

The Science Reflector

North Carolina Science Teachers Association



Promoting excellence
in science teaching
and learning

summer 2021

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A Message From Your President

I am proud to be writing a brief President's Message for this quarter's newsletter. This year's NCSTA Communication Committee chair, Allie Dinwiddie, has taken the 'bull by the horns' and has set the NC Science Teachers Association on track to get this Reflector newsletter regularly printed quarterly. This is great news, because communication with all of you during this time is more important than ever.

Following are a few updates of interest.

Annual Conference – The NCSTA Board and other committee members are busy planning the 2021 Professional Development Institute (PDI). We're excited about the possibility of holding this two-day, November 4-5, training and resource event in person in Winston-Salem.

- Kizzy Corbett, former NC Project SEED student and leading COVID-19 researcher, will be one of two great keynote speakers. We're all eager to have her with us for a day or two. See more about Kizzy at [Kizzmekia Corbett - NCSTA](#).
- Rumor is that collections of the 'Rocks of North Carolina' will be given away in the exhibit hall again this year. These great, take-home kits allow teachers to collect a wide variety of North



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 a number of years. She holds an undergraduate degree in Agronomy-Basic Science and a Master of Science degree in Soil Science with an

Carolina minerals. This wonderful resource is courtesy of the NC Aggregate Association, the Carolinas Section of the Society of Mining Engineers, and other geologic and mineral societies.

<https://www.ncaggregates.org/education/>

- And, it's not a rumor that at least one corridor in the exhibit hall will be filled with a plethora of environmental education organizations with free give-away resources and excellent networking opportunities for your classrooms. Many thanks to Lisa Tolley of the NC Office of Environmental Education for heading this up. <https://www.eenorthcarolina.org/>
- All your favorite parts of the conference will be back again – **Spin-a-Wheel** prizes during lunch period in the exhibit hall – **Reality Check**, the networking opportunity for pre-service educators – **Great raffle prizes** – and **Share-A-Thons** for elementary, middle school, earth science, physical science, chemistry, physics, and biology giving you a chance to share your great lessons or learn about other educators' lessons and tricks.

I am looking forward to meeting and seeing all of you in November!

Sandra

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 –

Board of Directors nominations are open through the summer! We are recruiting nominations for **President** as well as **District Directors** from **District 2** (*Sampson, Wayne, Greene, Lenoir, Craven, Pamlico, Jones, Onslow, Duplin, Carteret, Pender, New Hanover, and Brunswick counties*), **District 4** (*Moore, Lee, Harnett, Cumberland, Hoke, Bladen, Columbus, Montgomery, Scotland, Richmond, and Robeson counties*), **District 6** (*Cleveland, Lincoln, Gaston, Mecklenburg, Rowan, Cabarrus, Stanly, Union, and Anson counties*) and **District 8** (*Cherokee, Graham, Clay, Swain, Macon, Haywood, Jackson, Transylvania, Madison, Buncombe, Henderson, Yancey, Mitchell, McDowell, Polk, and Rutherford counties*).

Visit the [NCSTA website](#) to nominate yourself or a colleague for these leadership positions! **Nominations close August 1, 2021.**



Keynote Speaker



Dr. Kizzmekia S. Corbett,

a native North Carolinian, is a research fellow and the scientific lead for the Coronavirus Vaccines & Immunopathogenesis Team at the National Institutes of Health (NIH), National Institute of Allergy and Infectious Diseases, Vaccine Research Center (VRC). A viral immunologist, Dr. Corbett's expertise, along with her team, developed the mRNA-1273 from viral sequence data that was used by their industry partner, Moderna, Inc. for the COVID-19 vaccine.

Dr. Corbett is also an involved member of the NIH Fellows Committee and promotes STEM education and vaccine awareness. In June she will join the Harvard T.H. Chan School of Public Health as an assistant professor in the Department of Immunology and Infectious Diseases. She will also hold an appointment at the Harvard Radcliffe Institute as the Shutzer Assistant Professor.

- **2021 Professional Development Institute (PDI) –**
The 2021 NCSTA PDI will be held on November 4-5 at the Benton Convention Center in Winston-Salem, NC. The PDI consists of 2 days of concurrent sessions, a general meeting with a keynote speaker, an exhibit hall filled with vendors and other fun-filled activities. This year's keynote speaker is Dr. Kizzmekia S. Corbett and the theme is *Launch Your Science Program into a Higher Orbit!* We are planning for a return to our face-to-face conference although, NCSTA will switch to a virtual conference format if necessary. The General Schedule is coming soon and will be posted to our [PDI webpage](#).

If you submitted an application to present at the 2021 PDI by the June deadline, you will be notified if you were selected via email by **August 7, 2021**. We often encounter issues with blocked emails and emails going into spam folders. If you have not received an email from us by August 7, please notify Joette Midgett (ncstabusinessmanager@mindspring.com).

Save money by pre-registering for the conference. All pre-registration is done online: you will have the option to print an invoice if you are paying by check, or a receipt if you are using a credit card. Your registration will not be final until payment is received. You may also register at the conference, but you will save money by pre-registering by the deadline. [Click here for registration rates](#). **Pre-registration deadline is Oct. 21, 2021.**



10 Reasons to Join NCSTA and Attend the 2021 PDI

1. Networking Opportunities with Like Groups
2. Renowned Keynote Speakers
3. Sensational Sessions
4. Grade and Subject Level Share-A-Thons
5. Awesome Awards Ceremony with Door Prizes
6. Specialized Professional Development Strands
7. Connecting with Friends and Colleagues
8. Continuing Education Credits (CEU's)
9. Curriculum Connected Commercial Exhibits
10. Get out of Your Routine and Come Celebrate Science Education in North Carolina!

Request for Assistance



Ever want to be Pat Sajak or Vanna White? Tammi Rensburg needs help during the PDI to run the "Wheel of Prizes." Many hands make light work and keeps things fun! Let her know if you can help! The best way to get hold of Tammi is to email: trensburg@cabarruscounty.us. Thanks!

• 2021 NCSTA Grants –

NCSTA offers two grant opportunities to members: 1) **Study Grants** and 2) **Innovative Curriculum Support Grants**. Grants are reviewed twice a year in the Spring and Fall. The **Fall Grant Cycle Deadline is September 1, 2021**. NCSTA members who have been part of the organization for one year or more, and who have not received a grant within the past three years are eligible to apply. Applicants should allow 4-6 weeks for grant decisions to be made. For more details and application links, go to our grants webpage:

<https://www.ncsta.org/grants/>.

Study Grants – NCSTA members who are taking study classes, attending conferences, or participating in workshops may be eligible for one study grant. NCSTA will pay up to half of the expenses, not to exceed the amount approved by the NCSTA board each year. Graduate courses for the purpose of obtaining a degree are not eligible. To receive approval of the grant request, it must be submitted before your scheduled study. If approved, a nontransferable check is made out to the grant winner(s) upon receipt of items listed in the agreement. Grantees must submit a two-page summary about the study to be published in The Reflector Newsletter and must be prepared to give a presentation at the PDI conference.

Innovative Curriculum Support Grants – NCSTA members may apply for up to \$1,000 for supplies, materials, equipment, printing, travel and other expenses related to an innovative curriculum project involving students in a unique way. These funds are not intended for student travel such as field trips or for the personal gain of the Project Director. A committee will select recipients based on: innovativeness, establishment of need, realistic plan of action, ability to replicate, and the number of persons benefited. Grantees must submit a two-page summary about the study to be published in The Reflector Newsletter and must be prepared to give a presentation at the PDI conference.

Events & Resources

Professional Development Options Available

North Carolina's science educators have shown that effective instruction can occur under the most demanding of circumstances. After this unprecedented academic year filled with months of extraordinary challenges, you have certainly earned the opportunity to enjoy the summer break. However, the end of the school year may also generate a search for professional development venues. The issue of teaching licensure/certification is always present and many science teachers look at the summer recess as an opportune time to enhance or renew their professional knowledge and skills. Enrollment in academic courses remains a traditional option. However, there are numerous agencies throughout the state that offer the support, resources and flexibility that you need. In determining how you will secure valued CEUs or EE credits for renewal or certification, consider these agencies...

- **The North Carolina Science Teachers Association (NCSTA):** Consider attending NCSTA's two-day Professional Development Institute. The PDI offers sessions and workshops for educators who teach science kindergarten through college. Attendees track professional development time spent in workshops and or sessions on their NCSTA CEU Certificate Form which is submitted by the attendee to his/her respective LEA. This year's conference strands focus on Launching Science through digital literacy, blended and virtual classrooms, and environmental STEM Lessons.
- **North Carolina Museum of Natural Science:** You can receive credit toward CEUs or EE certification through the North Carolina Museum of Natural Science. The Museum offers a series of free asynchronous virtual workshops that provide information and activities for exploring the natural world. The workshops include videos and follow-up assignments. These self-paced opportunities range between 1 and 3 contact hours, and provide all resource and material on an ongoing basis. Go to <https://naturalsciences.org> for more information.
- **North Carolina Center for the Advancement of Teaching (NCCAT):** NCCAT is partnering with the North Carolina Museum of Natural Science to sponsor a workshop designed to assist educators in enhancing student literacy skills through examinations of the natural world. Reading, Writing, and Researching through the Real World will be offered **September 7 through September 10, 2021**. Participating educators will explore strategies that sharpen learners' skills in reading, writing, and researching through science-themed instructional practices. Further information regarding the workshop and registration is available at <http://nccat.org>.
- **North Carolina Environmental Education (NCEE) Certification Program:** NCEE provides professional development opportunities for educators interested in promoting environmental literacy, fostering community leadership, and enhancing their environmental education teaching skills. A wide range of courses and workshops are offered through the North Carolina State Parks, Division of Coastal Management, Division of Air Quality, Division of Water Resources, Albemarle-Pamlico National Estuary Partnership, Division of Conservation Education, Division of Soil and Water Conservation, and other state agencies. Those completing the environmental education certification program obtain the knowledge and skills to be community environmental education leaders, a certificate of program completion signed by the Governor, Chairman of the N.C. State Board of Education, and Secretary of the Department of Environment and Natural Resources, and professional recognition. Most environmental education programs and workshops, with approval from his or her school district, can also be used by the science teacher for continuing education credits. To learn more visit <http://eenorthcarolina.org/certification/program-providers>.

Events & Resources

Upcoming Events & New Resources:

- **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>
- **Project WET curriculum training July 10 in Cabarrus County** – First 20 Cabarrus County educators will get a free curriculum book. Others will pay \$30 the day of the workshop. Sign up at https://forms.office.com/Pages/ResponsePage.aspx?id=mnal5rawoUK1elp9Mo_aM5h26SWeF51AlxJDiCtI9QBUOEo4VUVLQjVPWVA5NUIY5UUhGRkNLUVdSTy4u
- **US EPA Air Quality Workshop for Educators** – Join the US EPA July 13 – 15 for a virtual Air Quality Workshop for educators. **Registration deadline July 8th.** [Air Quality Workshop for Educators Tickets, Tue, Jul 13, 2021 at 9:00 AM | Eventbrite](#)
- **Racial Equity Farm to School 2021 Training Series** – NC Farm to School Coalition organized a virtual summer series on Racial Equity in Farm to School. Free, 5 session, 2 hour workshops will be led by Ronda Bullock and her team from we are (www.weare-nc.org/). Sessions will be held from 3:00-5:00pm on the last Tuesday of every month June-October. Join any or all, but register for each training separately. Training Objectives: Participants will be able to 1) Understand how biases contribute to systemic harm, 2) Make connections between language and power, and 3) Apply a racial equity lens to farm to school practices. These workshops are intended for any and all who work in or support farm to school efforts: educators, school nutrition, school administrators and staff, non-profits, agriculture professionals, parents, state agencies, etc. <https://docs.google.com/document/d/1jmYN5DmgeXxLdg6du9UIR9EVEqNqG7NFpjBgwvqnrUU/edit?usp=sharing>
- **EENC and Southeastern Environmental Education Alliance Annual Conference** – The 30th Annual Environmental Educators of North Carolina Conference at Lutheridge Arden, NC will be held from Friday, September 10 to Saturday, September 11, 2021. This will also be the Southeastern Environmental Education Alliance (SEEA) regional conference. The conference will be full of professional development, networking, learning, and field experiences that will help you expand your knowledge of EE and resources in NC and beyond. Pre-conference workshops and field trips will be offered on Thursday, September 9. <http://www.southeastee.com/conference.html> ; <https://eenc.wildapricot.org/conference>



Events & Resources

Lesson Plan - "Create a Creature"

As part of our commitment to assist our members, NCSTA will offer sample lessons plans in our newsletters. In this edition, we are excited to share a lesson submitted by NCSTA board member, Manley Midgett. Manley is well respected by science educators across North Carolina.

In the "Create a Creature" activity, students will explore the special adaptations that help wildlife survive and thrive in their environments. Below is a link to the complete activity including directions, materials, and concluding homework/evaluation tasks. This activity may be completed both in a face to face classroom and virtually. Please note it was adapted from a merging of OBIS and Project WILD activities. Thank you for sharing, Manley!

https://drive.google.com/file/d/1wb5vhMI6n6SxFey_ZNC7n12WH6SnNn9r/view?usp=sharing

Spotlights & Musings



Dorothy Holley

West Johnston High School
District 3

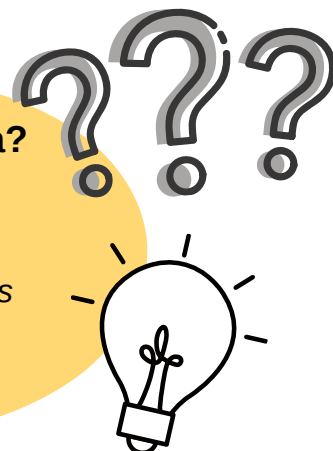
Spring 2021 Grant Award Recipient

Project Description: West Johnston High School science educator, Dorothy Holley, plans to work with NCSU Professor, Dr. Douglas Call, to introduce and mentor students in water quality learning activities. Funding through the NCSTA Innovative Curriculum Support Grant will allow for the school science department to purchase the water monitoring equipment students in Holley's classes will use to collect data on the waterbody on school grounds. Holley's ultimate goal with the project is to teach citizen science by engaging students with relevant and real time data that can be connected to their past and future science classes. Good luck with this innovative project, Dorothy!

**Do you have an innovative project idea?
Do you need financial assistance for
professional development?**

Consider applying for a NCSTA Grant! More details are available at <https://www.ncsta.org/grants/>.

Fall Deadline is September 1, 2021!



Spotlights & Musings

Sage Advice & Reflections

"On a recent trip to one of the most beautiful places on this third rock from the sun, Costa Rica, some of my fellow travelers were so engrossed in their smart phones that they failed to observe the surroundings. Just a few feet away from them were poison dart frogs, howler monkeys and caimans. Give it a rest. Put the devices down for a while, unplug, be where your feet are, see and smell the orchids or monkeys."

- Mike Tally

NCSTA Board Member, District 3

July 20, 2021 will be the 52nd anniversary of the historic Apollo 11 moon walk. What are your space exploration & moon landing memories? How will you be celebrating this anniversary?

"As a young girl, I remember watching it [the Apollo 11 Moon Mission] on TV and being so excited. After they started walking around, I ran outside and looked at the moon. I remember telling my family that I could see them!"

- Tammi Remsburg

NCSTA Board Member, District 6

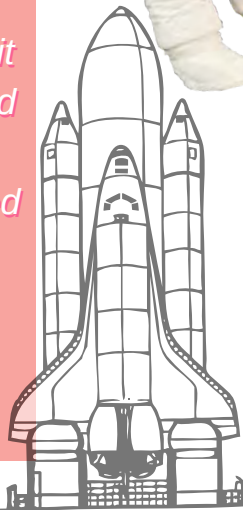
KUDOS:

Congratulations to Lindsay Smith and Amanda Clapp, NCSTA board members, for earning the Burroughs Wellcome Foundation Career Award in Math and Science Teaching!

- NCSTA Board

Do you know someone who deserves some kudos?

Submit a name and brief description for inclusion in future editions of The Reflector Newsletter!



CAN YOU NAME THIS CRITTER?

I am a wading bird that can be found on the Atlantic and Gulf coasts of North America. I have a black bill, black legs, and yellow feet. What am I?



Snowy Egret

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>
- **Community Grantmaking Program** – NCCF is the single statewide community foundation serving NC and supports a network of local affiliate foundations. Dates of all NCCF affiliate foundation cycles, are [listed chronologically here](#). There are multiple grants with deadlines in the summer. <https://www.nccommunityfoundation.org/apply/grants/community-grantmaking>
- **Youth Service America (YSA) Afterschool Grant** – YSA will award Afterschool Grants of up to \$500 each to support youth-led service or service-learning opportunities in up to 60 afterschool programs. Programs must engage at least 50 youth as volunteers in service or service-learning projects during the 2021-2022 academic year. 50% of youth engaged must be from low-income, underserved communities and focus must be on engaging middle-school and high-school aged youth. **Deadline: July 30, 2021 11:59 pm EST.** <https://ysa.org/grant/afterschool/>
- **2021 Little Seeds Pollinator Pals Grant** – Little Seeds and KidsGardening is offering funding to support youth garden programs that are interested in preserving and creating pollinator habitat to help rebuild declining pollinator populations. In 2021, eighteen programs will be awarded a check for \$500 to support the development of new and expansion of existing pollinator gardens in communities across the United States. **Deadline: July 30th, 2021.** <https://kidsgardening.org/garden-grants/>
- **NC Science Teacher’s Association (NCSTA) Grants** – NCSTA members are eligible for small grants to build professional development and take on an innovative curriculum project. **Deadline: September 1, 2021.** <https://www.ncsta.org/grants/>
- **Shade Structure Grant** – The American Academy of Dermatology offers grants of up to \$8,000 to public schools and non-profit organizations for installing permanent shade structures for outdoor locations that are not protected from the sun, such as playgrounds, pools, or recreation spaces. The AAD Shade Structure Program is open to 501(c)(3) non-profit organizations and public schools. Applicants must collaborate with a local dermatologist and implement a sun safety program. **Deadline: October 1, 2021** <https://www.aad.org/public/public-health/shade-structure-grants>
- **The Samull Classroom Herb Garden Grants** – The Herb Society of America established an herb garden grant for elementary school classes grades 3 through 6. Ten grants in the amount of \$300 are available. Elementary classrooms grades 3-6 with fifteen students or more may apply for a grant to establish an herb garden. In addition to plants, the funds may be used for supplies such as soil, plants trays, containers, child or youth sized tools, etc. **Deadline: October 1, 2021.** <https://www.herbsociety.org/explore/grants-scholarships/>
- **Lorrie Otto Seeds for Education Program** – This [Wild Ones](#) 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/>