

Newsletter Date: Spring 2007

Volume 41 Issue 3

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President's Newsletter Message
Janice Koch, ASTE President

Challenges and Opportunities for ASTE

As we pursue our work as an organization and a Board of Directors, we look to the ways in which we are expanding our vision and seeking new pathways for science teacher education. Our new Environmental Education Forum, co-chaired by Alec Bodzin, Beth Klein, and Peter Veronesi has started a listserve and seeks new members to consider how science teacher education can and will address issues surrounding global climate change and its implications. Furthering our goals, we have been active with our affiliates, NSTA, the Triangle Coalition and the Council for Scientific Society Presidents (CSSP). At each of these affiliates' conferences, Kathy Norman as Past President and Warren DiBiase as President-elect have represented ASTE and spread the word about the ways in which our constituents seek to prepare and provide professional development for future and current teachers of science. Kathy Norman and Herb Brunkhorst implemented successful sessions at NSTA that engaged preservice teachers.

At the recent CSSP meeting, I co-chaired the committee meeting on the Public Appreciation of Science with Linda Froschauer, outgoing President of NSTA. This visibility gives our organization a national presence and serves our Board and our Members by providing timely insights to the issues affecting the future of science teacher education in America and around the world. Several themes emerged from the policy topics that were addressed at the CSSP meeting in May in Washington, DC. Two major points of interest were (1) the impact of Global Climate Change on the future of life as we know it on earth and (2) the waning performance of students in science in the United States when compared to the rest of the world.

It is significant to note that public apprehension about global climate change has risen dramatically in the last year in spite the fact that 83% of Americans believe that the United States should be a global leader in scientific research (Bridging the Sciences Survey, 2006), there is no outcry for legislators to increase public funding of basic research. Amory Lovins reminds us that in the 19th century, people were relatively scarce while the



**... considering
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President's message continued

environment was abundant; in the 21st century, people are abundant, but the environment is scarce. How does this crisis relate to science education?

Several society leaders expressed the potential for global climate change to become the new "Sputnik" scare that propelled science education reform projects and funding to the forefront of public policy. The ASTE Ad-hoc committee on Public Policy co-chaired by Regina Toolin and Joseph Shane is another venue for ASTE members to mobilize legislators around funding for science education.

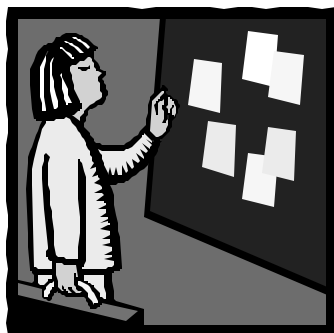
The Intergovernmental Panel on Global Climate Change (IPCC), reflecting the work of 1800 scientists in 40 countries, carefully documented the scientific basis for their conclusions that climate change is happening and that it is primarily driven by human activities (mainly the combustion of coal, oil, and natural gas, and deforestation) and that continuing to base most of the world's energy supply on technologies that burn coal, oil and natural gas and release the resulting carbon dioxide into the atmosphere will lead to greater climate change in the future. Teachers of science as well as journalist need to understand this reality. The role that ASTE can play in helping to prepare science teachers for this responsibility is substantial.

As many elementary science programs have been set aside for the demands of language arts and mathematics NCLB testing, we have seen a decline in science teaching K-5. This will shift as we are more aware of the challenges of the 21st century and the need for our youngsters to get a head start on the comprehension of the "Big Ideas" affecting our natural world.

As ASTE prepares for its summer board meeting in St. Louis, we look forward to enhancing the operations of our organization, refining the Standard Operating Procedures (revisions will be posted to our web site in late June), considering new directions and anticipating an exciting conference in St. Louis in January. Please be sure to submit your proposals!

Be certain, as well, to access our web site for information about the submission process and for directly submitting your proposal online. The deadline for proposals is June 30. Kathy Trundle and William Newman have been busy planning for a wonderful event. Save the dates: JANUARY 10-13, 2008 in St. Louis.

The Announcements



Eugene P. Wagner is the Executive Secretary of ASTE. He should be contacted with your questions, for solutions to membership issues, and when updating contact information, and the like.

He may be contacted at:

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Executive Secretary Association for Science Teacher Education
113 Radcliff Dr.
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Note Conference information on the colored Insert.

The Announcements Cont.

Membership Moment

With the summer soon upon us, it is the perfect time to think about membership. The start of the fall term will bring with it new faculty members who we should encourage to join our organization. ASTE strives to provide a nurturing community for graduate students, new faculty, teacher educators, scientists, and senior faculty members. We should take this opportunity to reach out to those at the beginning of their careers to offer support and collegiality.

The membership break down for this year is:

US members 577
Student Members 150
International Members 27
Canadian Members 9
Retired Members 21
Total membership 784 (2007)

For more information on membership, please contact
Rick Pomeroy, Board member, Chair of the Membership Committee and Senior Regional Director.

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ASTE 2008 International Conference

Teacher Preparation and Quality: Interconnections and Strategies for Science Education
Union Station Hyatt Regency
St. Louis, Missouri
January 10-13, 2008

A reminder: The proposal submission deadline is **June 29, 2007** for both Concurrent Session Papers and Workshops. You may access the proposal submission forms on the ASTE web page at <http://TheASTE.org> under the meetings quick tab.

Direct questions concerning:

- * the conference program to Kathy Cabe Trundle at trundle.1@osu.edu.
- * the workshops program to Kevin Finson at finson@bumail.bradley.edu.
- * technical issues relating to the online submission form to Eugene Wagner at ewagner@pitt.edu.

We hope you will consider sharing your knowledge and expertise with your colleagues. The conference will provide great opportunities for learning, making professional connections, and fostering friendships.

We look forward to seeing you in St. Louis!

Conference Committee

James T. McDonald, Central Michigan University, mcdon1jt@cmich.edu
Kathy Cabe Trundle, The Ohio State University, trundle.1@osu.edu
William J. Newman Jr., Illinois Institute of Technology, newmanw@iit.edu
Meredith Beilfuss, Indiana State University, mbeilfuss@isugw.indstate.edu



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ASTE Promoting Leadership in, and support for those involved in professional development of teachers of science

ASTE Newsletter

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

<u>Issue</u>	<u>Items due by</u>
Summer	Aug. 15
Fall	Oct. 15
Winter	Feb. 15
Spring	May 15

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Call for Proposals

In accordance with the conference theme, the 2008 conference committee sets forth a request for papers that examine the following challenges:

1. How does and how should the science teaching profession define “prepared” and “qualified”?
2. What are the similarities and differences between “prepared” and “qualified” according to the science teacher education community and government agencies?
3. What are the necessary components of science teacher education programs that ensure the graduates are ready to implement “best practice” in the “real world”?
4. What roles do environment, ethnicity, race, gender, socioeconomic status, and family play in science teacher education efforts to develop prepared and qualified teachers that are able to transfer learning to science classrooms?
5. How can the science education community (re)gain jurisdiction and maintenance of our science education programs and certification regulations?
6. What other important ideas/concepts regarding science teacher education will your colleagues find interesting and useful?

The submission deadline for all proposals is **June 29, 2007**.

ASTE 2008 International Conference
Teacher Preparation and Quality: Interconnections
and Strategies for Science Education

January 10-13, 2008
Union Station Hyatt Regency
St. Louis, Missouri

Mark your calendars and get ready to *Explore St. Louis, The Complete Getaway!*

Conference Theme

The theme for the 2008 ASTE conference is *Teacher Preparation and Quality: Interconnections and Strategies for Science Education*. This theme developed from members' interests and concerns about national, state, and local demands for science teacher certification and whether meeting these demands realistically indicates that a teacher is "prepared" and "qualified" to teach.

Most of us have known weak teachers that held certificates as well as excellent teachers that were not certified. Moreover, science educators have reported that graduates obtaining degrees and licenses through our accredited programs often discriminate teaching that is "best practice" from teaching that is "real world." To quote one of our students after she completed the Praxis exam, "I sometimes struggled to find the right answer. But then I remembered to look for what they would consider "best practice" instead of what I would do."

Recently, I spoke with a university faculty member that was teaching courses for in-service science teachers working towards administrative licenses. Even though he had taught every course in the university's accredited administrative program, he was unable to become certified as an administrator in his state because he had not gone through an "approved program."

I am certain that such anecdotes inspire many arguments about science teaching, education, learning, and teacher education programs. I hope all ASTE members will venture to St. Louis in January, 2008 and share their knowledge and experiences regarding science teacher preparation and quality.

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6. What other important ideas/concepts regarding science teacher education will your colleagues find interesting and useful?

The submission deadline for all proposals is **June 29, 2007**. We are using an online submission system that is accessible via the ASTE website, <http://TheASTE.org>.

Hotel Information

The ASTE rates for Union Station Hyatt Regency are \$119 per night for single or double occupancy, \$129 triple, and \$139 quadruple occupancy. More information about the hotel and registration, including necessary links, are on the ASTE website.

Keynote Speakers

We are pleased to announce our distinguished Keynote Speakers for the 2008 ASTE Conference: **Bonnie Bassler, Ph.D.** from Princeton University's Department of Molecular Biology and Howard Hughes Medical Institute and **Shirley Malcom, Ph.D.** from the American Association for the Advancement of Science (AAAS) Directorate for Education and Human Resources Programs.

Dr. Bassler studies the molecular mechanisms that bacteria use to communicate with one another, and her aims include combating deadly bacterial diseases and understanding cell signaling in higher organisms. She won a 2002 MacArthur Fellowship for her group's research and was chosen as the 2004 Inventor of the Year by the New York Intellectual Property Law Association for her idea that interfering with bacteria communication could form the basis of a new type of broad-spectrum antibiotic. The tentative topic for Dr. Bassler's keynote address is connecting science education to the story of her research as a process of inquiry. To read more about Dr. Bassler's work go to: (http://www.hhmi.org/research/investigators/bassler_bio.html, April 2, 2007)

Dr. Malcom is committed to improving public understanding of science, providing technology training for students with disabilities, science literacy for all, and women and minorities in science and engineering. In 2006, she was named as co-chair (with Leon Lederman) of the National Science Board Commission on 21st Century Education in STEM. She served on the National Science Board, the policymaking body of the National Science Foundation from 1994 to 1998, and served on the President's Committee of Advisors on Science and Technology from 1994-2001. In addition to holding 14 honorary degrees, Dr. Malcom received the Public Welfare Medal of the National Academy of Sciences, the highest award given by the Academy (<http://www.aaas.org/ScienceTalk/malcom.shtml>, April 2, 2007). The tentative topic for Dr. Malcom's keynote address is teacher preparation and the improvement of science, mathematics, and technology education for all students, especially underrepresented groups.

On behalf of the 2008 ASTE Conference Committee, I look forward to seeing everyone in St. Louis for what will surely be an eventful and memorable conference.

William

Conference Co-Chairs

William J Newman Jr, Illinois Institute of Technology, newmanw@iit.edu

Kathy Cabe Trundle, The Ohio State University, trundle.1@osu.edu