Association for the Education of Teachers in Science

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I took the opportunity in the Winter 2000-01 AETS Newsletter to remind the membership about the importance of getting involved in the many levels of AETS. Because much of the work of any organization takes place in committees, I suggested that you might want to become involved at that level. Several of you took the time to communicate with one of the committee chairs and have been included in email correspondences of the committee. These email discussions are very important in helping to establish the recommendations that come from committees. I want to thank you for coming forward and adding your wisdom to the discussions. I also want to encourage those of you who are still unsure of how to “become more active” to reach out to a committee chair or begin establishing a forum. These are ways that your voice can be heard!

As we move further into the year, this is a good time to remind you of two upcoming events: the summer AETS Board meeting and the deadline for proposals for the January 2002 annual meeting. The Leadership Team meets twice a year to conduct the business of the organization. One of these is in conjunction with the annual meeting in January and the other is in the summer.

Summer Board Meeting. The Leadership Team will conduct the sum- mer Board Meeting from June 21 to June 23 in Utah. During this meeting, the committee chairs that have been involved will report on the work that has been done since January. Many of them will have motions to for vote.

All of the committees have been very busy in the five months since our last meeting. The Leadership Team will report on the work that has been done and the work that will be continued. The annual meeting will be held in January and the Board will meet in the summer. The Leadership Team will conduct the business of the organization.

One of the elements of AETS that many of us love is the great variety of (annual meeting) sessions. These sessions are a great way to learn about new ideas and to share our own ideas with others.

(continued next page)
In addition, the Board will use part of the time to examine the suggested edits to the ByLaws. The suggested edits are a result of two years of discussions conducted at the Town Meetings held during the annual meeting. Any changes will have to be voted on by the membership. The AETS Newsletter and ListServ will be used to communicate this information to all members. The Board will also begin work on editing the Mission statement. Again, the members will be kept aware of this through the AETS Newsletter and ListServ.

Proposal Deadlines. For many of us, the annual meeting is the highlight of the year. We get to jump into the new year by attending AETS! If you are on the AETS ListServ, you received a message from Warren Dibiase in April reminding you about the submission deadlines for proposals. For those of you not on the ListServ, go to the AETS website (http://www.aets.unr.edu/) and you will find all the information. You have a June 15 deadline for paper submissions and a July 10 deadline for electronic submissions. I would like to encourage you all to submit!

As usual, you have several types of session formats from which to choose. One of the elements of AETS that many of us love is the great variety of the sessions. You may want to join with others who are doing similar research/teaching and submit a symposium. This is a great way to have multiple individuals represent varied perspectives on an important science teacher education issue. You may want to submit a poster so that you can have one-on-one conversations about your work with peers. Or perhaps you have some really interesting curricular materials, teaching strategies, etc. that you want to share with your peers through a demonstration. Or you may want to engage your peers during a session and feel the interactive session format is for you!! Contributed paper sessions are also an option for those of you who have research results or position papers.

The annual meeting will be in Charlotte, North Carolina. Mark your calendars!! I hope to see all of you in Charlotte where we can share concerns, successes, and questions.

Molly Weinburgh, AETS President
The Southeastern Association for the Education of Teachers in Science will be held at the Embassy Suites Hotel and Conference center at the University of South Florida, Tampa Florida on October 12th (p.m. - Registration and Reception) and 13th (actual conference sessions).

The Embassy Suites conference room rate is $99 per night (each room will accommodate 1-4 people at no extra charge) which includes buffet breakfast and 2-hour Happy Hour for each guest.

For those who may wish to extend their stay (prior to or after the conference) the hotel will extend the same rates. For family and friends the hotel offers discounted fairs and limo service to Busch Gardens (about 5 minutes away). The Museum of Science and Industry (MOSI) including a full IMAX theatre is also about 2 minutes away. Lowry Park Zoo (with its manatee rehabilitation center) is about 10 minutes away and St. Petersburg and Clearwater Beaches are about 40 minutes away.

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Samford University, under a grant from the Pew Charitable Trust, has established a national center for documenting and evaluating the scholarship of problem-based learning (PBL) instruction. Undergraduate faculty are invited to submit applications for developing Problem-Based Learning portfolios that describe the implementation and assessment of PBL approaches in various science disciplines. Accepted applications are awarded a $750 mini-grant, and portfolios are placed into an online PBL registry. Contact George Keller for more information at gekeller@samford.edu or 205.726.2033. Information and applications are available at www.samford.edu/pbl

http://www.aets.unr.edu/
√ join the AETS Listserv
√ view archived annual meeting proceedings
√ view Standards for Science Teacher Educators
√ view information on AETS publications
√ join AETS!

Attention California AETS Members
We have worked with the conference chairs to have an AETS strand at the annual California Science Teacher Association conference in Palm Springs. We hope that this will be the start for stronger connections between AETS and CSTA and increased communications across the K-16 continuum. Ideally, we will be able to have an AETS strand at each CSTA meeting. Not only will this increase collaboration between teacher preparation and inservice teachers, it will also provide us with an opportunity to get together to discuss issues related to California science teacher preparation.

If you are going to CSTA, plan on joining us for dinner! Contact Laura Henriques in early October for details about the dinner (lhenriqu@csulb.edu or 562-985-5949).

Start thinking about a presentation you might want to do at next year’s meeting, October 2002. We plan on sending in a group of presentations for a strand next year. Details will be available from Laura after the conference.

AETS Publications Information
Julie Luft, University of Arizona
Chair, Publications Committee

The AETS Publications Committee oversees several items of importance to AETS members regarding the Journal of Science Teacher Education (JSTE), affiliated journals, the AETS newsletter, and AETS sponsored documents. During the last year, the committee has been involved in a number of projects that directly impact the dissemination of knowledge in science teacher education.

JSTE Articles for Courses – If you are interested in including a JSTE article in your course readings, you can either work with your local bookstore/copy center or Michel Lockhorst at Kluwer to obtain permission to copy the article to include in your course readings. Michel Lokhorst can be contacted at michel.lokhorst@wkap.nl.

Indexes – The Publications Committee is working with Kluwer to get JSTE into the social science citation index and several international educational indexes. These indexes increase our readership and the pool of potential authors.

Monographs – The Publications Committee is interested in receiving proposals for AETS sponsored monographs. If you are interested in writing a monograph, guidelines for the process of submitting a proposal can be found on the AETS website or you can contact Julie Luft (luft@u.arizona.edu).
# AETS 2002 Program Proposal

**2002 AETS Annual International Conference**  
*Science Education: Financing Scientific Literacy for Global Success*  
*Charlotte Marriott City Center*

**January 10-13, 2002**

*Provide the requested information exactly as you wish for it to appear in the program*

Presenter Information (attach information for additional presenters on a separate sheet)

| Name______________________________ | Affiliation___________________________ |
| Address____________________________ | Work Phone__________________________ |
| City_______________________________ | Fax Number__________________________ |
| State, Zip, Country___________________ | Email_______________________________ |

Session Information (descriptions appear below)

**Type of Session (check one)**
- [ ] Contributed Paper (30 min)
- [ ] Panel Symposium (60 min)
- [ ] Demonstration (30 min)
- [ ] Poster Presentation
- [ ] Interactive Session (60 min)
- [ ] Other (please describe) ______________

**Intended Audience (check all that apply)**
- [ ] elementary
- [ ] high school
- [ ] supervision
- [ ] pre-service
- [ ] middle school
- [ ] college
- [ ] in-service
- [ ] informal

**Session Focus (check major emphases)**
- [ ] Science Teaching
- [ ] Professional Development
- [ ] Science Assessment
- [ ] Science Content
- [ ] Science Program and Systems

- All concurrent session rooms hold 50-60 people
- Audiovisual Needs – each room will be supplied with an overhead projector and screen.
- Presenters in need of TV/VCRs or other equipment must make their own arrangements with the hotel (Ms. Tina Wright, Event Delivery Manager, 704. 358.6753 or tina.wright@marriott.com). Please note that the rental fee for this equipment is the responsibility of the presenter. It is suggested that presenters needing such equipment use the AETS L-Serve to contact other individuals needing a TV/VCR and share the cost.

**Session Description**

| Session Title __________________________________________________________ |
| Abstract (25 words or less) |

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Proposal
In 1500 words or less, describe the theoretical background of the presentation, the relation of this work to other efforts, the relevance of this work to science teacher education, and your plan for how the actual presentation would be structured. Include a bibliography. Reviews of the proposals will center on how adequately each of these components is addressed. Proposal quality as well as the desire to create a balanced program will be criteria for making final acceptance decisions.

Details on Session Information
- **Contributed Paper**: Presentation of research results, philosophical essay or position paper.
- **Demonstration**: Exhibition of curricular materials, teaching strategies, technological applications, etc.
- **Interactive Session**: Presenter initiates consideration of a topic with majority of time devoted to active audience participation (e.g., hands-on activities, small group discussions, etc.)
- **Panel/Symposium**: Presentation by multiple individuals representing varied perspectives on an important science teacher education issue. Opportunities for audience involvement.
- **Poster**: Visual presentation of work in progress with one-on-one conversations about materials.

Proposal Transmission Options
- **Electronic Option** – Prepare your proposal in your favorite word processing program. DO NOT use any formatting in your proposal. Please do not use fancy typefaces and fonts, boldface and italics, underlined words and justified paragraphs, and tabs and tables. Please double space paragraphs, capitalize titles and headings, and indent using the spacebar. Since reviewers will be using a variety of email systems, the simpler the proposal, the more efficient and effective the review process will be.
  
  Type the requested information from the Program Proposal Form directly into your email message. Paste your proposal directly after the form data into the same email message. Please DO NOT send your proposal as an attachment. The subject line of your email should read: “AETS Proposal”

  Please send the entire message on or before July 10, 2001 to: AETS2002@vanderbilt.edu

  If you find it necessary to provide non-text information (i.e., graphs, tables, illustrations, photographs, etc.) you can fax such materials to the number listed below OR within the body of your proposal you can point the reviewer to the appropriate URL. Fax: 615.322.2291 Attention Cliff Hofwolt.

  You will receive electronic notification of the Program Committee's receipt of your proposal. Email will also be used to inform you about the acceptance or rejection of your proposal.

- **Hard Copy Option** – Prepare FIVE (5) copies of your proposal attaching a completed Program Proposal Form to the front of each copy. Please send these copies along with two self-addressed stamped envelopes so it will be received by June 15, 2001 to:

  AETS 2002 Program Committee
  Attn: Cliff Hofwolt
  Box 330, Peabody College
  Vanderbilt University
  Nashville, TN 37203

  The Program Committee follows the same minimum safety guidelines as for NSTA functions:

  http://www.nsta.org/conv/safety.htm

Program Coordinators: Clifford Hofwolt and Kathy Cabe Trundle
Examining Pedagogical Content Knowledge

Contents and Contributors
Acknowledgments. Foreword; L. Shulman.

Section I: Introduction
1. Pedagogical Content Knowledge: An Introduction and Orientation; J. Gess-Newsome.

Section II: The Literature
2. The Complex Nature and Sources of Teachers’ Pedagogical Knowledge; G. Morine-Dershimer, T. Kent.
3. Secondary Teachers’ Knowledge and Beliefs about Subject Matter and their Impact on Instruction; J. Gess-Newsome.
5. Domains of Teacher Knowledge; W.S. Carlsen.

Section III: Emerging Lines of Research in Science Teacher Education
6. Assessment and Measurement of Pedagogical Content Knowledge; J.A. Baxter, N.G. Lederman.
7. Changing our Teaching: The Role of Pedagogical Content Knowledge in Elementary Science; D.C. Smith.
9. Pedagogical Content Knowledge and Co-Participation in Science Classrooms; K. Tobin, C. McRobbie.

Section IV: Impacts of PCK on the Development of Science Teacher Education Programs

Section IV: Cross-Cultural Perspectives on Science Teacher Education
9. A Meeting of Two Cultures: The Experience of Facilitating a Teacher Enhancement Project for Egyptian Science Teachers; Janice Koch, Hofstra University & Angela Cabarese Barton, Teachers College, Columbia University, USA
10. International Partnerships as a Means of Reforming Science Teacher Education. Bolivia, Chile, Venezuela, and the US; Jon Pedersen, East Carolina University, USA, Ron Bonnsteller, University of Nebraska, USA; Marlu Roseco, Universidad de Concepcion, Chile; J. Mauro Briceno-Valero, Universidad de los Andes, Venezuela; Hernan Garcia, Cochabamba Cooperative School, Bolivia; Janice Koch, Hofstra University, USA; Lilia Reyes Herrera, Universidad de los Andes, Venezuela.
11. International directions in scientific literacy: Implications for training science teachers; Deborah Tippins, East Carolina University, USA, Sajin Chun, South Korea; Hideo Ikeda, Japan; Elizabeth McKinley, New Zealand; and Lilia Reyes Herrera, Colombia.

ORDER FORM

Science Teacher Education: An International Perspective

Experiencing Pedagogical Content Knowledge

Method of Payment (For Visa/MasterCard complete information below)

Check US$____, Money Order US$____, Visa $$____, MasterCard $$____

[Make Check or Money Order out to “AETS”]

Name: ____________________________________________

Mail this with appropriate payment to:
Dr. Jon E. Pedersen, AETS Books, University of Oklahoma, 820 Van Vleet Oval, Norman, OK 73072-1900

• Add 5% of total for shipping and handling.

TOTAL—PAYING BY CHECK/MONEY ORDER:

($____)

ORDER FORM

Please note: The following options are available for orders of 2 or more books:

o Order between 2-5 books and receive a 15% discount

o Order between 5-10 books and receive a 20% discount

o Order between 10-20 books and receive a 25% discount

o Order over 20 books and receive a 30% discount

(see additional discount information on back cover of this newsletter)
REGIONAL WORKSHOPS FOR EDUCATORS ON STANDARDS-BASED SCIENCE AND MATH TEACHING HOSTED BY AAAS’S PROJECT 2061

A series of regional three-day workshops designed to help school leadership teams bring standards-based science and mathematics programs into the classroom will be held by Project 2061, the long-term K–12 education reform initiative of the American Association for the Advancement of Science. The Focus on Standards for Science and Mathematics professional development workshops will be held this summer in Columbia, MO (June 26–28), Minneapolis, MN (July 10–12), Houston, TX (July 10–12), Seattle, WA (July 17–19), and Cleveland, OH (July 31–Aug. 2). Fall workshops are scheduled for Baltimore, MD (Oct. 4–6), Atlanta, GA (Oct. 4–6), New Orleans, LA (Oct. 25–27), and Miami, FL (Nov. 1–3).

For more information on these and other Project 2061 programs, including the Focus workshops, call 202-326-6666 or visit www.project2061.org.

Publications of Interest to AETS Members

From the National Science Foundation

This handbook was developed to provide Principal Investigators and project evaluators working with the NSF’s Directorate for Education and Human Resources with a basic understanding of selected approaches to evaluation. It is available on-line at:

User-Friendly Handbook for Mixed Method Evaluations (nsf97153)
This handbook builds on the above but amplifies the role of a combination of quantitative and qualitative evaluative techniques. It is available on-line at:

From the National Academy Press

Testing Teacher Candidates: The Role of Licensure Tests in Improving Teacher Quality
A report which presents the findings of the Committee on Assessment and Teacher Quality of the National Academy of Science’s Board on Testing and Assessment. Available at:
http://www.nap.edu/catalog/10090.html

Knowing What Students Know
A report of the NRC’s Committee on the Foundations of Assessment. A “natural extension of the conclusions and recommendations of How People Learn.” Available at:
http://www.nap.edu/catalog/10019.html
Destination: Charlotte, 2002

The Mid-Atlantic Regional Unit and the City of Charlotte are proud to host the 2002 Annual International Meeting of the AETS. The conference theme is Science Education: Financing Scientific Literacy for Global Success. Preliminary details and conference program proposal inside.