

E-NARST NEWS

National Association for Research in Science Teaching

*Organized to improve science
teaching through research*

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Message from the President

Invitation to Attend the NARST 2009 International Conference April 17-21

Charlene M. Czerniak, NARST President

The annual NARST conference will run from Friday, April 17, 2009 until 11:00 p.m. on Monday, April 20, 2009. The conference hotel is the Hyatt Regency on 11999 Harbor Blvd, Garden Grove, CA 92840. It is just a short drive away from area beaches, shopping outlets, and other attractions. It is easily accessible from all nearby airports.



Charlene M.
Czerniak, NARST
President

The theme of our annual international conference this year is Grand Challenges and Great Opportunities in Science Education. This theme focuses on the most compelling questions and puzzles facing science educators today, methodological and psychometric challenges in science education research, and major challenges associated with science education that impact our society. We

have two keynote speakers on this topic (Dr. Linda Darling Hammond and Dr. Leona Schauble) plus many of the special symposia and paper sessions relate to this theme.

When you go to register on-line for the conference, you will see there are three pre-conference workshops on Friday, April 17th, each running from 1 p.m. – 5 p.m. The Mentor-Mentee Nexus will run from 6-7 p.m. on April 17th, and the Presidential Welcome Reception will follow it from 7-9:30 p.m. I look forward to seeing you at the Presidential reception.

We received 929 proposals for individual papers, posters, symposia, and related paper sets. This year, the acceptance rate was 64%. Committee meetings, plenary sessions, concurrent sessions, and posters will be presented on our first full day on Saturday, April 18th. The NARST Business Meeting will be held

continued on next page ▶

In this Issue...

Message from the
President: 1

Pushing NARST's Policy
Agenda: 3

NCSE Resolutions 2008: 4

Changes in NARST Within
the Last Six Years: 5

Equity and Ethics
Committee: 6

External Policy and Relations
Committee: 7

Help Promote NARST
at NSTA: 8

International Committee: 9

Publications Advisory
Committee: 10

Research Committee: 11

From the Editors of
the JRST: 12

A Message from the
Executive Director: 13

at noon on Saturday, and we encourage all NARST members to attend the annual Business Meeting, which will include a box lunch for the first 100 individuals who sign up to attend. At the Business Meeting you will get an update on NARST committee business, including hearing from Bill Kyle, our NARST Executive Director, about NARST's financial balance. Finally, graduate students are invited to attend the Graduate Student Forum from 6:30-7:30 p.m. on the 18th.

On Sunday, April 19th, we will continue with morning committee meetings, a plenary session, and concurrent sessions throughout the day. The Awards Luncheon will be on this day, so more people can attend and we have more time to congratulate the awardees. Your conference registration includes the meal at the Awards Luncheon. Additionally, the IJSME meeting and New Researcher/Junior Faculty Early Career Discussions will be held from 5:45-6:45 p.m. The Equity Dinner will also be held from 7-9 p.m.

Monday, April 20th is the last full day of the conference. Strands will meet in the morning. Your current strand coordinators and the new one selected by President-elect Rick Duschl for 2009-2011 will organize the discussion to obtain feedback from NARST members. Any member can attend the Strand Meeting that is of most interest to them. The day will be filled with five concurrent sessions. Additionally, we have special technology sessions running the entire day, which are sponsored by Apple Computer. These special technology sessions will highlight some of the most cutting edge research that NARST colleagues are conducting using technology. Thanks go to Randy Yerrick and Carla Zembal-Saul for organizing these special technology sessions. On Monday, concurrent sessions will extend through 6:15 p.m. From 6:30-10:00 p.m., a special social event will be held. Additionally, the annual FARSE social will run from 8-10 p.m.

The 2009 conference registration fee will be \$220 for NARST members. The NARST contract also provides free Internet access for those NARST registrants who are staying at the Hyatt Regency. Once the information is posted on the NARST website, the advance registration deadline will be March 27, 2009; after that, on-site registration will be \$275. That information will be available in early January. We have posted the draft program at http://www.narst.org/annualconference/2009_preliminary_program.pdf. In early January, the draft program, listing all names of presenters and presiders, will be available. The hotel rates are as follows for the 2009 conference:

Single: \$179
Double: \$189
Triple: \$199
Quad: \$209

I look forward to seeing you in Garden Grove in April 2009!

Pushing NARST's Policy Agenda



*Richard Duschl,
President-Elect*

With election to the 3-year term of office of NARST President comes an invitation to participate in the Council of Science Society Presidents (<http://cssp.us>). CSSP is an organization of presidents, presidents-elect and recent past presidents of about 60 scientific federations and societies. CSSP functions as a voice for science and science education policy on the national scene and provides a forum for discussions on emerging scientific issues. There are two 4-day meetings each year; one in December and one in June or May. Last June Charlene Czerniak and I attended the Spring 2008 meeting together and we did so again for Winter 2008. This is a wonderful opportunity for networking.

The CSSP committees of interest to NARST and to which we have participation are Science and Mathematics Education and Public Understanding and Appreciation of Science. In addition to NARST, other education associations attending CSSP and sitting on these two committees are National Science Teachers Association, National Council of Mathematics Teachers, and the Association of Science Teacher Educators.

The final day of the CSSP meeting is a visit to Capitol Hill. We start with a breakfast in the morning attended by a small group of invited Congressional members and staffers. The remainder of the day is dedicated to visiting with staffers of Senators and Representatives who sit on STEM policy and/or STEM education committees. What emerges from the CSSP committee meetings is a set of Action Items that are voted on and approved by the CSSP members. These are then made available to pass out to staffers during our day on the Hill.

This year on behalf of NARST and CSSP I met with staffers of Connecticut Senator Christopher Dodd, New York Senator Hilary Clinton, and Pennsylvania Senators Arlen Specter and Robert Casey. All of the staffers were engaging and interested in matters of science education. The staffer for Senator Clinton was an AAAS Fellow completing an internship on the Hill. I would like to sug-

gest that NARST consider supporting such a fellowship in the future. The agenda with the staffers is to try and position NARST in a stronger policy and service arena for individuals working on STEM legislation. As information is needed about science teaching and learning in schools, in after-school programs, and in out-of-school venues, I hope that NARST members can be called upon to provide evidence and guidance. To this end, I am attempting to get NSTA, NCMT, and ASTE, as well as some of the numerous science societies in CSSP, to join NARST in sponsoring *A Day on the Hill* each spring to coincide with the CSSP meeting. I would be interested in hearing from members if you have any thoughts or interest in NARST's engagement with STEM education policy and leadership.

I also attended the NSTA - National Congress on Science Education (NCSE) this past summer in Indianapolis. NARST is a member of the NSTA Association of Affiliates (AoA) and is invited to send representatives to this important gathering of leaders from State science teachers associations, elected regional NSTA delegates, NSTA committee directors and executive board members. NARST's participation at this 3-day meeting is critically important and can serve to compliment and coordinate the STEM policy efforts of NARST with NSTA and with the other affiliates. The hope is to have both the NARST Research Coordinator and NARST President commit to attending this meeting over consecutive years so as to build rapport with the teachers and leaders associated with NSTA.

If NARST is sincere about making strides in reaching out to teachers and practitioners, then the NSTA NCSE is the venue to most effectively do so. It is here at the NCSE that the future agenda of NSTA is established. The meeting is very political and functions like the US Congress with a House of Representatives (The State Affiliated Teachers Associations), a Senate (Council: 18 District Directors, 7-8 Affiliates) and an Executive (3 Presidents, 10 Division Directors). Votes/decisions at one level can be overturned at the next.

I was invited by NSTA President Page Keeley to lead Focus Group 6: Bridging the Gap from Research to Practice

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and from Practice to Research. Julie Luft, NSTA Research Director, was in attendance and the session facilitator was Christine Royce, NSTA District IV Director (Pennsylvania). Time was allocated to two topics: the NRC report *Taking Science to School* and the *NSTA Taskforce Science Anchors*. The role of Focus Groups is to put forward resolutions that will be voted on as action items. The job of the facilitator is to make sure teachers' voices are heard. Of the 4 resolutions that emerged from our Focus Group – all dealing with research – only one was passed by the vote of the State teachers' representatives, but in the end none were adopted by

the Congress. The message is clear; we have a lot of work to do to get teachers to appreciate the value of science education research. NSTA leadership is on board, but we need to join forces with teachers, too.

Below are the resolutions passed for 2008. NARST should select one or two resolutions to be an ACTION item. For example, consider resolution 7/08CNG10, here the NARST website may be linked to NSTA's and begin to share information about resources/strategies for teachers that are supported by research evidence.

NCSE Resolutions 2008

Addressed to the attention of the Chapters, Affiliates, and Associated Groups for their consideration

7/08CNG1 Be it resolved that the National Science Teachers Association (NSTA) work with Chapters, Affiliates, and Associated Groups to identify strategies for accessing the talents and expertise of retired science teachers in order to support and enhance science education, and that these strategies be shared with the attendees of the 2009 National Congress on Science Education

7/08CNG3 Be it resolved that the National Congress on Science Education encourages the Chapters, Associated and Affiliated Groups to disseminate the NSTA position statement on Elementary School Science to state education agencies, colleges and universities that accredit administrators and pre-service teacher educators, and to all elementary administrators.

7/08CNG4 Be it resolved that the National Congress on Science Education encourages Chapters, Associated and Affiliated Groups to identify high quality community resources (e.g. informal science institutions, science speakers) and share these collections with teachers in order to support relevant effective science instruction.

7/08CNG7 Be it resolved that the National Congress on Science Education 2008 encourages the Chapter, Associated Groups and the Alliance of Affiliates to include conference strands that blend inquiry and experiential learning into STEM and 21st Century Skills for Pre-Kindergarten-16 curricula.

7/08CNG8 Be it resolved that the National Congress on Science Education encourages Chapters, Associated Groups and the Alliance of Affiliates to support both formal and informal educators of science by publicly advocating strategies to assist in the identification of valid science in popular media/materials to cultivate scientifically literate citizens.

7/08CNG10 Be it resolved that the Chapters, Associated Groups and the Alliance of Affiliates are encouraged to utilize interactive, collaborative technologies to promote current and highly effective resources for their members.

7/08CNG14 Be it resolved that the 2008 National Congress on Science Education encourages Chapters, Affiliates, and Associated Groups, to promote high quality professional learning opportunities that are focused on teaching science to students of poverty.

7/08CNG16 Be it resolved that the National Congress on Science Education encourages the Chapters, Affiliates and Associated Groups to actively promote Science Professional Learning Communities that are characterized by a shared vision, engaged collaboration, and collective responsibility.

7/08CNG24 Be it resolved that the 2008 National Congress on Science Education recommends that Chapters, Associated Groups and Affiliates actively seek participation in the development of local and state STEM literacy initiatives.

7/08CNG9 Be it resolved that the National Congress on Science Education advocate the selection of non print-based science curriculum materials that are current, global, and technologically accessible.

7/08CNG15 Be it resolved that the National Congress on Science Education promotes Professional Learning Communities (PLC) as a model of high quality professional development to improve student achievement and support highly effective teaching practices in science.

Changes in NARST Within Last Six Years



*Penny J. Gilmer,
Past President of NARST*

I decided to write about the changes that I have seen within NARST in the past six years. In Spring 2003, I started on a three-year term on the Board as Chair of the Publications Advisory Committee (PAC). At that time we had no overlap of committee chairs, so I learned the responsibilities by attending one session that the previous chair had at the annual conference on getting published in our journal, JRST. At that time I inherited mainly paper files.

While being PAC Chair I developed the electronic E-NARST News, as the previous printed NARST News publication had mainly the conference program and the President's annual award address. I wanted our members to know the issues addressed by each of our committees so the plans and activities of our organization would become more transparent to our members. Each committee chair generally writes an article at least once a year for the E-NARST News.

We reorganized the Board so that we utilize our Board members more effectively, now with six standing committees, each chaired by one Board member. In the chair's third year on the Board, one of the three incoming Board members becomes co-Chair of that committee. The task of teaching the new Board member the duties and responsibilities is much easier with this yearlong overlap. In addition, our International Coordinator chairs the International Committee, but we do not have build-in overlap as we do with the other committees.

During my final year on the PAC, the Board decided to hire a management company, DMG, Drohan Management Company. DMG's first year as our management company was my year as President-elect. Robin Turner has been our consistent contact person from DMG, and with time we learned to work effectively with DMG. DMG excels on many aspects, including managing our funds and putting together the conference program book and the CD of the conference papers. I worked considerably with Podi.com in developing the program that would allow NARST members to upload conference proposals electronically and for the Strand Coordinators to organize the reviews by strand.

I became part of the Presidential team when elected President-elect in Spring 2006. As President-elect, we reorganized and expanded the number of strands from 12 to 14. In my years as President, PAC members worked with Podi.com to improve the features of our NARST Web site.

However, one issue I confronted was that NARST needed to learn the process of developing the program for our annual conference. Fortunately, my daughter, Helena Safron, helped me identify the TTMaker software, which we still use to develop a conference program without author conflicts.

My year as President-elect was difficult not only because we had just started to work with our new management company and we had to learn to develop the conference program, but also because I was in charge of the NARST conference for two consecutive years. Normally, I would have chaired the conference only for my year as President-elect, but NARST changed the policies and procedures so that the President would be in charge of the conference starting the year I became President. I got a double dose.

In my six consecutive years on the Board, NARST went electronic, including files to incoming committee chairs, submission and reviews of conference proposals, membership renewal and conference registration, scheduling the conference, new Web site, and E-NARST News.

I learned tremendously from the experience of being on the NARST Board and the Presidential team. I worked with many dedicated science educators and learned from the others on the Presidential team, Board members, executive directors, strand coordinators, DMG staff, and NARST members. Thank you for trusting me with leadership of our organization and for electing me!

Equity and Ethics Committee

*Valarie Akerson,
Chair*

The Equity and Ethics Committee has been busy preparing events for the NARST 2009 conference. We are excited about our work and our offerings. We are sponsoring a pre-conference workshop and two symposia, and have numerous poster and paper presentations within Strand 11. Below we foreshadow the NARST 2009 events we hope you will attend. We also invite you to our committee meetings at NARST which will be listed in the Program.

Pre Conference Workshop:

Grand Challenges and Great Opportunities in Science Education for Scholars of Color

Facilitators: Maria Rivera, Barnard College and Felicia Moore, Teachers College

Panelists: Eileen Parsons, University of North Carolina, Chapel Hill; Jerome Shaw, University of California, Santa Cruz; Claudette Giscombe, University of Massachusetts, Amherst; Sumi Hagiwara, Montclair State University, Malcolm Butler, University of South Florida, St. Petersburg

The pre-conference workshop emphasizes opportunities available to scholars of color in science education. Each panelist offers specific advice about conducting research and taking advantage of their unique positions as scholars of color. The panel will field questions from the audience relevant to the grand challenges and great opportunities as scholars of color in science education. Attendees will work in small groups to outline personal or individual plans of research that they may continue to develop after NARST. Breakout groups and work sessions will be lead by facilitators and panelists.

Symposia:

1. Opportunities and Challenges of Equitable Science: A Call for Action at Many Levels

Facilitators: Jrene Rahm, University of Montreal, and Valarie Akerson, Indiana University

Panelists: Doris Ash, University of California, Santa Cruz; Mary Atwater, University of Georgia; Mary Beng, TERC, Cambridge; Cory Buxton, University of Georgia

Discussant: Angela Calabrese-Barton, Michigan State University

Equitable science is accessibility, empowerment, and agency. All persons should have opportunities to engage in a science that is meaningful and psychologically and culturally accessible (Delgado, 2002). All persons should experience opportunities to use science in ways that are empowering, that improve lives and make science pleasurable and worthwhile. Equitable science is about responding to the effects of globalization which calls for the valuing of, and respect for nonmainstream students' funds of knowledge, histories, and communities (Lee & Kuykx, 2006). The invited panel will speak to these issues from the following science education research areas: 1) science teachers; 2) science teacher educators; 3) museums and informal science; 4) tools of science such as curriculum or technology, and 5) policy makers. In each case, they will address ways their field has responded to the challenges yet also take advantage of unique opportunities in issues of diversity, accessibility, empowerment and agency in science education.



*Pre-conference workshop facilitator,
Felicia Moore of Teachers College*

2. Exploring the Grand Challenges and Great Opportunities in Realizing a more Equitable Science Education

Discussant: Gayle Buck, Indiana University

Presenters: Jennifer Adams, Brooklyn College; Geary Cofford, University of Oklahoma; Cesar Delgado, University of Michigan; Allison Kang, University of Washington; Kihyun Ryoo, Stanford University; Stephanie Preston, Pennsylvania State University

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This symposium showcases six of the 2008 Equity and Ethics Committee scholars who are underrepresented in the research community as they present new research that addresses the challenges of underrepresentation in science education. Their research raises and responds to compelling questions of equity and ethics, then addresses those questions from multiple theoretical frameworks and methodological approaches. Together and individually, the work of these scholars affords NARST members a better understanding of the grand challenges and great opportunities from teacher and student perspectives in science education.

Equity and Ethics Dinner

Sunday, April 19, 7-9 p.m. organized by Sandy Jones of Valdosta —more details to follow.



Artwork representing science and the struggle with diversity and poverty created by the 5th-6th grade students of Jrene Rahm (Jrene is a member of the Equity & Ethics Committee)

External Policy and Relations Committee

Lynn Bryan and Betsy Davis, Co-chairs

The External Policy and Relations Committee (EPRC) has been working this fall on several efforts related to fostering the development of partnerships and collaborations with appropriate professional organizations and groups concerned with the quality of science teaching and learning. Several major tasks that we have been working on include:

NARST at NSTA 2009

NARST will once again host a booth at the NSTA annual meeting. The External Policy and Relations Committee has reserved a booth in the Exhibition Hall for the 2009 NSTA meeting in New Orleans. We are using the booth as a means to raise our visibility among K-12 classroom teachers. One outcome related to the success of last year's booth is that the NARST Board approved a reduced membership rate for fulltime pre-college teachers, so that they may have access to JRST. We will have NARST membership applications available at the NSTA booth. Last year at the booth, there were numerous inquiries from teachers about how they can get a subscription to JRST. If you will be at the 2009 NSTA meeting, please consider volunteering a couple of hours to promote the mission of NARST and connect with classroom science teachers! To volunteer, contact Lynn Bryan (EPRC co-chair) at labryan@purdue.edu.

NARST 2009 EPRC-Sponsored Sessions

The External Policy and Relations Committee is sponsoring two back-to-back sessions for the 2009 NARST annual meeting. Mark your calendars for Monday, April 20, from 1:00-4:30 pm. The first session, Math Science Partnerships (MSPs): Rising to the grand challenges of bringing contemporary science to K-12 teachers and students and providing evidence of impact, is a symposium featuring four directors of successful MSPs, as well as representatives from the U.S. Department of Education and the National Science Foundation. Presenters will not only discuss the MSPs' accomplishments, but also focus on research and policy challenges that they have encountered.

In Part II of Math Science Partnerships (MSPs): Rising to

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the grand challenges of bringing contemporary science to K-12 teachers and students and providing evidence of impact, participants will have the opportunity to interact in Q&A groups with four MSP directors as well as representatives of the U.S. Department of Education and the National Science Foundation.

In addition, EPRC is co-sponsoring a session, Engaging with Teachers around Science Education Research, with the Publications Advisory Committee and the Research Committee. For those interested in external relations and policy issues, we look forward to seeing you in Garden Grove.

Policy for Affiliation with NARST

The External Policy and Relations Committee currently is in the process of drafting a policy for organizations that wish to have affiliation with NARST. We are reviewing existing policies from NSTA and ASTE. Betsy Davis (EPRC Co-Chair) is coordinating this effort.

Guidelines for Creating NARST Position Statements

Another initiative in which EPRC is involved is collaborating in the development of guidelines for the creation of NARST position statements. Members of EPRC (Lynn Bryan and Julie Luft) currently are serving on a sub-committee with members of the Publications Advisory Committee and Research Committee.

Finally, in Fall 2008, we expanded the size of the committee and welcomed three new members. We would like to thank all of the External Policy and Relations Committee members for their ongoing hard work and dedication to the charge of the committee and mission of NARST:

NARST External Policy and Relations Committee

Lynn Bryan (Co-Chair)
Betsy Davis (Co-Chair)
Janet Carlsen-Powell
Julie Luft
Eileen Parsons
Carla C. Johnson
Mike Vitale
Sharon Lynch
Christopher Miller
Andrew Shouse
Kevin Holtz

Any suggestions, comments, or question that you have about any of the above items or activities are certainly welcome. If you are interested in becoming involved in the External Policy and Relations Committee, please feel free to email Lynn Bryan or Betsy Davis (labryan@purdue.edu; betsyd@umich.edu) or come to the committee meetings at the 2009 NARST annual meeting in Garden Grove.

Help Promote NARST at NSTA!

Call from the External Policy and Relations Committee
By Lynn Bryan and Betsy Davis, Co-Chairs

The External Policy and Relations Committee will once again have a booth for NARST in the Exhibition Hall at the NSTA annual meeting. This year's NSTA meeting will be held March 19-22, 2009 in New Orleans, Louisiana. We want to raise our visibility among K-12 classroom teachers and spread the word about what NARST has to offer. We need your help!

If you are a NARST member and will be at the 2009 NSTA meeting, please consider volunteering to staff the NARST booth. It is a great opportunity for connecting with science teachers, promoting the mission of NARST, and providing an important service to our organization. If you are willing to volunteer a few hours of your time, please send an email with the following information to Lynn Bryan at labryan@purdue.edu:

1. Your name and contact information (email, office and/or cell number)
2. Day(s) and time(s) that you would be willing to staff the booth (between 9 am and 5 pm each day).

In the subject line of your email, please indicate: NARST at NSTA. Thank you for your help!

International Committee

Mei-Hung Chiu, Chair

The NARST International Committee continues to provide services in science education to international members of NARST, including a mentor-mentee program, an International Committee scholarship, and a newly launched initiative entitled Linking Science Educators Program (LSEP). By promoting these programs the International Committee aims to extend the worldwide influence of NARST in the area of science education reform and policy making. The first LSEP participant was Professor Busisiwe Alant of University of

meeting. The presentation attended to the importance of the LSEP and its contribution to promoting science education reform in other countries. We are looking forward to having the second LSEP in 2009.

Finally, you may be aware that the International Committee has been involved with international science education associations, such as the European Science Education Research Association (ESERA) and the Australian Science Education Research Association (ASERA). We send delegates to international conferences, as well as invite other associations to organize their delegates to attend the NARST annual conference. With these close interactions among associations, we hope that collaborative research projects can be developed based upon mutual interest in science education. The International Committee will continue to seek input from the international members regarding research and practice in various contexts and in different countries. Please e-mail Mei-Hung Chiu (mhchiu@ntnu.edu.tw) to provide us with your inspiring suggestions about the LSEP as well as other innovative activities.



LSEP Malawi Participants (photo provided by Bill Kyle)

KwaZulu-Natal (UKZN), South Africa, who conducted the LSEP in Malawi between 29 September and 6 October in 2008. The Committee recognized the value of developing research capacity in Malawi through the collaborative work in science and technology education. The resource people for the LSEP workshop in Malawi were Professor Bill Kyle from the United States and Drs. Nyna Amin and Alan Pillay from UKZN. The NARST-LSEP and Project Sustain workshop in Malawi addressed the following three issues during the workshop: (1) research development, implementation, and supervision; (2) possibilities and constraints associated with transformative research; and (3) new ways of facilitating graduate student research. Bill Kyle presented this work to the NARST Board of Directors at their Fall



Children of Malawi (photo provided by Bill Kyle).

Publications Advisory Committee

Carla Zembal-Saul, Chair

Members of the Publications Advisory Committee (PAC) include Len Annetta, Angelo Collins, J. Randy McGinnis, Kate McNeill, Hedy Moscovici, Kate Popejoy, Tamara Nelson, Gill Roehrig, Kathy Roth, René Schwartz, and Tali Tal. Please join us at our committee meeting(s) at the NARST 2009 meeting.

The PAC invites NARST members to attend one of our sponsored sessions at the 2009 conference. Abstracts for these sessions are provided below. Special thanks to the co-sponsors of the “Engaging with Teachers around Science Education Research” session – the Research Committee and the External Policy and Relations Committee – for their support and commitment to the mission of deepening connections among research and practice. The PAC also would like to thank NARST leadership for providing modest stipends for five teachers to attend the conference and co-present at this session.

The PAC continues to work on improving the NARST web site. Currently our attention is focused on creating a protocol for keeping web site content up to date and increasing the functionality of the web site. We encourage NARST members to share their feedback and ideas about the web site with a PAC member.

The PAC is collaborating with the External Policy and Relations Committee, the Research Committee, and the NSTA Research Director, Julie Luft, to craft guidelines for the development of NARST position statements. We are reviewing existing guidelines from NSTA and ASTE. We anticipate presenting a draft document to the Board at the NARST 2009 meeting.

Symposium: Engaging with Teachers around Science Education Research

(Saturday, 4/18/09, 1-2:30 PM)

It can be argued that one of the grand challenges in science education today is the need to become more effective at bridging the persistent research–practice divide. Not only is there a need for science teaching to be more research-informed, but also the need exists for our research to be more practice-based, or at the least practice-aware. The Publications Advisory Committee invites NARST members who are interested in research–practice connections to attend this session and share their experiences and

ideas related to engaging with teachers around science education research. Rather than discuss how research can be translated for teachers in order to impact practice, the focus of this session is on research-based endeavors involving collaboration among science educators and classroom teachers. A brief framing of the session will be followed by a series of interactive posters highlighting “images of the possible,” as well as practical challenges associated with this line of work. Ample time will be dedicated to group discussion. Invited guests from the National Science Teachers Association and the National Science Foundation will be on hand to provide insight into the related initiatives of those organizations.

Symposium: Publication in the Journal of Research in Science Teaching

(Sunday, 4/19/09, 8:30-10 AM)

Participants in this session will become familiar with the submission, review, and the communication process of the Journal of Research in Science Teaching. This session welcomes all those who are interested in submitting and publishing articles in JRST or anyone who would like to become a reviewer for the journal. JRST Editors, Associate Editors, Editorial Board Members, reviewers and JRST Editorial Office Staff will be present to share information, experiences, and answer questions.

The image shows a screenshot of the NARST website homepage. The header features the NARST logo and the full name: NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING. Navigation links for 'CONTACT US' and 'SITE MAP' are visible. A central banner image shows a child looking through a magnifying glass at a flower. To the left is a vertical menu with links: ABOUT NARST, JOIN NARST, NEWS & EVENTS, ANNUAL CONFERENCE, PUBLICATIONS, RESEARCH TO PRACTICE, OTHER ASSOCIATIONS, CONNECT TO LISTSERV, MEMBERS ONLY, CONTACT US, and HOME. Below the menu is a search box. To the right of the banner are three promotional boxes: 1) 'THE OFFICIAL JOURNAL OF NARST JOURNAL OF RESEARCH IN SCIENCE TEACHING' with a 'Check out the latest issue' link. 2) '2009 NARST ANNUAL CONFERENCE' with details: APRIL 17-21, 2009, HUNT REGION, ORANGE COUNTY, GARDEN GROVE, CA (ADJACENT TO ANAHEIM). 3) 'E-NARST NEWS ORGANIZED TO IMPROVE SCIENCE TEACHING THROUGH RESEARCH'. At the bottom, there is an 'Announcements' section with a link to 'NARST International Committee CALL for PROPOSAL' and a 'Click Here' link.

Research Committee

Randy Yerrick and Troy Sadler, Co-chairs

The NARST Research Committee is charged with providing leadership in research for the NARST membership, including but not limited to compiling special topic pre-sessions and workshops at the Annual Meeting, research reviews, and research-oriented professional development tailored to the needs of the membership. As a committee we have reviewed and selected the workshops for the 2009 Annual Meeting in Garden Grove, CA. We are confident members will benefit greatly from the following planned sessions and we look forward to your feedback. The workshops selected were:

Workshop #1

Title: How can we plug the hole in the bucket?: Addressing beginning science teacher retention issues before it's too late.

Presenters:

Donna R. Sterling,
Wendy M. Frazier,
Myra Thayer,
Jason Calhoun,
George Mason University

Workshop #2

Title: From Teaching to "Know" to Learning to "Think": Science Education for Sustainability.

Presenters:

Uri Zoller
University of Haifa, Israel

Please check the upcoming program for the NARST Annual Meeting for further details to see which workshop best addresses your interests.

Our committee also takes seriously the need to look forward at future developments in science education and the changing landscape of learning being influenced by technology. In response to the requests from some of the membership to offer more non-traditional and creative venues for sharing our organization's latest developments, the Research Committee discussed ways sessions presented at NARST can alter the venue and format to be more inviting to a 21st Century approach to sharing and discussing research findings. The

Research Committee and Publications Advisory Committee secured corporate support to create a technology venue for one day at this year's Annual Meeting. For one day only, Apple Computer Inc. will be providing a wireless mobile computing classroom environment for NARST members selected to present in these limited time slots in a learning space called the Science Teaching, Learning, and Research Technology Forum. Sessions featured for this limited time slot were based upon and the leadership the sessions offered the membership and the potential advancement of new developments in science education and other related disciplines. Sessions will be on Monday, April 20th in the Pacific Room and will span 90 minutes each. Featured scholars for this forum include Drs. Nancy Butler-Songer, Kathleen Fisher, Marcia Linn, Scott MacDonald, and Robert Tinker. A higher education representative from Apple Computer Inc. will also be on hand during this forum to answer questions from NARST members about partnership and professional development opportunities.

Our committee also has successfully completed a varied roster of research sessions to address vital issues in our field. One of those committee sponsored sessions is designed to assist the NARST membership in being more responsive to policies and directions dictated by federal funding sources. With the major granting sources emphasizing an "evidence-based" design and evaluation for funded projects, it is essential that science educators keep in step with techniques of analysis used in large-scale studies. This research symposium will feature scholars, who employ and evaluate "scale-up" projects intended to expand impact of current science education initiatives. The members of this panel represent a variety of analytic, curriculum, instructional, and assessment perspectives. There are many kinds of large scale studies and analyses and specific issues related to quasi-experimental studies that do not take the forefront of NARST discussions but that may have a profound impact on funding and future support of research institutions. It is important that the NARST membership be actively engaged in the public discourse surrounding large-scale studies and this panel will discuss issues associated with large-scale studies. We look forward to seeing you at these exciting Research Committee sponsored events in Garden Grove.

Finally, you likely know that we value recommendations and proposals from the membership to create new opportunities for professional development of NARST members. Dr. Sandra Abell has proposed a Summer Research Institute for doctoral students to have opportunities to discuss their research work in progress with other PhD students and with experienced researchers. We hope that this is the first of what becomes an annual event. The research institute will be modeled after the ESERA Summer School and will be hosted at the University of Missouri Science Education Center in Columbia, MO. Activities throughout the weeklong event include: a) lectures, b) small group seminars, c) workshops providing feedback on design, analysis, and interpretation,

d) support for proposal writing, and e) social events for networking creating a strong base for collaboration. Selected research mentors will be present to advise and support emerging scholars. The tentative date for this event is June 22-27, 2009. Student applicants must be NARST members who are actively collecting and analyzing data that falls within the focus of the Research Institute. Research mentors may apply to the host institution and must be NARST members who actively publish their research in the research focus area(s) in top-tier journals in the field. Please contact Dr. Sandra Abell with questions regarding applications, fees, and other details about this great opportunity for young researchers.

From the Editors of the Journal of Research in Science Teaching (JRST)

J. Randy McGinnis and Angelo Collins

1. A Call for JRST Editorial Board Members

Annually, the JRST editorial team needs to replenish with new members approximately one-third of its 40-member editorial board. The appointment is for three years, contingent on performance. NARST policy requires that a member of the JRST editorial board must review each JRST manuscript. All NARST members in good standing who have published in JRST at least once, and who have experience as a JRST reviewer in Manuscript Central, may apply for this scholarly service. Duties include in-depth review of 6 to 8 manuscripts yearly and attendance at the annual JRST Editorial Board Meeting/Dinner at the National Association for Research (NARST) Conference. Applications from International members are especially welcomed.

To apply, please submit (by February 16, 2009):

- A letter of interest, which includes a list of up to four areas of expertise in science education research in which you would be comfortable reviewing manuscripts.
- A two-page curriculum vita (highlight publications in prominent refereed journals in science education and your previous reviewing or editing experience).

**It's time to vote for NARST
President-elect and Board
members. [Click Here](#) before
the February 12th deadline.**

Apply electronically, by emailing us at: jrst@umd.edu. Use as a subject title: Attn: Editorial Board Application ('09).

If you have any questions please contact J. Randy McGinnis (jmcginni@umd.edu) or Angelo Collins (Angelo.Collins@kstf.org), Editors, Journal of Research in Science Teaching.

2. Innovations for JRST Volume 46

In the past four years, we have introduced multiple new features to the journal, including launching the electronic submission, review, and communication system (Manuscript Central), conceptual grouping of articles by issue when it makes sense (accompanied occasionally by an editorial), annual acknowledgement of reviewers, and a dynamic journal cover. In the 2009 volume, we are pleased to announce the continuation of innovation in JRST. Specifically, we will publish two Special Issues on "Learning Progressions" (v46, issue 6) and "Contexts in PISA Science (PISA)" (v46, issue 8), respectively. Guest editors for the "Learning Progressions" special issue are Cindy Hmelo-Silver and Ravit Golan Duncan, and guest editors for the "Contexts in PISA Science (PISA)" special issue are Rodger Bybee, Peter Fensham, and Robert Laurie. The submission deadlines for both special issues have passed, so no new submissions will be considered.

A Message from the Executive Director

Bill Kyle

Greetings! I hope you had a relaxing holiday season ~ best wishes for a healthy and prosperous New Year. I look forward to seeing you at the forthcoming 2009 Annual International Conference at the Hyatt Regency Orange County (11999 Harbor Boulevard, Garden Grove, California 92840 USA), April 17-21. I urge you to read the section herein regarding the 2009 conference in its entirety.

Remember to renew your membership

In early-December you received the dues renewal notice for your 2009 membership. NARST membership is based upon the calendar year. Membership dues (\$100) remain at the same level as they have for several years. Please renew your membership as soon as possible to ensure the uninterrupted delivery of JRST.

As a reminder, in 2007 the NARST Board approved the UNDP .700 and below membership category for members residing in approximately 65 developing countries. In 2008, the Board approved a new membership category for Pre-collegiate classroom teachers. These 2 new membership categories join the Student and Emeritus classes of membership at the rate of \$50 per year. This is an exceptional value for graduate students, teachers, colleagues in the UNDP recognized developing countries, and those members who have served our organization prior to their retirement, since \$42 of every member's dues goes directly to Wiley-Blackwell for the JRST subscription.

I recommend each NARST member identify a colleague whom you believe would benefit as a result of joining NARST. If we wish to expand upon the services, programs, and outreach opportunities presently sponsored by NARST committees, then we must continue to grow our membership. Identifying new members is but one way in which current members can invest in the health of the Association.

How NARST maintains its low membership due structure

Compared to other professional organizations, NARST is able to maintain its exceptionally low membership dues for a number of reasons. The scholarly contributions of NARST

members to JRST and the annual meeting offer the vibrancy and intellectual stimulation that sustains the Association. JRST ~ our internationally acclaimed Association journal ~ continues to accrue royalties that enable NARST to accomplish as much as it does to support and enhance opportunities to improve science teaching and learning through research.

As a frame of reference, membership dues account for approximately 20% of NARST's annual revenue and cover approximately 25% of NARST's annual expenses. Thus, if the Association relied solely upon membership dues to run the organization, then the annual due structure would be 4 to 5 times the current rate! The NARST leadership offers the kind of organizational guidance and direction to ensure the Association continues to be fiscally sound.

2009 Annual International Meeting

Speaking of value for one's investment, the NARST Annual International Meeting offers the best conference value you will find among professional organizations. What more could NARST members ask for than the following: the annual meeting being held in first class convention hotel venues; an exceptional conference registration rate that includes FREE meeting space, continental breakfasts, the Presidential Reception, the Awards Luncheon, and many other amenities; and negotiated hotel rates that are reasonably priced (in some cases up to half off of the hotel's rack rate per night).

Those who attended the 2008 meeting in Baltimore raved about the conference venue (which John Tillotson negotiated) and the meal functions (which Robin Turner at DMG and I selected in conjunction with the hotel staff). John Tillotson negotiated the 2009 conference venue in Garden Grove and I have already negotiated the conference venues for 2010 (Philadelphia, March 20 – 24), 2011 (Orlando, April 2 – 6), and 2012 (Indianapolis, March 24 – 28). You will find all of these conference venues and facilities to be outstanding!

So, you may be asking yourself what is the point of bringing all of this to your attention. Sure, I would like you to mark your calendars so you have the conference dates between now

and 2012. However, there is a bigger issue and one that I only came to realize within my first year as Executive Director: NARST members may not realize all of the variables that go into negotiating the hotel contract for each year's conference and the financial risk that NARST assumes as a part of each contract. I would like to briefly explain the details, the financial risks, and what I believe are the concurrent member responsibilities to ensure the health of the Association. But let me begin with a story:

During one of the coffee breaks at last year's conference I joined a conversation with a member who was complaining about the hotel room rates. The individual had already enjoyed the complimentary continental breakfast, was enjoying a cup of coffee and throughout the conversation was most complimentary of the hotel's facilities. However, the individual proudly announced having found a hotel down the street for a few dollars less per night and noted he would gladly walk a couple of blocks to save the money.

What is wrong with this picture you might ask? Ironically, while consuming Association resources the individual was willing to save personal dollars! Here is how convention contracts are negotiated. Each contract specifies the dollar amount the Association must spend on food and beverage (F&B), which is generally in the \$100,000 range. Each contract also specifies the number of room nights that must be sold by the advance deadline established by the hotel. If these minimum requirements are met, the hotel offers its conference space free of charge. Thus, as an attendee you are part of the overall equation. In essence, the hotel expects attendees to support their Association by staying on-site in order to receive the free conference facilities and staff support throughout the meeting.

Clearly we never have any problem spending the required minimum on F&B. However, it is the minimum room nights sold that is often a concern. This figure is established by the hotel based upon the conference space needed by the Association. For the size of our conference (approx. 1000 attendees), we require considerably more space than any meeting our size. Why? We require 16 concurrent sessions throughout the conference in addition to all of the extra meeting rooms for special events, plenary sessions, and banquets. And, we utilize the space from 7:00 am until well into the evening, which requires hotel support staff to turn the rooms over several times throughout the conference. The hotel sales managers that I have negotiated the three contracts with inform me that we require a lot from a hotel.

Finally, let me explain what happens if we do not meet the contractually obligated minimum room block:

NARST pays for the difference between the room block guaranteed and the actual number sold at the negotiated rate plus tax. As an example, if we are 100 rooms short of the Hyatt Regency Orange County guarantee at \$179 per night plus tax, then NARST would owe the hotel approx. \$20,000.

AND...

NARST pays for all conference room facility rental and expenses (which were previously provided free of charge in exchange for the F&B minimum and guaranteed room block). The rental of the conference space is generally in the \$15,000 to \$22,000 range.

As you can see, 20 members spending 5 nights at a savings of \$10 or so dollars per night has the potential of costing the Association \$40,000!

This year's room block minimum at the Hyatt Regency Orange County is set at 1674. This is approximately 80 rooms more than we sold at last year's conference in Baltimore, which was one of the most successful NARST conferences in history.

Thus, as you make your plans for the forthcoming conference, I urge you to support NARST by investing in the conference facility that has been selected by the Board for this year's conference. The Board always strives to find the best facility and value for the dollar and we need NARST members to be supportive of the contract we have negotiated by staying on-site at the conference venue.

Please do not hesitate to contact me if you have any recommendations and / or concerns related to NARST and your membership in NARST. Your efforts to enhance science teaching and learning through research are greatly appreciated.