

# ASSOCIATION FOR SCIENCE TEACHER EDUCATION

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## President's Newsletter Message **Kathy I. Norman, ASTE President**

### President's Message

#### **Time to Speak Out for Science Teacher Education**

Imagine the outcomes for your community, state and the nation if each of us made one presentation to the public during 2006 on the importance of science education to our children, society, and the future of our country.

- ✓ How might we impact programs and funding for science teaching and learning if each science teacher educator, staff developer, science supervisor or scientist involved in teacher education wrote one editorial reflecting on the fact that highly qualified teachers of science are essential to our nation's future?
- ✓ What if each of us spoke at a community discussion, a neighborhood gathering, or a local association meeting about how K-12 teachers of science are vital to the continued growth and development of our society, because they will educate our next generation of scientists, engineers, and workers who will find new ways to defend our country, create new technologies, and cure diseases?
- ✓ Is it not the responsibility of the members of the Association for Science Teacher Education to take such steps, to bring these issues to the public?

Visualize the results in the next decade and century. This is a pivotal time, the time for each of us to speak out regarding the need for a strong focus on science teaching and learning for students and teachers at every educational level, everywhere. This is an opportunity for each of us to agree 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. The actions you choose to take might include speaking at a local Rotary Club meeting, writing an editorial, or being interviewed by a member of the media. But whatever methods you utilize, make 2006 the year to "speak out" to those outside our profession. Speak up and be heard!

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"This is an optimum time to be vocal. The importance of science education in our schools has received recent and powerful attention in the United States."

This is an optimum time to be vocal. The importance of science education in our schools has received recent and powerful attention in the United States. On January 25<sup>th</sup>, Senators Domenici (R-NM), Bingaman (D-NM), Alexander (R-TN) and Mikulski (D-MD) introduced the Protect America's Competitive Edge (PACE) Act -- three bipartisan bills designed to implement the 20 recommendations contained in the National Academy of Sciences (NAS) 2005 report "Rising Above the Gathering Storm." The number one action item

In the NAS report was to improve K-12 science and mathematics education. The recently introduced PACE Act will improve science and math education by providing scholarships to future teachers, establishing master programs and summer institutes for current teachers, creating specialty math and science high schools, and providing summer research opportunities for students. PACE had over 40 senators sign on as co-sponsors, and it is strongly supported by the business, high tech, engineering, and science communities.

On January 31<sup>st</sup>, President Bush highlighted the issues outlined in the NAS report, and gave science and math education a prominent focus in his State of the Union Address. President Bush's 2006 education agenda, the American Competitiveness Initiative, will provide additional funding for key federal science and math education programs that will help schools and districts strengthen their instructional programs in science and math, allow more students to take advantage of advanced science classes, bring more teachers into the classroom, increase support for research and development, bolster teacher education, and provide new graduates in STEM fields.

It is time that legislation focus on improving programs, training and funding for K-12 science and math teacher education. It is up to science teacher educators and others involved in the development of science teachers to ensure that effective science education programs are implemented. We can do this by letting our voices be heard, by speaking out to national leaders as well as members of our communities, on the importance of science in K-12 schooling and the essential role played by teachers of science. The "job description" of university faculty previously had three components: teaching, research and service. Another prong has been added to that role, as well as to the responsibilities of all of us involved in science teacher education: that of speaking out in our communities and regions, to the media, and to policymakers.

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### Guest Editorial

By Dr. Jon E. Pedersen

#### **Whose Responsibility? Leading, Following, or Cleaning Up After the Parade.**

A long time ago, a colleague told me that there were only three ways in which we can react to issues, problems, or challenges that we face. That is, to lead the band; follow the bandleader and be a member of the parade; or clean up after the parade has finished. Although many will take issue with this simplistic metaphor I think that it reinforces an important point. What role will ASTE and its membership play in the arena of politics and policy making locally, regionally, and nationally? This question has become increasingly pertinent to me after attending several meetings in the past month and listening to individuals--such as Art Levine, Lee Shulman, and Art Wise--talk about the future of Higher Education and the implications of policies being developed that will impact all of us in teacher education.

It was with great interest that I listened to Art Levine describe a conversation he had with a publisher, in which the publisher indicated that he was no longer in the publication/book business, rather in the knowledge business. Dr. Levine went on to say how this particular company is offering on-line professional development to literally thousands of common schools throughout the nation. In fact, it was the intention of the publisher to completely cut out higher education and

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directly contact the schools to support their needs for professional development. Although this particular anecdote in isolation is not surprising, when considered alongside the comments of others, it establishes an alarming trend. During the same meeting, Art Wise and others from NCATE briefed attendees on the future of NCATE. For example, the first completely on-line teacher preparation program will be considered for accreditation this spring. Additionally there was a discussion regarding the interest of State Departments of Education, school districts, private organizations and for-profit organizations to acquire NCATE accreditation. Art Wise and others from NCATE anticipated that just as the on-line institution has made its way toward accreditation so would/could these other entities. I find the implications of this trend alarming.

After these particular sessions I made it a priority to seek out others who were discussing and presenting sessions about policy issues and trends in Higher Education. Topics were covered such as the reauthorization of the Higher Education Act (HEA), No Child Left Behind (NCLB), and the movement for standardized assessment for all federally funded IHE's. Lovingly labeled by some as "No College Left Behind," Charles Miller (chairman of the Secretary of Education's Commission on the Future of Higher Education) believes that universities and colleges must be held accountable for what their students learn and standardized assessment is one way to do this. The diversity of a universities student body would make it nearly impossible to develop such an instrument. But it seems that we are headed in this direction. We should all also take the time to read the latest version of the HEA and understand the implications of both the House and Senate versions. The language in the HEA provides for those alternative pathways to certification and licensure for all teachers. Again, as one begins to look at all the data, a trend emerges that causes me stop and consider the future "health" of teacher education.

All of the above does not even begin to touch upon the pervasiveness of disturbing "science" focused issues that are currently being discussed at a national level. In particular—and with great fan fare in my own state of Oklahoma—is the debate over Intelligent Design (ID). We have not fewer than four (4) bills being presented in the current legislature promoting ID as science. One bill is part of a larger movement across the nation titled, "Academic Freedom." David Horowitz, an emerging national figure, is promoting the academic freedom agenda throughout the nation and in fact has developed a national academic freedom conference. For more information on this topic go to: <http://www.studentsforacademicfreedom.org/letters/LettersJan-May2006/letter-AprilConferenceAnnouncement020706.htm>. I think you will be surprised as science educators by the rhetoric and disturbed by the conceivable impact such an agenda is likely to have on common school science education throughout the nation.

The question is, What are we doing about all of this? Are we leading? Are we following? Or will we have to clean up after the parade? Will there be anything to clean up? It is my opinion that we must be more proactive in communicating with policy makers, at both the local and national level. There has been a firestorm of criticism suggesting empirical research does not exist to support much of what we do in teacher education. Yet, every year at ASTE and other science related conferences I hear my colleagues share their experience regarding successful programs and initiatives. How is this getting communicated to the "right" individuals? It seems that we have spent a lifetime talking to ourselves. It is time that we look beyond the boundaries of our own professional colleagues and think about how we promote our knowledge base to key individuals who are in the policy-making business.

We need to think creatively and out-of-the-box regarding how we communicate with key stakeholders and policy makers. Invite them to our conferences. Spearhead themes or strands that focus on particular key policy issues. Develop a "research agenda" around particular key policy issues and encourage members to present empirical research at annual meetings related to the agenda. Develop a policy-briefing book directed specifically to state and federal lawmakers. Such

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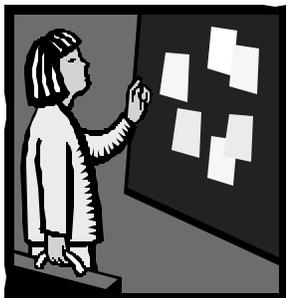
## Guest Editorial Cont.

a briefing-book or information pamphlet would summarize and highlight key information from our members relating to critical issues and would be written in a language and style that all lawmakers could use and understand.

This all might sound like Chicken Little and free floating anxiety with regard to a falling sky. But from my perspective the sky will fall if we don't decide to take the lead as the national Association for Science Teacher Education and use our bully pulpit as a way to inform and shape national policy. But we can't take this lead as a single committee within our association. We can't rely only on the leadership in the organization to be the only ones to carry the message. This is a cause to which we all must contribute. We are going to have to organize a common voice and purpose in order to impact and change policy. Without this common purpose, we may not even have a parade to follow.

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### The Announcements



**ASTE** has moved to promote its goal of broadening the involvement of more international members with the ad hoc committee on International Science Teacher Education. Given our mutual interests in excellence in research and practice, it is vital for science teaching educators from all nations to convene and collaborate. The Board of Directors extends a sincere welcome to our colleagues from nations outside the United States of America.

### Call for CITE Science Section Reviewers

Contemporary Issues in Technology and Teacher Education (CITE), Science Section, currently has need for several new reviewers. This section of the online journal is sponsored by ASTE and publishes articles particularly focused on innovative uses of technology in science teacher education. Qualified reviewers will have expertise in both technology and areas of science teacher education such as online science education, nature of science, the science of learning, inservice and preservice teacher education, problem based learning, and inquiry learning.

To apply, please complete all information including online at <http://site.aace.org/newpubs/index.cfmCFID=3563379&CFTOKEN=48499032&fuseaction=Reviewer.SignUp>. Your application will be reviewed by the Section Editor and the Publications Committee before you are accepted as a reviewer. You will be expected to fulfill a three-year term with the possibility of renewal.

Thank you,  
Ruth Burkett  
CITE Science Section Editor



A reminder: Next year's **ASTE** conference (Jan. 3-6, 2007) will be held at the Clearwater Beach Hilton, Clearwater Florida. Stay tuned to the ASTE website for more conference information this spring semester! USF looks forward to seeing you there.

Dana Zeidler, ASTE 2007 Conference Chair

## Additional Announcements

### Call for Nominations for ASTE

As an active member in ASTE, we are asking for you to nominate an ASTE colleague or colleagues for the following offices:

- ⇒ President
- ⇒ Director at Large
- ⇒ Elections Committee

Please email your nominee(s) to Joanne Olson [jkolson@iastate.edu](mailto:jkolson@iastate.edu)

Please include:

- ✓ Name of nominee
- ✓ Position nominated
- ✓ Contact information for reaching you or the nominee

The ASTE Technology Education Committee is pleased to announce the 2006 NTLI Fellowship in Science Education and Technology award to Len Annetta and John Park for their ASTE 2006 paper: Game On: Graduate Students Creating Role Playing Video Games in a 3-D Virtual Environment through Synchronous Online Instruction.

The NTLI award recognizes an exemplary paper related to technology in science teacher preparation and provides funding to present the paper in an invited session at the 2006 annual meeting of the Society for Information Technology and Teacher Education (SITE) in Orlando, FL (March 20-24). For more information about the SITE conference, see <http://www.aace.org/site/>.

Our new NTLI sponsor, Vernier Software and Technology, will provide Len and John up to \$1,000 toward their SITE conference travel and lodging expenses. SITE will provide one complementary conference registration and an award luncheon.

Congratulations to Len Annetta and John Park!

Dr. Jon E. Pedersen

Thank you to everyone who was involved in the fall elections for your our new ASTE leadership team.

Congratulations to the new leadership team and a sincere thank you to all who were on the ballot, who agreed to be considered for the ballot and those who worked on the Elections committee.

New ASTE Leadership Team

- ◆ President Elect **Janice Koch**
- ◆ Director at large **Penny Gilmer & William McComas**
- ◆ Elections Committee **Mary Atwater, Mary Stein, and David Crowther**

Congratulations and THANK YOU to ALL.

Pamela Fraser-Abder, Ph.D.

Walter Smith & Caryl Kelley Smith are the Executive Secretaries of AETS. He may be contacted at:

Walter S. Smith  
 Dept. of Biology  
 Ball State University  
 Muncie, IN 47306-0440  
 765/285-8840

[wsmith@bsu.edu](mailto:wsmith@bsu.edu)

**We would like to encourage all science methods instructors to encourage their pre-service students to attend the National Science Teachers Association (NSTA) annual conference in Anaheim, California April 6-9, 2006.**

The advance registration rate (good through March 10) for full-time students is \$70 after which the on site rate is \$95.00. The conference staff needs help and students can receive a 50% registration refund for signing up to work 8 hours at the convention, or receive FREE registration for working 16 hours. These hours can be distributed over the course of the convention. To take advantage of this opportunity, students can go the NSTA website and register on line at [www.nsta.org/conferences](http://www.nsta.org/conferences). The percentages will be taken off of the full-time student registration pricing sheet on the website. Everyone who works receives a FREE T-shirt! Encourage your students to attend!

The cheapest route to Anaheim short of car or van pooling is to contact the following airlines and use the following NSTA codes to receive discounts off even the lowest online promotional fares. Restrictions may apply.

American – 1-800-433-1790	NSTA STAR File 9346AT
Continental – 1-800-468-7022	NSTA Reference No. 3HXJNY (\$10 fee/ticket)
Midwest Express – 1-800-542-2022	NSTA Conv. File No. CMZ6568
United – 1-800-521-4041	Meeting ID Code 510CK

Disneyland Resort is offering NSTA convention attendees discounted shuttle service to and from SNA (Orange Co) and LAX (Los Angeles airports and NSTA Hotels. There is a coupon (pg 42) of the Advance Program to take advantage of this special rate.

Housing options are available on line also. Many experienced NSTAers strongly recommend sharing rooms with some friendly, known or vouched for by someone you know, fellow teachers. Fellow conference goers can make the conference experience even more enjoyable. If any faculty are having difficulty finding housing for your students at NSTA contact Roxanne Miller at Chapman University in Southern California at [rgmiller@chapman.edu](mailto:rgmiller@chapman.edu).

The following list of events may be of particular interest to pre-service teachers/student chapters, in addition to a huge list of sessions and social events. Tickets for some social events can be purchased with their registration.

01. Preservice and New Teacher Breakfast – sponsored by Kendall-Hunt Publishing Company. Thursday, April 6, from 9:00-10:30 AM. Reserve your space – Tickets (#M-1; \$10 advance, \$15 on-site) required and if still available, must be purchased at the Registration Area before 9:00 PM on Wednesday, April 5.
02. Starting an NSTA Student Chapter: Faculty and Student Perspectives - Thursday, April 6, 9:30-10:30 AM Redondo, Hilton Anaheim.
03. Student Chapter Poster Session Share-a-Thon. - Thursday, April 6, 12:30-1:30 PM Marquis Center, Anaheim Marriott.
04. Meet Your Preservice Teacher Representative – Thursday, April 6, 2:00-3:00 PM, Newport Beach/Rancho Las Palmas, Anaheim Marriott.
05. NSTA Conference Tips for First Timers. Thursday, April 6, 3:30-4:30 PM, Marquis Center Ballroom, Anaheim Marriott Hotel.
06. Attendee Reception – Thursday, April 6, 5:00-7:00 PM, will be an exclusive time for attendees and exhibitors to discuss and learn about new products and teachers' needs in the classroom.

There are also several NSTA District Receptions on late Thursday and Friday afternoon. See the program for which state your district is in. The entire program can be viewed on the web at [www.nsta.org/conferences](http://www.nsta.org/conferences). We also encourage you, if you have not already, to take your methods students through the introductory methods class activity developed by Laura Henriques from California State University, Long Beach. This was posted on the ASTE website. It is an excellent opportunity to introduce students to professional organizations and attending conferences. Hope to see many of you and your students in Anaheim.

Herb Brunkhorst, Past President, ASTE  
NSTA representative on the ASTE Board

Bonnie Brunkhorst Past President, NSTA

## Graduate Student Forum Buzz – by Chair, Catherine Koehler, University of Connecticut

I would like to introduce myself as the new Chair of the ASTE Graduate Student Forum (GSF). I am currently finishing my doctoral program in Science Education at the University of Connecticut. Things get quite hectic at the end of your program but I will do my best to keep you informed as to the activities and discussions in the Forum. I took over the position from Rudolf Kraus at the Annual Conference in Portland Oregon last month.

For those of you in attendance at the Conference, you will concur with me that ASTE is moving science education in a positive direction. The presentations and activities were extraordinary and I would like to thank the Conference Committee for an outstanding job! Something that impressed me occurred during the Annual Luncheon. Different groups were asked to stand and when it was the graduate students' turn, I was surprised to learn that approximately one third of the attendees were graduate students! We are the future of the organization and it is important that we take a vital role in shaping it by presenting and becoming involved.

During the Conference, the Graduate Student Forum sponsored two meetings. The first was a panel discussion with senior researchers (Julie Luft, Janice Meyer, William Newman, and Barbara Crawford). This discussion was primarily directed toward applying for faculty positions and the interview process. This gathering was informative and enlightening. The second was the annual meeting of the GSF. During this lunch gathering, we discussed elections for 2007 and our participation in the 2007 ASTE Conference which will be held in Clearwater FL. Regarding elections, I am requesting nominations from potential candidates for the position of Chair Elect. The Chair Elect works together with the current Chair in the development of GSF programs, particularly with regard to the Annual Conference. Anyone interested in this position, please contact me and Janice Meyer ([sissianne@aol.com](mailto:sissianne@aol.com) and MeyerJ@uhcl.edu) by March 15 with a brief statement of intent and a short bio. We will compile a list of all interested parties and post this information on the GSF listserve. We will conduct the election during the month of April. At the meeting, we had one volunteer interested in the position of recording secretary. This zealous individual, Laura Smetana from the University of Virginia, will now serve as our recording secretary for 2006. Thanks Laura for volunteering. Also Karen Shuck has volunteered to continue to serve as the manager of the GSF listserve. Thanks Karen! With regard to our participation at the 2007 ASTE Conference in Clearwater, FL (January 3-6, 2007), it was suggested that the GSF sponsor a cocktail hour one evening. Other suggestions for our Pre-session meeting included a round-table discussion with invited faculty about how to publish, the ethics and authorship as a graduate student and NSF funded programs for graduate students. These suggestions are by no means set in stone and I welcome any new ideas from our membership.

Finally, I offer each of you a challenge: since we all have science education colleagues at our home institutions, I challenge each of you to invite your colleagues to join the GSF. My mission is to give the GSF a voice in ASTE. We can only do this by numbers so please, help the cause. Last but not least, those of you who are attending NARST in San Francisco, let's try to get together for a luncheon on Tuesday, April 4th. Check out the NARST bulletin board for details. I hope to see you there. If anyone is looking for a roommate at NARST, we can coordinate something through the GSF listserve. I look forward to your suggestions and responses!

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### **Wanted:** "The American Biology Teacher"

A German science educator working in a teacher training department is looking for back volumes of "The American Biology Teacher" for his department. Perhaps a retired colleague might clean up his or her shelves and at the time help the German teacher educator? Shipping will be paid. Contact: [merzyn@uni-lueneburg.de](mailto:merzyn@uni-lueneburg.de)

Sincerely, Gottfried Merzyn.



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

### **ASTE Newsletter**

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Phone: 928-317-6412  
Fax: 928-317-6419  
Email: merton.glass@nau.edu

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As an active member in ASTE, we are asking for you to nomi-  
nate an ASTE colleague or colleagues for the following offices:

- ✓ President
- ✓ Director at Large
- ✓ Elections Committee

Please email your nominee(s) to Joanne Olson

**[jkolson@iastate.edu](mailto:jkolson@iastate.edu)**

Please include:

- ⇒ Name of nominee
- ⇒ Position nominated
- ⇒ Contact information for reaching you or the nominee