



SIG/Research in Mathematics Education
American Educational Research Association
<http://www.sigrme.org>

Fall 2008 Newsletter

SIG/RME Executive Board

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Remember to Vote for Officers

It's time for the SIG/RME officer elections. The biographies of the candidates appear below. You can vote electronically by going to the SIG/RME website (www.sigrme.org) or you can vote by using the ballot at the end of this newsletter. Either way, please vote! Ballots are due by January 1, 2009.

Officer Candidate Biographies

Candidates for Co-Chair

Arthur B. Powell is Associate Professor of Mathematics Education in the Department of Urban Education at Rutgers University, Newark, New Jersey, and Associate Director of the Robert B. Davis Institute for Learning of the Graduate School of Education in New Brunswick. Dr. Powell's research interests focus in the following areas where he has published extensively: writing and mathematics learning; ethnomathematics; development of mathematical ideas, reasoning, and heuristics; teacher professional development in mathematics for teaching; and collaborative problem solving in mathematics with technology. To fund his collaborative research, Dr. Powell has garnered funding from local, national, and international agencies.

In the area of service to the mathematics education community, Dr. Powell has the co-author with Beatrice Lumpkin of *Math: A Rich Heritage* (1995); co-editor and co-author with Marilyn Frankenstein of *Ethnomathematics Challenging Eurocentrism in Mathematics Education* (1997); and co-author with Marcelo A. Bairral of *A Escrita e o Pensamento Matemático: Interações e Potencialidades [Writing and Mathematical Thinking: Interactions and Potentialities]* (2006); co-editor with Carolyn Maher and Elizabeth Uptegrove of *Combinatorics and Reasoning: Representations, Justifying and Building Isomorphisms* (in press); co-author with Brian Greer, Swapna Mukhopadhyay, and Sharon Nelson-Barber *Culturally Responsive Mathematics Education* (in press). Dr. Powell is currently on the editorial board of the *Journal of Mathematical Behavior*; *Boletim GEPEM: O Boletim do Grupo de Estudos e Pesquisas em Educação Matemática [The Bulletin of the Study and Research Group in Mathematics Education, published in Brazil]*; and *BOLEMA: O Boletim de Educação Matemática [BOLEMA: The Bulletin of Mathematics Education, published in Brazil]*. He is the past vice president of the International Study Group for Ethnomathematics and co-founder and editor of the *Criticalmathematics Educator Newsletter*.

Jon R. Star is an Assistant Professor in the Graduate School of Education at Harvard University. Before moving to Harvard in 2007, Star was an Assistant

Professor for 5 years in the College of Education at Michigan State University and earned his PhD in Education and Psychology at the University of Michigan in 2001. A former middle school and high school mathematics teacher, Star's research focuses on students' learning of mathematics, particularly algebra. Star's work has been widely published in top-tiered journals in mathematics education and educational psychology, including several recent articles in *Journal for Research in Mathematics Education* and *Journal of Educational Psychology*. Star was recently an author of a US Department of Education practice guide *on Encouraging Girls in Math and Science*. In addition, Star is a principal investigator on three large federally funded projects - two from the US Department of Education and one from the National Science Foundation. In all three of these projects, Star and his colleagues conduct experimental studies that investigate the effectiveness of interventions designed to improve the teaching and learning of middle school and high school mathematics topics. Complementing his research on student learning of mathematics, Star is an experienced teacher of in-service and pre-service mathematics teachers. In addition, Star serves on the editorial boards of *Contemporary Educational Psychology* and the *American Educational Research Journal*; he also served on an NCTM Task Force on intervention programs and the AERA Scribner Award Committee for Division C.

Candidates for Events Board Member

Laurie Rubel is an Assistant Professor in Mathematics Education at Brooklyn College of the City University of New York and is also a member of the Doctoral Faculty of the Graduate Center of the City University of New York. She teaches courses on secondary mathematics curriculum and pedagogy, action research in mathematics education, and the history of mathematics for teachers. In 2007, she was the recipient of her campus' Excellence in Teaching Award.

Dr. Rubel's Ph.D. dissertation and early research investigated on middle and high school students' probabilistic reasoning. Her post-doctoral work with the Diversity in Mathematics Education Center for Learning & Teaching redirected her work to focus on equity and diversity in mathematics education. More specifically, her current research has a specific goal of studying and improving the teaching of mathematics in urban high schools. Her research received the Young Scholar Award by the Knowles Science Teaching Foundation in 2006, as well as the Faculty Early Career Award by the National Science Foundation in 2008.

Rubel taught high school mathematics for 9 years in New York City and in Tel Aviv. She recently served as co-chair of AERA's Division C Teaching & Learning Section 3 Mathematics. She has recently published work in the *Journal for Research in Mathematics Education*, *Mathematical Thinking & Learning*, *Mathematics Teacher*, *Journal of Statistics Education*, and *Mathematics Teaching in the Middle School*.

Jeffrey Shih is an associate professor of elementary mathematics education at the University of Nevada, Las Vegas. Dr. Shih currently teaches undergraduate and graduate mathematics education courses and advises mathematics education graduate students.

Jeff is a member of the editorial panel of the Journal for Research in Mathematics Education (JRME), a Research Associate of the NSF-funded Center for the Study of Mathematics Curriculum (CSMC), and on the advisory board of the NSF-funded Longitudinal Investigation of the effect of Curriculum on Algebra Learning (LieCal) project. He also serves as Coordinator for the Nevada Collaborative Teaching Improvement Program (NeCoTIP), the Title 2A Improving Teacher Quality State Grant program. He also currently serves on the Clark County School District (CCSD) Research Review Committee.

Jeff recently served as Chair of the AERA Outstanding Book Award Committee, as well as on the program committees for the NCTM Annual Meeting in Salt Lake City and the NCTM Regional Meeting in Kansas City.

Jeff's research focuses on the effect of curriculum on student achievement. His recent work has been published in JRME and SSMA. He looks forward to working with the NCTM Research Committee in planning the NCTM Research Pre-session.

Candidates for Communications Board Member

Mike Steele is an Assistant Professor of Mathematics Education in the College of Education at Michigan State University. His research focuses on the the nature of mathematical knowledge for teaching in middle school teachers and on ways in which this knowledge can be studied and developed in teaching practice. Dr. Steele's recent focus has been on the content of reasoning and proving. He has conducted several research studies investigating preservice and practicing teachers' knowledge of reasoning and proving and their enactment of lessons related to proof. He currently serves as senior staff on the Cases of Reasoning and Proving in Secondary Mathematics Project (Fran Arbaugh and Peg Smith, co-PIs), a project aimed at developing materials for teacher educators that enhance teachers' knowledge of reasoning and proving. At Michigan State, Dr. Steele teaches content-focused mathematics methods courses for preservice teachers, content courses for practicing teachers, and supervises the secondary mathematics teacher preparation program.

Dr. Steele had his work published in *Cognition and Instruction*, *Journal of Mathematics Teacher Education*, and the Association of Mathematics Teacher

Educators Monograph Series. He serves on the editorial board of *Review of Educational Research* and regularly reviews for JRME, AERA, JMTE, and the NCTM practitioner journals.

Despina Styliano is an Associate Professor in Mathematics Education at City College – The City University of New York. Her research interests lie in the area of mathematical cognition; her work explores the mathematical skills, sensibilities, and habits of mind and action that are critical to doing, learning, and using mathematics proficiently. In particular, she focuses on the use of visual representation and justification in the process of solving problems in advanced mathematics. She is currently the PI of her NSF-CAREER grant that is studying urban middle school children’s development of mathematical reasoning. She is also a co-PI of an NSF-funded project on mathematical proof and she is co-editing a volume on the learning and teaching of proof.

Dr. Stylianou’s work has been published in *Mathematical Thinking and Learning*, *Journal of Mathematical Behavior*, and *Mathematics Teaching in the Middle School*. She is a member of several research and professional organizations in education and has served as a reviewer to various journals.

Candidates for Electronics Board Member

Indigo Esmonde is an assistant professor of Mathematics Education at the Ontario Institute for Studies in Education, University of Toronto, teaching pre-service courses in mathematics teaching methods for teacher candidates, and graduate courses in culture and cognition, and diversity and equity in mathematics education. Dr. Esmonde’s research has focused on mathematics learning in schools and in out-of-school contexts in the U.S., Canada, and Papua New Guinea. Recently, Dr. Esmonde’s primary focus has been on issues of equity that arise in secondary mathematics classrooms, investigated through in-depth analysis of classroom video, ethnographic interviews, and tools from discourse and conversation analysis.

Dr. Esmonde has been involved in several large-scale collaborative research projects, including the Diversity in Mathematics Education group, and the LIFE Center (Learning in Informal and Formal Environments), both funded by NSF. Since moving to Toronto, she has begun piloting a new project, *Learning to teach elementary mathematics for social justice*, in collaboration with the Center for Urban Schooling at the University of Toronto. The project aims to implement and study an innovative professional development model to help elementary teachers develop tools to teach mathematics for social justice and equity, and to document the challenges that make this work difficult for teachers to develop.

Dr. Esmonde has presented at AERA, NCTM, ICLS, the Canadian Mathematics Education Study Group, and the International Conference on Ethnomathematics. Her work has been published (or is forthcoming) in *Mind, Culture and Activity*, *Mathematical Thinking and Learning*, *Review of Educational Research*, and *Journal of the Learning Sciences*. She is a member of the editorial board for the *Canadian Journal for Science, Mathematics and Technology Education*, and has served on the review board for AERA Division C-Mathematics.

Keith R. Leatham is an Assistant Professor in the Department of Mathematics Education at Brigham Young University where he teaches undergraduate and graduate courses in mathematics education as well as the occasional Calculus course. Keith's research focuses on the process of learning to teach mathematics. He continues to be interested in the role technology plays in this process as well as in how future mathematics teachers can best be prepared to use technology effectively with their students. His current research examines the purpose and structure of student teaching in mathematics and investigates the ways in which the student teaching experience can be focused on students' mathematical thinking. Dr. Leatham's work has been published in the *Journal of Mathematics Teacher Education*, *Contemporary Issues in Technology and Teacher Education*, the *Mathematics Teacher* and the *Canadian Journal of Science, Mathematics and Technology Education*. He has also presented his work at AERA, NCTM, PME-NA, SITE and AMTE. He is just finishing his tenure as Associate Editor for JRME.

NCTM Research Pre-Session Information

The NCTM Research Pre-Session will be held in Washington, DC, April 20 - 22, 2009. The opening session's invited speaker on Monday evening will be Adam Gamoran, whose talk will be entitled "Can Standards-Based Reform Help Close the Poverty Gap in Mathematics Achievement?"

The final program for the NCTM Research Pre-session will be available January 2009 through NCTM's website at <http://nctm.org>.

Pre-registration for the Research Pre-Session is also available electronically through NCTM's website at <http://nctm.org> or by calling (888) 241-8406. On-site registration will also be available. For more information on registration costs, please consult the NCTM website.

AERA Information

The Annual Meeting of AERA will be held in San Diego April 13 - 17, 2009. At its June meeting, the AERA Council approved an allocation of 1,440 sessions for the 2009 Annual Meeting in San Diego, based on available meeting space. There were over 10,700 proposals received across all divisions and SIGs this year. For the 2009 Annual Meeting, each unit (division or SIG) is being allocated a certain number of sessions proportionally, based on the number of joint SIG/RME and AERA members as well as the number of proposals received by each division and SIG in relation to the total number of proposals received. In addition to this allocation, each division and SIG has been assigned one session for a Business Meeting and one Paper Discussion Session (formerly known as a Roundtable Session).

SIG/RME has been allocated a total of 16 sessions to be distributed as one Business Meeting, two Paper Discussion Sessions (a total of 13 individually submitted proposals assigned across two sessions) and 13 other "substantive" sessions. The 13 other "substantive" sessions can be assigned as Symposia (one submitted symposium per session), Individual Paper Sessions (4 or 5 individually submitted papers per session), or Poster Sessions (up to 16 posters per session). [See note below for further clarification.] Transference of allocations is not permitted. That is, it is not permissible to decrease the Paper Discussion Session allotment by 1 in order to increase the "substantive" session allotment by 1. Further, if a Business Meeting is "not populated" by a SIG or division, the session will be lost to that division or SIG; it may not be re-assigned to another session format.

This year, there were approximately 100 submissions to the SIG/RME for the 2009 Annual Meeting of AERA. The program development process is still in progress. As a result, submitters are not to be notified of the decision regarding their submission (acceptance or rejection) prior to November 3, 2008.

There will be a SIG/RME Business Meeting session in San Diego with an invited address. The speaker will be Alan H. Schoenfeld from the University of California Berkeley, the recipient of the SIG/RME Senior Scholar Award.

Note: Actually, a substantive session may be a symposium, paper session, poster session, new member poster session, structured poster session, interactive symposium, interview, workshop, off-site visit, demonstration or performance. But, with limited exception, submissions to SIG/RME for the 2009 Annual Meeting were symposia, papers, roundtables and posters. Therefore, the 13 “substantive” sessions assigned to SIG/RME will be distributed within the designation of Symposia, Individual Paper Sessions, or Poster Sessions.

For program details as well as information regarding registration for the Annual Meeting and lodging, please consult the AERA website at <http://aera.net/>. Pre-registration will be made available electronically at the AERA website in early December or through U.S. mail with the forms provided in an upcoming issue of *Educational Researcher*. On-site registration will also be available.

SIG/RME Website

Please check our website at <http://www.sigme.org> for information related to SIG/RME announcements, positions available, upcoming conferences, and much more. The Annual Membership Directory can also be accessed through the website. (The user ID is **math**, and the password is **sigme**.)

If you have any information you think should be posted on the SIG/RME website, please contact Gwen Lloyd at lloyd@vt.edu.

A new SIG/RME Annual Membership Directory will be available in January 2009. Please check your contact information in the current directory by checking the electronic directory on the SIG/RME website; the online directory was recently revised as of October. The user ID is **math** and the password is **sigme**.

If any changes need to be made to your contact information, please notify Amanda Jansen at jansen@udel.edu. You may also notify Amanda by using the address correction form at the end of this newsletter.

Call for Early Career Publication Award Nominations

In 2001, the Special Interest Group for Research in Mathematics Education established the "SIG/RME Early Career Publication Award". The first award was presented in 2002. The most recent award was presented to Dr. Amy Ellis.

The purpose of the Early Career Publication Award is to recognize an outstanding mathematics education research publication by an individual within six years of receiving her/his doctoral degree. The award includes a stipend of \$500, announcement in the SIG/RME newsletter and on the SIG/RME website and recognition at the annual NCTM Research Pre-session.

The publication being nominated for the SIG/RME Early Career Publication Award may be based on the dissertation work of the nominee or other recent research the nominee has conducted. The nominee should be either the single author or the first author (in the case of a jointly authored publication). Note that only a peer-reviewed research publication is eligible for nomination; the award will not be given for a dissertation. The nominee should have received her/his doctoral degree in mathematics education no more than 6 years prior to the nomination deadline (e.g., no earlier than September 2002 for this year's nominations).

Nominations should include (and are restricted to) the following items.

1. A letter nominating the author of an early career publication. Please include the name of the author, the date he/she received the doctoral degree, and the name of the institution that conferred the degree. The nominator should also include reasons that the paper should be considered as an example of an outstanding mathematics education research publication.

If the publication is based on the author's dissertation, please include the name of the dissertation director and complete bibliographic information about the dissertation (including the dissertation abstract's number). (Self nominations will be accepted.)

2. A copy of the paper, including complete bibliographic information.
3. A copy of the Table of Contents of the journal or other peer-reviewed research publication in which the paper appeared.

Nominations will be considered by a committee consisting of the Steering Committee members and the Electronic Communications Secretary of the SIG/RME Executive Board. The decisions of that committee will be final. Please send nomination materials **no later than January 15, 2009** to Corey Drake. **Electronic submissions to cdrake@iastate.edu are preferred.** Alternatively, you may submit **two copies** of the above items to:

Corey Drake
cdrake@iastate.edu
Iowa State University
Department of Curriculum and Instruction
E115 Lagomarcino Hall
Ames, IA 50011

More information on the award, criteria and nomination procedures can be found at the SIG/RME's website: <http://www.sigrme.org>.

Senior Scholar Award Announcement

The Special Interest Group for Research in Mathematics Education (SIG/RME) of the American Educational Research Association announces the selection of Alan Schoenfeld of the University of California Berkeley as the recipient of the second SIG/RME Senior Scholar Award. This award is presented in alternate years in recognition of the research of a single scholar within the field whose programmatic work has been essential in mathematics education. In their selection of Dr. Schoenfeld for this honor, the Award Committee noted that Schoenfeld's empirically grounded research has so contributed to development within the field that his work now serves as a primary theoretical reference on mathematical problem solving as well as a model for classroom instruction. Schoenfeld's study of problem solving has systematically addressed the cognition of individual students and the modeling of thinking patterns within classroom environments. He is currently studying issues of equity in students' access to quality mathematics education. As such Schoenfeld's work has established constructs and results that are used regularly by others as his theoretical frame spans problem-solving strategies, monitoring and control, beliefs, and practices.

Dr. Schoenfeld received his Ph.D. in mathematics from Stanford University and is a professor in the Graduate School of Education at the University of California Berkeley, holding the Elizabeth and Edward Conner Chair in Education. A past president of the American Educational Research Association, Schoenfeld is a Fellow of the American Association for the Advancement of Science and was a lead author of the *Principles and Standards for School Mathematics* of the National Council of Teachers of Mathematics. The recipient of numerous research grants, Dr. Schoenfeld has offered his professional service to several organizations, including the Mathematics Association of American, the American Mathematical Society, the National Science Foundation, the U.S. Department of Education, and the National Academy of Education.

Membership Dues & Contact Information

AERA has changed its membership procedures. All SIG-RME members must also be active members of AERA. In other words, it is no longer possible to be a member of SIG-RME and not a member of AERA. To join SIG-RME, Please do so when you initiate or renew your AERA membership. Please go to the following website to initiate or renew AERA membership: <http://www.aera.net/membershipinfo/?id=48>

It is important to note that slots on the AERA Annual Meeting program are in part allocated to our SIG based in part on the number of people who are members of both SIG/RME and AERA. Therefore, we strongly encourage you to be a member of both organizations.

If your mailing address or other contact information is incorrect, please use the form at the end of this newsletter to send corrections to Amanda Jansen, at the contact information provided below.

**SIG/RME OFFICER ELECTION
PAPER BALLOT**

You may vote by using this paper ballot or vote electronically by going to the SIG/RME website (<http://www.sigrme.org>).

Please vote by January 1, 2009

Vote for one person for each office.

Co-Chair

_____ Arthur Powell

_____ Jon Star

Events

_____ Laurie Rubel

_____ Jeffrey Shih

Communications Board Member

_____ Mike Steele

_____ Despina Styliano

Electronics Board Member

_____ Indigo Esmonde

_____ Keith Leatham

Please return this ballot by January 1, 2009 to

Gwen Lloyd
Department of Mathematics
Virginia Tech
Blacksburg VA 24061-0123

For questions or problems voting electronically, contact Gwen Lloyd at lloyd@vt.edu.

Address Correction Requested!

If any of your contact information has changed since the last SIG/RME directory (e-mail address, phone number, etc.), please provide corrected information to Amanda Jansen. You may email her at jansen@udel.edu, or mail the completed form below to her.

Please update my information!

Name_____

Institution_____

Mailing Address_____

Phone Number_____ Fax Number_____

e-mail Address_____ AERA Member Number_____

(This information will assist us with keeping our membership records accurate and up-to-date with AERA.)

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