

MESSAGE FROM THE PRESIDENT— ORLANDO, FLORIDA, 2011



Dana L. Zeidler

I would like to wish you a Happy New Year and hope that your dreams are fulfilled!

Many thanks are due to all of you who helped move our association in new directions this past year. Our Strand Coordinators and reviewers have done an extraordinary job to ensure timely feedback on proposals for our upcoming annual conference in Orlando. To those who took the time to submit proposals and those who will be in attendance, your participation helps our Association to continually examine our mission and find new ways to enhance science education through research.

We have implemented a new proposal system based on extensive feedback from NARST members and the Program Committee, to better serve the needs of our membership and we will continue to make modifications to stream-line the process in the future. A dept of gratitude is owed to Toni Sondergeld, who kept the entire review process running quite efficiently. Also, this year you no doubt noticed that papers could now be submitted under an Empirical category as well as a Theoretical category and assessors were prompted to consider the appropriate rubrics created for each kind of submission so papers could be better evaluated according appropriate criteria. This was certainly an improvement to the “one size fits all” approach we had in past years. Additionally, Related Paper Sets were evaluated with additional criteria of “Cohesiveness.” These changes should be realized in the overall quality of sessions this year. At last year’s meeting in Philadelphia, I had asked for volunteers from the Program Committee to help in developing these new rubrics. My thanks go to the subcommittee that worked on this. They include: Maria Rivera Maulucci, Helen Meyer,



Anita Welch and Danielle Dani. Finally, it should be stated for the record that our Executive Director, Bill Kyle, President-Elect, Randy McGinnis, and Past President, Rick Duschl, and the Board, have all devoted a great deal of time and energy to help keep the association running and to challenge us to rethink the organizational structure and priorities of NARST. This work is ongoing.

The work of the Board might seem “mysterious” to the general membership. In an effort to lift that mystic just a little, I would like to share with you one important initiative that an Ad hoc Committee (including Board members and other NARST members) is considering. Let me first make clear that the tasks associated with this initiative have

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A MESSAGE FROM THE PRESIDENT-ELECT



J. Randy McGinnis

During the time period since the summer issue of the eNARST News I focused on the following activities:

As Co-Program Chair of the 2011 NARST Annual International Conference, I assisted NARST President Dana Zeidler with all the myriad tasks related to our conference.

- Participated with Dana, the Annual Conference Scheduler/Coordinator Toni Sondergeld, and with the Annual Conference Coordinator Robin Turner in discussion with Podi to implement revisions to the proposal submission and communication system.
- Reviewed the draft call for proposals for information and errors before it was released to the membership.
- Reviewed and edited (as needed) all emails sent out to Strand Coordinators, assessors, and authors.
- Worked with Toni Sondergeld to add key words to the proposal submission system as a way to better match assessors' expertise with submitted proposals' foci.
- Served as final contact (first contact: Strand Coordinators) for authors who had concerns about the conference review process/decision of their proposals.

I also made NARST committee and Strand Coordinators appointments, as needed to keep the committees and strand leadership positions filled (soliciting recommendations from committee chairs). Please note that early in the New Year 2011, I will send out an open call (placed on the NARST Listserv and on the NARST website) for NARST members who wish to nominate themselves to fill the service slots that will open up after the 2011 International Annual Conference. For those interested in this type of essential and valued volunteer service to the association, please keep out an eye for the call.

Finally, I spend considerable time on another important matter. In my previous communication in the eNARST News (summer 2010), I reported that Dana Zeidler asked me to chair an Ad Hoc Committee on NARST's International Identity. One of his goals as President, and one that I share, is to give serious consideration to this matter. As a result, I worked over the summer and the fall with an internationally representative committee (consisting of Justin Dillon, Sibel Erduran, Norm Lederman, Julie Luft, Erminia Pedretti, Hsiao-lin Tuan, Jan Van Driel, Grady Venville, and Alice Wong) to systemically re-conceptualize our association's identity and what our association now represents from an international perspective. In the fall I presented to the NARST Executive Board a progress report of the committee's work. The three key areas of conversation were:

1. The association's name.
2. The annual conference geographical venue.
3. The association's board structure & activities.

The committee and I were encouraged by the board's reception to our deliberation and recommendations. We look forward in the near future to presenting to the membership some exciting new changes and features related to enhancing NARST's international identity.

EQUITY & ETHICS COMMITTEE



Julie A. Bianchini, Chair

The Equity and Ethics Committee is planning a number of events at the NARST 2011 conference: We are sponsoring a preconference workshop, hosting three committee-sponsored symposia, and organizing the ever-popular Equity and Ethics dinner. We hope to see you at these events! We also invite you to attend our regular committee meetings at NARST (dates and times will be listed in the conference program). We provide more details about these upcoming events below.

Pre-Conference Workshop

Equity Internationally: Scholarship, Research, and Service for a Global Science Education Community

Sunday, April 3, 2011 | 8:00 am-12:00 noon

Pre-conference Planners: Geeta Verma, Georgia State University, and Regina E. Wragg, University of South Carolina

Participants: Gillian U. Bayne, Lehman College of the City University of New York; Nate Carnes, University of South Carolina; Sumi Hagiwara, Montclair State University; Maria S. Rivera Maulucci, Barnard College; Felicia Moore Mensah, Teachers College, Columbia University; Jomo Mutegi, Indiana University--Purdue University Indianapolis; Wesley Pitts, Lehman College of the City University of New York; and Jerome M. Shaw, University of California, Santa Cruz

Description: The Equity and Ethics Committee sponsors this pre-conference workshop for scholars of color and other scholars interested in science education research on equity issues. Workshop participants will network with scholars representing the spectrum of career stages in science education. Workshop attendees will also engage in discussions on science education in an international context, as well as on opportunities and challenges available for scholars researching science education equity issues.

Symposia

Providing Underrepresented Students Access to Science: Three Successful Efforts

President: Sumi Hagiwara, Montclair State University

Presenters: Judith Lombana, Tampa's Museum of Science and Industry; Doris Ash, University of California, Santa Cruz; Jrene Rahm, Universes de Montreal; Mika Munakata, Ken Wolff, and Mary Lou West, Montclair State University; and Nirmala Ramlakhan, Workforce Central Florida

Description: In this Equity and Ethics Committee-sponsored symposium, three groups of educators share their efforts to enhance and improve the experiences of underrepresented students in science. Nirmala Ramlakhan will present her research on the kinds of mentoring, academic, and social interventions that keep females in STEM. She will discuss the GEMS (Girls EXCELLing in Math and Science)

Mentoring program that encourages female undergraduates to major in STEM by engaging them within the industry they wish to work.

Mika Munakata, Ken Wolff, and Mary Lou West—with participating teachers—will present findings from their GK-12 Fellows in the Middle project. This project matches STEM graduate students with middle school teachers in diverse New Jersey schools. Fellows and teachers design interdisciplinary inquiry units, prepare students for an annual Science/Math Day, and collaborate with scientists and teachers from other countries.

Finally, Judith Lombana, Doris Ash, and Jrene Rahm will present a collaboration between Tampa's Museum of Science and Industry and UC Santa Cruz. They will discuss efforts to provide access to informal science for culturally and linguistically diverse learners. In particular, they will describe new instructional practices that give both educators and families power and access to science ideas and talk.

The Jhumki Basu Scholar Symposium: Global Sustainability and Public Understanding of Science—The Role of Science Education in the International Community

Presenters: Reizelie Barreto-Espino, Towson University; Tapati Sen, Arizona State University; and Ashraf Shady, Queens College, CUNY

Presiders and Discussants: Mamta Singh, Martin University, Indiana; and Lisa Martin-Hansen, Georgia State University, Georgia

Description: In this symposium, three winners of the 2010 NARST Equity and Ethics Committee's Jhumki Basu Scholarship present their research. The symposium showcases the work of scholars who are underrepresented in the science education research community. Using different theoretical frames and methodological approaches, each of these three scholars investigated issues of equity and ethics in the teaching and learning of science. Individually and collectively, their studies speak to the NARST conference theme: Global Sustainability and Public Understanding of Science—The Role of Science Education in the International Community. More specifically, Tapati

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EQUITY & ETHICS COMMITTEE

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Sen examined on the impact research experiences for science teachers had on their classroom instruction. She analyzed documents collected from teachers during the course of the Mathematics and Science Teaching Fellows (MSTF) program. Ashraf Shady investigated the role of cultural alignment in producing success in urban science education. His paper highlights a study he conducted during the 2006-2007 school year in a low performing middle school in New York City. Reizelie Barreto-Espino investigated changes in prospective teachers' knowledge of teaching science with an emphasis on evidence-based explanations. This scholar contextualized results in light of available literature on teaching science in urban contexts.

Moving the Equity Agenda Forward: Equity Research, Practice, and Policy in Science Education

President: Julie A. Bianchini, University of California, Santa Barbara

Presenters: Many of the authors from the related volume, *Moving the Equity Agenda Forward*

Discussants: Michael Reiss, University of London; Lyn Carter, Australian Catholic University; Tali Tal, Technion University in Israel; Mei Hung, National Taiwan Normal University; and Melina Furman, University of San Andres

Description: This symposium highlights current equity-related research, practice, and policy in science education and suggests important directions for future work. Presiders, presenters, and discussants in this symposium are contributors to an edited volume by the same name to be published later this year. Both the symposium and edited volume grew out of a NARST Equity and Ethics' ad hoc committee convened three years ago. The symposium will begin with a brief introduction to each of five areas of equity-related research: (1) Science Education Policy; (2) Globalization; (3) Language, Discourse, and Identity; (4) Context and Culture; and (5) Leadership and Social Networking.

After introductory remarks, participants will be invited to read and discuss the research of contributing scholars displayed around the room on posters. To promote coherence, each set of

authors will explain how their work informs the following two questions: (1) What insights do the theoretical and methodological lenses used in this scholarship enable and constrain? (2) What are ways ideas presented here can be used to inform research, practice, and policy?

To close the symposium, five discussants, all international scholars in science education, will look across the research presented and discuss ways ideas introduced could inform science education work internationally.

Equity and Ethics Dinner

We are trying something new for the Equity and Ethics Dinner in 2011. We have reserved a room at the Bahama Breeze Lake Buena Vista. Dinner, including tax and gratuity, will be \$35. Diners will be able to choose from one of three menu options (including a vegetarian one). All who plan to attend this dinner must register in advance on the NARST Advance Conference Registration form. Those who are able are also invited to donate the cost of a dinner — to allow someone else to attend who cannot afford to do so.

A MESSAGE FROM THE PRESIDENT *Continued from page 1*

not been completed, they are ongoing at the present time. I have been pushing (quite gently, I assure you) for us to think about our sense of International Identity as an association. I have been asking this committee and the Board to consider how to better leverage the “brand name” of NARST to better reflect that which our global character really represents. Many interesting ideas are coming forward that may have implications for structural changes for strands as well. But perhaps someday we will not be cognizant of having to distinguish between US members and “International” members. To be a member of NARST would simple mean being a member of a global forum for advancing science education through research.

As you know, our conference theme is Global Sustainability and Public Understanding of Science: The Role of Science Education Research in the International Community. I have challenged you to revisit what our notions of educating to promote scientific literacy entails, and how we might contextualize that notion in a world where our future

survival is intricately linked to the quality of the decisions our students and the public will make with respect to how those choices impact political, environmental and social matters of importance.

I truly hope you are looking forward as much as I am to our 2011 Annual International Conference in Orlando, April 3-6. The Caribe Royale All-Suite and Conference Center Hotel and Convention Center promises to be an excellent venue. Remember, you can take advantage of hotel conference rates 3 days prior to and after the conference if you wish to extend your stay to take advantage of the many internationally known theme parks, cultural and natural attractions that the greater Orlando area has to offer. I am looking forward to seeing you there—and since your future will be so bright, remember to wear shades!

Best, Dana

EXTERNAL POLICY & RELATIONS COMMITTEE

Betsy Davis and John Falk, Co-Chairs

The External Policy and Relations Committee (EPRC) continues to work on efforts related to fostering the development of partnerships and collaborations with professional organizations and groups concerned with the quality of science teaching and learning. We also are working to support increased awareness among NARST members about policy issues relevant to science education.

NARST at NSTA 2011: Come help out!

NARST will host a booth at the 2011 NSTA National Conference—March 10-13 in San Francisco! We use the booth as a means to raise our visibility among K-12 classroom teachers. We will have NARST membership applications available at the booth, as well as copies of a few papers from JRST. For the past several years, there have been numerous inquiries from teachers about how they can get a subscription to JRST. If you will be at the 2011 NSTA meeting, please consider volunteering a couple of hours to promote the mission of NARST and connect with classroom science teachers! If you're interested, contact Betsy Davis (EPRC co-chair) at betsyd@umich.edu, providing your contact information and the day(s) and times you would be able to volunteer. Betsy will contact you again closer to the annual conference to set up a schedule.

NARST 2011 EPRC-Sponsored Sessions

With Strand 15 (Policy), the External Policy and Relations Committee will be co-sponsoring two sessions for the 2011 NARST annual conference in Orlando. One session will focus on the development of the conceptual framework for the new science education standards, and one will focus on the development of the new standards themselves. These should be exciting opportunities to learn about something that will affect us all, so please plan to attend!

Policy for Affiliation with NARST

NARST should have meaningful affiliations with other science education organizations. Our affiliations might work toward collaborative organization of conference sessions, writing of position or policy statements, development of research studies, sponsorship of professional learning communities—or other joint ventures we haven't thought of yet! EPRC is working to bring our existing affiliations into accordance with NARST's policy, and then to begin to foster new affiliations. Do you have thoughts about how we can make these affiliations even more meaningful, or about groups you think NARST might productively affiliate with? Please feel free to let us know!

Thanks!

A big thank you to all of the External Policy and Relations Committee members for their on-going hard work and dedication to the charge of the committee and mission of NARST.

NARST External Policy and Relations Committee

Co-Chairs:

Betsy Davis
John Falk

Members:

Michael Vitale
Sharon Lynch
Kevin Holtz
Mike Barnett
Nam Hwa Kang
Kathy Malone
Chris Wilson
Meredith Houle
Tim Scott

Do you have any suggestions, comments, or questions about any of the above activities? Are you interested in becoming involved in the External Policy and Relations Committee? If so, please email the EPRC co-chairs, Betsy Davis (betsyd@umich.edu) or John Falk (falkj@science.oregonstate.edu), or any of the EPRC members.

INTERNATIONAL COMMITTEE



*Sibel Erduran,
NARST International Coordinator &
Chair of International Committee*

Funding Available for Scholarships

The NARST International Committee (IC) has recently announced the availability of funding to support (a) scholarships for junior NARST members to attend and present papers at the annual conference and (b) the Linking Science Educators Program (LSEP) to encourage collaborations and dialogue with colleagues from low-income countries. The committee will be awarding fifteen scholarships to support international members of NARST (e.g., graduate students and junior scholars within 6 years' of completion of PhD degree) to attend the 2011 NARST international conference from 3-6 April 2010 in Orlando, Florida. Application deadline for the scholarships was December 15, 2010. The LSEP Program provides financial support for individuals from countries that are economically disadvantaged or underrepresented but are eager to implement new ideas in science education reform. The deadline for LSEP applications was January 15th, 2011. Information on the IC Scholarships and LSEP is available on the home page of NARST (<http://www.narst.org/>).

Paper Session at the ESERA Conference

IC is coordinating a paper session at the ESERA (European Science Education Research Association) Conference which will be held in Lyon, France from September 5th-9th, 2011. The theme of the session is "Globalisation and Science Education". The theme was proposed by members of the International Committee which is tasked with the review and selection of the proposals for the paper session. For details about proposal writing guidelines, please visit the following website which also has further information about the conference.

<http://www.esera2011.fr/en/esera-2011-paper-submission.html>.

International Committee to Sponsor Sessions at the NARST 2011 Annual Conference

Two IC-sponsored sessions have been organized for the NARST 2011 Annual Conference. The first aims to promote links with other science education research association and includes input from members of the Australasian Science Education Research Association (ASERA). The title of the session is "Exemplary research in science education from Australia and New Zealand that fosters engagement and understanding." The participants in the session are Alister Jones, Mary Oliver, Grady Venville, Philip Adey, Dianne Nichols, Dan Churach, Darrell Fisher, Deborah Corrigan, Rebecca Cooper, Stephen Keast, Bronwen Cowie, Kathrin Otrell-Cass, Ted Glynn and Helena Kara.

The second IC-sponsored session focuses on the outcomes of the LSEP 2010 Research School held in collaboration with the Southern African Association for Research in Mathematics, Science and Technology Education (SAARMSTE) in South Africa. The LSEP grant supported the travel costs of two NARST Resource Persons, Julie Luft and Eduardo Mortimer, to attend the 2010 SAARMSTE Research School, held in South Africa, June 7–11, 2010. The conference session will provide a description of the 2010 Research School and the role played by the two NARST Resource Partners, an analysis of different forms of feedback provided by participants during the school, reflection by school facilitators, including Resource Partners, about their experience, and reflections by a few participants on the role played by their experience at the school in furthering their research. The participants in this session will be Peter W. Hewson, Marissa Rollnick, Mariana G. Hewson, Julie A. Luft, Eduardo F. Mortimer, Audrey Msimanga, Simasiku Siseho, Washington Dudu and Linda KeenRocha.

MEMBERSHIP & ELECTIONS COMMITTEE

Reneé Schwartz, Chair

2011 Elections: Executive Board and President-Elect



Look for the 2011 elections to begin soon. NARST members have an impressive slate of candidates for Executive Board and President-elect. The three people elected to the Board will also serve as Co-Chair of the Membership & Elections committee, Co-Chair of the

Equity & Ethics committee, and Co-Chair of the Publications Advisory Committee. When the ballots are available, an announcement will be sent over the NARST listserv. Watch for it and respond! Let your voice be heard by voting!

Getting involved: NARST needs your expertise!



NARST is primarily a volunteer association, and committee work is one of the best ways to become involved, meet other members, and contribute to the mission of NARST. A list of current committees and their charges can be found in the NARST Policies and Procedures manual (NARST website; www.narst.org).

Each year there are openings on nearly every committee. NARST President-elect, J. Randy McGinnis, will be sending an open call for committee volunteers in the New Year. Look for the announcement on the NARST Listserv and on the NARST website. Please consider volunteering and respond to the call! If you have questions regarding committee work, please contact the President-elect, J. Randy McGinnis (jmcginni@umd.edu) or the Chair of the M & E committee, Reneé Schwartz (r.schwartz@wmich.edu).

M&E Committee Sponsored sessions during the 2011 NARST International Conference

The M & E committee is sponsoring three sessions at the 2011 international conference in Orlando, FL. These sessions are intended to support early career researchers and help new NARST members to get acquainted with the conference, the organization, and other members. The 2011 *Mentor-Mentee-Nexus* is being organized by April Adams and Corinne Lardy. This session brings new NARST members and experienced NARST members together for good conversation and conference planning, and to facilitate networking among our newer members. We encourage all experienced NARST members to consider sharing their wisdom and experience by being a mentor at the 2011 conference. The other two sponsored sessions are the *Graduate Student Forum*, organized by Jomo Mutegi and Kathryn Drago; and the *New Researcher and Junior Faculty Early Career Discussion*, organized by Julie Luft and Reizelie Barreto-Espino. Both sessions will bring together outstanding NARST members to offer insights, guidance, and great discussion for attendees at these critical stages of their careers. We highly encourage those who participate in these sessions to continue the conversations throughout the year. Plans are underway to facilitate informal gatherings and discussion forums for special interest groups that are organized from these sessions. If you would like to help with the formation and functioning of such groups, please contact one of the session organizers.

PUBLICATIONS ADVISORY COMMITTEE



Jan van Driel, Chair

The Publications Advisory Committee (PAC) is sponsoring three sessions at the NARST 2011 International Conference in Orlando. These are described below.

Pre-Conference Workshop

Developing High Quality Reviews for the Journal of Research in Science Teaching

Sunday, April 3, 2011 / 8:00 am-12:00 noon

Angie Calabrese Barton and Joe Krajcik, and JRST Associate Editors

The purpose of this preconference workshop is to provide professional development for JRST reviewers. It will also provide valuable information to new researchers on what reviewers look for in a manuscript and how to prepare a manuscript for publication. During this 4-hour workshop we will work with reviewers to develop knowledge and skills for preparing high quality reviews for JRST, foster conversation on expectations for and purposes of reviews, and discuss how to handle common reviewer problems and questions. This session welcomes returning reviewers as well as those who are new to academia and are interested in submitting to and getting published in JRST or anyone who would like to become a reviewer for the Journal. JRST Editors and Associate Editors will facilitate the session.

Managing the Digital Intellectual Life(stream) of a 21st Century Science Education Scholar

Scott McDonald, Penn State University; Eric Wiebe, North Carolina State University & Carla Zembal-Saul, Penn State University

The way scholars in science education and members of NARST do their jobs has not changed fundamentally, but the process of participating in the intellectual community is being changed by the same tools that are reshaping social interactions. This session is organized into three parts and will describe some of the tools currently available to science education scholars to organize their digital lives in ways that support their intellectual work. The first part of the session will focus on accessing resources using RSS feeds from journals and intelligent searches from databases that allow scholars to easily find the journal articles and other resources they are interested in reading. The second part of the session will deal with the organization and management of intellectual resources. A number of tools have emerged that allow for tagging, grouping, reading and note-taking around the resources that have been gathered. These tools also allow groups to come together to do collaborative scholarly work at a distance.

The final part of the session will deal with citations and bibliographic management, the tools for which have become increasingly powerful and focused on the support of collaborative scholarship.

Publication in the Journal of Research in Science Teaching (JRST)

Angie Calabrese Barton and Joe Krajcik, JRST Co-Editors; Bob Geier, Assistant Editor

The purpose of this session is to engage potential authors in dialog about what and how to publish in JRST. The JRST co-editors and associate editors will share their philosophy, goals and visions for the Journal of Research in Science Teaching. The editorial team will present their model for how manuscripts are reviewed. Discussion of the publication guidelines that reviewers of the *Journal of Research in Science Teaching* use when reviewing submitted manuscripts will also be examined and discussed. This session welcomes those who are new to academia and are interested in submitting to and getting published in JRST or anyone who would like to become a reviewer for the Journal. JRST Editors, Associate Editors, Editorial Board Members, reviewers and JRST Office personnel will be present to share experiences and insights.

NSTA Reading List

In early 2011, a subcommittee consisting of 3 members of the PAC will select articles from the last volume of JRST for the NSTA reading list. Each member will first select 2-3 articles. Selection will be based on a rubric focusing on practicality for science teachers (elementary, secondary, informal, higher, teacher educators). The chair of the PAC and the subcommittee will discuss this initial selection and bring it down, eventually, to 5 articles which will be communicated to the NSTA liaison. NSTA will include these papers, together with papers from other journals, in a selection to be called *Current research for teachers to read*. The same 5 articles will be made available freely on the JRST website, and hard copies will be given away at the NARST booth at the NSTA conference.

I wish to thank the members of the PAC for the contribution they made to the committee. Please contact me at Driel@iclon.leidenuniv.nl with questions, feedback, comments, and if you are interested to work with this committee.

RESEARCH COMMITTEE

Troy Sadler and Stephen Norris, Committee Co-chairs

2011 Sandra K. Abell Institute for Doctoral Students

The Research Committee coordinates the newly established Summer Research Institute (SRI) for Doctoral Students. As reported in a previous eNARST News, the first of these institutes was very successfully run at the University of Missouri in the Summer of 2009. At the recent fall Executive Board meeting, the second SRI was recommended by the Research Committee and approved by the Board. The SRI will be co-hosted by BSCS (organizers Janet Carlson and Joseph Taylor) and Penn State University (PSU) (organizers Scott McDonald and Carla Zembal-Saul). The institute will be held at BSCS headquarters in Colorado Springs, CO. The theme of the institute will be Classroom-based Research.

In addition to approving the BSCS/PSU proposal, the Executive Board also renamed the biennial event: "Sandra K. Abell Institute for Doctoral Students." This name change honors the important and enormous contribution that Sandi Abell made in bringing the SRI into reality. The recommendation for the change of name came from within the Research Committee. The news of the change has been greeted with humility and appreciation by Sandi's family.

The institute will be held during the Summer of 2011, July 23-28. The organizing committee is currently in

the process of beginning to recruit students. The aims of the institute are

- (a) to support and develop doctoral students' abilities to conduct classroom-based research, including the design of the research, choices of methodology, and communication of results;
- (b) to increase doctoral students' understanding of the science education research community and of their position within that community; and
- (c) to develop networks of emerging and established researchers in science education around the topic of classroom-based research.

The organizing committee had several reasons for proposing to focus on classroom-based research. First, studies of student and teacher learning, curriculum, and policy should have strong links to the classroom. For this reason, classroom-based research will appeal to many graduate students. Second, classroom-based research uses a wide range of research methods, which will challenge and broaden students' knowledge and skills. Third, BSCS and Penn State science educators have extensive experience in conducting classroom-based research using a variety of methods. Finally, the theme complements the focus on

teacher education at the first Summer Research Institute.

We wish the team the best of luck in their recruitment efforts and look forward to hearing about what we are confident will be an exciting and rewarding institute.

The Research Committee would also like to announce the following pre-conference workshops to be held on Sunday April 3, 8:00 am-12:00 noon. Please consider registering for one of these sessions when you register for the 2011 conference:

- 1) Developing and Assessing Learning Progressions in Science (Presenters: Ravit Golan Duncan, Joseph Krajcik, David Fortus, Katherine McNeill, and Julia Plummer)
- 2) Developing a Competitive Educational Research Proposal for NSF's Division of Research on Learning (Presenters: Gavin Fulmer, Janice Earle, Kusum Singh, and Celeste Pea)
- 3) Videocase-based Lesson Analysis of Science Teaching to Support Teacher Learning: Experiencing Lesson Analysis and Mapping a Program of Research (Presenters: Kathleen Roth, Meridith Bruozas, Elaine Howes, Paul Numedahl, and Kathleen Schwille)

A MESSAGE FROM THE EXECUTIVE DIRECTOR

Bill Kyle

Best wishes for a healthy and prosperous New Year! I look forward to seeing you at the 84th NARST Annual International Conference, 3–6 April 2011, at the Caribe Royale in Orlando, FL, USA. The Program Committee has been working diligently to ensure you have a memorable conference experience.

Remember to renew your membership...

You received the dues renewal notice for your 2011 membership. NARST membership is based upon the calendar year. Please renew your membership as soon as possible to ensure the uninterrupted delivery of *JRST*.

You will notice the Board has approved some new membership categories. In addition, if you have fully retired, then the process for changing your membership to that of Emeritus status has been streamlined. If you have any questions regarding your membership status, then please do not hesitate to contact info@narst.org.

I recommend each NARST member identify a colleague whom you believe would benefit as a result of joining NARST (e.g., classroom teachers, graduate students, non-collegiate educators). If we wish to expand upon the services, programs, and outreach opportunities 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 NARST.

Looking towards the Future...

I encourage you to consider making a donation to NARST to support a variety of worthy initiatives that NARST has begun to invest in recently. Please share the opportunity to donate to NARST (<https://www.narst.org/commerce/donate.cfm>) with philanthropists and agencies you believe would be interested in investing in science education. And, if you - or anyone you know - might be interested in planned giving or estate planning, then I encourage you to contact me at your earliest convenience.

NARST has been taking action on outreach and expanding its services. NARST now sponsors 40 scholarships for those presenting at the Annual International Conference: 15 scholarships through the International Committee; 15 scholarships through the Equity and Ethics Committee;

and beginning in 2011, ten scholarships for Classroom-based Teachers. In 2011 NARST will sponsor the biennial Sandra K. Abell Institute for Doctoral Students (hosted in odd calendar years). And, 2011 will be the 4th year in which NARST will sponsor the International Committee's LSEP (Linking Science Educators Program).

As we look towards the future, the Board wishes to expand upon its outreach and service opportunities. Over the course of the past 3+ years we have launched several new and exciting initiatives. While the present initiatives have sustained funding, the expansion of these outreach initiatives and / or creation of new ventures will require additional resources. And, this is where input from the membership is highly valued – I welcome your response to the question “What new ‘worthy causes’ do you believe NARST should be looking to create and invest in the future?”

For more than 80 years, NARST has been a voice of and for science education researchers. Historically, that has often implied disseminating knowledge through publications and conferences. Your ideas and recommendations for future outreach and action-taking initiatives that fulfill the NARST mission are encouraged at this time!

Finally...

Please do not hesitate to contact me if you have any recommendations and / or concerns related to NARST and your membership. Your efforts to enhance science teaching and learning through research are greatly appreciated. I look forward to hearing from you regarding your ideas for future ‘worthy causes’!

AD-HOC STANDARDS COMMITTEE

Troy Sadler and Betsy Davis, committee co-chairs

Review of the NRC Science Conceptual Framework

NARST convened an ad-hoc committee co-chaired by Troy Sadler and Betsy Davis (members of the NARST Executive Board) to review and provide feedback on the National Research Council (NRC) Science Conceptual Framework. The framework was being developed to guide the development of new national science education standards in the US.

Davis and Sadler constructed the committee by purposefully sampling from among the wide-ranging expertise represented in the NARST organization. NARST members with teaching experience and research expertise related to the four areas of science outlined in the framework (life sciences, earth sciences, physical sciences, and engineering & technology) as well as the different K-12 grade bands (elementary, middle and high school) participated in the review process. Committee members also possessed expertise in other areas of significance for the consideration of a standards framework including scientific practices, learning progressions, and equity.

The co-chairs facilitated conference calls during which individuals, who had previously read the framework, discussed the materials and the vision laid out in these materials. Ultimately, fourteen NARST members participated in the review process and provided feedback. In the document that was submitted to the NRC, Sadler and Davis summarized and synthesized the committee's response to the framework and the questions posed by the NRC.

To briefly summarize, the committee appreciated the framework's move toward coherence and the framing of science as explanatory. There was support among the committee members for the framing of science in terms of core ideas, cross-cutting ideas and practices. However, concerns emerged regarding

- the number of core disciplinary ideas,
- the way cross-cutting ideas and practices were featured, and
- the positioning of engineering and technology.

These and other concerns were elaborated in the main report provided to the NRC—along with commentary on the framework's many strengths.

We thank the members of the NARST community who served on the ad hoc committee and provided extraordinary willingness to contribute to this meaningful task under a very tight timeline. We also thank *all* of the NARST members who contributed in other ways to the development of the framework—through participation with the NRC itself, and/or through commenting on the draft framework. This will be an important move forward for the science education community!

NOTES FROM THE JRST EDITORS

Angie Calabrese Barton & Joe Krajcik

As we move towards the end of our first year as editors of *JRST* we would like to update you on some innovations we have brought to the journal. Before we do we want to thank the previous editors, Randy McGinnis and Angelo Collins. Due to their fine work, the 2009 ISI Impact Factor is 1.91. That puts the *Journal* 13th out of 139 in the Education/ Education Research category, and ahead of journals in our field (Science Education's 2009 *Impact Factor* is 1.625, *JLS* is 1.767 and *IJSE* is 1.047).

Submissions and Turn Around

As of October 1, the *Journal* has received 231 original submissions. This figure does not include manuscripts returned to the authors under a Special R&R decision which have not yet been resubmitted (see below). This puts us about even with the 2009 submission rate of 241 original submissions at this time.

We have been working steadily at reducing the turnaround time on manuscripts. For the first nine months of 2010 our average time to regular decision was 76 days from submission, compared with 101 days for the first nine months of 2009. Average time in editorial review has been 15 days.

At the time we took over the *Journal*, the publication queue (backlog) was approximately 9-10 months from final accept to publication. Working with Wiley-Blackwell on page formatting and adding pages to the last five issues of 2010 has further reduced our backlog, so that we are now approaching a 5-6 month publication queue. Combined with the reduced review time, we are starting to see the shortest time-to-publication for *JRST* articles in many years.

Twelve month rolling accept ratio is currently at 16%, slightly ahead of the 12.5% average over the previous two years. Now that the editorial office has worked through the publication backlog, we anticipate that the accept ratio will rise slightly from previous levels to allow for a sustainable flow of articles.

Special Issues

We will keep the practice of special issues. We will craft them around cross cutting issues that impact members of our community throughout the globe. We have started the processes of special issues. Currently we have four special issues planned.

August, 2011:

Globalization—Science Education from an International Perspective,

Guest Editors: Mei-Hung Chiu and Reinders Duit

January, 2012:

Large-Scale Interventions in Science Education for Diverse Student Groups in Varied Educational Settings.

Guest Editor: Okhee Lee and Joseph Krajcik

August, 2012:

Assessment (exact titled to be determined).

Guest Editor: Nancy Songer

January, 2013:

Equity (exact titled to be determined).

Guest Editor: Eileen Parsons and Angie Calabrese Barton

Virtual Issues

Our virtual issues will unite articles with similar topics from past issues of *JRST* that inform an aspect of the field, and will be marketed to introduce *JRST* and the work of our author community to broader audiences. Virtual issues are generally 8-10 manuscripts long and include an opening editorial that speak to the collection as whole.

The first virtual issue, *Research Informing Practice*, was edited by Associate Editor Professor Julie Luft in collaboration with the National Science Teachers Association's Research Committee and was published online in August, 2010. The special issue provides a collection of articles from *JRST* that are particularly relevant to the practitioner community. Collaborating with our publishers, this virtual issue will be widely available to members of the National Science Teachers Association and other practitioner communities. So far the response to this virtual issue has been extremely positive.

Our second virtual issue will focus on equity, diversity, and multicultural education. Professor Mary Atwater will serve as the special guest editor. She is convening a committee to work with her (composed of current and previous coordinators of Strand 11 and the E&E Committee and other scholars). We expect this special issue to be available by NARST 2011 conference.

Continued on page 13

New Media

In keeping with our goals, we've made progress on several "new media" efforts to enhance the *Journal*.

In late August, Wiley-Blackwell shifted the *JRST* site over to the new Wiley Online Library system, which affords us greater ability to link articles to supplementary materials and to tailor our online journal experience. We anticipate that our first video podcast will premiere on the site in early 2011.

To support our editorial team, we initially developed a *JRST* site as a limited-access collaborative workspace for members of the editorial team, providing detailed instructions for Associate Editors, searchable information on Editorial Board members for review assignment, and email, comment, and wiki features. As we have rolled out new initiatives, we've increasingly expanded the information on the site to offer timely information and support materials to authors, reviewers, and NARST members, including the opportunity for members to respond to *JRST* editorials. See Web <http://jrst-editors.net/>.

Supplementary Materials

With the switch to the Wiley Online Library functionality on the *Journal* site, we have begun encouraging authors to make full use of online supplementary materials to support an article. We believe this serves several important purposes that will substantially improve the quality of *JRST* pieces.

First, online supplementary materials allow the authors to move supporting materials and background information out of the main article text, allowing the article to focus more concisely on the research being presented. Readers who have an interest in the detailed description of a methodology or the background information can still find it online, while a more casual reader can follow the primary research methods

and findings without distraction. The reduced page count allows for more timely publication.

Second, online supplementary materials allow the authors to include information that is not possible in print. Audio and video clips to support the text, for example. Interactive models or animations are possible, along with more detailed interview transcripts or extended discussion of secondary findings.

Third, after resolving issues of copyright with the publisher, we are encouraging authors to include instruments and data sets with their articles, so that other researchers may build off of the work presented.

While the supplementary material sections offer considerable possibilities to greatly enhance the character of *JRST* articles, we anticipate several years of educating the author community to take full advantage of these new tools.

Special R&R (revise & resubmit)

During our initial reading of manuscripts, it became clear that while some manuscripts had strengths to the underlying work, the initial submission suffered from one or more critical but potentially correctable flaws. As submitted, the manuscript would very likely be rejected if sent out for external review, but the editorial team believes with attention to the revision, the article would be more competitive in formal review. As a service to authors, and to improve feedback and turnaround, we have been issuing Special editorial revise & resubmit decisions during the initial screening of manuscripts. Thus far, the response from authors has been extremely positive. We recognize that we have more work to do to educate the author community to this new step, but we believe that overall it is an important addition to the editorial process.

CALL FOR JRST EDITORIAL BOARD MEMBERS

The *JRST* editorial team uses NARST researchers as important participants in the review process. Each year, one-third of the 40 member Editorial Board is replaced by new members.

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:

A cover letter, which includes a description of your research expertise.

A two-page curriculum vita (highlight publications in prominent refereed journals in science education and your previous reviewing or editing experience).

Applications should be submitted electronically at: <http://jrst-editors.net/> **before February 15, 2011.**

If you have any questions please contact Angela Calabrese Barton (acb@msu.edu) or Joseph Krajcik (krajcik@umich.edu, Editors, *Journal of Research in Science Teaching*).

CALL FOR PAPERS FOR A SPECIAL ISSUE OF JRST:

Large-Scale Interventions in Science Education for Diverse Student Groups in Varied Educational Settings

Guest Editor, Okhee Lee & JRST Co-Editor, Joseph Krajcik

Focus

Current classroom practices internationally have largely been shaped by changing student demographics and accountability policies. In the U.S., the school-aged population is becoming increasingly more diverse, while achievement gaps across content areas persist and in some areas increasing. At the same time, more demands are being placed on all students as a result of high-stakes testing and accountability policies according to the No Child Left Behind (NCLB) Act of 2001. Educational innovations take place against such backdrop of changing student demographics and educational policies. Teachers are asked to provide reform-oriented practices based on content standards across subject areas to all students, while preparing their students to perform well on high-stakes tests. This presents challenges for teachers and intervention programs alike in meeting these multiple, often conflicting, demands.

JRST invites you to prepare a manuscript for the forthcoming issue on large scale interventions for diverse student groups in varied educational settings. The special issue will discuss challenges and failures as well as accomplishments and promises of such efforts. Interventions are defined broadly including, but not limited to, curriculum development, teacher professional development, instructional strategies, assessment, learning technologies, school restructuring, or school leadership. In a similar manner, student diversity in varied educational settings is defined broadly including, but not limited to, race, ethnicity, culture, language, social class, disability, and gender.

Kinds of Contributions

This special issue invites manuscripts that report on empirical studies or develop conceptual pieces that focus on large-scale interventions of educational innovations for diverse student groups in varied educational settings. You are encouraged to address such issues as the goal or purpose of the intervention, conceptual or theoretical framework guiding the intervention, the context in which the intervention took place, implementation of the intervention, methodological approaches, and the intervention's effects on intended participants or participant groups.

In addition, you are encouraged to address unique challenges facing such interventions, including high mobility rates of students and teachers, instability of leadership at the district and/or school levels, limited organizational resources (materials, human capital, and social capital), pressure to "cover" the curriculum or to emphasize facts and basic skills over understanding of key concepts and big ideas, and demands of high-stakes testing and accountability policies placed on academically low performing schools.

Finally, you are encouraged to offer insights for designing and implementing effective interventions, as well as to discuss implications for educational policies and practices, for student groups who have traditionally been underserved in science education.

Timeline

Manuscript Submission Deadline:
April 1, 2011

Reviews returned:
June 15, 2011

First revisions due:
August 15, 2011

Second revisions due:
September 30, 2011

Expected publication:
January 2012

Submission Guidelines

Submissions of manuscripts should follow the publication guidelines for the *Journal of Research in Science Teaching* and be submitted electronically to Manuscript Central (<http://mc.manuscriptcentral.com/jrst>). Select "Special Issue" option in Step 1 of the submission process, and identify the special theme title as "Large-Scale Interventions" in Step 4. Manuscripts selected after competitive, peer-reviewed process, will be published with reaction from experts in the field. Inquiries concerning the suitability of possible contributions to this special issue should be encouraged to send directly by e-mail to:

Okhee Lee, Guest Editor
School of Education
University of Miami
1507 Levante Avenue, Room 220
Coral Gables, FL 33146 U.S.A.
olee@miami.edu

Joseph Krajcik, JRST Co-Editor
School of Education
University of Michigan
610 East University
Ann Arbor, MI 48109-1259 U.S.A.
Krajcik@umich.edu