

ASSOCIATION FOR SCIENCE TEACHER EDUCATION

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In This Issue :

President's Message	1
Announcements	3 – 11
Special Flier as an Insert	
Call for nominations	12

ASTE ASTE

Newsletter

President's Newsletter Message Patricia E. Simmons, ASTE President



“How can we, the science teacher education community of practitioners, researchers, and consumers, lead policy?”

President's Message

As we work in preK-12 school settings, institutions of higher education, and cultural institutions, I am reminded of the following quote by H. G. Ginot, “Teachers are expected to reach unattainable goals with inadequate tools. The miracle is that at times they accomplish this impossible task”. During our successful meeting in Colorado Springs this year, this sentiment was echoed numerous times in sessions conducted by colleagues working in all educational settings. It is clear that we (the community of science teacher educators) continue to deal with a large number of issues and challenges (the nature of problems and needs in science teacher education, effectiveness of curricula and teacher education programs, high stakes testing, accountability, alternative teacher licensure) cutting across local, national, and international levels.

Faced with the challenges presented by budget constraints and legislation, such as the No Child Left Behind Act and the Higher Education Reauthorization Act, we must direct our thinking toward more informed strategic planning and actions by which we can directly and comprehensively influence and lead policy. As a science teacher education community and organization, we must respond professionally and proactively by informing all levels of stakeholders and policy makers about high quality research studies in the literature base and highly effective practices and programs. Through our professional societies and organizations, such as the Association for Science Teacher Education, we can and must take on the leadership role on policy affecting science teacher education.

How can we, the science teacher education community of practitioners, researchers, and consumers, lead policy?

Over the past 50 years, we have developed many science education resources, and accumulated information and ideas about how people learn and about the nature of effective science teacher education. The excellent materials and strategies we have developed and what we have learned must be applied more consistently in practice and policy. Concurrent with this, we also 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. These **outcomes can be institutionalized through a variety of channels, such as generating new standing committee charges and organizational priorities,**

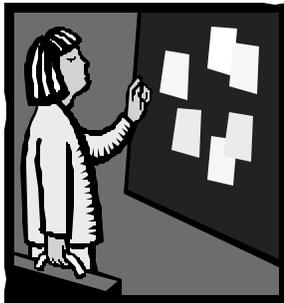
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President's message continued

establishing collaboratories (regional/local levels and at the national level, such as an ASTE Collaboratory on Exemplary Science Teacher Education Programs) to bring together practitioners and researchers, using products to inform/revise NSTA/NCATE work and ASTE position statements, and helping federal agency (the National Science Foundation and the Department of Education) leadership set recommendations for funding priorities. Most important is our communication with elected officials and key education and scientific governmental agencies. Each person needs to not only serve as an advocate, but be proactive in policy initiatives at all levels.

One arena in which we do not take as strong an advocacy role that we should is policy initiation and analysis. Our professional association should be viewed as one of the principal or leading repositories and 'databases' for expertise in science teacher education policy, especially policy analysis. To engage in policy analysis and comprehensive planning, we must become familiar with and use the principles by which analysts draft and enact policies. [A policy is defined as a settled course of action to be followed by a government body or institution (used synonymously with plan or program). Policy analysis is a final product (in the form of a memorandum, issue paper, or legislation) resulting from a process that usually begins with a problem definition, includes a discussion of alternatives, focuses on a specific client, promotes a specific perspective, and has an openly political approach (see Patton & Sawicki, 1993, *Basic methods of policy analysis and planning*).] For example, to draft policy requires that participants engage in more narrative styles of reporting. The problem to be solved must be defined, followed by the assembly of evidence/research and the construction of alternatives and selection of criteria by which to assess the policy. Possible courses of action (supported by evidence) with trade-offs ultimately lead to stated recommendations for decisions. Among two important attributes for policy analysis is that we must learn the language of policy planning, policy analysis, and the legislative language. The science teacher education community, working in partnership with the science and policy communities, can assert a leadership role in general policy implications based on available knowledge/research findings and exemplary practices.

To accomplish this goal, we will work toward delineating strategies to address policy in science teacher education (please watch our website for announcements and calls for input), continue to build on strong collaborative relationships with our science and science education organizations and associations, and provide special sessions at our conference to address policy. The summer board meeting (July 7-9) will continue strategic planning for the association with a special focus on policy and the ASTE (developing and implementing a 5 and 10 year comprehensive plan), incorporating major input and feedback from the membership. We will also implement or continue a number of special ad hoc committees to focus on targeted areas such as increasing the participation and membership of science teacher educators outside the U. S., designing and implementing a development plan for the association, and prioritizing recommendations from the mentoring ad hoc committee. We will continue our support of and work with graduate students, focusing on the development of leadership in science teacher education. With the establishment of the newly created Technology Committee (started as an ad hoc committee), a position paper on technology is near completion that will assist the ASTE in strategic planning (a very special thanks to the leadership and commitment of the ad hoc committee and ASTE members for their work). In summary, this year marks our transition to the Association for Science Teacher Education (initiated during the presidency of Herb Brunkhorst). Our Association continues to move forward because of the insights, willingness to collaborate, and professional commitment of members, as exemplified by our motto, "advancing scholarship, collaboration, and innovation in science teacher education throughout the world".



Announcements

The ASTE 2005 NTLI Fellowship in Science Education and Technology for the year 2005 has been awarded to Thomas Koballa, Leslie Upson, Cynthia C. Minchew, Amy Parlo, & Justus Inyega, at the University of Georgia, for their paper: Using Technology to Support Evidence-based Science Teaching and Mentoring.

The paper is available online at: <http://www.arches.uga.edu/~cminchew/papers/>

The NTLI Fellowship is awarded to an exemplary presenter and paper on the topic of Technology in Science Education given at the 2005 AETS annual meeting. As the fellowship recipient, Tom's group will represent AETS by presenting their paper at the Society for Information Technology and Teacher Education (SITE) 2005 annual conference in Phoenix, Arizona in March.

The NTLI Fellowship provides up to \$800 for travel and lodging expenses; complementary SITE conference registration; an awards luncheon; and a plaque for each of the paper authors.

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We are pleased to announce the **2005 election results**. The winners are:

- President - Kathy Norman
- Director at Large - Jon Pedersen and Eileen Parsons
- Elections Committee - Joanne Olson and Ann Cavallo

Congratulations to these members and many thanks to all who ran for office.

Also, the name change was approved and was officially unveiled at the Colorado Springs conference in January when AETS become the **Association for Science Teacher Education (ASTE)**.

Financial Report for 2004

Walter S. Smith Executive Secretary

The fiscal health of ASTE is quite strong. With careful management by the Board over the years, the organization's assets have grown to the point where reserves in a CD and checking are approximately equal to one year's expenses; so the organization is well protected in case of some unforeseen event. Income in 2004, including dues, Nashville conference, sales of Science Education, Journal of Elementary Science Education, back issues of the Journal of Science Teacher Education and address labels, checking and CD interest, and other income totaled \$71,728. Expenses, including editing, printing and distributing ASTE's journal (Journal of Science Teacher Education), sales of Science Education and Journal



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

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Additional Announcements

DISCOVER A NEW WORLD OF EDUCATION

Sponsored by the United States Department of State, the Fulbright Teacher and Administrator Exchange arranges: direct one-to-one classroom exchanges to over thirty countries for teachers at all levels. Most exchanges occur for an academic year. Argentina, Mexico, and the United Kingdom offer fall-semester exchanges. The United Kingdom and Morocco offer six-week exchanges.

In addition to the teacher exchanges, there are administrative exchange opportunities in Argentina, Bulgaria, Canada, the Czech Republic, Estonia, Finland, Mexico, Romania, the Slovak Republic, Thailand, Turkey and the United Kingdom. Jordan, and Uruguay currently offer opportunities to host incoming administrators during site visits to the United States. Germany offers a two-week special program for U.S. principals to study school systems there for several weeks.

The program also offers eight-week seminars in Italy or Greece for teachers of Italian, Latin, Greek or the Classics.

Prospective applicants must meet the following general eligibility requirements:

- U.S. Citizenship
- Fluency in English
- Bachelor's degree or higher
- Be in at least third year of full-time teaching
- A current full-time position

The application deadline is October 15, 2005 for the 2006-2007 program year. For more information and/or an application please visit our Web site: www.fulbrightexchanges.org or call (800)726-0479.

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Developing a 10-year plan for ASTE

The Oversight Committee will be working on a 10-year plan for the Association in the upcoming year. Our goal is to have a working document for the Board and ASTE members this summer and a final document by the Portland conference. In starting this plan, we began with several areas suggested by the Board last summer. Ultimately, each area will have a descriptive statement about the purpose, strategies aligned with the purpose, indicators of accomplishment, and 5- and 10-year benchmarks. The following are the 6 areas that we will be developing in the upcoming year:

Area 1 – Maintaining the health of the Association - This area addresses the financial goals, the management, and the organization of the Association.

Area 2 - Increasing membership and participation – This area includes retaining current members, recruiting science teacher educators who are underrepresented in our association, and mentoring new and potential members.

Area 3 - Impacting science teacher education at all levels – This area currently relates to our work in the area of policy and how the Association will impact science teacher education policy at the local (e.g., schools, universities, colleges), regional, national, and international level.

Area 4 – Disseminating expertise in science teacher education – This area pertains to our recognition and dissemination of the work of ASTE members. It includes the ASTE awards, along with the dissemination of ASTE documents, journals, books, and proceedings.

Additional Announcements

Continued from page 4

Area 5 – Strategies for collaboration – This area describes our work with other organizations to impact science teacher education.

Area 6 - Developing the knowledge base of the membership – This area discusses the education of the membership and includes such initiatives as learning to use technology and understanding local and national policy.

As the plan is just in the beginning stages, we would like to hear from the membership about certain aspects. Specifically, we are interested in knowing 1) Can these areas take ASTE into the next 10- years? If not, what needs to be added?, 2) What additional topics would you include under each area? and 3) What types of activities/strategies would you associate with each area?

Please send this and other comments about this plan to Julie Luft (jluff@mail.utexas.edu) and she will share your comments with the committee. Thanks for your input on this important plan.

From the Publications Committee

The Association for Science Teacher Educators (ASTE) has a new contract for publishing the *Journal of Science Teacher Education* (JSTE). The contract begins immediately and runs through the completion of volume 21. The publishing world has changed dramatically and so has the contract. To these ends, the publications committee is reporting some of these changes in this article. Please contact us if you would like additional information.

The new publisher is Springer. If you would like information beyond that reported here, we urge you to go to their web page (<http://www.springeronline.com/>) for more information regarding their publication services and practices.

Copyright Issues

Copyright is always a big issue with authors and publishers. Many approaches to copyright exist. Some copyright agreements permit anyone to have access to the publication at anytime. Other agreements state that once a publication appears, it is owned by the publisher.

Springer's policy reads as follows:

"...important elements of the publisher's role in the scientific communication process are peer-reviewing, registration and quality assurance. In order to guarantee that the requirements of these three elements are fully met, control of the dissemination of the final article is necessary."

Their policy helps ensure that no one else can use your work without citing the reference and it also prohibits someone else selling your work or using it in ways that you did not approve. Importantly, the Springer policy gives the authors leeway in using their own work(s) that some copyright agreements do not allow.

For example,

- Patent and Trademark Rights: patent and trademark rights, or rights to any process or procedure described in the article.

Additional Announcements

What all this means is that we have a fairly flexible copyright agreement with Springer. For all the details please visit their website at: <http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-111-2-124761-0,00.html>.

- Classroom Use: the right to use the article for personal use, including use in your own classroom provided classroom copies are not offered for sale and are not distributed in a systematic way outside of the employing institute.
- Work for hire: if the article is "work for hire" written within the scope of the author's employment, the employer may use all or part of the information in this article for intra-company use.
- Use at conferences: the right to present the paper at a meeting or conference and to hand out copies of the paper to the delegates attending the meeting.
- Pre-press: the right to retain a pre-press version of the article on a public electronic server such as the World Wide Web. Springer does not require that authors remove versions of their article that differ from the version as published by Springer from publicly accessible servers, however, Springer asks that a link be made to the final published article and that the following statement accompany that link: "The original publication is available at <http://www.springerlink.com/> "to be posted with the pre-press article. Please use the appropriate URL and/or DOI for the article.
- Uncorrected proofs: the right to post the uncorrected proofs of the article on a public electronic server such as the World Wide Web or the author's homepage. These proofs will be sent to you after acceptance by the journal. Springer does not require that authors remove versions of their paper that differ from the version as published by Springer from publicly accessible servers, but Springer asks for a link to the final article to be posted with proofs.
- Final article on a secure network: the right to post the final article on a secure network (not accessible to the public) within the employer's institute. Unfortunately, for logistical reasons it is not currently Springer's policy to provide PDF files. If this poses a particular problem for you or if you have a specific requirement, please contact our Special Licensing Department.
- Final article on a public server: posting of the final published article on a non-commercial public server is allowed when using protected PDFs that are available at a surcharge through Springer's PDF-offprint program."

Online Article Submission and Tracking

The Association and our JSTE editors elected to use Springer's Journal Editorial Office and the Online Article Submission and Tracking System. These services are offered at no additional charge to the Association or to individuals who submit manuscripts to JSTE. This change in the submission process will appear in the "how to submit" portion of JSTE as soon as our editors have completed their training and wish to implement the service. Other important issues are:

Production Schedule

We now have a production schedule that was written and agreed upon by our editors and Springer. Four to four and a half months are needed between receipt of the complete issue prior to the date of publication. That means that all manuscripts must be to the publisher four to four and half months before the complete issue goes to press.

Additional Announcements

Frequency of Publication

The Journal is published in 1 (one) volume per year, consisting of 4 (four) issues of approximately 100 (one hundred) pages each. This is an increase of about 20 pages per issue.

Springer is encouraging the Association to expand *JSTE* to six (6) issues per volume, or increase the number of articles per issue while maintaining the current number of issues at four (4). In either case, the number of published manuscripts would increase by approximately ten (10) per volume.

These increases (pages, articles or issues) will not increase our Association's financial obligation to Springer. However, this will increase the workload for the *JSTE* editorial team, and a change in the financial support from the Association to our editors will have to be negotiated. We are currently working with our *JSTE* editorial team to see if and when these changes can occur and what costs the ASTE will incur.

Advertising

Free advertising in the journal, of other publications is permitted. Paid advertising will only be by mutual agreement.

Your Journal Copy

You will receive the *JSTE* as part of your membership. ASTE is responsible for renewing the annual membership subscriptions—the executive secretaries forward your information to Springer each year after you renew your membership. Springer is then responsible for shipping the issues to the individual members at its expense.

You will receive complimentary access to the online version of the *JSTE* with your paid subscription. This means that members of ASTE may download *JSTE* articles from any place that you have web access.

You will receive free e-access to the *Journal of Science Education and Technology and Research In Science Education*.

JSTE will be available to nonmembers on a “pay-per-download” basis of an article. Some publishers are pay-per-view only. This means you can only read the article on your screen. With Pay-per-download you download the article and use it when you are ready. You download to the device of your choice, eg. PDA, computer, etc. Also, the first issue of each year is free to the public. The “pay-per-download” is one way that the Association receives revenue.

E-journal Capabilities

Our journal is available via several indexes (e.g. Wilson) that most libraries subscribe to—your library can give you details regarding how you may download our manuscripts via the electronic format.

Contributors to *JSTE* may now publish formats that were in the past not available. For example, video, large graphics, and other formats will be just a click away when accessing the electronic journal format. The print form of the journal will name the web site that such materials can be found. Our editors will post this in the “what to submit” page of *JSTE*. When the editors are ready and able to make the change.

Please remember to use *JSTE*. The more “hits” our articles produce the more likely we are to gain additional indexing of the various forms.

2006 ASTE International Conference

Portland Marriott Downtown

Portland, OR

January 12-14, 2006

Please provide the requested information *exactly* as you wish it to appear on the conference program.

Presenter Information

Name:	Affiliation:
Address:	Work Phone:
City:	Fax Number:
State, Zip, Country:	E-mail:

Use the space below to list the name(s), affiliation(s), address(s), and contact information for all additional presenters.

--

Session Information (choose only one!)

- Paper Presentation** – a presentation of a research study, philosophical essay, position paper, or innovative idea delivered in a traditional transmission format of **15 minutes**, followed by **5 minutes** of discussion. Please choose one of the following that best describes your presentation:
- Research study
 - Philosophical essay
 - Position paper
 - Innovative idea.
- Interactive Poster Session** – a visual presentation, such as poster or other creative format, and one-on-one conversation of: a) completed or in-progress research study, b) science education or teacher preparation issues or perspectives, or c) practices in teacher education. Please choose one of the following:
- Poster session during Thursday evening reception
 - Poster session scheduled during concurrent sessions.
- Small Group Roundtable** – Similar to a traditional roundtable, but with multiple papers being discussed simultaneously. Conference organizers will group 3-6 papers on a similar topic for an interactive discussion session. Each author will provide a brief synopsis of the paper (**5-7 minutes**) followed by a whole group discussion to share perspectives on the issues presented. For planning purposes, times will be as follows:
- 1-3 facilitators – **½ hour** session
 - More than 3 facilitators or panel – **1 hour** session

Experiential Session – a hands-on session in which a facilitator(s) demonstrates, and participants interact with, materials/equipment, methods, activities, and/or technology applications. This ½ **hour** session should encourage the free exchange of ideas among the facilitator(s) and participants. Please indicate if you will need the Technology-Enhanced Presentation Room at the end of this proposal.

Conference Workshop – a **two or three hour** interactive session focusing on: a) in-depth examination of issues in science teacher education and/or science education, or b) an update on scientific knowledge.

Please indicate time preference:

2 hour session 3 hour session

Session Threads (choose only one!)

- College & University Science Education: Studies about science courses & their impact on preservice/in-service teachers
- Curriculum & Assessment: Strategies for curricula & assessments (published or in action)
- Equity & Diversity: Issues of gender, language, power, culture, etc.
- Innovations in Science Teacher Education: Thinking ‘outside the box’
- Policy and Reform: Their impact on Science Education and ASTE members
- Student Learning: Issues related to Pre-K-12 student learning of science
- Teacher Education (**In**service): Issues affecting science teacher professional development
- Teacher Education (**Pre**service): Issues affecting preparation of science teachers
- Teachers’ Action Research: Studies by teachers about their practice
- Technology: The use of technology in teaching and learning
- Other (write in emphasis) _____

- All concurrent session rooms hold 20-50 people
- Audiovisual Needs – each room will be supplied with an overhead projector and screen. A **limited number** of LCD projectors will also be provided.
- Presenters in need of TV/VCRs or other equipment **must** make their own arrangements with the hotel.

- **Session Description**

Session Title:

Abstract (25 words or less)

- **Proposal**

Please address the following components (1500 words or less):

1. State the focus/problem of your proposal. Support with a theoretical framework.
2. What is the design of your study (i.e. methodology, organization)?
3. State the findings of your study.
4. Describe the relevance of your study to science teacher education.
5. Describe how your proposal would interest the ASTE membership.
6. Provide pertinent reference list.

Please Note: Reviews of the proposals will center on how adequately each of these components is addressed. Proposal quality and the desire to create a balanced program will be criteria for making final acceptance decisions.

I will need the Technology-Enhanced Room (computers provided for participants) for my presentation:

- Yes
 No

I would like to be a **Presenter** for a session(s) in these Threads (Check all that apply):

- College and University Science Education
 Curriculum & Assessment
 Equity & Diversity
 Innovations in Science Teacher Education
 Policy & Reform
 Student Learning
 Teacher Education (**In**service)
 Teacher Education (**Pre**service)
 Teachers' Action Research
 Technology
 Other

ASTE 2005 Annual Conference Proceedings Guidelines

Papers of presentations made at the 2005 ASTE Annual Conference can be submitted for inclusion in the 2005 ASTE Conference Proceedings. The Proceedings will be available on the ASTE Web Site (<http://aste.chem.pitt.edu>).

Papers presented at the 2005 ASTE Annual Conference may be submitted for inclusion in the Proceedings by sending an electronic copy of the presentation as an attachment in Word or RTF format to Warren J. DiBiase at aets2005@email.uncc.edu. Use the lead author's last name when naming the attached file (e.g.- DiBiase). If submitting more than one presentation, follow the lead author's last name with an underscore and a number (e.g.- DiBiase_1, DiBiase_2, etc.). Include the following information in the body of the email:

- Author's name(s)
- Contact information-
 - o Email address
 - o Phone number
 - o FAX number

The 2005 ASTE Conference Proceedings will not be refereed, nor will they be copyrighted. This will allow authors to submit papers included in the Proceedings to journals such as the *Journal of Science Teacher Education* and *Science Education*.

Each submission must be formatted as per the specifications noted below. The Proceedings' editors will review papers, do light editing and make suggested modifications or revisions using Track Changes or Edit Mode. If the paper requires more than light editing, the papers will be emailed back to the submitting author for revision. Submitting authors are asked to return the revised version of the paper within **two weeks**. Use the following scheme when resubmitting the paper as an attached file (Last Name_revised or Last Name _1_revised).

It is anticipated that review by the editors will take about 3 months. The editors reserve the right to not include in the Conference Proceedings, for example: a) documents that do not resemble what is generally considered a "paper" (overheads used in a presentation; handouts such as tables, figures and reference lists without explanatory text), b) papers not prepared in final version using the specified format, c) papers not submitted by a deadline and d) papers not submitted as a single Word or RTF file.

Format Specifications

APA style as presented in the 5th Edition of *Publication Manual of the American Psychological Association* should be followed except as noted below:

Font Style:

Font Size:

Spacing:

Margins:

Justification:

Page numbers

Running Headings:

Title/Authors:

Headings:

Tables and Figures:

References:

Times New Roman;

12 point, except for the paper's title, which should be 14 point;

Body of paper double-spaced; Paragraphs indented 1/2 inch; Quotations from interview transcripts should be single-spaced and indented on both sides;

1 inch all sides;

Left only;

Bottom center (not to appear on final paper);

None;

At the top left margin of the first page of text, please list the paper's title, author (s) and institution(s) only, all single spaced;

See example on the insert on placement of headings; Single space within headings; Leave two blank lines above first level and one blank line above all other headings;

Place in body of the paper; (Follow APA manual recommendations on format;)

Use first level heading, do not start a new page; double space within and between; indent second (and third) line only 1/2 inch.



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

Editor: Mert Glass
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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 Pamela Fraser-Abder

Pamela.abder@nyu.edu

Please include:

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

Thank you for helping us create a strong slate of new leadership for the organization.