

The Science Reflector

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A Message From Your President

NCSTA President's Message – Fall, 2021
From the President . . .

Dear Friends,

I am happy to be able to write a final message to you. I am grateful for each of you and your resilience in the face of our society's current condition. Unfortunately, I will not be meeting you in-person on November 4-5 at the annual NCSTA Professional Development Institute (PDI).

Considering the health and welfare of all of you, our members, and some financial considerations, the face to face PDI will transition to virtual platforms. Member committees are working now on details of these virtual meetings and more information will follow for fall and spring get-togethers.

I encourage you to contact your District Director with encouragements to create additional events locally.

- Please don't be disappointed. The planning committees have been tasked with providing the time and structure for your networking opportunities in the virtual world. I understand the Awards Ceremony and perhaps other topics will occur on the



Sandra Weitzel,
*Education and Outreach
Coordinator for the North
Carolina Division of Soil and
Water Conservation for over
20 years, has served with the
NC Science Teachers
Association Board for many
years. She holds an
undergraduate degree in
Agronomy-Basic Science and
a Master of Science degree in
Soil Science with an*

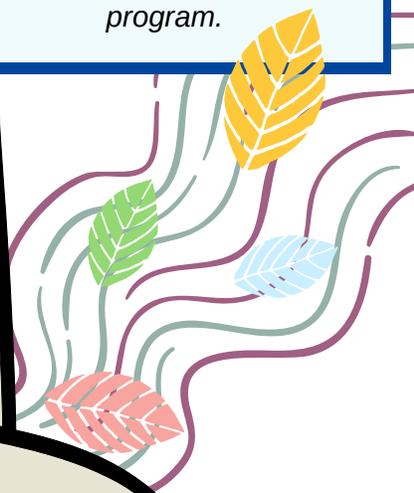
November conference dates. Perhaps the keynote speakers will be able to be rescheduled for a time in the spring.

I am encouraged by yours and your Board of Directors' resilience in this very trying time. This era, we will remember as our parents or grandparents remembered the dust bowl and great depression or World War II. We are in one of those momentous times in history. I pray for your strength of spirit.

Thank each of you for this wonderful opportunity to be your president this past year. Beginning next month your new president will be MaryKate Holden.

Sincerely,

emphasis in soil chemistry from North Carolina State University in Raleigh. Sandra has been a NC Certified Environmental Educator for more than 15 years. She is the state-wide coordinator for the Envirothon program and for the Food, Land & People program.



NCSTA Updates



• Board Elections –

Voting for the 2022 Officers and Directors of NCSTA is **open until Oct. 13, 2021**. You must be a current member to vote. Log in at www.ncsta.org/members and you will see the 'Voting' option above your profile. Please take some time to meet our candidates:

President Elect - Cliff Hudson

Secretary - Brad Woodard

District 2 Director - Michelle Hafey

District 4 Director - Kelly Ficklin

District 6 Director - Carie Fugle & Jennifer S. Crawford

District 8 Director - Tom Savage



IMPORTANT NCSTA CONFERENCE NEWS



THERE WILL BE NO FACE-TO-FACE PROFESSIONAL DEVELOPMENT INSTITUTE (PDI) THIS FALL!

*Considering the health and welfare of our membership,
the 2021 NCSTA face-to-face PDI will transition to a two-part event.*

We are pleased to announce that our PDI will be virtually presented in two segments: one in the fall and one in the spring. On **November 4th** we will celebrate our members' accomplishments during our **Virtual Awards Ceremony** where nominees will be recognized at the elementary, middle grades, and high school levels in their respective districts as well as others who will be acknowledged for their special contributions to the profession and our organization. Also, NCSTA Grant Award Winners will be announced. Our guest speaker for the Nov. 4, 2021 awards ceremony is Dr. Kizzmekia Corbett. She will join us at 4:00 pm for an address that will surely be engaging for all NC Science Educators. She is a native of NC and was part of NC's Project SEED. She was a lead in the development of the Moderna Vaccine at the National Institutes of Health and is now at the Harvard Radcliffe Institute in Boston.

The **Spring Conference** will be held on **Tuesday – Thursday, February 15 – 17, 4:30 pm – 7:30 pm, and Saturday, February 19, 9 am – 1pm**. Each weekday session will address one of the three strands at each grade level: elementary, middle grades, and high school. The strands are #1: Launching Science through Digital Literacy; Strand #2: Launching Science through Blended and Virtual Science Classes; and Strand #3: Launching Science through Environmental STEM Lessons.

The Saturday segment will include break out sessions, a keynote speaker, and collaborative and EdCamp sessions. During the virtual conference that week there will be giveaways/door prizes.

Grant-A-Wish Awardees will be recognized during the virtual conference. More details on the process, registration fees, etc. will be posted on our website soon.

We hope you will come and join the FUN! Mark your calendars now!

Events & Resources

Upcoming Events & Opportunities:

- **Science Competitions & Contests for Students** – Get to know the science competitions and contests that are available for your students by checking out this Wakelet which covers major science competitions and contests happening in NC! <https://wke.lt/w/s/vgleUT>
- **Cryptography and Cybersecurity Curriculum Research** – Pfeiffer University Teacher Education Candidates, Public School Classroom Teacher Partners & Associate Professor of Education Faculty Member, Dr. Laura Lowder, are implementing the National Science Foundation grant-funded research development, CryptoComics program in collaboration with a leading team of educational researchers at University of Florida. This fall, 60 3rd-5th grade girls from Stanly and Rowan-Salisbury School System, six classroom teachers, and three teacher education candidates, along with Lowder, will lead 18 sessions focused on cryptology, coding, and related careers with the goal of empowering more girls to engage in science. The University of Florida research team, led by Dr. Pasha Antonenko, is researching the implementation of a technology-enhanced, culturally responsive curriculum to engage girls in cryptology and cybersecurity. Learn more here <http://cryptocomics.org/>.

Lesson Plans, Ideas, & Resources

As part of our commitment to assist our members, NCSTA will offer sample lessons plans and resources in our newsletters. In this edition, we are excited to share the following:

- A lesson plan about using CoVID-19 as an example with High School Biology students to introduce Molecular Genetics. This was submitted by NCSTA board member, MaryKate Holden who currently teaches at Middle College at UNC Greensboro. Link to access: <https://docs.google.com/document/d/1W0mKg03wtshFDQVuoxN3kmvTxMvBCy-gbEPsfyHRvsU/edit?usp=sharing>
- A physics activity was shared by Adrienne Evans, NCSTA District 3 Director and High School Science teacher at Southern Wake Academy. Check it out and contact Adrienne if you are interested in a Spring Workshop on Socraevic Questioning (not socratic) and Modeling Instruction! Link to access: <https://drive.google.com/drive/folders/1SPkIbPnR9ggz1sfoSUTmfK2uz-ONxA4P?usp=sharing>
- NCSTA board member, Manley Midgett shared an activity for 5th graders designed to have students collect climate data in teams of 2 or 3 for different locations around the globe, compare the climate at those locations and explain why some places have a climate that is different than first expected. <https://docs.google.com/document/d/1rv4TOFBAidyq5N36mNX4IkrvtuTB9yJ4/edit?usp=sharing&oid=108460490763960087380&rtpof=true&sd=true>
- The second full week in October (10 - 16) is Earth Science Week! Students will have fun (and will have the chance to get a little messy!) in this Soil Erosion Activity created by NCSTA board member and Cabarrus Soil and Water Conservation District educator, Tammi Remsburg. Link to access: https://drive.google.com/file/d/1zlnW_HJppK3xvXpRp_2Tt7jZ1TMOR_8l/view

KUDOS

Do you know someone who deserves some kudos?
Submit a name and brief description for inclusion in future editions of *The Reflector Newsletter!*



From Ashleigh Miller, FFA Teacher, Mt. Pleasant Middle School Cabarrus County, District 6: *"Our chapter is a finalist for the National FFA Middle School Model of Excellence! The National FFA Middle School Model of Excellence chapters exhibit exemplary qualities in all categories of growing leaders, building communities and strengthening agriculture. An overall national winner will be chosen out of the Middle School Model of Excellence chapters. This is the highest honor a middle school FFA Chapter can receive by the National FFA Organization. A few of our members will present in September to a panel of judges, who will then determine the top middle school FFA chapter in the US. The top chapters will be recognized at FFA National Convention in Indianapolis, IN in October. We have also already been recognized as a 3 Star National Chapter. This recognizes us as in the National top 5% of all FFA Chapters."*
This has been accomplished in 4 years of teaching! Way to go, Ashleigh!

From Brad Woodard, Teacher Pitt County Schools, District 1: *"Just wanted to say thanks for the excellent job the NCSTA board has done over this 19 month period during the pandemic. They planned virtual workshops and made many important decisions throughout this difficult time. Special thanks to two presidents, Carol Maidon and Sandra Weitzel, for their leadership."*

Also from Brad Woodard...September 18th was the Opening of the Greenville NC Science Museum; many were in attendance with social distancing protocols. In addition to other exhibits, there was a green screen and WNCT-9 Meteorologists were in attendance helping participants to give the weather. **Special thanks to Mary McDaniels and Emily Jarvis for their contributions.**



Carol Maidon



Sandra Weitzel



Spotlights & Musings

From Dr. Laura Lowder, Pfeiffer University: *"Mrs. Hannah Park is a nominee for the NCSTA non-public school Educator of the Year, for her service and innovative effectiveness in the virtual classroom over the 20-21 school year."*

KUDOS



Arina & Marley French, kindergartener and second grader, conducting a science experiment from home during a synchronous online science class at Scholars Academy for the Gifted & Artistically Elite, taught by Union County Teacher of the Year, Mrs. Hannah Park



Penelope Lowder, kindergartener, observed during a science experiment she is conducting at home, as a part of a synchronous, virtual science class taught by Mrs. Hannah Park, Union County Teacher of the Year.

CAN YOU NAME THIS CRITTER?

I am a relatively common resident throughout North Carolina, but I like to hide beneath leaves and logs. I am part of the 'mole' salamander family and am recognized as our State Salamander. What am I?



Marbled Salamander

Photo Credit: Jeff Hall, NCWRC Biologist

QUOTABLE KIDS

Mom asks a fifth grader if he needs the "ultimate" access subscription for an online reading library and he replies, "I don't know, I've been doing most of my reading in the 'real world'."

"Innovative, blended learning, science-focused private school for gifted children receives full accreditation recognition. Scholars Academy for the Gifted & Artistically Elite, with brick and mortar locations in Cary and (now) in Albemarle, NC, has received official notice of having earned fully accredited status as a K-12 (online and brick-and-mortar) private school. Scholars Academy was founded by Dr. Laura Lowder, Associate Professor of Education at Pfeiffer University in Stanly County, NC who currently serves on the NCSTA Board as the liaison for beginning teachers and university teacher education faculty and candidates."

<https://scholarsacademyatcaryballet.org>

Way to innovate, Laura!

Available Grants

- **Duke Energy Powerful Communities: Local Impact** - Grants \$10,000 and under are available in four defined areas: K-12 Education, Nature, Workforce, State Strategic Impact. Applications for Local Impact grants are accepted year-round. <https://www.duke-energy.com/community/duke-energy-foundation/local-impact>
- **NC Office of Environmental Education Grant Page**- NC Office of Environmental Education has a grants webpage updated regularly with opportunities for formal and nonformal educators. Check it out today! <http://web.eenorthcarolina.org/core/item/topic.aspx?tid=85010>
- **Lorrie Otto Seeds for Education Program** – This [Wild Ones](https://wildones.org) donor-funded program has provided grants ranging from \$100 to \$500 for native plant gardens and landscaping projects throughout the United States. The funds are designated for acquiring native plants and seeds for outdoor learning areas that engage youth (preschool to high school) directly in planning, planting and caring for native plant gardens. All public and private schools, non-profits such as nature centers, youth organizations and community youth centers in the US are welcome to apply so long as the project uses native plants or seeds to educate youth. Application opens July 15th. **Deadline: October 15, 2021 11:59 pm CDT.** <https://wildones.org/seeds-for-education/>
- **American Heart Association (AHA) Teaching Gardens Network Grant Program** – AHA has partnered with CAULIPOWER to sponsor \$2,500 grants for 50 organizations to help garden spaces thrive. Recipients will be announced in January 2022. **Deadline: October 29, 11:59 PST.** <https://www.heart.org/en/professional/educator/teaching-gardens/teaching-gardens-grant>
- **Budding Botanist Grant** – In partnership with the @kloraneusa Botanical Foundation, Kids Gardening will award \$1,000 to eighteen high-schools across the United States to support their youth garden programs. Any public school, charter school, or private school serving students in grades K to 12 in the United States that can demonstrate that at least 40% of their student population would qualify for free or reduced price meals is eligible to apply. **Deadline: October 29, 2021 at 11:59pm PST.** <https://kidsgardening.org/2022-buddingbotanist-grant/>
- **Walmart Local Community Grants** – Walmart awards local community grants through an open application process. Local Community grants range from a minimum of \$250 to a maximum of \$5,000. Organizations may only submit a total number of 25 applications and/or receive up to 25 grants within the 2021 grant cycle. **Deadline: Dec. 31, 2021.** <https://walmart.org/how-we-give/local-community-grants>
- **2022 Whole Kids Foundation - Garden Grant Program** – Provides a \$3,000 monetary grant to support a new or existing edible educational garden at a K-12 school or nonprofit. Application period opens in February 2022. <https://www.wholekidsfoundation.org/programs/school-gardens-grant>
- **NOAA Environmental Literacy Program: Increasing community resilience to extreme weather & climate change** - Priority 1 awards will support new projects taking place in states in the Central and Eastern regions of the United States including North Carolina. The goal of this funding opportunity is for communities to have sufficient collective environmental literacy and take actions to build resilience to extreme weather and climate change. Projects should demonstrate how they will engage children, youth, and/or adults to build these capabilities, particularly through active and social learning, during the award period. Projects should leverage and incorporate relevant state and local resilience plans and collaborate with individuals and institutions that are involved in efforts to develop or implement those plans. Funding Opportunity Number: NOAA-SEC-OED-2022- 2006995. **Deadline: March 17, 2022.** <https://www.grants.gov/web/grants/viewopportunity.html?oppld=335699>