Greetings Fellow Science Teacher Educators,

I hope this message finds each of you in the midst of preparing for a fantastic summer (or winter!) of professional and personal activities. Since the annual conference this past January, your ASTE has been hard at work moving on an agenda of inclusiveness and advocacy for science teaching and learning. Here is a just a sampling of the initiatives that are happening on your behalf:

- The launch of the new online journal, *Innovations in Science Teacher Education*, is going well. You can look for the inaugural issue in the next few months.
• A Memorandum of Understanding (MOU) has been agreed to with the East-Asian Association for Science Education (EASE). A formal signing ceremony of the MOU will take place at EASE’s conference in August in Tokyo, Japan, and at our annual conference in Des Moines, Iowa, next January.

• New editors for this newsletter and the Science Section of the *Contemporary Issues in Technology and Teacher Education* (CITE) journal have been selected. Look for these editor announcements soon.

Earlier this month, the Executive Board met in Des Moines, Iowa, for its annual summer meeting. We took care of the business of the organization, including visiting with hotel staff where our next conference will be held, discussing local plans with our 2017 conference chairs, and looking for places for you to visit when you are in Des Moines in a few months.

Photo: ASTE 2016 Summer Board Meeting in Des Moines, Iowa. Board Members and Local Conference Chairs. Absent from picture Meredith Park Rogers and David Haury – Publications Committee Co-Chairs, and Eric Pyle – NSTA Liaison.
Another major task of the Board was to build upon the important work of strategic planning that was started in earnest at the summer board meeting in 2014. The 2016 Board identified the following seven goals:

- 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
- Strengthen connections between research and practice in science teacher education

As you can see, we are using the past to inform the present, and then plan for the future of ASTE. The work has now turned to putting in place specific tasks to achieve each goal and assigning lead persons to ensure each task is addressed. Timelines and updates will also be a part of the ongoing process of moving us forward. The board welcomes your feedback on where we've been, where we are, and where we are going as an organization. Please communicate with the presidential team, board members and committee members by viewing the most recent and accurate leadership list on the ASTE website under the following link: http://theaste.org/about/.

Let us know what we can do and what you want to do to make ASTE THE organization for me, for you, for us.

Malcolm B. Butler, Ph.D.

ASTE President and Liaison to the Council of Scientific Society Presidents (CSSP)
2017 ASTE International Conference
Contributed by Joanne Olsen and Jerrid Kruse

Come join us in Des Moines, Iowa for ASTE in 2017. Take advantage of Des Moines—a big city feel with small city advantages. Accessible. Easy. Enjoy the free shuttle service to/from the airport, 24/7 access to our extensive skywalk system, and a catered reception at the World Food Prize Hall of Laureates with interactive exhibits. We'll be staying at the Des Moines Marriott Hotel, which provides extensive space, beautiful views of the river, and a wonderful atmosphere. Expand your horizons with great sessions, top-notch keynote speakers including Diane Ravitch, and live entertainment. Des Moines International Airport has 120 domestic flights daily and is within driving distance of many US cities—at the intersection of interstates 80 and 35.

Downtown Des Moines offers many opportunities for off-site entertainment including: fine restaurants, microbreweries, live music venues, the Science Center of Iowa, outdoor ice skating just a few blocks away at Brenton Skating Plaza, live performance opportunities at the Des Moines Performing Arts Center, a brand new YMCA, and shopping in the eclectic East Village. While many downtown venues are accessible via skywalk, you can venture a bit further into Des Moines to visit the botanical center, Blank Park Zoo, the Des Moines Art Center, or Living History Farms. Any part of the Des Moines metro is a short taxi or Uber ride away!

Proposals should address issues concerning science teacher education; these can be a research study, philosophical essay, position paper, innovative idea, etc. Formats include traditional paper presentations, themed paper sets, posters, roundtables, syllabus sharing, and experiential sessions. **The priority deadline for proposals is midnight (Eastern) July 8, 2016.** Proposals received after the deadline will only be considered on a space-available basis. For more information or to submit a proposal, please go to the ASTE website at [http://theaste.org/meetings/2017-international-meeting/](http://theaste.org/meetings/2017-international-meeting/). Find us on Facebook by searching “ASTE Des Moines 2017”. If you have questions, please contact the conference co-chairs, Joanne Olson and Jerrid Kruse at conferencechairs@theaste.org.
While we have used conference apps for the last few conferences, for the 2017 conference, the plan is to more fully incorporate the features of a conference app, Guidebook, features of which were used nominally in 2016. Guidebook offers iOS and Android based apps that can all be used offline as well as a web based version.

Guidebook ASTE 2017 should allow you to view the conference schedule by time slot, thread or speaker and will include abstracts of each session. Also included will be maps of the meeting rooms, general conference and Des Moines information as well as some advanced features such as individualized scheduling, to-do lists, integrated social media, live polling, and the ability to upload presentation materials.

Click [here](http://example.com) for a short video about the app.
We have been very productive since our website went live in early March. Manuscripts are going out for review and completed reviews are being submitted. Thanks to our fantastic Editorial Review Board, we have been able to get decision letters back to authors in less than six weeks from the date of submission.

This summer, take some time to reflect back on the innovative aspects of your lessons, classes, collaborations, and programs. Do you have an innovative idea to share with your colleagues? Will you be providing professional development for science teachers this summer? Consider sharing your ideas and lessons learned with colleagues by submitting a manuscript describing your work with preservice and inservice science teachers!

Check out our website to learn more about publishing in Innovations in Science Teacher Education by using the following link: http://innovations.theaste.org. Please be sure to review the instructions for authors section prior to submitting to ensure that your manuscript adheres to format guidelines and addresses each criterion.

We look forward to receiving your manuscripts and want to thank everyone who is, and will be, participating in the submission and review of manuscripts to bring the first issue to publication on July 1, 2016!

If you have any questions regarding the Innovations journal, please contact Rommel Miranda (Rmiranda@towson.edu) or Ron Hermann (Rhermann@towson.edu).
The CITE Journal (Contemporary Issues in Technology and Teacher Education is excited to announce that our website at http://citejournal.org has undergone a makeover. Come by and visit to see Volume 16 Issue 2 where one of our papers by Mike Borowczak and Andrea Burrows has used interactive data graphics to allow you to dive deep into their data. The ability to embed multimedia and use web enabled graphics is one of the things that makes submitting to the CITE Journal Science Education Section great.

I believe you will enjoy both manuscripts in this new issue:


To learn more, contact Theresa Cullen, Editor of the CITE Science Education section at tacullen@ou.edu
Mid-Atlantic - ASTE Meeting News

Contributed by Rommel Miranda, Regional Director
Photos contributed by Ron Hermann

Please mark your calendars to attend the 2016 MA-ASTE Regional Conference next September 22-24 at Edgewater Hotel and Conference Center in Gatlinburg, Tennessee. Please click on the following link to find out how you can make your reservation TODAY for a lodge room: http://ma.theaste.org/meetings/2016-mid-atlantic-aste-regional-conference/

Special thanks go out to our 2016 regional conference planning team: Aimee Govett (East Tennessee State University), Paula Magee (Indiana University – Purdue University Indianapolis), Kerry Cresawn (James Madison University), and Matthew Perkins Coppola (Indiana University – Purdue University Fort Wayne)!

Also, please click on the following link to join our MA-ASTE Facebook group page: https://www.facebook.com/groups/1400991133530421/ This Facebook group page was created for the exchange of ideas and promotion of high-quality science teacher education, both pre-service and in-service. Special thanks go out to Eric Pyle and Christopher Atchison for volunteering to moderate our Facebook group page!

Lastly, if you are a graduate student planning to attend the 2016 MA-ASTE conference, please click on the following link for information regarding the 4th annual MA-ASTE Graduate Student Presentation Award at http://ma.theaste.org/mid-atlantic-aste-graduate-student-research-presentation-award/
Professors at dozens of colleges and universities have opted to use NSTA professional learning resources and the NSTA Learning Center portal (NSTA LC) as their online textbook when teaching science pre-service teachers. The NSTA online textbook option is a class bundle that consists of a personal NSTA LC subscription and a 1-year NSTA student membership.

“I have been using this portal for a number of years and believe it is an exceptional value and unparalleled in quality. The NSTA Learning Center makes individualizing instruction effortless because of the sheer number of learning opportunities that are available within the site. Because the Learning Center account extends beyond the semester, I have found it to be an effective induction tool as well as an effective way to get and keep teachers connected in the profession and growing.”

J. Metty

How Does it Work?

Professors create collections of learning resources combining NSTA resources and their own. NSTA resources available include interactive web modules (Science Objects and SciPacks), journal articles, web seminar archives, e-book chapters, podcasts, conference materials, and symposia archives. Professors’ resources may include Word documents, PowerPoint presentations, PDF files, images, and/or URLs from other web sites. The Instructor then shares her class collections with her students via the class landing page, the class private forum, a university system page (like Blackboard), or via e-mail.
In addition to gaining access to a suite of NSTA’s fee-based resources, students benefit from participating in the integrated online community that is the Learning Center by creating and sharing collections, engaging in discourse and networking with other professional educators, attending web seminars, and reviewing and rating resources. They also use professional learning tools to personalize, diagnose, and document their growth. While working on class assignments and projects, students build a professional persona (My Profile) that serves as evidence of their work during the academic semester and beyond. While other textbooks are returned to the bookstore for a refund, the students’ Learning Center account and the resources they add to their library are available for use beyond the course.

Furthermore, activity points, badges, and class leader boards provide immediate recognition and affirmation to students for their learning. The class landing page receives a unique URL, is branded with a university banner, and its text may be customized by the professor. For the professor, an Admin Area is provided where she can track her students’ work and assessments’ scores for grading purposes.

“Test-drive” the Learning Center Today!

Professors can create a class landing page in the NSTA LC to “test-drive” the portal and explore the resources. This zero-risk opportunity gives professors to determine their course of action. After creating the class landing page, an NSTA staff approves it and contacts the professor to answer her questions, to share useful strategies, and to gauge her interest regarding future use.

What is the Cost to Students?

There are two different price points for the NSTA class bundle. The professor selects one price point for all the students in the class.

- ($99) Per student, for a 1-year NSTA LC subscription and a 1-year NSTA student membership
- ($72) Per student, for a 6-month NSTA LC subscription and a 1-year NSTA student membership

Students purchase the class bundle online with a credit card. Optional: Students may purchase the class bundle at the university bookstore using financial aid funds, check, or cash. Students redeem their purchase online.
What Professors Say?

“All my students have found the Learning Center to be an invaluable resource in supporting content knowledge, pedagogical strategies, and as a source of lesson ideas.” M. Vaughn

“The courses prior to this were considered courses from "Hell" by our students. Now the science faculty is having fun teaching. The department chair told me that the NSTA SciPacks offer more in-depth content than what they had before and the students in this course are scoring about a mean of 18% above his other more traditional course. He is sold. So am I.” K. Miller

“Instead of an expensive and outdated science methods books, my students now have the latest and greatest information and resources to use.” V. Massey

“Components in the NSTA Learning Center allow me to provide consistent and accurate content for my students while at the same time allowing them to tailor aspects to their individual needs and meet the need for differentiated instruction.” C. Royce

Useful URLs:

- NSTA Learning Center home
  - [http://learningcenter.nsta.org](http://learningcenter.nsta.org)
- Creating an account in the Learning Center (it is free and NSTA membership is not required):
- Creating a class landing page to use as an online textbook (professor must be logged-in):
  - [http://learningcenter.nsta.org/group/manage](http://learningcenter.nsta.org/group/manage)

Questions?

Contact Flavio Mendez, Sr. Director, at 703-312-9250 or via e-mail at (fmendez@nsta.org).
National Survey of Teacher Educators
Contributed by Gillian Roehrig

American Association of Colleges for Teacher Education (AACTE), Association of Teacher Educators (ATE), and GLSEN (Gay, Lesbian & Straight Education Network) have developed a survey to help learn about the practices, preparation, and needs of our nation's teacher educators. They would love your help to give voice to teacher educators in your network. The results from this survey will be shared widely and will be used to create resources and supports to help teacher educators in their work.

By offering your insights, you will help to improve supports for your work with teacher candidates in preparing them to teach all students. Teacher educators who complete the survey will have a chance to enter a drawing for one of five $100 Amazon.com gift cards or one free registration to the AACTE conference in 2017.

Go here to take the survey: www.teacheredsurvey.org

More about the survey: The National Survey of Teacher Educators is a first-of-its kind national survey of teacher educators and the only national survey that specifically examines the state of teacher education on lesbian, gay, bisexual, and transgender (LGBT) issues. It also provides an important opportunity for teacher educators to speak out about the perspectives and experiences of teacher education professionals (faculty, deans, program coordinators, etc.) regarding their curriculum and pedagogy. The survey conducted through a partnership between the American Association of Colleges for Teacher Education (AACTE), Association of Teacher Educators (ATE), and GLSEN. The survey was developed and reviewed by experts in the field of teacher education, including teacher educators themselves. We are in the process of contacting organizations that may be able to help us the spread the word about the online survey.
An Invitation to Attend and Present: 2016 The Astronomy Teaching Summit Conference
Contributed by Sharon Schleigh

August 1-3, 2016 - City College of San Francisco-North Beach ChinaTown Campus
http://caperteam.us11.list-manage.com/track/click?u=5860b37ed047af08a48a1bff7&id=e0dcdd3ed2&e=2d034d84a4

The Astronomy Teaching Summit brings together dedicated astronomy and planetary sciences educators to share innovative teaching techniques and successful instructional strategies that increase students’ engagement, achievement, and motivation. Although the ATS is designed primarily for college professors teaching the introductory astronomy survey course (ASTRO 101), science teacher educators and high school teachers that touch on earth & space concepts will find the talks and workshops valuable. The summit includes formal presentations, interactive workshops, and roundtable discussions all designed around astronomy teaching innovations. Astronomy educators and outreach enthusiasts from all levels are invited to participate and submit proposals for presentations.

The presentation submission deadline has past, however, proposals may be accepted as long as there is time and space available. Presentation proposals for 90-min workshops, 20-min talks, and/or poster presentations can be submitted through the link at http://caperteam.us11.list-manage.com/track/click?u=5860b37ed047af08a48a1bff7&id=8e539d8afe&e=2d034d84a4. Kindly note that each author may serve as lead author on only one proposal per summit meeting.

Registration to attend is the summit is $225 and it is now open. Please use the above link to register and to find more information about the keynote speakers and attendee logistics. If you need further information please contact the Conference Committee Chair, Dr. Sharon Price Schleigh, at sharon@caperteam.com.
Enhancing Professional Knowledge of Pre-Service Science Teacher Education by Self-Study Research

Turning a Critical Eye on Our Practice

Series: ASTE Series in Science Education

- Compiles self-studies in science teacher education highlighting methods, content, and doctoral level courses to foster discussion on complexities of science teacher education
- Analyses the current and potential impact that self-study research makes and can make on the field of science teacher education
- Shares implications for future research in science teacher education using self study

Self-study research is making an impact on the field of science education. University researchers employ these methods to improve their instruction, develop as instructors, and ultimately, impact their students’ learning. This volume provides an introduction to self-study research in science education, followed by manuscripts of self-studies undertaken by university faculty and those becoming university faculty members in science teacher education. Chapter authors range from those new to the field to established researchers, highlighting the value of self-study research in science teacher education for every career rank. The fifteen self-studies provided in this book support and extend this contemporary work in science teacher education. They, and the subsequent reflections on professional knowledge, are organized into four sections: content courses for preservice teachers, elementary methods courses, secondary methods courses, and preparation of future teacher educators. Respondents from various locations around the globe share their reflections on these sections. A culminating reflection of the findings of these studies is provided at the end of the book that provides an overview of what we have learned from these chapters, as well as a reflection on the role of self-study research in the future of science teacher education.
Forthcoming December 2015!

STEM Learning with Young Children: Inquiry Teaching with Ramps and Pathways

By Shelly Counsell, Lawrence Escalada, Rosemary Gelken, Melissa Sander, Jill Uhlenberg, Beth Van Meeteren, Sonia Yoshizawa, and Betty Zan

"Written by eight remarkable educators, this powerful book carefully illustrates the design and teacher practices of constructivist classrooms that nurture the whole child. The authors describe how teachers can scaffold young children's building of global competencies through inventive, imaginative, and intentional problem solving. The teaching/assessment dynamic unfolds with new resources throughout the text."

—Jacqueline Grennon Brooks, professor, curriculum & teaching, director of the IDEAS Institute, Hofstra University

"This book is a must for all concerned with the education of young children. Using ramps and pathways as an exciting and stimulating example of how to engage children in rich STEM experiences, this team of highly knowledgeable and skilled researchers and practitioners draw from their deep and extensive backgrounds to present a clear and comprehensive view of the current landscape of inquiry-based STEM teaching and learning for young children. It is a book that can and should inform both policy and practice."

—Karen Worth, Elementary Education Department, Wheelock College

This teacher's guide provides the background information, STEM concepts, and strategies needed to successfully implement an early STEM curriculum (Ramps and Pathways) with young children, ages 3–8. R&P actively engages young children in designing and building ramp structures using wooden cove molding, releasing marbles on the structures, and observing what happens. Children use logical-mathematical thinking and problem-solving skills as they explore science concepts related to motion, force, and energy.

Shelly L. Counsell is assistant professor of early childhood education at the University of Memphis. Lawrence Escalada is professor of physics and science education and head of science education at the University of Northern Iowa. Rosemary Gelken is an associate professor in the early childhood program at East Tennessee State University. Melissa Sander is a special education teacher in the Wapsie Valley Community School District, Iowa. Jill Uhlenberg is associate professor and head of Curriculum and Instruction at the University of Northern Iowa. Beth Dykstra Van Meeteren is director of the Regents' Center for Early Developmental Education and Center for Early Education in STEM at the University of Northern Iowa. Sonia Yoshizawa is a doctoral fellow in the early childhood education program at East Tennessee State University. Betty Zan is associate professor of early childhood education at the University of Northern Iowa.

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