **DOWNLOAD** this form, enter your list of wish items, and email to Tom Savage tomncsta@gmail.com



Hosts: Sean Higgins, North Carolina State Parks, Lisa Tolley, NC Office of Environmental Education and Sarah Yelton, UNC Institute for the Environment

Cost: \$15.45 for transportation, after-hours tour and dinner.

#### Register HERE

Maximum: 35 participants

Description: Join us on a science enrichment field trip to Pilot Mountain State Park. Enjoy the sunset (6:26 PM) from the overlook atop Pilot Mountain. See the new Visitor Center featuring natural science exhibits. We will provide dinner and talk with park rangers about the science of protecting the natural resources including monitoring migrating hawks and setting prescribed fires.

#### Schedule

5:00 PM - Meet at the Winston-Salem Marriot-downtown lobby. Guided van shuttle to the summit of Pilot Mountain.

5:45 PM - Optional Guided Hike around the Pilot Knob Trail (1 mile), and/or Natural Resource Management discussion with Park Staff at the accessible overlook.

6:35 PM - Vans depart the summit for the Visitor Center at the base of Pilot Mountain.

6:45 PM – 7:45 PM - Buffet dinner in the Visitor Center. Welcome with Park Superintendent Jason Anthony. Short introduction to the Schools In Parks Program with UNC-Institute for the Environment. Tour exhibits.

7:45PM - 8:30 PM - Vans Depart Pilot Mountain visitor center to return to the Winston-Salem Marriot-downtown

# **Share-a-Thon Opportunity**

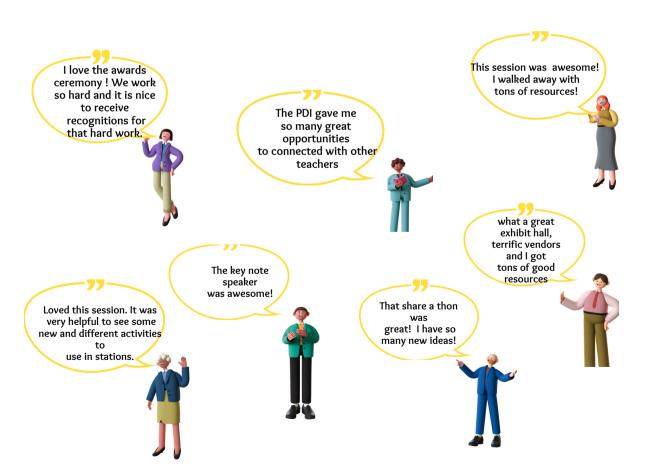
Do you have an exceptional lesson that always engages your students? Have you found an instructional approach that seems to help your students comprehend that really difficult science concept? What about that unique strategy that promotes critical thinking and creativity for your students? NCSTA asks that you consider attending the 2023 PDI and volunteering to share your best innovative and hands-on science lesson or activity at one of the following Share-A-Thons: Elementary Science, Middle School Science, Biology/Life Science, Physical Science/Physics/Chemistry, and Environmental/Earth Science.

Those who volunteer to participate in a Share-a Thon must register for the conference and bring a copy of their activity to share as attendees rotate around a large room. We ask that your activity be engaging and aligned with the North Carolina Science Standards.

Each Share-a-Thon session will be held in a large room. All presenters will have a space to showcase their lesson, and, as PDI attendees rotate around the room you will have opportunities to briefly describe your activity. Each Share-A-Thon presenter that is approved will have his/her name included in the conference program. Please note that the PDI planners attempt to eliminate conflicts between Share Sessions and other regular sessions that are covering the same topics.

If you would like to participate in a Share-a-Thon please submit your <u>Share-a-Thon Information form</u>. Please check the <u>NCSTA webpage for more information</u>. You will be notified via email about the status of your submission. You will be notified by your Share-a-Thon leader with information and instructions.

#### **WHAT DID 2022 ATTENDEES SAY ABOUT THE PDI?**





### Steps to an AWESOME 2023 PDI





#### **PDI Registration**

Don't wait, **REGISTER** for the 2023 PDI today! Registration fees and deadlines are listed below.

Fee	Pre-Registration	On-Site Registration
Member	\$ 180	\$ 200
Non-Member	\$ 230	\$ 250
Retired Member	\$ 49	\$ 45
Retired Non-Memb	er \$ 60	\$ 65
Student Member	\$ 20	\$ 25
Student Non=Men	nber \$ 40	\$ 45

#### PDI Registration Deadlines

Pre-Registration Deadline -Checks	10/20/2023
Pre-Registration Deadline - Credit Cards	10/29/2023
On-Site Registration Deadline	
11/1/2023 - 11/3/2023	

If your school is issuing a Purchase Order, select the 'Payment by Check' option when registering.



#### Prepare your 2023 PDI Schedule

NCSTA will use the conference APP SCHED. We encourage you to use it for the latest updates to our PDI sessions and activities.

<u>Information on how to access SCHED</u> is available on the NCSTA website.

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/



# Make Your Room Reservations

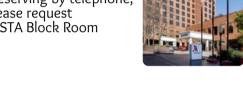
#### PDI Hotel

Marriott Winston-Salem 425 Cherry Street Winston Salem, North Carolina 27101

> Conference Rate: \$168.00 Plus Tax Single/double Occupancy

Reservations: Deadline October 4, 2023 (on-line reservations)

If reserving by telephone, please request NCSTA Block Room





#### Come to the 2023 PDI

- 1- Come to the Benton Center Winston-Salem- NC November 2-3,2023
- 2- Check in at the Registration Booth and collect your name badge. and conference tote
- 3- Review your PDI Schedule in SCHED
- 4- Attend multiple concurrent sessions
- 5- Attend the General Session and Keynote Address
- 6- Explore the Exhibit Hall
- 7- Attend the Awards Celebration and win prizes
- 8- Win Spin a Wheel prizes
- 9- Network, collaborate, interact with old and new professional friends.



#### Parking Fee Reimbursement

NCSTA will pay up to \$15 toward parking for registered attendees of the PDI (no vendors please), limited to one parking receipt per day. Please download and fill out the <u>Parking</u> Reimbursement Form, put your name on your parking receipt(s), and either mail or email the form and receipts to us before Dec. 1, 2023. Instructions are on the form. You will receive a check in the mail after the conference.