President’s Message Winter 2021
Where we’ve been and where we’re headed

In preparing to write this column, my first one as President of ASTE, I’ve looked back at what other presidents have written in the ASTE Newsletter. This was an interesting reflective exercise, as it pointed out some stark differences that the past two decades, and past two years in particular, have brought to our organization, our profession, and our daily lives, as well as some continuing challenges we face as science teacher educators. I’d like to highlight some of those here.

- At the start of the millenium, and before our name change to ASTE, President Julie Gess-Newsome shared information about the upcoming conference and a session titled Getting to Know AETS, to help all members (new and established) understand how AETS operates and how individuals can become more involved.
- In 2003, President Herb Brunkhorst’s letter was followed by a paper ballot that members were to mail in to cast their vote for the new ASTE leaders.

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In 2005, President Patricia Simmons highlighted the “need to identify and pursue careful, scientific research on what we still need to know about science teacher education, purposefully disseminating these materials and outcomes to the public.”

In 2006, President Kathy Norman encouraged ASTE members “to take three actions this year toward making our voices heard and to speak to those outside of our profession, to the public, and to policymakers regarding how to meet critical needs for highly trained teachers and effective science education programs”.

In 2007, President Janice Koch emphasized the “responsibility of our growing organization is to assume more active roles in helping policy makers understand the scientific underpinnings of the civic issues we need to address”.

In 2010 President Meta van Sickle highlighted the problematic rhetoric of education that frames opportunity as a competition (e.g., Race to the Top) rather than as a way to create opportunities for all students to learn.

In 2011, President Randy Bell applauded the “warmth of our members” in overcoming the frigid temperatures at our annual meeting in Minneapolis.

In 2012, President John Tillotson welcomed our new Executive Director, Bob Hollon and Director of Electronic Services, John Rhea, and also celebrated a growth in our membership to nearly 800, following a well-attended conference in Clearwater, Florida.

In 2013, President Kathy Trundle announced our new website, which enabled conference proposals, reviews, etc. to be done through a single log-in.

In 2014, President Joanne Olson foreshadowed the creation of the Innovations journal and also cautioned us that “we are not reaching a substantial number of individuals who are heavily involved in science teacher education. State-level science curriculum coordinators, area education agency science leaders, and our colleagues from smaller colleges and HBCUs are not well represented at ASTE.”

In 2015, President Lisa Martin-Hansen described ASTE’s response to proposed U.S. legislation regarding assessment of teacher education programs through the tracking of children’s test scores, relating back to their teachers, then tracing back to teacher education programs.

In 2016, President Malcolm Butler described seven goals the Board discussed for the upcoming year: Enhance recruitment of new members; Improve retention and active involvement of members; Enhance diversity of the membership; Enhance education and professional development of members; Improve effectiveness and governance of the organization; Increase the visibility and involvement of ASTE in science education policy and practice; and Strengthen connections between research and practice in science teacher education.

Amidst the shifting political leadership in the US in 2017, President Gillian Roehrig called for ASTE members to “stand up for science, for the teaching of evolution and climate change, and for the education of all of our students”.

The last two years have seemed very different from those before as we have faced a dual pandemic of public health and racial injustice, globally. Yet, a look back through our newsletters shows that these issues are not really new problems at all—many relate to persistent challenges that past ASTE leaders have sought to address. Despite past efforts, however, there remains a tremendous amount of work to do going forward. We can do that more effectively if we acknowledge where we’ve been and where we want to go.
As an organization, ASTE has the potential to enact change by working collectively towards reaching common goals. At our 2021 ASTE Virtual Conference, we introduced two strategic priorities that the 2020 Board and Presidential Team identified through conversations about our mission and progress towards achieving that.

- Broaden the diversity of membership and leadership in ASTE; and
- Provide a leading voice in conversations about science teacher education research, policy, and practice

The first strategic priority focuses our attention internally— to examine our membership composition, member retention, and recruitment. The second directs our attention outward— to how ASTE as individual members and an organization participates in and drives conversations about research, policy, and practice in science teacher education.

In the upcoming year, the Board as a whole and all ASTE Committees will be reflecting on their respective charges, and identifying ways their work can address these priorities. We recognize, however, that meaningful and substantive action by our organization cannot be accomplished by our leaders alone -- ASTE IS OUR MEMBERS.

As your President, I am committed to LISTENING to our membership and serving their needs and interests. What do you feel ASTE is doing well in terms of these two priorities? What can we improve? How can our membership, as a whole, contribute to addressing these strategic priorities? All ASTE members are invited to submit their comments, questions, and concerns directly to the ASTE President here. You may remain anonymous, or provide contact information for follow-up.

Yours in service,
Debi Hanuscin

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From the Desk of Kate Popejoy, Executive Director

Due Date: Monday March 1, 2021

Dear Members of the Association for Science Teacher Education (ASTE),

Are you interested in serving on the Editorial Review Board (ERB) for the practitioner journal Innovations in Science Teacher Education (Innovations)? If so, please apply; we would love to have your expertise on the board.

Innovations is an online practitioner development journal of the Association for Science Teacher Education. It is a place where science teacher educators can share the work they do to prepare pre-service and in-service science teachers. We publish four issues per year featuring concrete ideas and strategies that are easily replicable by science educators in their own setting, context, and with their unique student population. The activities, ideas and strategies described in the manuscripts are based on a firm foundation of scholarly work in science education and describe innovative efforts to advance the field and enhance science teacher education.

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We are seeking any (and all) interested ASTE members from different stages in their careers and/or working in a variety of contexts (i.e., university faculty, graduate students, and formal or informal science educators working in private sector or nonprofit centers focused on science teacher professional development).

Qualifications:
- Established record of publishing in, or reviewing for, peer-reviewed science education practitioner and/or research journals.
- Prior experience as a reviewer for grants or other scholarly works.
- Expertise in teacher education (preservice, induction, and in-service). Areas within these domains can focus on curriculum development, technology, or informal settings.

Duties and Responsibilities if Selected:
- Read and evaluate approximately 4-6 manuscripts per year in a timely manner.
- Review manuscripts within four weeks of receipt.
- Maintain membership in the Association for Science Teacher Education.
- Commit to serving on the ERB for three years (ERBs will be reviewed yearly).
- Provide written reports and formative feedback on submitted manuscripts using the criteria and evaluation form provided by the Editors.
- Provide feedback to the editors about the journal direction and review process.
- Help recruit high impact authors for the journal.

To apply, please submit electronically in a SINGLE PDF the following materials to Sarah Boesdorfer at ISTEjournal@ilstu.edu by Monday March 1, 2021.

- One-page letter of interest that includes a list of at least three areas of expertise, very specific areas welcome, in science teacher education in which you would be comfortable reviewing manuscripts.
- Two-page vita that emphasizes publications in refereed journals, especially practitioner journals, and includes any previous reviewing or editing experience.

A Note from the ASTE Conference Planning Committee
Dear ASTE Conference Attendees,

Thank you to the over 350 of you who participated in our first ever Virtual Conference! We owe a debt of gratitude to our Thread Coordinators, Proposal Reviewers, Presiders, Zoom Hosts, and all the ASTE staff (Program Coordinator, Brooke Whitworth, Executive Director- Kate Popejoy, and Director of Electronic Services- John Rhea) and the ASTE leadership who worked behind the scenes to make this happen! While we weren’t able to be in Salt Lake City with Kathy Trundle and Max Longhurst, we know they are planning to host us in the future!

We are eager to hear your input about this, and future, conferences. Please take the time to share that via our 2021 Annual Conference Survey. We appreciate your responses which allow our Conference Planning Committee to take your thoughts into consideration.  

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CONGRATULATIONS to our Three-Minute Thesis competition winner, Stephanie Stehle from George Mason University who presented High School Students’ Use of Metacognition in Physics Problem Solving.

On behalf of the SITE Science Education SIG Chair Joshua Ellis and Co-Chair Dr. Nathan Dolenc, we are pleased to announce this year’s NTLI Fellow as Prof. Kate Walker for her presentation, Undergraduate Utilization of Virtual Reality in Conducting Student Designed Scientific Research. Congratulations!

The John C. Park National Technology Leadership Initiative (NTLI) Fellowship, sponsored by Vernier Software & Technology, was established to recognize an exemplary presentation on technology at ASTE’s annual conference. Each year, NTLI Fellows are invited to present at the annual conference of the Society for Information Technology and Teacher Education (SITE). We would like to thank the members of this year’s NTLI Review Panel: Drs. Sumreen Asim, Rich Lamb, Gillian Roehrig, and David Slykhuis.

Sincerely,

ASTE Conference Planning Committee
2021 ASTE Awards

Contributor: Jennifer Stark

Award I, Level I, Outstanding Science Teacher Educator
This award recognizes the individual achievements and contributions of persons in their first ten years of service as science teacher educators. Two deserving ASTE members were awarded this year:

Dr. Lauren Madden, Associate Professor of Elementary Science Education at the College of New Jersey

Dr. Andrea Burrows, Associate Dean for Undergraduate Programs and a Professor at the University of Wyoming

Award V, Implications of Research for Educational Practice
This award recognizes ASTE 2021 conference paper presentations that identify persistent and recurring problems in the practice of science teacher education and propose viable strategies grounded in both theory and research. Two paper presentations were awarded, including one for the graduate student level:

Dr. Joanne Olson (Professor of Science Education, Texas A&M University), Dr. Jacob Pleasants (Assistant Professor of STEM Education, Keene State College), and Dr. Kristina Tank (Associate Professor of Science Education, Iowa State University)

A Reform without Time: NGSS and Time for Sense-Making in Elementary Classrooms

Graduate Student Level:
Dr. Melanie Kinskey (Assistant Professor of Science Education, Sam Houston State University)

Challenges of Elementary Preservice Teachers as they Implement Socioscientific Issues in the Elementary Classroom

Award Winners, Fireside chat during the 2021 conference
Future ASTE Awards

ASTE offers five awards for members. Manuscript award nominations are due March 1 and science education career award nominations are due June 1. Graduate student levels are offered for the manuscript awards. Specific information for each award can be viewed online, https://theaste.org/awards/.

ASTE Manuscript Awards (Due March 1)

ASTE offers two manuscript awards, ASTE Award IV for Innovation in Teaching Science Teachers, and Award V for Implications of Research for Educational Practice. ASTE members are invited to submit an electronic copy of any manuscript presented at the 2021 ASTE conference. The submission should be identifiable to the presentation given and closely resemble the presentation given at the conference. Questions related to these awards should be directed to the Awards Committee Co-Chair, Dr. Corinne Lardy, corinne.lardy@csus.edu

Awards IV and V include graduate student only levels. Only graduate students who were the first author on a 2021 ASTE conference presentation may apply. In addition to the standard required information, graduate students must also indicate their interest in this particular award by checking a box on the submission page and submitting a letter signed by any faculty mentor who appears as author to indicate their involvement in the work, which should be kept to a minimum. In recognition of their achievement, awardees of the graduate student option will receive conference registration to the 2022 ASTE conference in Greenville, SC. This award will only be granted to the first author. Please note that papers may not be considered for both levels of the award simultaneously, but graduate students may choose to submit to either level.

ASTE Science Education Career Awards (Due June 1)

ASTE offers three science education career awards, Award I for Outstanding Science Teacher Educator of the Year (two levels for different career lengths), Award II for Outstanding Mentor, and Award III for Outstanding Longtime Service to ASTE, that recognize the personal achievements and professional contributions of its members. An ASTE member, who is cognizant of the qualifications of an ASTE member nominee, must submit the nomination. The nominee should be informed about the award nomination and nominators must follow guidelines in preparing nomination materials. The responsibility for the preparation of documentary evidence rests with the nominator.

Questions related to these awards should be directed to the Awards Committee Chair, Dr. Jennifer Stark, jstark@uwf.edu
Dear ASTE members,

The ASTE Elections Committee would like to announce the call for nominees for the following elected positions that will be on the 2021 ballot (number of positions in parentheses):

President (1)
At-Large Board Members (2)--NOTE: All At-Large Board Members are appointed to serve as chair/co-chair of an ASTE Committee.
Upcoming vacancies include the Publications Committee & Professional Development Committee.
Elections Committee (3)

The deadline for nominations is March 15, 2021.

The following information should be submitted for the nominee:

· Name of Nominee
· Position for which the person is being nominated
· Nominee contact information, including email address

The nominee information should be submitted electronically on the website http://theaste.org/resources/submit-an-elections-nomination/. You will need to log in as an ASTE member to submit your nomination. Receipt of the nomination will be acknowledged via a reply message.

Once the Elections Committee receives nominations, potential candidates are evaluated based on their service to ASTE through a variety of venues including service on ASTE committees, service at ASTE conferences, and publications in ASTE related journals. The rubric used to evaluate nominated candidates is found on the nominations page. This rubric will be used to evaluate nominees so that there are no more than 3 candidates for President, 4 candidates for At-Large Board Members, and 4 candidates for Elections Committee. Please note that prior service experience to ASTE is what is primarily used to evaluate nominees. We encourage anyone interested in more information to contact the co-chairs of the committee.

For more information about the roles and responsibilities of the ASTE Leadership Team positions, please visit the ASTE website- www.theaste.org. Information about each of the positions may be found on pages 4, 15 of the link “Statement of Operating Procedures” found within the “About” tab.

We look forward to receiving your nominations.
Amanda Glaze-Crampes and Jeanna Wieselmann, Elections Committee Chairs
In order to encourage ASTE members to share ideas and start conversations that we hope will continue online and in person, the Newsletter Editor invites ASTE members to write a Newsletter Op-Ed piece about something they are passionate or curious about and want to share with the rest of ASTE. I hope this begins a conversation that can can be continued via the ListServ, Facebook, and/or Twitter.

If you would like to contribute your own piece for future issues, submit it to us via Newsletter@theaste.org.

**Women in Science Education (W.I.S.E.) Forum Op-Ed**

*By Jessica F. Riccio*

"Women belong in all places where decisions are being made. It shouldn't be that women are the exception."- Ruth Bader Ginsberg

I am a first-generation college student on both sides of my family tree. I grew up on a block with famous neighbors. Our block, in south Queens, was just one intersection from the Brooklyn border, with sounds of the J-train rumbling past all day and night. My favorite “neighbor” was one of the original Carnegie libraries. It was a place where I famously attained an “unlimited” adult library card at age 8, my first and favorite job at 14, an appreciation and uncanny memorization of the Dewey decimal system, and the benefit of first access to all of the withdrawn books set to be discarded. My other famous “neighbor” was the home of author, Betty Smith, the place where perhaps a famous tree once grew. Other than the pages in books, from the age of birth to 18, my entire world existed within the confines of a 10-mile radius. My dedicated working class family had no passports, and little access to education. My parents never attended parent teacher conferences, or engaged with my schools. Not because of lack of interest, but because I understand now, they perceived school as a place where they did not have capital to contribute to the discourse. My grandmother was a hero of mine. She attained her GED at forty, her Associates at forty-two and BS at forty-five. She became a nurse and worked her entire life pursuing her dreams. Like RBG, she always said “a woman can have it all-just not at the same time.” She always told me that your education is your key to new paths and opportunities. In high school, I was wholeheartedly supported by my entire family to pursue college. My guidance counselor, I suppose, assumed my family knew about the process, and never advised me how to apply for college, financial aid or the like. I only applied to and attended CUNY Hunter, commuting each way 47 stops, by the J-train down the block.

Fast forward, twenty-five years, and here I am writing to you, as Forum Chair of the WISE (Women in Science Education) Committee at ASTE, gratefully reflecting on my growth and position in these challenging times in America. I’ve felt a great loss, I know as many of us have, not being with our students, or meeting with our colleagues. While many are thrilled to find time to be at home, I find myself looking for the communities that inspire me, and help me cope with the popular disregard for inequity in our

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communities and schools, and a crisis in scientific literacy. Most importantly, I seek a place to construct meaningful conversations towards personal growth and shared learning in mentoring relationships.

I am a mother, a wife, a daughter, a sister, and a professor. If you know me, I am usually extremely organized, on-time, and well-coordinated. Since March, I cannot even tell you what day it is, and I haven’t gotten dressed up more than one or two times. In Summer, I usually disconnect from campus, and take time to recharge and reconnect with my goals for the next year. The pressures to maintain my student, family and self- needs, emotionally, professionally, in the transition to a digital landscape has been like a marathon race with no end (and I am not a runner), even though I have been teaching online since 2002! Even as we continue to cope with the never-ending policy changes in the context of teacher education and certification this Fall, every day is like Groundhog Day and we wake up to reimagine a new way to serve our students in the College and in our community schools for another day (or if we are lucky, another week).

The New York Times, Scientific American, The Atlantic, all report that preliminary evidence suggests fewer journal submissions from women authors since the start of stay-at-home orders, while submission numbers have increased for men. Twitter and my own personal communications are all full of instances of how the tenure and promotion clocks of so many faculty have not been extended, and they propose how this will affect gender equity in raises and promotions in coming years. Our graduate students and faculty seeking to move to new positions, need only speak from experience as positions disappeared, or follow one or two popular blogs to see the devastating market, as budgets shrunk, adjuncts lost assignments and many of the clinical faculty in this country, like me, who do the work of teacher education are left to ask, “What am I to do?”

When I attended my very first regional NE-ASTE conference, in Amherst, MA in the early 2000s, Janice Koch came up to me and said, “Who are you, and where did you come from?” Anyone who knows Janice, is probably giggling, but her authentic effort to get to know me began my membership and mentorship in the ASTE community. In over twenty years from graduate student to Instructor, Lecturer, NE-ASTE Regional Director, Senior Lecturer, ASTE Board Member, and now WISE Forum Chair, my friends and mentors in this community have always been invaluable.

In this unusual time on Earth, I want to ask my ASTE colleagues: “What can we do?” How many members do you know about and where they came from? We need to address the ways we can support one another, ensure that we are in the places that decisions are being made, and advocate every day in our own positions for what is right and just. Are we in cultures where the people doing the work are never part of the conversation? Have we done everything we can to consider our graduate students and their lived experiences in this time? Have we tried to incorporate them more into our work, to give them a chance in this limited landscape? Have we simply looked at each other as neighbors in this world, among the challenges to our discipline? Do we have any new ideas to reinvigorate science as a civil right, based in the nature of science our NGSS standards have evolved to incorporate explicitly? What can we reimagine in the context of how we do things to be truly innovative- in service of one another? 

**Continued on the next page**
I invite you to help me collaborate in this spirit of hope. Would you contribute to this WISE Brainstorm and let’s investigate a way we can effectively DO SOMETHING as a community in January. I am open to any and all suggestions. ASTE has always been a place for collective and supportive lifelong learning. Perhaps we can rely on my “famous” neighbors for inspiration- create a virtual library, or be the space to nurture the growth of a prolific piece of writing, or a goal. Today, I am the age my grandmother set out on her first official career- I am hopeful there is much we can accomplish. Let’s collectively find a way to shine light in the darkness and continue to pursue our dreams.

Respectfully submitted,

Jessica F. Riccio
Riccio@tc.edu

P.S. Please write back! I’d love to know about you, where you are from and how we can serve in community to support each other!

Have a topic you are passionate about and want to bring to the attention of the ASTE community?

Submit it to us via the Newsletter@theaste.org.

Climate Change Professional Development for Teachers
Contributor: Dieuwertje Kast

Authors: Kyla Kelly, Jessica Stellmann, Dieuwertje Kast

The USC Joint Educational Project’s STEM Education Programs hosted a climate change professional development (PD) for elementary school educators on Saturday October 17th, 2020. The virtual PD workshop covered elementary lesson plans that could be incorporated in digital and in-person classrooms and featured hands-on, inquiry-based and interdisciplinary activities with math and literacy components. The lessons covered how to introduce students to climate change using at-home-friendly supplies, like glass and plastic cups and thermometers, and how to collect data related to climate change for their digital classrooms.

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To assist with data collection, JEP’s STEM Education Programs purchased seven CO2 sensors to install in each of our seven Los Angeles Unified School District (LAUSD) partner schools. Once in-person learning resumes, these sensors will be placed in various locations around schools, including classrooms, outside near the car drop-off area, and in large community spaces such as the cafeteria. Students will use these sensors to measure atmospheric CO2 levels at the local level. Classrooms will be responsible for monitoring and recording sensor CO2 levels daily, and the data from each sensor will be compiled and collectively analyzed with the help of researchers from the USC’s Earth Sciences, and Marine and Environmental Biology departments.

The workshop provided helpful resources to the teachers in attendance, eighty percent of whom reported that they were “extremely likely” to teach one or more of the lessons to their students, facilitating further elementary education on greenhouse gas emissions. Elaine Krebs, an informal science educator from the California Science Center, remarked: “This workshop provided useful experiments and conversation starters for my students that will get them thinking about how they can make a difference on climate change on both a global and local scale.” Another teacher commented: “The lessons in this workshop are simple to implement and capitalize on an issue relevant to schools, teachers, and students”.

JEP’s STEM Education Programs partnered with the USC Rossier School of Education to offer Continuing Education Units (CEU) to participating teachers. Funding for the project was provided by the North American Association for Environmental Education (NAAEE).

A Note from ASTE Professional Development Committee Chair
Anyone interested in working with the Professional Development Committee on creating webinars for ASTE members, please email Andrea.Burrows@uwyo.edu
JSTE Mentoring New Reviewers

Contributor: Wayne Melville, Geeta Verma and Todd Campbell

As Co-Editors in Chief of the *Journal of Science Teacher Education*, we oversee the journal on behalf of the Association. As such, we work with the Managing Editor to accept manuscripts, collaborate with the Associate Editors and Editorial Review Board (ERB) members to conduct reviews, and make the final decision on publication, before working with Taylor and Francis to bring you the finished product.

Two of the guiding principles that we hold in this work relate to the manuscript review process. We believe that providing authors with descriptive and constructive feedback aimed at improving the quality of a manuscript is essential to the caliber of research that is published. Second, we believe that we have an obligation to assist the next generation of reviewers in learning how to write reviews. To meet this obligation, we are trialing a Mentorship Program for reviewers.

The aim of the program is to have a mentor and protégé work together, allowing the protégés to develop and refine their ability as a reviewer. In using the term mentoring, we have adopted the conceptualization proposed by Awaya, McEwan, Heyler, Linsky, Lum & Wakukawa (2003). This conceptualization has five central features: viewing the mentor/protégé relationship as a journey; the equalitarian nature of the mentor/protégé relationship; the mentor as a source of practical knowledge; the mentor as a source of moral support; and the mentor’s skill in allowing the protégé to “show their stuff.” Mentoring relationships evolve over time, with each of these features assuming greater, or lesser, degrees of prominence at different points in the relationship.

Over the course of the trial, a manuscript submitted to the journal is provided by the mentor to the protégé, who then develops a review which is then critiqued with the mentor in the context of the other ERB reviews completed for the same manuscript. This process is then repeated for a second manuscript, with the idea that the descriptive feedback from the first critique feeds into improvements in the second review. Finally, a third manuscript is reviewed, and if the mentor agrees that the review is of a sufficient standard, then this review can be used as part of the formal review process for the manuscript alongside the normal set of reviews conducted by two additional ERB members.

After the successful completion of the third review, protégés can use the mentoring program as evidence of experience in reviewing for any ERB membership submission. They will need to meet the other established criteria and having completed the mentorship program does not necessarily guarantee a successful application.

The trial currently underway has three mentors and three protégés: Dr. Linda Hobbs and Joanne Baltazar Vakil, Dr. Femi Otulaja and Regina McCurdy, and Dr. Sophia Jeong and Meenakshi Sharma. The feedback that we have received so far indicates that the mentoring relationship is valuable for both mentor and protégé. The co-development of mutually respectful relationships is central to mentoring that supports the "habits of mind" needed to conduct an unbiased, rigorous, and constructive review of an author’s work. Our trial is clearly in good hands, and we would like to thank both both mentors and protégés for their willingness to be part of the process. At the end of the trial, we will be conducting an evaluation, and then looking to expand the program. Stay tuned.

**Reference**
Southwest Region (SWASTE)

We enjoyed seeing our SWASTE members virtually at ASTE! We are inviting any South-West Region graduate student presenters to apply for the SWASTE Graduate Student Travel Award by completing the application found here: https://forms.gle/TJHtPxeAMDixHoQ8. We will accept applications for the travel award through February 28th. Checks will be mailed to the address provided on the application.

Additionally, if our regional graduate students would like to submit a summary of their work (either video or PDF) to the SWASTE Graduate Student Showcase, please submit that information here: https://forms.gle/VgQSVq4qF24F7BVU7.

We encourage all SWASTE members to plan to attend SWASTE 2021 "Bees, Trees, and Breweries! Preparing future science educators to embrace green time over screen time" at Sam Houston State University this October 22 & 23, 2021. Stay up to date by visiting the SWASTE homepage: https://sw.theaste.org/.

Kelly Feille
Regional Director
University of Oklahoma

For updates check the regional websites here
Southeastern Region (SASTE)

SASTE Annual Meeting:
Our SASTE annual meeting for 2021 will be held on Saturday, October 16th with an in-person component located at the Safety Harbor Resort and Spa in Downtown Safety Harbor, FL. Proposals will open this spring, but anyone who might attend in person is encouraged to reserve your hotel room now due to other events occurring at the hotel that same weekend. Details to reserve your hotel room are below:

- Hotel name: Safety Harbor Resort and Spa
- $129 per night, the $16 resort fee is waived
- Do not book online, call the hotel directly at 727-726-1161 during business hours (9:00am - 5:00pm EST). Request to speak to someone "at the front desk of the hotel" to avoid reaching the call center, which does not have our group information.
- We have a block of rooms for Friday, October 15th and Saturday, October 16th.
- When you call, provide the group code: 39M2J1 (or Southeast Association for Science Teacher Education annual conference)
- If you have any issues, email me (MelanieKinskey@gmail.com) and I'll connect you with the hotel staff for assistance.

Congratulations to SASTE members on their recent publications! Check out what our regional members have been working on:


For updates check the regional websites here

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Mid Atlantic Region
Submitted by Rachel Wilson

Title: SAVE THE DATE! Mid-Atlantic Region to Host September Conference in Beautiful North Carolina Mountains

Text:
SAVE THE DATE! September 23 and 24, 2021!
We are hopeful that our Fall Mid-Atlantic ASTE conference will be in person in Blowing Rock,

North Carolina at the Blowing Rock Conference Center. Mark your calendars to arrive on Wednesday evening, September 22, 2021 with the conference all day Thursday, Sept. 23-24. More information about conference registration and lodging will be decided and shared soon. Spread the word to all of our colleagues in the District of Columbia and the following states: Delaware, Kentucky, Maryland, North Carolina, Ohio, Tennessee, Virginia, West Virginia and beyond! All are welcome. Questions? Please contact Rachel Wilson (wilsonre3@appstate.edu), MAASTE Regional Director.

For updates check the regional websites [here](#)
ASTE Graduate Student Forum Updates

Contributed by Regina McCurdy

We had a great showing for all of the ASTE Graduate Student Forums for the 2021 ASTE International Conference. There were approximately 25 in attendance for our Business Luncheon. Attendees shared a little bit about themselves and posted ideas on our Padlet page. One idea was to start ASTE Graduate Student Virtual Writing Sessions. We’ve already started getting this idea in motion! We hope to meet and write for the first time in the upcoming weeks.

Our GSF Roundtable Workshop attendees participated in very valuable mentoring sessions led by speakers Dr. Malcolm Butler, Dr. Sonia Howard, Dr. Melanie Kinskey, and Dr. Katie Green. Topics addressed included scholars of color in the academy, alternative careers in science education, developing meaningful collaborative relationships, and tips to finishing the dissertation. Attendees truly enjoyed the presenters’ wonderful words and insight. One new ASTE member stated in our feedback survey, “...I am very excited to be a part of such a warm, welcoming community with such an amazing wealth of knowledge and resources. I am grateful for my advisor for recommending this event. Thank you!”

Stephanie Stehle was the sole participant for our 3rd Three Minute Thesis® competition. Stephanie is in the doctoral program at George Mason University, and she presented her research “High School Students’ Use of Metacognition in Physics Problem Solving”. Thank you to our Three Minute Thesis® judges Dr. Colby Tofel-Grehl, Dr. Su Gao, and Dr. Jonathan Hall for viewing the presentation prior to the conference and supplied Ms. Stehle with specific written feedback.

Last, but not least, is the installation of our new officers. Heather Lavender ended her year-long position as the 2020 GSF Vice President. Her work was monumental in helping to organize and facilitate these graduate events. As Regina McCurdy, the 2020 GSF President-Elect, became the 2021 GSF President, we voted in and welcomed two new GSF officers: Selene Williams as 2021 Vice President and Chelsea Sexton, as 2021 President-Elect. This conference was a great start to the year for ASTE GSF, and we look forward to more good things to come.
Larry Nielsen launches conservation history blog –
*Today in Conservation*

Giving a speech soon and need the perfect way to start your remarks? Looking for a topic to energize a 4-H, scouting or day-camp session? Want a great subject for your classroom bulletin board? Wondering how to get students to take a more active role in class?

Larry Nielsen's new website, *Today in Conservation*, is the resource you've been waiting for (the url is todayinconservation.com). *Today in Conservation* contains a story—or two—for every day of the year about an environmental or conservation event that happened that day, written in Nielsen's engaging style. Here's a sample, one from each month:

- January 11 – Aldo Leopold was born (1887)
- March 22 – World Water Day is celebrated annually
- April 14 – The “Black Sunday” Dust Storm occurred (1935)
- May 7 – Nature’s Best Moms—a Mothers’ Day special
- June 20 – Australia protected the Great Barrier Reef (1975)
- July 22 – Beatrix Potter, Author and Conservationist, was born (1866)
- August 7 – Elinor Ostrom, Environmental Economist, was born (1933)
- September 25 – Pope Francis addressed the UN about the Environment (2015)
- October 18 – The Clean Water Act was established (1972)
- November 14 – US crushed confiscated elephant ivory for first time (2013)
- December 15 – Chico Mendes, Brazilian rainforest advocate, was born (1944)

Each day’s entry includes a short description about the day (400-600 words), photographs and artwork depicting the person, place or thing (all in the public domain, so they are free to use), and several references for more information (and to lead students to more research).

Larry Nielsen retired recently from North Carolina State University, where he had been dean, provost, and distinguished professor. In 2020, he received the American Fisheries Society Excellence in Education award. Nielsen says this about the website:

“This has been a labor of love, a way to give back after 40 wonderful years as a professor and natural resource professional. Over my years of teaching general classes about natural resources and the environment, I gathered together a calendar of significant events in conservation. After retiring, I was able to fill in the calendar, all 366 days. Some days I had to stretch the definition of conservation a bit, but, hey, if we can’t have a little fun, we’re not doing it right!”

The array of topics ranges broadly. Many days feature an important person born on that day, but other days feature the establishment of a national park or other protected area, or the founding of an environmental organization. Want to read about the first Ford Mustang rolling off the assembly line, or why he put such a thing in an environmental calendar? Try April 17. How about when “The Lorax” was published and what Dr. Seuss says about his perspective on logging? Look up August 12. And what do you suppose Nielsen covers on February 29? Nature's great leapers, of course!
The website also contains special features that cover a longer time-frame. For example, Nielsen highlights African-American conservation leaders for Black History Month. New special features are added at least monthly, but also whenever conservation history provides a unique “teachable moment.”

*Today in Conservation* is available (for free, of course) at [todayinconservation.com](http://todayinconservation.com). To contact Larry Nielsen for more information, please email him at lnielsen409@gmail.com

### New Resources

**Contributor: Mark Bloom**

This spring Houghton College will be offering a FREE 8-week online course called "God, Country, and Climate Change: A Christian Perspective on a Global Problem." The course, which is taught by Climate Caretakers' founder Brian Webb, will feature guest lectures from top global experts including Katharine Hayhoe, Ed Maibach, Bob Inglis, John Cook, Jonathan Moo, Lowell Bliss, James Bhagwan, and more. The course runs March 17 - May 5 (Wednesdays from 7:00-9:00 ET) and will include topics such as creation care and climate theology, climate science and solutions, climate change in the American mind, and the context for global climate action. Please visit [www.houghton.edu/climate-course](http://www.houghton.edu/climate-course) to learn more or to register for the free webinar. Participants may also audit the course for just $150, which includes full access to supplementary lectures, forum discussions, and the opportunity to interact live with guest speakers.

**Contributor: Peter Carafano**

Dear Friends,

I wanted everyone to know about a free program my district created open to all schools from any district in any state. Spacegate Station is an interactive live streaming STEM education program for 5th through 7th-grade students. Using a video chat-based platform, teachers can schedule a session for their class with our astronaut/teachers who are working in a futuristic "space laboratory" orbiting the moon. During the 20-30 minute program students, as a class, will participate in a math/science-based activity which includes helping out during the eventual emergencies that occur on the station. The Spacegate Station crew will also provide pre-recorded instructional lessons on various STEM subjects for remediation, enrichment, or activity based.

Please share with your colleagues. [https://spacegatestation.com/](https://spacegatestation.com/)

*Continued on next page*
BSCS Videoverse Offers Free Science Classroom Video Resources
Contributor: Connie Hvidsten
By: Dr. Connie Hvidsten, Science Educator at BSCS Science Learning

Through decades of research-driven work with teachers, BSCS Science Learning has developed hundreds of high-quality K-12 science classroom videos. We want to make these resources broadly available to support preservice and inservice teacher learning.

That’s why we’ve launched BSCS Videoverse -- a free new platform for teacher educators, professional development leaders, district coaches, individual teachers, and researchers.

In BSCS Videoverse, you will discover a growing collection of 2-20 minute video clips that can be filtered by science discipline, science topic, grade band and level, activity focus, science and engineering practice, and crosscutting concept.

Many of these videos come with associated resources, including: transcripts with context for the video content, links to classroom ready interactives, lesson plans, student handouts, and other teacher materials.

High quality science classroom video resources can be a game changer for teacher learning. They provide opportunities to notice student thinking, analyze teaching strategies, and develop deep understanding of the complex inquiry practices. Through BSCS Videoverse, you’ll find resources that will help teachers learn about pedagogical strategies related to Next Generation Science and support them in noticing key decision points while teaching. You’ll find resources that will enhance their content knowledge in the areas of earth science, physical science, life science, and chemistry. You’ll find resources that highlight student interviews, small group discussions, working with models, and so much more.

What stands out as valuable to your work? BSCS wants to know. This site is currently a free beta version and will continue to evolve as we collect feedback from users on the site’s content and functionality.

You can register for full access to BSCS Videoverse now at videoverse.bscs.org.

Even better, you can help inform the future direction of this site by joining a user test group.

Please contact Connie Hvidsten at chvidsten@bscs.org if you’d like to apply to participate in BSCS’s user test group. Participants will be compensated for their time.
RAPID: Supporting Responsible Action through COVID-19 Education

Benjamin Herman, PI; Michael Clough, co-PI; Asha Rao, co-PI

With NSF funding, COVID-19 education materials have been developed for use in post-secondary science courses and are freely available at https://storybehindthescience.org/

The materials include:
- SARS-CoV-2 and COVID-19 background information
- COVID-19 Pandemic and Science-Based Decision-Making
- COVID-19 Pandemic and Pseudoscience Impact on Decision-Making
- COVID-19 Case Study: To Mask or Not to Mask

Citizens are largely being asked to judge information about COVID-19 and make crucial decisions regarding how to respond. However, pervasive misinformation and pseudoscience exists regarding COVID-19 that both reflects and promotes public distrust in science and exacerbates the personal and societal decision-making that places all of society at greater risk. The project research and data driven educative materials are designed to promote both content understanding and foster trust in STEM professionals and the knowledge they produce to improve personal and public decision-making regarding the COVID-19 pandemic and future pandemics.

Contact the project PI, Dr. Benjamin Herman (bcherman@tamu.edu) for further information regarding the materials and if you are interested in participating in the project research.

We ask that you please share this with your science faculty/colleagues!

Workshop Proposal Process Now a Part of Full ASTE Proposal Process

Contributor: Andrea Burrows

ASTE proposals are usually due in late June, and the exact day will be released soon. Professional development workshops are now going to be a part of the regular ASTE proposal process. One hour-long workshop/experiential sessions will be submitted at the same time as paper, roundtable, or poster submissions.

This is a change from the last few years. Professional development/experiential sessions will be stand-alone, interactive sessions, and no pre-registration is allowed for these workshops. If you have any questions, please contact Professional Development workshop chair Andrea Burrows (Andrea.Burrows@uwyo.edu).
Journal Announcements

**Qualitative Research on the Influence of Engineering Professional Development on Teacher Self-Efficacy in a Rural K-5 Setting**
by Kelly Ficklin, Michele Parker & Tammy Shaw-Ferguson

Don't forget - Submit your articles about technology, science, and teacher education today!

Check out the new articles in CITE Journal Science -

Current CITE Issue: [https://citejournal.org/publication/volume-20/issue-4-20/](https://citejournal.org/publication/volume-20/issue-4-20/)

ASTE sponsored Science Education section: [https://citejournal.org/category/science/](https://citejournal.org/category/science/)

Co-editors Andrea Burrows and Helen Meyer encourage ASTE members to submit articles and reach out about potential article ideas. They ask that the authors check for a clear connection to science education and technology (e.g., pre or in-service teacher education or college-level faculty). Additionally, they encourage authors to embed interactive technology in the manuscript (e.g., links, video, audio, animation).

ASTE sponsors the CITE Journal Science Education section and they would like to see your work highlighted!

Email Andrea.Burrows@uwyo.edu or Helen.Meyer@uc.edu with any questions.
We are excited to introduce ourselves as the new editors of Innovations in Science Teacher Education, and express our gratitude to the previous editors, Rommel Miranda and Ron Hermann, for the foundation they have set for us and their support in as we transition into our new role.

There are numerous announcements for Innovations:

Submit your Manuscript to Innovations. Have you had success educating preservice or inservice teachers online or in hybrid situations? Have you found a new and effective way for clinical hours in our current situation? What about supporting science teachers uses of culturally relevant practices? These are just a few ideas of many activities, ideas, or strategies you could submit to Innovations to share and inspire other science teacher educators. For author guidelines for submitting a manuscript to the Innovations journal, please visit the following webpage: https://innovations.theaste.org/submit/instructions-to-authors/.

Join the Editorial Review Board. We need your expertise. Please consider serving as an Editorial Review Board member for Innovations. Applications are due March 1, 2021. All are encouraged to apply! See the following for more details: https://theaste.org/re-call-for-innovations-in-science-teacher-education-journal-erb-members/.

Please join our Facebook Group at: https://www.facebook.com/ISTEjournal/ so that you can receive announcements regarding the Innovations journal.

We are excited to begin this journey as the new editors. If you have any questions regarding the Innovations journal, please contact the editors: Sarah Boesdorfer and Rebekka Darner at ISTEjournal@ilstu.edu
In Memoriam: Dr. Dorothy Gabel

Dear Colleagues,

It is with a heavy heart that I inform you of the passing of one of our dear colleagues, Dr. Dorothy Gabel. Dr. Gabel was a professor at IU when I began working there, and she was a wonderful colleague and had an amazing career. She passed on October 30 after battling severe dementia for 7-8 years.

She had not only been President of Hoosier Association of Science Teachers, Inc (HASTI), and the Research Division Director of the National Science Teachers Association, but also served as President of School Science and Mathematics Association as well as NARST when the name was National Association of Research in Science Teaching. She was obviously great at balancing not only teaching, but her research. In fact, she had been the recipient of NARST’s Award for Outstanding Research emphasizing Classroom Applications four times. She also received the Journal of Research in Science Teaching for outstanding research paper twice. She also received the Distinguished Contributions through Research Award in 2007.

While at IU, her procurement of external funding led to the development of Q200 Introduction to Scientific Inquiry, which was the first science content course offered in the School of Education, and to the design of Saturday Science, which enabled preservice teachers and graduate students to use best practices to teach science to school age children at IU. Both of these programs still exist today and are a testament to her work as they continue to support IU students and the local community.

She was also just an amazing colleague. I was grateful to have my office next to hers. She was the first female science educator at IU, and I was the second. She was an unofficial mentor to me early in my career and I am ever grateful for it. She was a strong woman in science education, which made the paths to a successful career for other women easier due to her work.

I spent a few times with her celebrating her dogs’ birthdays, as she always loved her dogs. I’m sure they will be happy to have her with them. Dorothy will always be remembered, loved, and missed.

Sincerely,
Valarie

Contributed by Valarie Akerson
Hello all! I bring you the latest installment of the newsletter and hope you find it informational and entertaining! President Hanuscin and I have been talking and we would like to make the newsletter a peer-reviewed publication. This means that you will be able to put your articles published here on your CV and tenure packages! This also means we will be asking for new, different and more short pieces to publish. View the invitation to submit here. To start moving in this direction, we have three wonderful volunteers who helped me organize this issue and will continue to help out around here! Thank you so much to Michelle, Preethi, and Beverly who were invaluable in getting this issue into shape! I couldn't have done it without you!

Please feel free to contact me at any time if you have items that you feel are good for the newsletter or if you have any suggestions on how we may improve it. I love being able to serve you all, the members and organization of ASTE, through the newsletter.

Issue items due by:

- Autumn Oct. 15
- Winter Feb. 15
- Spring May 15
- Summer Aug. 15

All members are invited to submit items.

Editor: Jennifer Oramous
Email: newsletter@theaste.org

Newsletter Sleuth Challenge: Use the clue below to locate the ‘easter egg’ to become a Newsletter Sleuth! Remember to click on it.

Clue: This clue may take you on a circuitous route but science wins either way!

Community Engagement Challenge: Post your thoughts on one of this issue’s articles on FaceBook or Twitter, and tag the author and #ASTENewsletter.

Join us in Greenville, SC on January 6-8, 2022