

eNARST NEWS

National Association for Research in Science
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A MESSAGE FROM THE PRESIDENT

Richard Duschl

As we prepare for the upcoming 2010 Philadelphia Annual International Conference March 21-24, I find myself thinking about all the ways that

NARST has developed over the years. In a few years our journal will celebrate a 50th year. Since 1928 our members have had a commitment to the improvement of science teaching and learning through research. NARST is dedicated.

We are now a strong international association with many Board Members and Past Presidents from outside North America. This year we have established policies for forging affiliations with science education research, policy, and/or teacher professional development organizations. NARST is reaching out.

The NARST 2010 Annual International Conference program has been set and once again the quality of the papers, posters and symposia is strong. Many very good proposals were not included in Philadelphia program due to space restrictions. NARST is competitive.

NARST welcomes the new JRST editorial team led by Angie Calabrese-Barton and Joe Krajcik as they take the helm this coming year for the journal's 47th year of publication. NARST thanks J. Randy McGinnis and Angelo Collins and their editorial team for a highly successful 5 years. JRST is a research journal with a proud legacy, current high ranking, and promising future. NARST has impact.

NARST held its first Summer Research Institute for Doctoral Students under the very able leadership of Sandy Abell, Pat Friedrichsen, and Carla Zembal-Saul, and it was a triumph. Our plans are to host future Summer Research Institutes every other year. Future decisions concerning these Research



Institutes must address how many to offer, on what topics, and where in the world to host these important mentoring events. NARST is expanding.

NARST now offers sponsored attendance to teachers, junior researchers and international scholars at our Annual International Conference. NARST sponsors science education research conferences in developing nations. NARST reaches out locally and globally.

NARST has growing pains though. We need to have some serious conversations about our financial future and stability. Due to increased costs in running our conference and organizational activities, we have in recent years not been making the progress we once did. NARST for many years now has not had any dues increases. We need to have conversations about raising our association's dues and our conference registration fees in order to keep pace

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A MESSAGE FROM DANA L. ZEIDLER, PRESIDENT-ELECT

As President-elect, one of my responsibilities is to recommend to the NARST Executive Board appointment of new members to the eight NARST standing committees. The way that I got involved in NARST on the organizational level was by serving first on a number of committees – Early Career Research Award, Distinguished Contributions in Research Award, and NARST Outstanding Paper Award. In addition to serving on the editorial board for JRST, I was later elected to the Executive Board where I was further mentored in the organizational policies and procedures while co-chairing the Awards Committee. I have found that offering my service in these capacities provided my most rewarding encounters with NARST members, on both professional and personal levels.

Each year we solicit members who are interested in joining one of the committees. Participation in committee assignments is the best way to get involved in NARST and to influence decisions and policies. If you would like to serve, indicate to me in an e-mail to zeidler@coedu.usf.edu on which committee you would like to serve, and what your qualifications and interests are to serve. It will be helpful if you include the name of the committee you are interested in serving on in the e-mail header. There are a limited number of positions, so please state your case well. To serve on a NARST committee, you must be a member of NARST.

Please let me know of your interest by February 1, 2009. At that time, I will collate all the requests to serve and make my recommendation to the NARST Board of Directors on the membership for all standing committees. You will hear from me on our decision before annual meeting in Philadelphia.

When you come to the annual meeting, your committee will meet at least one morning at 7 AM (with a free continental breakfast that you can take into your meeting room). Committee Meetings will be posted in the NARST International Program schedule. Some committees meet also (or only) for the second day, so check the schedule. You should plan to attend the committee meeting(s) and provide input during the meeting and contribute throughout the year in a timely fashion as your committee will have work to do. If you are on the committee, and you do not do your work in a timely way, you may be replaced. Therefore, this is a serious responsibility, but one in which you will learn about your committee's focus and its interaction within the organization and in our greater effort to improve science education worldwide. Camaraderie and networking opportunities formed with others on the committee are also enjoyable and rewarding.

Your appointment to the committee is for two or three years, depending on the committee. We have a rotating committee membership, so only part of the membership is new each year. You can get the details of how long the term is and how many members there are by going to see our Policies and Procedures Manual at the NARST website.

We would like to encourage both US and international members to consider asking for a committee assignment. One goal is to have the composition of the committees reflect the membership. Since our 2009 international membership is approximately 30%, then we want our committees to reflect that percentage. We all have so much to contribute and learn from each other, with the common goal of improving the teaching and learning of science worldwide.

The various committees are listed at the end of the newsletter with a brief description of each along with the number of openings and associated terms. If you are interested in being considered for one of the committees, please email me at: zeidler@coedu.usf.edu.

Committee appointments will be finalized by March 1st. New committee members will be contacted prior to our annual meeting in Philadelphia, March 20-24. Please check the final program for information on when the committee to which you are assigned meets.

I am enjoying this opportunity to serve NARST and our members. We welcome your voice, input and participation.

A MESSAGE FROM THE PRESIDENT

with inflation and the rising costs of:

- Hosting a quality conference,
- Running research institutes and Linking Science Education Programs,
- Sponsoring a world class journal,
- Conducting preconference workshops,
- Sponsoring strand activities,
- Developing our website and virtual presence,
- Supporting junior scholars, and
- Supporting the organization's leadership to conduct NARST business.

One way to secure our financial future is to establish an endowment. Bill Kyle, Executive Director, has led the way, and NARST has now established an endowment. Go to our website, click on 'About NARST' and then select 'Donate to NARST'. I invite all members to give what they can. I challenge in particular all Past Presidents, JRST Editors, and Board Members to join me in making annual contributions to either the 'Scholarship Fund', 'Research Institutes,' or 'Unrestricted' category. Let us all lead once again. NARST is maturing.

See you in Philly!

THE NARST DIGITAL DIVIDE

Charlene M. Czerniak, Past President



The 2009 Horizon Report, an annual report published in collaboration between the New Media Consortium and the EDUCAUSE Learning Initiative, is a long running research project that seeks to identify emerging technologies that are highly likely to impact teaching, learning, and research over the next one to five years (<http://wp.nmc.org/horizon2009>). In this year's Horizon Report, mobile technology and cloud computing were

identified as technology adoptions that are only one year away from widespread use. Geo-everything and personal web spaces, commonplace in entertainment, commerce, and work environments, are predicted to impact education settings soon. The Horizon report placed semantic-aware applications (new ways of finding and aggregating content) and smart objects (technology objects with the ability to recognize their physical location and respond appropriately) as technologies worth watching for in the educational world.

We are all aware of the rapid evolution of mobile devices and the popularity of iPhones and other pda devices, which can be loaded with apps for almost everything imaginable. Clearly, mobile technologies are quickly competing with computers. Cloud computing allows for large-scale data collection and processing. Personal web technologies make it easy for individuals to create web environments for social, educational, and professional endeavors.

It is clear that increasing globalization continues to affect the way we work, collaborate as communities of learners, and communicate with each other as scholars. Information technologies have a significant impact on these activities. The growing ability to use technology tools to connect scholars around the world through online collaborative workspaces, social networking tools, and mobile devices are rapidly eliminating borders and changing the way we work. The 2009 Horizons Report appropriately points out "The notion of collective intelligence is redefining how we think...The notions of collective intelligence are redefining scholarship as we grapple with issues of top-down control and grassroots scholarship. Today's learners want to be active participants in the learning process – not mere listeners; they have a need to control their environments, and they are used to easy access to the staggering amount of content and knowledge available at their fingertips." The recent online NARST discussion sparked by a paper written by Norm Letterman and Jonathan Osborne underscore our association's interest in rethinking the way we communicate as a science education research community.

However, I believe we have a digital divide in the NARST community; one that separates our professional work from our personal use of technologies. Technological advancements such as Webinars, webcasts, discussion boards, blogs, wikis, Twitter, social networking sites (such as Ning, Facebook and MySpace) are widely used in the general public but not used by the NARST organization to promote conversations, collaborations or networking. Let me suggest a few examples: Mobile devices could change the format and feel of our annual conference as well as our continued collaborations year-round; cloud computing applications could allow for large-scale international research databases, which could change the face of science education research. Additionally, many professional organizations have begun to use open source publishing outlets to supplement or replace their print journals. Open source publishing allows for rich data sources associated with an article to be linked within the manuscript (e.g., instruments, rubrics, video, audio, and interviews) and provides a format for members to comment on/discuss the manuscript online. Let me make it clear that the NARST board is not looking to replace JRST. However, some board members indicated at our Fall board meeting in October an interest in exploring open source publishing as a way to meet NARST members' interests and needs not accommodated through normal print publication.

Despite these aforementioned technological possibilities that could dramatically change science education research, a survey that was sent by the Publications Advisory Committee to the membership found that the most members used the NARST web page only to submit their conference paper annually and to read the ENARST news a few times a year. I believe it is time that NARST take the lead to adopt technology tools that would enable researchers worldwide to engage in dynamic collaborative research.

At the Fall board meeting, I was charged with chairing an ad hoc group to explore NARST's electronic presence. If you have an interest in working with me on this ad hoc committee, please contact me at Charlene.Czerniak@utoledo.edu

EXTERNAL POLICY AND RELATIONS COMMITTEE

Betsy Davis, Chair

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.

Policy for Affiliation with NARST

At the NARST Board of Directors meeting in October, the Board approved a policy for developing affiliations with other science education organizations. EPRC has been developing the policy over the last several months. In the words of the policy, the affiliations might work toward "joint organization of conference sessions, co-authorization of position/policy statements, research studies, joint or co-sponsored publications, joint events for doctoral students, co-sponsored professional learning communities, and so on." Our goal has been to develop a policy that is flexible enough to allow different flavors of affiliations. The policy is a first step. Moving forward, after bringing existing affiliations into accordance with the policy, we will begin to foster new affiliations.

NARST at NSTA 2010

NARST will once again host a booth at the 2010 NSTA annual meeting. 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 two years, there have been numerous inquiries from teachers about how they can get a subscription to JRST. If you will be at the 2010 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 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 meeting to set up a schedule.

NARST 2010 EPRC-Sponsored Sessions

With Strand 15 (Policy), the External Policy and Relations Committee will be co-sponsoring three sessions for the 2010 NARST annual meeting in Philadelphia. Two of the sessions will focus on the Opportunity Equation report that was released in Summer 2009 by the Carnegie Foundation. The sessions will include, first, a talk by Michele Cahill, the co-chair of the commission that developed the report, followed by a panel discussion building on Cahill's talk. Together the sessions will explore the report's policy implications for STEM education. A third co-sponsored session will focus on the Science College Board Standards for College Success. These new standards have the potential for wide-ranging implications for STEM education and STEM education policy. These should be exciting opportunities to learn so please plan to attend!

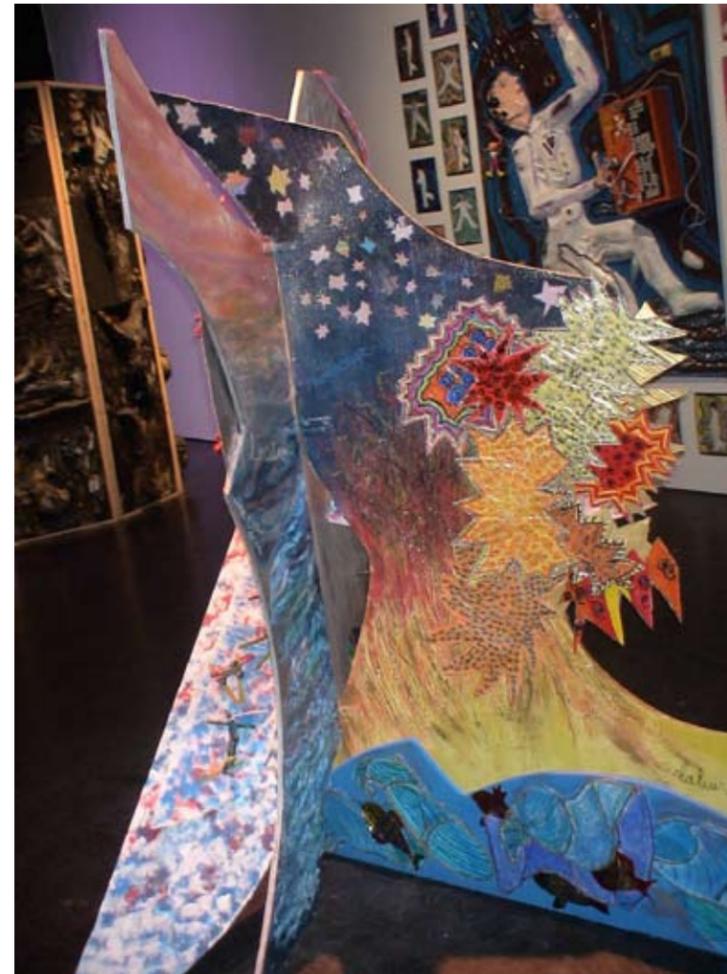
A big thank you to all of the External Policy and Relations Committee members for their on-going hard work and dedication to the charge of the committee and mission of NARST.

NARST External Policy and Relations Committee

Chair:
Betsy Davis

Members:
Eileen Parsons
Carla C. Johnson
Andrew Shouse
Michael Vitale
Sharon Lynch
Kevin Holtz
Mike Barnett
Nam Hwa Kang
Kathy Malone

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 chair, Betsy Davis (betsyd@umich.edu), or any of the EPRC members.



Artwork representing science and the struggle with diversity and poverty created by the 5th & 6th grade students of Jrene Rahm

EQUITY AND ETHICS COMMITTEE

Valarie L. Akerson and Julie Bianchini, Co-Chairs

The Equity and Ethics Committee is planning several great events for you at the NARST 2010 conference! We are sponsoring a preconference workshop, hosting two committee-sponsored symposia, and organizing the ever-popular equity dinner! We hope to see you at these events, and also invite you to attend our regular committee meetings at NARST which will be listed in the Program. We provide more details on our events below.

Pre-Conference Workshop

Research into Practice: Practice Informing Research for Equity Scholarship and Teaching

Sunday, March 21, 2010

1:00- 5:00 pm

Pre-conference Planners: Felicia Moore Mensah, Teachers College, James Ellis, The University of Kansas (committee members), and Regina Wragg, University of South Carolina, Columbia.

Panel: Dr. Janell N. Catlin, Teachers College Columbia University (keynote), Jomo Mutegi, IUPUI, Blakely Tsurusaki, Washington State University, Gillian Bayne, Lehman College, Rowhea Elmesky, Washington University-St. Louis Wilbert Butler, Tallahassee Community College, Nate Carnes, South Carolina State University, Mary Atwater, University of Georgia, Sumi Hagiwara, Montclair State University, and Melody Russell, Auburn University

Description: The pre-conference workshop will emphasize opportunities available to scholars of color and scholars who do research involving issues of equity on how to develop relationships so that equity research that influences practice can be accomplished. Each panelist will offer some specific advice about teaching and conducting equity research, how to make connections in order to conduct research, how their research informs practice, or what particular practices are outgrowths of their research and vice versa. The panel will field questions from the audience relevant to the challenges and opportunities that face equity scholars and scholars of color who are doing research in science education. Attendees will work in small groups to outline personal or individual plans of research that they may continue to develop after the NARST conference. Breakout groups and work sessions will be led by facilitators and panelists representing a range of expertise.



Artwork representing science and the struggle with diversity and poverty created by the 5th & 6th grade students of Jrene Rahm

EQUITY AND ETHICS COMMITTEE Symposia

1. Learning to Participate in the Culture of Science: Equity and Access in Science Education

Chair: Doris Ash, University of California, Santa Cruz

Panel: Bryan A. Brown, Stanford University, Pauline Chinn, University of Hawaii, Manoa, Noah Feinstein, University of Wisconsin, Madison, Sumi Hagiwara, Montclair State University, and Maria Rivera Maulucci, Barnard College

Discussant: Jrene Rahm, Universite de Montreal

Description: The science that is taught has sometimes been couched as culturally neutral and thus immune from the need to come from a culturally relevant perspective. The paradigm that guides this thinking operates on the assumption that if all students have to learn the language, epistemology, and knowledge of science, then why does science teaching bear the responsibility of culturally relevant instruction? We know from real classrooms and informal learning institutions that such views do not fit reality. The issue of learning how to

participate in and become part of the culture of science, then, is the central framework for this session. We will examine this issue from multiple viewpoints and diverse research perspectives. The five panelists are interested in a wide range of research including but not limited to urban school students and discursive identity, native Hawaiians and place-based learning, Japanese-American immigrants' views of science in school, informal institutions and issues of access, and the role of critical science pedagogy in teacher education. The goal is to present a well-rounded cross section and lively discussion of scholars working in a variety of settings with diverse populations toward the shared goal of achieving equity and access in science education.

2. Equity and Ethics Scholar Symposium: Presenting Examples of Research into Practice and Practice Informing Research

Panel: Mamta Singh, Texas State University, Joi Merritt, University of Michigan, Fran Matecyik, The Pennsylvania State University, Altoona, Rashmi Kumar, University of Pennsylvania, Younkyeong Nam, University of Minnesota, and Femi Otulaja, The City University of New York

Chair and Discussant: Julie Bianchini, University of California, Santa Barbara

Description: In this symposium, six winners of the 2009 NARST Equity and Ethics Committee Scholarships present their research. Using different theoretical frames and methodological approaches, they investigated issues of equity and ethics in the teaching, learning, and researching of science in schools. Individually and collectively, these Scholars' studies speak to the NARST conference theme: Examples of Research into Practice – Practice Informing Research. More specifically, three Scholars focused on student learning resulting from instructional innovations grounded in existing research. One Scholar investigated college students' success in entry-level science courses; a second, the strengths and limitations of assessment items in tracking sixth grade students' understanding of matter; and a third, the use of simple strategies to facilitate student problem solving. The remaining three Scholars examined the teacher: They explored the impact of research-based professional development opportunities on science teachers' views and practices. One Scholar examined teachers' understanding and implementation of PBL; a second, urban teachers' teaching of earth system and environmental science; and a third, an urban science teachers' use of small-group discussions to promote student learning. The Scholars' collective purpose is to inform researchers' and practitioners' understanding of ways to improve the teaching and learning of science for all students.

Equity and Ethics Dinner

Tuesday, March 23, 7-9 p.m. organized by Kathy Fadigan and Rashmi Kumar. More details to follow—check your NARST listserv, or registration at the meeting!

INTERNATIONAL COMMITTEE

Happy New Year! 新年快樂! 新年あけましておめでとうございます! 새해 복 많이 받으세요! Feliz Ano Novo! Buon anno! Feliz Ano Nuevo! Glückliches Neues Jahr! Gelukkig Nieuw Jaar! Yeni yılınız kutlu olsun! Onnellista Uutta Vuotta! Gott Nytt År! A'am Saeed! Shana Tova! Bonne et heureuse annee! ευτυχισμένο το νέο έτος! Glade Nytt år! Godt nytår! Selamat Tahun Baru! Masaganang Bagong Taon! С Рождеством Христовым! Häid Jõule ja Head Uut Aastat! Hamingjusamur Nýár! قديديجلا قنسرلا لولوح و داليجلا قنسرانجب يناحتلا لمجا

First, I would like to wish everybody a prosperous year of 2010 (The year of the Tiger according to the Chinese Zodiac).

Linking Science Educators Program (LSEP)

After the first Linking Science Educators Program (LSEP) successfully conducted in Malawi, Africa, between September 29 and October 6 in 2008, the International Committee continued to make efforts to promote the 2nd LSEP for the year 2009. In 2009, the 2nd LSEP was granted to Dr. Uchenna Udeani at the Department of Science & Technology Education of University of Lagos in Nigeria. The project title is Developing Research Capabilities of S&T Teachers and Graduate Students. The workshop was carried out between November 29 and December 4 in 2009. The resource person was Prof John Penick, and Dr. Udeani was partnering with the National Open University of Nigeria based in Lagos. The purposes of this workshop were: (1) to develop appropriate courses on research methodology, (2) to develop international collaborations, and (3) to develop teaching and staff development modules. A brief report about the workshop can be found elsewhere in this edition of E-NARST News (see p.13). The closing date for submitting proposals for the 2010 LSEP will be on January 31, 2010.

International Committee (IC)-sponsored Session at ESERA 2009

ESERA and NARST have a reciprocal conference arrangement. Every two years, NARST invites ESERA to submit a proposal for organizing a symposium at the annual conference. In return, ESERA invites NARST to submit proposals for a symposium at its biennial conference. In 2009, the NARST International Committee organized a session entitled 'A Global Challenge for Science Teacher Education from International Perspectives' and had five papers presented at the ESERA conference during August 31 to September 4, 2009 in Istanbul, Turkey. At the ESERA conference 2009, the highest number of attendees was apparently from Turkey. Germany had 97 attendees, and the UK had 80. There were 70 attendees (ranked 4th place) from the USA, which is the largest number ever from the States. Eleven members of the NARST Board of Directors attended the ESERA conference. In 2010, the NARST-ESERA symposium at NARST will be organized by the President of ESERA, Justin Dillon.

Mei-Hung Chiu,
International Coordinator

International Committee (IC)-sponsored Session at NARST 2010

As usual, the International Committee is organizing an IC-sponsored session for the NARST Annual International Conference in 2010. The title of the session is "Challenges and opportunities between research and practice from international perspectives." The titles of the presentations and authors are as follows. (1) "Challenges and Opportunities between Research and Practice in China: An Examination of Exemplary Physics Instruction and Standardized Assessments" by Ling L. Liang at La Salle University in USA and Xian Chen at Nanjing Normal University in China. (2) "Does Chinese Marxist Education Affect Chinese Science Teachers' Views of Nature of Science?" by Miancheng Guo and Norman G. Lederman at Illinois Institute of Technology. (3) "Research into Practice and Feedback: System Thinking-decision Making Secondary Science Teaching in the Israeli Multicultural Context" by Uri Zoller, Faculty of Science & Science Education, Haifa University, Israel. (4) "Using Research on Students' Learning Processes to Inform Pre-service Teacher Education" by C. V. Aufschnaiter, G. Duebbelde, J. Cappell, M. Ennemoser, M. Meyer, J. Stiensmeier-Pelster, J. Straesser, and A. Wolgast in Germany.

International Committee and Membership and Elections Committee-sponsored Symposium at NARST 2010

This is the first time that the two NARST committees, Membership and Elections and the International Committee are co-organizing a symposium for the NARST International Conference in 2010. The symposium addresses the theme of the conference "Research into Practice: Practice Informing Research" by entitling the symposium as "Research into Practice: Various Strategies in Countries around the World." Over the past decades, although studies have investigated problems and issues about learning and teaching science from different perspectives, few school systems are able to adopt the research outcomes for improving science education. The purpose of this symposium is to discuss this issue from international perspectives to find some possible solutions for closing the gap between research and practice.

Acknowledgments

Finally, I would like to express our sincere thanks to all the International Committee members, in particular, Dr. Sibel Erduran, Dr. Barbara G. Ladewski, and Dr. Uri Zoller, who have been serving for the NARST international members with the responsibilities of reviewing scholarship applications and Linking Science Education Program (LSEP) proposals,

INTERNATIONAL COMMITTEE

selecting themes and reviewing abstracts for International Committee-sponsored sessions, and helping in other related

activities for the past two and a half years. Their term of service will end in March 2010. Their contributions to the NARST International Committee are highly appreciated. I would also like to thank the following persons who helped translate "Happy New Year" into different languages. They are Saouma BouJaoude (Lebanese), Liberato Cardellini (Italian), Jens Dolin (Danish), Reinders Duit (German), Jorge G. Ibáñez (Spanish), Rosária Justi & Eduardo F. Mortimer (Portuguese), Masahiro Kamata (Japanese), Jari Lavonen (Finnish), Martine Meheut and Cécile de Hosson (French), Feral Ogan-Bekiroglu (Turkish), Lida Schoen (Dutch), Fortunato B. Sevilla III (Filipino), Helge Strömdahl (Swedish), Hye-eun Zew (Korean), and Uri Zoller (Hebrew).



NARST International Committee Sponsored Session Presenters at ESERA

MEMBERSHIP & ELECTIONS COMMITTEE

Reinders Duit & Renee Schwartz, Co-Chairs

The M & E Committee will be sponsoring three sessions and one joint session at the upcoming NARST conference in Philadelphia 2010. Three of the sessions are intended to support early career researchers and enable new NARST members to get the most benefit from the conference and association.

1. Mentor-Mentee-Nexus

Organizers: April Adams, Northeastern State University
Julia Grady, Arkansas State University

We invite all new NARST members and experienced NARST members to participate in a Mentor/Mentee program and special NARST session at the annual international conference. To aid new members in the navigation of the NARST community and conference, we match newer members (mentees) with more seasoned members (mentors) to engage in discussion to help launch or expand professional networks. Mentors and mentees are encouraged to communicate before and during the annual conference and then participate in this informal discussion session during the conference. We encourage all NARST members who

are early in their professional career to attend this session. We encourage all experienced NARST members to consider sharing their wisdom and experience by being a mentor.

Are you a new member to the NARST community? Do you have questions about how to get the most out of your annual conference experience? Do you have questions about how to get involved in NARST committees? Do you want to begin networking with others in your field and in the broader NARST community? Please sign up as a mentee, and we will match you with an experienced NARST member to help mentor you through the early phases of your NARST career.

Are you an experienced member in the NARST community? Would you like to help the newer members get the most benefit from their conference experience? Can you show them how to navigate the program and conference events? Can you answer questions about sessions, committees, and ways to get involved in the association? We need experienced NARST members who want to continue making a difference in the association by helping build and foster our new membership. If you would like to serve as a mentor for a new NARST member, please sign up. We will match you with a mentee before the annual conference.

- If you want to be guided into the NARST Community by a Mentor or if you are ready to be a Mentor please contact April Adams (adams001@nsuok.edu)

2. Graduate Student Forum

Organizers: Mary M. Atwater, University of Athens
Corinne Lardy, San Diego State University

The graduate Student Forum aims to guide and encourage beginning researchers by discussing various problems that may rise, e.g. when completing the dissertation or searching for a position. Attendees of the forum are given the opportunity to question a panel of experienced colleagues on all matters of academic interests.

3. New Researcher and Junior Faculty Early Career Discussion

Organizers: Julie Luft, Arizona State University, Tempe
Laura Henriques, California State University, Long Beach
This session is particularly designed for the early career, junior faculty who want support during the first years of their academic career. The focus will be a panel discussion with experienced faculty, representing a variety of institutions and structures, who can guide junior faculty through important issues that pertain to the tenure process and other issues. Discussion topics include, but are not limited to: publications, research in the new position, collaboration with different colleagues within the university setting, teaching loads, the tenure and promotion process, etc.

In addition the NARST International Committee and the Membership and Elections Committee will sponsor a session on the key topic of the 2010 Annual International Conference:

4. Research into Practice: Various Strategies in Countries Around the World

Organizer: Mei-Hung Chiu; *Discussant:* Reinders Duit
With contributions by Julie Luft (USA), Phil Scott (UK), John Loughran (Australia), Chorn-Jee (Taiwan)

PUBLICATIONS ADVISORY COMMITTEE

Carla Zembal-Saul and Jan van Driel, Co-chairs

The Publications Advisory Committee (PAC), in close cooperation with the executive director and the Drohan team, agreed about the new look of E-NARST News, as you now hold it in your hands, or see it on your screen. Of course, we hope you appreciate this new design, and we welcome any feedback.

Recently there has been a fair amount of interest in reviving Research Matters to the Science Teacher from the NARST leadership, PAC and others in the community, prompted by the need to make research in science education accessible to a wide variety of groups, including teachers and policy makers. Some have advocated to resurrect this type of publication with the intent of making important research findings accessible to teachers, administrators and policy-makers. However, others have called for more dialogic models of research and practice, as opposed to the unidirectional impact conveyed through the original Research Matters. The PAC sponsors a special session at the 2010 Annual Meeting about this issue. The session will showcase three examples of the dynamic interplay of research and practice as conveyed by NARST members and their teacher collaborators. The session aims to generate ideas for a new generation of Research Matters that can be taken under consideration and moved to an action plan by the Publications Advisory Committee.

In the previous edition of E-NARST News we informed you about the new editors of the Journal of Research in Science Teaching, Angela Calabrese-Barton (MSU) and Joe Krajcik (UM). The PAC is sponsoring two sessions at the 2010 Annual Meeting, led by the new editors. In the first session the new 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. In addition to this, a pre-conference workshop will be held 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. JRST Editors and Associate Editors will facilitate the session.



The PAC conducted a survey among NARST members regarding website features and functionality. The survey was completed by 178 members. The overall quality of the website (e.g. content, look, organization and navigation) was rated as good. It appeared that members mostly use the NARST website to submit conference proposals and proposal reviews. Also, members use the website to access publications and information about conferences. Among the most useful features, conference registration and membership dues were mentioned. To further enhance the website, members pointed at online payment and a unified login. In addition, there was an interest in committee reports and regular updates of organization news.

As always, we welcome your feedback. Please contact Carla (czem@psu.edu) or Jan (Driel@iclou.leidenuniv.nl) with your questions, suggestions, and/or interest in working with the committee.



SRI 2009 Group Photo



Some SRI mentors and participants

RESEARCH COMMITTEE

Troy Sadler, Chair

Summer Research Institute

NARST sponsored the first ever NARST Summer Research

Institute (SRI) this past June. Sandra Abell, Patricia Friedrichsen and Carla Zembal-Saul conceptualized and organized the SRI which was hosted at the University of Missouri in Columbia, MO. Science teacher learning served as a central organizing theme for the Institute. Six other NARST members all of whom have expertise in science teacher learning joined Abell, Friedrichsen and Zembal-Saul to serve as faculty mentors for 23 doctoral student participants. The students and mentors worked together to support the development of the students' research agendas and build a network of emerging science education scholars. SRI activities included small group working sessions, faculty presentations, workshops and social gatherings. In the small groups, teams of students and faculty engaged in critical discussions of the students' research projects and trajectories. The faculty presentations provided an opportunity for students to hear about how their mentors' research interests and agendas had evolved. The workshops focused on specific research-related topics such as establishing validity in qualitative research, using software packages and new technologies to support research, and navigating the publication process.

The NARST Board charged the Research Committee with evaluating the SRI in order for the Board to be able to make informed decisions regarding sponsorship of future Institutes. As a part of the evaluation, the Research Committee collected

data through site visit observations, interviews with student and faculty participants, post-Institute surveys, and content analyses of student research proposals developed before and after the SRI. The participants provided positive assessments of the institute and resounding support for hosting future Institutes. Students were particularly struck by how useful the Institute had been in terms of improving their abilities to frame and discuss their research as well as fostering development of new networks of colleagues. The faculty mentors were equally supportive of the Institute activities and outcomes. In addition to providing assistance to the student participants, the faculty cited benefits to their own professional growth in terms of providing a source of new ideas for their research and mentoring practices.

In order to gain a sense of how the Institute may have impacted practice beyond the participants' personal perspectives, the Research Committee conducted content analyses of research proposals submitted by the students prior to and following the SRI. Ninety-three percent of the post-Institute research proposals showed demonstrated improvements as compared to pre-Institute proposals. Areas of significant improvement included how students framed their research questions, presented theoretical frameworks and discussed research methods. The work of these students will be showcased in a Research Committee sponsored poster session at the national meeting in Philadelphia.

At the most recent fall board meeting, the NARST Board approved continued sponsorship of future Summer Research Institutes. Initially, the organization will sponsor one Institute every two years with the next institute to be hosted in summer 2011. Anyone interested in hosting the 2011 SRI should contact the chair of the Research Committee (tsadler@coe.ufl.edu) to discuss the application process.

A CALL FOR JRST EDITORIAL BOARD MEMBERS



From the Editors of the *Journal of Research in Science Teaching (JRST)*
Angela Calabrese Barton and Joseph Krajcik

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/> between January 1 and February 15, 2010.

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



HELP PROMOTE NARST AT NSTA!

Call from the External Policy and Relations Committee
By Betsy Davis, Chair (betsyd@umich.edu)

The External Policy and Relations Committee will once again have a booth for NARST in the Exhibition Hall at the NSTA National Conference. This year's NSTA meeting will be held March 18-21 in Philadelphia, right before the NARST Annual International Conference. 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 2010 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 Betsy Davis at betsyd@umich.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!

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 2010 Annual International Conference at the Philadelphia Downtown Marriott (1201 Market Street, Philadelphia, PA 19107, USA), March 20 - 24.

Remember to renew your membership

You received the dues renewal notice for your 2010 membership. NARST membership is based upon the calendar year. Membership dues 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.

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 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.

Your annual membership dues account for approximately 20% of the annual operating expenses of NARST. And, your annual conference registration fee covers about 80% of the total conference expenses. Thus, you can see that your annual dues and conference registration fees are maintained at a minimum level while offering you outstanding benefits. The NARST leadership offers the kind of organizational guidance and direction to ensure the Association continues to be fiscally sound.

Make a Donation to NARST

I am most pleased to announce that for the first time in NARST's history you are able to make a donation to NARST. You may access the online giving form on the NARST website; or you may use the following link <https://www.narst.org/commerce/donate.cfm>.

NARST is a 501(c)(3) organization in the USA and in accordance with IRS Code section 170 is able to receive tax-deductible contributions. Whether you reside in the USA or another country, I encourage you to consider making a donation to NARST to support a variety of association initiatives. I encourage you to share this information with philanthropists and agencies you believe would be interested in investing in NARST. 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.

In recent years, 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 10 scholarships for Classroom-based Teachers. Beginning in 2009 NARST sponsored what will be the biennial Summer Research Institute (hosted in odd calendar years). And 2010 will be the third year in which NARST will sponsor the International Committee's LSEP (Linking Science Educators Program).

The Board wishes to continue to expand upon its outreach and service opportunities. However, such expansion will require additional resources. We are hopeful that the opportunity to donate to NARST will enable the association to expand its outreach, while providing more and better services to the membership as well.

For more than 80 years, NARST has been a voice of and for science education researchers. Please consider making a gift to NARST!

Finally, 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.



Photos: Top: Workshop Participants
Bottom: Roundtable Discussion at the Workshop

LINKING SCIENCE EDUCATORS PROGRAM (LSEP)

Prof. Uchenna Udeani, HOD, Science and Technology Education. University of Lagos

Dr. Blessing F. Adeoye, Lecturer, Science and Technology Education. University of Lagos

The second LSEP was conducted at the University of Lagos from November 30th 2009 to 4th of December 2009 by Prof. Uchenna Udeani. Participants were drawn from the Department of Science and Technology, University of Lagos and the School of Education, National Open University of Nigeria. Altogether 25 Science and Technology Lecturers participated in the workshop. The resource person for the Nigerian LSEP was John Penick, Professor Emeritus of the North Carolina State University. The theme for the workshop was Capacity Building for Research.

The objectives of the workshop were to:

- Improve the content of existing courses on research methodology.
- Enhance supervisory capacity of staff in developing, implementing, and supervising graduate research
- Improve the capacity of researchers in writing award winning research proposals and publications in international journals
- Develop partnerships for sustaining the culture of research in the Science and Technology Department

At the end of the workshop, the participants left with knowledge gained in research writing, proposal writing, and got answers to many of their questions regarding conducting research.

NARST COMMITTEE OPENINGS

The standing committees, their number of new members elected each year and their terms of office include the following:

Research Committee - 3 year term (Openings = 2)

The Research Committee will develop, organize and/or implement various professional development activities for the NARST membership, including special research topic pre-sessions at the Annual Meeting and research reviews and research-oriented documents specifically designed for internal use and member benefit. Fill our allocated slots at the NSTA conventions by selecting and coordinating presentations made by NARST members at these meetings. Conceptualize, develop, and disseminate reviews of research and white papers on appropriate topics.

Publications Advisory Committee – 3 year term (Openings = 3)

The PAC will recommend policy concerning the Association's publications, and develop and disseminate additional publications specifically designed for use by media, policy-makers, education officials, teachers, and other professional organizations. In addition it will monitor the process of development of publications initiated by the External Policy and Relations, and Research Committees. And finally, the committee will monitor and oversee updates, and additions/deletions to the website.

External Policy & Relations Committee – 3 year term (Openings = 3)

The External Policy and Relations Committee will review existing and/or controversial educational policies at the state, national and international levels and produce position papers based on research. These position papers should be based on current and innovative findings and distributed through the Publications Advisory and Research Committees to the membership, policy-makers, and the community-at-large. Note that these position papers may not necessarily reflect a unified position for NARST, but they are meant instead to add information from various perspectives of science education research. These papers would assist policy-makers and the public-at-large to make more informed decisions. This committee would also foster the development of partnerships and collaborations with appropriate professional organizations and groups concerned with the quality of science teaching and learning.

Program Committee – 2 year term (Openings = 15)

The Program Committee assists the program chair in planning and conducting the annual meeting. This is a very rigorous position and needs members who are willing to work hard through the proposal process of assigning proposals to blind reviewers, making decisions on acceptance/rejection of proposals, and grouping proposals into sessions. Please specify which Program Strand you would like to volunteer for:

- Strand 1: Science Learning, Understanding and Conceptual Change
- Strand 2: Science Learning: Contexts, Characteristics and Interactions
- Strand 3: Science Teaching—Primary School (Grades preK-6) Characteristics and Strategies
- Strand 4: Science Teaching—Primary School (Grades 5-12) Characteristics and Strategies
- Strand 5: Science Teaching—Primary School (Grades 13-20) Characteristics and Strategies
- Strand 6: Science Learning in Informal Contexts
- Strand 7: Pre-service Science Teacher Education
- Strand 8: In-service Science Teacher Education
- Strand 9: Reflective Practice
- Strand 10: Curriculum, Evaluation, and Assessment
- Strand 11: Cultural, Social, and Gender Issues
- Strand 12: Educational Technology
- Strand 13: History, Philosophy, Sociology of Science
- Strand 14: Environmental Education
- Strand 15: Policy

Membership & Election Committee – 3 year term (Openings = 3)

In addition to developing a slate for annual elections, the Membership and Election Committee is concerned with recruitment, retention, and responsiveness of the organization to members' interests. The committee will seek new members from a variety of backgrounds and retain active members by soliciting interest in committee membership throughout the organization as well as for elected offices.

International Committee – 3 year term with 2/3 of the members needing to be international (Openings = 3)

The International Committee recommends policy to the NARST Board concerning matters of international science education research; represents the concerns, interests and unique perspectives of international members; and, stimulates collaborations and exchange of ideas between NARST and other international science education organizations. The Chair serves as NARST's liaison to various international science education organizations.

NARST COMMITTEE OPENINGS

Equity & Ethics Committee – 3 year term (Openings = 3)

The Equity and Ethics Committee will provide leadership and guidance to the organization on issues of equity and ethics including, but not limited to, gender, ethnicity, socioeconomic status, disabling conditions, sexual orientations, language, national origin and religion.

Awards Committee – 2 year term

The Awards Committee will oversee the work of the Award Selection Committees that solicit nominations and select winners for each of the NARST awards. Discuss issues related to equity and efficiency in the selection process, and the appropriateness of the award considering the NARST mission. If necessary, recommend changes in awards or procedures to the Board of Directors.

NARST Outstanding Paper Award (Openings = 7)

Outstanding Doctoral Research Award (Openings = 5)

Early Career Research Award (Openings = 3)

Distinguished Contributions Through Research Award (Openings = 2)

JRST Award (Openings = 8)