

ASTE NEWSLETTER

President's Newsletter Message

Meta Van Sickle, ASTE President



Greetings ASTE members: We just completed a wonderful summer board meeting. While we had to make some difficult decisions during these economic times we are hopeful that you think the future conference will be better than ever. George Davis and Gillian Roehrig are working diligently to ensure that downtown Minneapolis is ready for us. The conference hotel is fabulous with wonderful meeting spaces and ample room to chat when we are not in a session. I am certain the hotel meeting area will help us with networking via the open spaces available. The Keynote Speakers are also going to be fabulous! There will be one speaker who focuses on science and one who will focus more on an education issue. I'll keep the names confidential until the contracts are firm. The proposals for workshop sessions were plentiful and are in the review process now. Remember to submit your own session to our proposal section on the website <http://theaste.org/meetings/2011conference/>.

Continued on next column

Inside:



President's Message

1-2



Follow up from Sheila Tobias. 2010 ASTE Conference Keynote Speaker

3



2010 ASTE Awards

4-6



Regional and International Conference Updates

7



General Announcements and STEM Initiative Update

8-9

Promoting leadership and support for those involved in the professional development of science teachers

I know our members create the best sessions! I am looking forward to seeing plenty of sessions and the excitement that sessions can create. I personally enjoy the sessions that help us work with students that need a different approach to learning.

Continued on Page 2

President's Newsletter Message Continued from Page 1

We also decided on a new tag line that you will see on our web page, letterhead and other places. The new tag line helps us to envision our future during this time of assault on teacher education programs. The new tag line will be: Promoting leadership and support for those involved in the preparation and professional learning of science teachers. I am hopeful that this statement will keep us mindful of the times and the need for leadership, support, and professionalism. As noted in the last newsletter's Presidential Message and in this issue by Shelia Tobias' follow-up note addressing new thoughts about her Keynote Address from the 2010 conference (page 3), we must present our case and use our data to convince others of the efficacy of science teacher education. If we don't advocate for ourselves we cannot expect others to do so.

Another exciting change will be the formation of a Policy and Government Relations Forum. This new forum was formerly an ad hoc committee and now has a more permanent place in our organization. It is an important forum and will be led by Joe Shane and Regina Toolin. The former ad hoc committee submitted a policy statement about advocacy for science teacher education that the Board unanimously supported. Look for it on our website.

On a lighter note, downtown Minneapolis was fun and exciting. There are great restaurants, beverage establishments, theater, music and shopping all within easy walking distance of the hotel and tunnels in the air to maneuver from building to building. So please attend the conference in January and enjoy our friends, colleagues and the city. The North Central group will complete a trial run for the conference in October to ensure that everything is "just right."

Promoting leadership and support for those involved in the preparation and professional learning of science teachers.

2010 ASTE Board



From left: Deborah Tippins, Kate Popejoy, Dana Zeidler, Brenda Capobianco, Meta Van Sickle, Randy Bell, Hedy Moscovici, David Wiley, Joanne Olson, Kathy Cabe Trundle, Eugene Wagner, Alec Bodzin, Jon Pedersen.
Not pictured: Richard Hechter

Follow-up from Sheila Tobias: 2010 ASTE International Conference Keynote Speaker

Is Teacher Preparation "Broken," as Arne Duncan Asserts? How do we respond?

Sheila Tobias, member of ASTE
and co-author,
*Science Teaching as a
Profession. Why it isn't. How it
could be.*
NSTA Press, 2010

Where is the evidence that
"Teacher Preparation in America
is broken?" (ref: Arne Duncan's
Teachers College speech,
October 2009)

As an organization of science
teacher educators we have a right
to demand "evidence" for the
claims that are being loosely
made that "teacher preparation in
America is broken" and the
counterpart claims that non-
traditional alternatives, as in a
five-week training of well
educated recent college graduates
(Teach for America), can lay the
foundation for a long-term
teaching career.

Why are we being set up to
compete - teacher vs. teacher,
school vs. school, teacher
preparation program v. teacher
preparation program? Such
rhetoric and all the testing our
students are made to endure send
out the message that we (just as
our students) must compete
individually to succeed. Perhaps
it's the language we use. "Better"
vs. "Worse," "Passing" vs.
"Failing." We may need new

words to describe the cooperative
classroom. But even more urgent
is documentation that a classroom
in which all students learn is our
goal as teacher educators and the
mark of good teaching.

Where does an individual begin
to fight back on behalf of teacher
educators?

I'd suggest we begin with some
hard-nosed self-examination. Is
the bad science teacher really the
"Exception" as my bumper
sticker claims? Do we have hard
data for our graduates' long-term
competence in the classroom?
Ought we not figure out how to
do this? And, related to this, are
we asking our graduates (and
their school supervisors) for
feedback about our programs?
And using that feedback to make
"continuous improvement"?

What about the alternate models?
Can we not collect our own data
about Teach for America teachers
in the schools that we supply with
our own graduates? How long
they stay; how well they perform.
And what about the much touted
"clinical" model for teacher
preparation? (The one that
eliminates cognitive psychology,
discipline specific pedagogy, and
educational foundations.) It's
been tried in Indiana. Let's see
how well their graduates are
doing, compared to ours.

And finally, let's publicize the
importance and value to future

teachers of the courses we teach
that are *not* taught elsewhere:
courses in theories of learning and
conceptual development; courses in
pedagogy and instruction; courses
in classroom interactions, courses,
in short, that define our discipline
and are not taught elsewhere.

It is not enough for us to meet
NCATE standards. We have to do
even better. Let's start collecting the
hard evidence that proves that we
do.



Sheila Tobias Tucson, AZ
February 2010

*As an organization of
science teacher
educators we have a
right to demand
"evidence" for the
claims that are being
loosely made that
"teacher preparation in
America is broken" . . .*

2010 ASTE Awards

2010 Award I Level I, Science Educator Award - Randy Bell



Award I Level I, the *Outstanding Science Teacher Educator of the Year Award*, recognizes the individual achievements and contributions of persons having ten or fewer years in their career service. This year's awardee for Award I Level I is Dr. Randy Bell.

Dr. Randy Bell, in addition to being our ASTE President Elect, is Associate Professor of Science Education in the University of Virginia's Curry School of Education. Randy received his doctoral degree from Oregon State University after teaching middle and high school science for six years in a rural community in eastern Oregon.

Randy's research agenda at the University of Virginia focuses on two primary areas: (a) teaching and learning about the nature of science and (b) using digital technologies to facilitate effective science instruction and conceptual change. His research was recognized by the National Association of Research in Science Teaching with the 2005 Early Career Research Award. In 2007, the University of Virginia recognized his commitment to education and the high quality of his instruction by presenting him with its All-University Teaching Award.

Randy has maintained strong ties to the classroom through a variety of collaborative professional development projects. Most recently he served as co-PI on a US Department of Education-funded research project designed to develop models of technology-enhanced inquiry instruction for single-computer classrooms. Randy has just completed a term on the ASTE Board of Directors and is beginning a second term as president-elect. Randy has also served on the editorial boards of the *Journal of Research in Science Teaching* and *School Science and Mathematics*. The author of more than 100 articles, chapters and books, he currently is co-authoring a series of elementary science textbooks for National Geographic.

2010 Award I Level II, Science Educator Award - Julie Juft



Award I Level II, the *Outstanding Science Teacher Educator of the Year Award*, recognizes the individual achievements and contributions of persons spanning more than ten years in their career service.

This year's awardee for Award I Level II is Dr. Julie Luft, Professor of Science Education at Arizona State University. She graduated from the University of Iowa in 1994, after teaching middle and high school science for 5 years.

As an educator and a researcher, it is important to Dr. Luft that her work impact science classrooms. As a result, a significant amount of her time is spent with teachers, district science coordinators, and organizations on the development and implementation of courses and programs for science teachers. This has resulted in her development and implementation of, to list a few, a Master's program to certify science teachers, an induction program for science teachers, and graduate courses that develop the next generation of science teacher educators.

Her current focus is preservice teacher education and she is leading an interdisciplinary team that is creating a personalized approach that prepares secondary science teachers. More recently, her work has been focused on the development of beginning secondary science teachers. She and her research team are currently following approximately 100 beginning secondary science teachers for 5 years. This study is funded by the National Science Foundation.

Dr. Luft has written numerous research articles, book chapters, and editorials, and she has co-edited books that are on-line and free to all science educators. She has served as a board member and President of ASTE; an Associate Editor for the *Electronic Journal of Science Education*, *Journal of Research in Science Teaching*, and *School Science and Mathematics*; and she is currently the Research Director of the National Science Teachers Association, on the Board of NSTA, and the NSTA representative to the NARST Board.

2010 ASTE Awards Continued

2010 Award II, Outstanding Mentor Award - Kathryn Scantlebury



Award II, the *Outstanding Mentor Award*, recognizes outstanding accomplishments in contributing to the professional development of pre-service and in-service science teachers and teacher educators. The ASTE Awards Committee selected Dr. Kathryn Scantlebury for this award.

Dr. Kathryn Scantlebury is a Professor of Chemistry in the Department of Chemistry and Biochemistry at the University of Delaware. She received her Ph.D. from Purdue University under the direction of Dr. Jane Butler Kahle who provided Kate with an exemplary model of mentoring scholars into the academy, especially women.

Kate is a coeditor of a forthcoming book, entitled *Revisioning science education from feminist perspectives: Challenges, choices and careers* in which she has coauthored a chapter on cross generational mentoring with Jane Kahle and Judith Meece.

Kate has provided mentoring support to teachers, graduate students, and faculty to present and publish their research. She continually encourages the preservice and inservice teachers she works with to improve their practice by involving them as mentors in the University of Delaware's secondary science education program and as researchers focused associated with improving the science teacher education.

Kate's scholarship, collegueship, and inclusive approach to research collaboration and her openhanded sponsorship of ongoing participation in professional organizations provide further evidence of her outstanding qualities as a mentor. Kate is a generous and kind person who places considerable time and energy in establishing and maintaining positive rapport with her colleagues, peers and students.

2010 Award IV, Implications of Research for Educational Practice - Nicole Grimes



Award V: *Implications of Research for Educational Practice* recognizes the best paper submitted for nomination and presented at the last ASTE conference. The paper must identify a persistent and recurring problem in the practice of science teacher education and develop strategies to resolve the problem based upon a comprehensive synthesis of relevant research and interpret theory and research for practice.

Our award winner this year is Nicole Grimes for her paper entitled "Exploring multiple outcomes: Using cogenerative dialogues and coteaching in a middle school science classroom."

Nicole Grimes is currently a doctoral candidate at the Graduate Center, City University of New York pursuing a Ph.D. in Urban (Science) Education. Nicole currently chairs the science department at her middle school and also teaches high school physical science and physics. Alongside her work in the classroom, she is also interested in teaching and learning science in informal and out-of-school settings in NYC. Her current research centers on using sociocultural frameworks to explore coteaching and cogenerative dialogues in urban science classrooms and out-of-school programs. She hopes to add to the existing body of research on transforming science education in urban high schools, especially on the ways to improve teacher-student interactions.

The mission of the ASTE is to promote excellence in science teacher education world-wide through scholarship and innovation.

2010 ASTE Awards Continued

2010 Award IV, Innovation in Teaching Science Teachers Christina Siry, Nicole Lowell and Elizabeth Zawatski



Dr. Christina Siry

(No Picture available for Nicole Lowell & Elizabeth Zawatski)

Award IV, *Innovation in Teaching Science Teachers*, recognizes the best paper submitted for nomination and presented at the last AS development and dissemination of new designs for courses and curricula, new instructional methods or approaches, and other types of teachers of science.

The authors of best paper nominated and presented at the ASTE 2009 conference are **Dr. Christina Siry**, University of Luxembourg Charter School in Brooklyn, New York and **Elizabeth Zawatski**, Rippowam Cisqua School in Mount Kisco, NY. Siry, Zawatski, an science through collaboration: Co-teaching and cogenerative dialogue in elementary science methods courses.”

Dr. Christina Siry is a post-doctoral researcher at the University of Luxembourg, where she is investigating how young children develop and transform their knowing and reasoning about the physical and chemical properties of natural elements through multilingual, multi-modal interactions in schools.

She has several active lines of research that focus on the two intertwined areas of science learning and learning to teach science, particularly at the elementary / early childhood levels. At the foundation of her work is the importance, and the complexity, of working towards incorporating multiple voices and perspectives in teaching and in research. Specifically, she focuses on the use of collaborative pedagogies and participatory methodologies as tools for transforming science teacher education and science education at the primary and pre-primary levels. Dr. Christina Siry

Elizabeth Zawatski is a graduate student at Manhattanville College and an assistant first grade teacher at the Rippowam Cisqua School in Mount Kisco, NY. After participating in a field-based science methods course as an undergraduate, she became interested in sharing responsibility for teaching and learning, and this led to her participation in a research group that examined the field-based methods courses. Their research is ongoing, as the group continues to investigate the areas of identity, group membership, cogenerative dialogue, collaboration and coteaching for a book that is currently in progress.

Nicole Lowell is currently a first grade general studies teacher at the Hebrew Language Academy Charter School in Brooklyn, New York. She has been an active collaborator in several research projects focusing on her participation in a field-based elementary science methods course. Her ongoing involvement in this research work has provided a focus for her professional development as a new teacher.

2010 Award III – *Honorary Emeritus Membership* not awarded

ASTE North-Central Region Meeting

October 7-9.

The 2010 North-Central regional meeting will be hosted in Minneapolis as a warm-up for the National Meeting in January. It would be our pleasure to see many of our North-Central colleagues, graduate students, and friends join us for two days of professional development, networking, and discourse!

Please mark your calendar to join us October 7-9 at the Hilton Minneapolis. A call for Papers and Presentations for our interactive and collaborative conference format will be made this summer. We hope to see you in Minneapolis in Autumn (and January!)

For additional information, please do not hesitate to email me at hechter@cc.umanitoba.ca

Respectfully submitted,
Richard Hechter, Regional Director,
North-Central Region

ASTE North-East Region Meeting

The 2010 ASTE Northeast Region meeting will be held on October 21-22, 2010 at Pocono Environmental Education Center (PEEC).

The conference will begin on Thursday afternoon with roundtable discussions. An afternoon break will follow with optional activities available including a very scenic waterfall hike. After the evening panel and discussion activity (with dessert, wine, and microbrews), we will gather around a bonfire and make s'mores.

A Project Learning Tree workshop will be conducted during Friday morning and roundtable discussion will occur in the early afternoon.

The 2010 conference registration fee includes all meals and lodgings. Lodging options at PEEC will include cabins and yurts. Hotels in the Poconos are located about 20 minutes away.

Additional information and registration forms will be available this summer on the Northeast Region Web site at: <http://theaste.org/memberresources/regions/ne/>

ASTE 2011: Explore the Boundaries at ASTE

ASTE
2011 International
Conference
January 20-22, 2011

Hilton Minneapolis

1001 Marquette Avenue South
Minneapolis, MN 55403-2440
Tel: 1-612-376-1000
Fax: 1-612-397-4875

Mark your calendars now!

[Getting around in the skyways](#)

Conference Proposals

The concurrent sessions proposal form is now available. Proposals are due by July 10th, 2010.

[Concurrent Sessions Proposal Submission](#)

Conference Workshops

The workshop proposal were due by April 30th.

Conference Chairs

George Davis, Minnesota State University-Moorhead, davisg@mnstate.edu
Gillian Roehrig, University of Minnesota, roehr013@umn.edu



Conference: <http://theaste.org/meetings/2011conference/>
Proposals: <http://theaste.org/meetings/2011conference/2011proposalform.htm>

Share your course syllabus at the Minneapolis conference

Science methods courses are central to the role that science teacher educators play in their instruction. Hundreds of hours go into the preparation and revision of the syllabus and course documents, as well as the documentation of student learning. As science teacher educators, we are constantly looking for ways to improve on our blueprints for critical pre-service experiences. ASTE wishes to facilitate the exchange of ideas for methods courses by making syllabi available to our members. We hope that you will bring your favorite ideas, activities, scoring rubrics, and field requirements to share at our next conference in a poster format that will promote the exchange of ideas and innovations. This session should help us all collaborate to improve the impact of our methods courses and point to research that can document their impact.

For details, go to www.TheASTE.org and click on the Submit a Proposal for the 2011 ASTE conference <http://www.theaste.org/meetings/2011conference> and then select the Poster Session category: *Syllabus Sharing Poster Session*. This poster session has been designed for the purpose of sharing science education syllabi. The poster should include evidence of outcomes or student learning to support the course activities and assessments shared. To submit a syllabus, select all the appropriate descriptors for this course.

For more details or questions, contact **Bill Baird** at bairdwe@comcast.net

Preservice Points

By Erica M. Brownstein

Input requested for DRAFT version of the NSTA Standards for Science Teacher Preparation Programs

The NSTA Teacher Accreditation Subcommittee has released a DRAFT version of the revisions to the NSSTP. Feedback and comments are welcome. This vetting process is an important one as we revise the NSSTP. When considering the five standards, please keep in mind our work was guided by the following:

- The revised Standards are for beginning science teachers and are meant to represent minimal competencies.
- The revised Standards are designed so as to not replicate those competencies addressed and assessed under the NCATE Unit Standards.
- The revised Standards are designed to allow individual emphases within programs while maintaining a basic level of competency.
- The revised Standards adopts the Continuous Improvement model approach adopted by NCATE and assumes programs currently holding accreditation to be meeting the standards.

We have used research to guide the revisions. We are very interested in additional research resources (please put on the comment section of the survey). The draft version of the revised NSTA Standards for Science Teacher Preparation is on the survey and also is available at www.nsta.org/preservice. The website has the link to the survey as well.

The survey is available at: <http://www.surveymonkey.com/s/RF8CNWQ>

Congratulations to new NSTA/NCATE Audit Team Members

Congratulations to two new individuals to serve on the NSTA Preservice Program Recognition Audit Team: Jeanelle Day and Rene' Carson. As a part of a team, they will audit reviews of science teacher preparation programs seeking NSTA recognition (through either NCATE or NSTA). Both Rene' Carson and Jeanelle Day work at NSTA recognized preservice preparation programs and have extensive experience as reviewers and lead reviewers in the NSTA recognition system. We welcome their service to the profession as part of the Audit Team.

If you have questions about the NSTA recognition process or would like to become a reviewer, please contact the NSTA Accreditation Coordinator, Erica M. Brownstein at ebrownst@capital.edu or visit the web page at www.nsta.org/preservice

Educators of Science and Mathematics Teachers Central to Iowa's STEM Advancement

When Iowa's universities joined together to form the ***Iowa Mathematics and Science Education Partnership*** two years ago, the mandate was straightforward: produce more (and better) math and science teachers, improve the performance of Iowa youth in science and math, and build a collaborative statewide structure for doing so. Over the 24 month interval from the launch of this state-funded initiative to now, newly implemented programs have begun to show encouraging signs of success, including a comprehensive science/math teacher recruitment plan linked to community colleges, a professional development program that marries the state's private sector to its teachers ("Real World Externships"), in-school and out-of-school enrichment projects for youth (e.g., "Energize Me!" summer camp), and a public awareness campaign ("Who Knew Math and Science Could be so Cool?"). But above all the start-up activity, the central role of science and mathematics teacher preparers in solving the nuanced challenges of teacher enhancement (both pre and in-service) and thus student performance, has moved to center stage. And, since teacher production in Iowa is shared almost 50:50 between the private colleges (n = 33) and public universities (N= 3), leaders adapted quickly to the reality that solutions were to be inter-institutional. For the first time in the state's history, math and science teacher preparers across Iowa convened for a sharing summit last year, where seeds of collaboration were planted. This August—aptly at the peak of Iowa's growing season—the second summit of its kind will nurture the sprouting of ideas across disciplines and spanning private and public institutions. More information about the Summits can be accessed at http://www.iowamathscience.org/summit_2010/.

Jeff Weld, Ph.D., Director, Iowa Mathematics and Science Education Partnership

Associate Professor of Biology/Science Education

University of Northern Iowa



Others are encouraged to submit summaries of what is happening in their state with regards to STEM initiatives for inclusion in future ASTE Newsletters. Please contact Todd Campbell at todd.campbell@usu.edu for more information.

ASTE 2013 - Charleston, S.C.

ASTE is excited to announce that it will return to Charleston, S.C. for its 20th conference anniversary, where the first official ASTE conference was held.

Dates: January 10-12, 2013.

Host Hotel: Francis Marion Hotel,
<http://www.francismarionhotel.com/>

Conference Chairs: Meta Van Sickle & William Veal

SCI-LINK at NCSU

GRANDFATHER MOUNTAIN INTERNATIONAL WORKSHOP *June 21-25, 2010*

Study a unique mountain ecosystem. Model teaching practices to benefit students in the 21st century: cooperation, collaboration, problem solving, utilizing STEM skills, techniques, and outcomes. **THREE GRADUATE CREDITS** available with additional completed assignments.

BRAZIL ADVENTURES IN ECOLOGY AND EDUCATION *July 28-August 6, 2010*

SCHOLARSHIPS still available . . . go global! TEN days in Brazil! Visit Sao Paulo, economic center of Brazil. Compare educational systems facing challenges often similar to ours. APPLY to be considered for scholarships. Inquire about Brazil Online course, ONE GRADUATE CREDIT.

For more information:

Email questions: sci-link@ncsu.edu
www.ncsu.edu/scilink

Dr. Harriett Stubbs, Emeritus (919)787-8387
SCI-LINK, North Carolina State University
North Carolina State University

ASTE Newsletter

Published four times a year by the Association for Science Teacher Education. All members are invited to submit items.

Issue	Items due by
Summer	Aug. 15
Fall	Oct. 15
Winter	Feb. 15
Spring	May 15

Editor: Todd Campbell

Phone: 435-797-7038

Fax: 435-797-1441

Email: todd.campbell@usu.edu