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The Association of Mathematics Teacher Educators is a member of the Conference Board of the Mathematical Sciences and is an Affiliated Group of the National Council of Teachers of Mathematics. AMTE is proud to acknowledge and welcome members of its 16 affiliated organizations to our Thirteenth Annual Conference.

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Acknowledgements

The Thirteenth Annual AMTE Conference would not be possible without the contributions and support of many individuals. AMTE wishes to express its sincere appreciation to:

- all speakers who contributed their time and expertise to make this conference a success;
- the AMTE Board of Directors, Conference Director and Assistant Conference Director, Executive Director, Program Committee, Local Arrangements Committee, and Headquarters staff for providing the time and effort necessary to pull this conference together;
- Mike Klass, San Diego State University, for his tireless work to develop the submission website system;
- Lori Albers and Cathy Boyle, San Diego State University, and Helen Kirk, Auburn University, for their support with registration and conference materials;
- FAMTE for assisting with technology for the conference;
- the organizations who participated in the AMTE Exhibits (please see page 13); and
- the publishers who donated materials for the AMTE Browsing Room.

Thanks to our Sponsors!

The Thirteenth Annual AMTE Conference would not be possible without the contributions and support of many individuals. AMTE wishes to express its sincere appreciation to:

- CYBERCHASE - Thirteen/WNET, an *AMTE Silver Sponsor*, for sponsoring lunch on Saturday,
- CORD Communications, an *AMTE Bronze Sponsor*, for printing the conference program and signage, and
- the University of Central Florida for sponsoring the Friday afternoon break. Please see page 13 for a complete listing of this year's Exhibitors and Sponsors.

Conference Registration Desk

Please stop by the AMTE Registration Desk, located in the hotel's conference center, to obtain your conference materials, including the conference program and your nametag. Please submit your completed Conference Evaluation Form in the box on the AMTE Registration Desk at the conclusion of the conference.

AMTE Registration Desk Hours:

Thursday, February 5	8:00 a.m. – 5:30 p.m.
Friday, February 6	7:30 a.m. – 5:00 p.m.
Saturday, February 7	7:30 a.m. – 11:30 a.m.

Wireless Internet Access

For conference attendees staying at the Orlando Airport Marriott Hotel, internet access is available in individual guestrooms for a reduced rate of \$7.00 per 24 hours from the time you sign on. Directions on how to access this service are posted in your guestroom. With your guestroom internet, you also have internet access in the lobby, restaurant and pool areas of the hotel. When you check in or check out and identify yourself as part of the AMTE conference, the hotel staff will adjust your rate daily for internet to this special price.

Hotel Parking Information

Parking: Self-parking rates per car per day are \$5 for up to 12 hours and \$8 for overnight parking. Valet parking per car per day is available for \$9.00 for up to 12 hours and \$12 for overnight parking.

Options for Thursday Dinner

Check at the AMTE Registration Desk for a map of the area and list of nearby restaurants.

Please note that other important information is available at the back of the program book, including the following:

- Lead speakers' contact information
- AMTE Events at the NCTM and NCSM Conferences in Washington, DC, in April, 2009
- AMTE Leadership for January 2008 through February 2009
- Call for Proposals for the 2010 AMTE Conference, to be held in Irvine, CA, from January 28 – 30, 2010 (deadline: May 1, 2009)
- Call for Manuscripts for the Seventh AMTE Monograph (deadline: June 1, 2009)
- Call for Nominees for the AMTE Award for Excellence in Service in Mathematics Teacher Education (deadline: September 30, 2009) and AMTE's Early Career Award (deadline: October 15, 2009)
- Call for Papers for the *Contemporary Issues in Technology and Teacher Education* (CITE) Journal

For your convenience, a map of the hotel convention center is printed on the back of the program booklet.

For any other questions, please contact the volunteers at the AMTE Registration Desk or the hotel staff.



Thirteenth Annual Conference SCHEDULE

February 5 – 7, 2009
Orlando, Florida

Thursday, February 5, 2009

8:00 a.m. – 5:30 p.m.	AMTE Registration Desk Open
Morning (varies)	Preconference Sessions (separate registration required; see AMTE website)
12:00 – 5:15 p.m.	Exhibits and Browsing Room Open
1:00 – 1:45 p.m.	Concurrent Sessions
1:45 – 2:00 p.m.	Break
2:00 – 3:00 p.m.	Concurrent Sessions
3:00 – 3:30 p.m.	Break
3:30 – 4:45 p.m.	Concurrent Sessions
5:30 – 7:00 p.m.	Opening General Session

Friday, February 6, 2009

7:00 – 8:00 a.m.	Continental Breakfast
7:30 a.m. – 5:00 p.m.	AMTE Registration Desk Open
8:00 a.m. – 5:00 p.m.	Exhibits and Browsing Room Open
8:00 – 9:30 a.m.	Concurrent Sessions
9:30 – 9:45 a.m.	Break
9:45 – 10:45 a.m.	Concurrent Sessions
10:45 – 11:00 a.m.	Break
11:00 a.m. – 12:00 p.m.	Concurrent Sessions
12:00 – 1:30 p.m.	Lunch and Committee Meetings
1:30 – 2:00 p.m.	Concurrent Sessions
2:00 – 2:15 p.m.	Break
2:15 – 3:00 p.m.	Concurrent Sessions
3:00 – 3:15 p.m.	Break
3:15 – 3:45 p.m.	Concurrent Sessions
3:45 – 4:00 p.m.	Break
4:00 – 4:45 p.m.	Concurrent Sessions
5:15 – 6:45 p.m.	Judith E. Jacobs Lecture
7:00 – 8:00 p.m.	Dinner

Saturday, February 7, 2009

7:00 – 8:00 a.m.	Continental Breakfast
7:30 – 11:30 a.m.	AMTE Registration Desk Open
8:00 – 11:30 a.m.	Browsing Room Open
8:00 – 8:45 a.m.	Concurrent Sessions
8:45 – 9:00 a.m.	Break
9:00 – 10:00 a.m.	Concurrent Sessions
10:00 – 10:15 a.m.	Break
10:15 – 10:45 a.m.	Concurrent Sessions
10:45 – 11:00 a.m.	Break
11:00 – 11:45 a.m.	Concurrent Sessions
11:45 – 1:15 p.m.	Lunch and Business Meeting
1:30 – 2:30 p.m.	Closing Session

Overview of Thursday Afternoon, February 5, 2009

	1:00 - 1:45	2:00 - 3:00	3:30-4:45
Vista AB	1. <i>Enhancing Preservice Mathematics Teachers' Geometric Reasoning by Using Geometric Constructions</i> – Jakubowski & Bayazit	12. <i>The National Council on Teacher Quality and its Exit with Expertise Test: Come and Share Your Thoughts</i> – Greenberg	23. <i>A Capstone Course that Links Undergraduate Mathematics with 7-12 Mathematics and Pedagogy</i> – Artzt & Sultan
Vista CD	2. <i>A Comparison of Teaching Environments: Microteach vs. Virtual</i> – Haciomeroglu, Andreasen, Cristwell, Coskun, & Akyuz	13. <i>Journey in Developing Statistical Reasoning in Elementary and Middle-school Teacher Leaders</i> – Huinker, Laughlin, & Freckmann	24. <i>Connecting Children's Mathematical Thinking to Funds of Knowledge in Elementary Methods Courses</i> – Drake, Turner, Andreotti, Gutierrez, & Land
Marco A	3. <i>Comprehensive Framework for Teacher Knowledge</i> – Ronau, Rakes, Wagener, Taylor, & Dougherty	14. <i>Making Mathematics Explicit in Inclusive Classrooms</i> – Storeygard & Reynolds	25. <i>Assisting Elementary Teachers in Assessing the Mathematical Understanding of Struggling Learners in Number and Operation</i> – van Garderen, Lannin, & Switzer
Marco B	4. <i>An Evolution of a Partnership Between a Middle-school Mathematics Teacher and a Teacher Educator</i> – Fernandes	15. <i>Virtual vs. Hands-on Manipulatives in Teacher Education: Is One Type More Effective than the Other?</i> – Hunt, Nash, & Nipper	26. <i>Developing Prospective Teachers' Ability to Ask Questions that Support Student Thinking</i> – Beckmann, Rubenstein, & Thompson
Marco C	5. <i>Using Extended Student Responses from the NAEP Test in a Preservice Mathematics Methods Course</i> – Nugent & Grant	16. <i>Mathematics Coaches, Specialists, and Teacher Leaders: Redefining Professional Development for Student Achievement</i> – Erchick & Brosnan	27. <i>Action Research Projects in Teacher Preparation: A Potential Pathway</i> – Clarke, Vidakovic, Thomas, Fournillier, Costen, & Bragelman
Amelia	6. <i>Effects of Participation in Research on Preservice Teachers' Mathematical and Pedagogical Content Knowledge</i> – Wilkerson, Cooper, Montgomery, Baker, & Sharp	17. <i>Essential Understandings in Mathematics Project: A New Resource for Enhancing the Mathematical Knowledge of Teachers</i> – Wilson, Zbiek, & Rathmell	28. <i>Detailing Teaching: How, Why, and Whether?</i> – Suzuka, Ball, Hiebert, Lewis, Sleep, & Morris
Sanibel	7. <i>Unpacking Connections Between Subject-matter Knowledge and Pedagogical Decision-making of Secondary Teachers</i> – Manouchehri & Hughes	18. <i>Proficiency and the Relationship between High-school Mathematics Curricula and College Mathematics Performance</i> – Post, Bush, Reys, & Norman	29. <i>Using Research to Bring About Important Teacher Change: Experiences from England</i> – Boaler
Captiva B	8. <i>Shaping Teacher Attitudes Toward Technology from "Tools for Doing" to "Tools for Learning"</i> – Dick & Burrill	19. <i>STEM Undergraduate Teacher Preparation – Analyzing Student Work</i> – Lager	30. <i>Defining and Developing Mathematical Content Knowledge for Teaching Elementary-school Mathematics</i> – Thanheiser, Browning, Moss, Philipp, & Watanabe
Captiva C	9. <i>Preservice Teachers' Field Experience in a Middle School with a Highly Prescriptive Mathematics Program</i> – Taube & Ortiz	20. <i>Expanding the Power of Proof Beyond Verification</i> – Kotelawala & Yopp	31. <i>Multiple Perspectives on Affect in Urban Mathematics Classrooms</i> – Arias, Jones, Pedrick, Rossman, Warner, & Schorr
Augusta	10. <i>First-timers' Session</i> – Bay-Williams & Bezuk	21. <i>Developing Preservice Teachers' Understandings of Middle Grades Students as Learners of Mathematics</i> – Jenkins	32. <i>Committee Chairs' Meeting</i> -- Bay-Williams & Bezuk
Capri	11. <i>Online Courses for Math Content and Pedagogy: Promises and Pitfalls</i> – Royster & Pugalee	22. <i>Preparing Mathematics Teachers of Quality for the Nation: Community Colleges at Work</i> – Wood, Carson, & Blair	33. <i>Using Tasks from DMI and Investigations in Developing Elementary Pedagogical Content Knowledge (PCK)</i> – Smith, Smith, & Jacobs

Session Number 1 Vista AB
Teacher Content Knowledge/Content Courses

Enhancing Preservice Mathematics Teachers' Geometric Reasoning by Using Geometric Constructions

Elizabeth Jakubowski, *Florida State University*
 Nermin Bayazit, *Florida State University*

In this presentation, we will discuss how geometric constructions can be used to enhance preservice mathematics teachers' geometric reasoning. We will also share our experiences with using geometric constructions in our teacher education program and students' reflections on the activity.

Session Number 2 Vista CD
Teaching and/or Learning with Technology

A Comparison of Teaching Environments: Microteach versus Virtual

Erhan Haciomeroglu, *University of Central Florida*
 Janet Andreasen, *University of Central Florida*
 Precious Cristwell, *University of Central Florida*
 Sirin Coskun, *University of Central Florida*
 Didem Akyuz, *University of Central Florida*

Prospective teachers developed a lesson plan for an algebraic reasoning task. Results of the comparison of the teaching and learning environments of microteach and virtual environments will be shared. Benefits and limitations of each will be discussed as well as implications for the preparation of prospective teachers of mathematics.

Session Number 3 Marco A
Teacher Content Knowledge/Content Courses

Comprehensive Framework for Teacher Knowledge

Robert Ronau, *University of Louisville*
 Christopher Rakes, *University of Louisville*
 Lauren Wagener, *University of Tennessee*
 P. Mark Taylor, *University of Tennessee*
 Barbara Dougherty, *University of Mississippi*

A framework for understanding teacher knowledge is critical to every facet of teaching. The Comprehensive Framework for Teacher Knowledge is composed of six aspects of knowledge. In this session, we explain these aspects of knowledge, their role in teaching, and how these aspects of teacher knowledge inform principles of teaching and learning.

Session Number 4 Marco B
School/University Partnerships and Projects

An Evolution of a Partnership Between a Middle-school Mathematics Teacher and a Teacher Educator

Anthony Fernandes, *University of North Carolina Charlotte*

This session will use an example of a partnership between a middle-school mathematics teacher and a teacher educator over a period of one year as a springboard to discuss teacher-researcher collaborations in general. Factors that impact the collaboration will be the focus of discussion.

Session Number 5 Marco C
Pedagogical Content Knowledge/Methods Courses

Using Extended Student Responses from the NAEP Test in a Preservice Mathematics Methods Course

Patricia Nugent, *Bradley University*
 Jean Marie Grant, *Bradley University*

How do you incorporate student work samples in your preservice classroom? We incorporate material from the NCTM's *Learning from NAEP: Professional Development Materials for Teachers of Mathematics*. We will share how we use this material with our K-9 and secondary preservice teachers. We will also share student feedback on the use of this material.

Session Number 6 Amelia
Pedagogical Content Knowledge/Methods Courses

Effects of Participation in Research on Pre-service Teachers' Mathematical and Pedagogical Content Knowledge

Trena L. Wilkerson, *Baylor University*
 Sandi Cooper, *Baylor University*
 Mark Montgomery, *Robinson Independent School District & Baylor University*
 Betty Ruth Baker, *Baylor University*
 Pat Sharp, *Baylor University*

In Fall 2007, elementary preservice teachers participated in a research study on teaching fractions. Presenters will share effects on understandings held by the preservice teachers, both in terms of mathematical and pedagogical content knowledge. Participant discussion will focus on applications related to research implementation and findings.

Session Number 7 **Sanibel**
Teacher Content Knowledge/Content Courses

Unpacking Connections Between Subject-matter Knowledge and Pedagogical Decision-making of Secondary Teachers

Azita Manouchehri, *The Ohio State University*
Kimberly Hughes, *The Ohio State University*

In this session we will report the result of a research project in which we studied ways in which the subject matter knowledge of prospective secondary teachers influenced ways in which they responded to unexpected questions raised by children in a geometry classroom.

Session Number 8 **Captiva B**
Teaching and/or Learning with Technology

Shaping Teacher Attitudes Toward Technology from “Tools for Doing” to “Tools for Learning”

Thomas Dick, *Oregon State University*
Gail Burrill, *Michigan State University*

The teacher educator can shape teachers' attitudes toward technology by making explicit the distinction between activities focused on task performance (technology as tool for doing) and activities focused on inquiry and sense-making (technology as tool for learning). Applying an action-consequence-reflection principle to technology use can be helpful in shifting both attitude and practice.

Session Number 9 **Captiva C**
Preservice Teacher Field Experiences

Preservice Teachers' Field Experience in a Middle School with a Highly Prescriptive Mathematics Program

Sylvia R. Taube, *Sam Houston State University*
Rebecca Ortiz, *Sam Houston State University*

Preliminary data on the impact of a prescriptive mathematics program in a middle school on preservice teachers who are preparing to teach mathematics in grades four through eight will be presented. Questions for follow up research will be discussed.

Session Number 10 **Augusta**

First-Timers' Session

Jennifer Bay-Williams, AMTE President, *University of Louisville*
Nadine Bezuk, AMTE Executive Director, *San Diego State University*

Join us! We will share highlights of this conference and activities of AMTE (of interest to all members). We will have time for Q & A and time to interact with those in attendance.

Session Number 11 **Capri**
Math Education Policy and Program Issues

Online Courses for Math Content and Pedagogy: Promises and Pitfalls

David Royster, *University of North Carolina Charlotte*
David Pugalee, *University of North Carolina Charlotte*

Content and pedagogy courses offered entirely online will be highlighted including format, tools, and content. Instructors will discuss positives and negatives related to teaching the courses in this environment. Student feedback will provide a lens into issues from their perspective as learners.

Session Number 12 Vista AB
Math Education Policy and Program Issues

The National Council on Teacher Quality and its Exit with Expertise Test: Come and Share Your Thoughts

Julie Greenberg, *Senior Policy Analyst, NCTQ*

In its June 2008 report, *No Common Denominator: The Preparation of Elementary Teachers in Mathematics* by America's Education Schools, the National Council on Teacher Quality proposed that mathematicians and mathematics educators collaborate to develop a new generation of assessments that can discern if elementary teachers have a depth of understanding of mathematics sufficient for the demands of classroom instruction. The report included *Exit with Expertise: Do Ed Schools Prepare Elementary Teachers to Pass This Test?* as a springboard for this development. One of the report's authors will seek input on this test as well as the initiative in general.

Session Number 13 Vista CD
School/University Partnerships and Projects

Journey in Developing Statistical Reasoning in Elementary and Middle-school Teacher Leaders

DeAnn Huinker, *University of Wisconsin-Milwaukee*
 Connie Laughlin, *Marquette University*
 Janis Freckmann, *Milwaukee Public Schools*

The Milwaukee Mathematics Partnership engaged teacher leaders in a year-long program to strengthen their statistical reasoning using the recently released GAISE report framework. They engaged in meaningful tasks and completed pre-post assessments to capture and monitor growth in content knowledge and mathematical knowledge for teaching.

Session Number 14 Marco A
Equity Issues

Making Mathematics Explicit in Inclusive Classrooms

Judy Storeygard, *Technical Education Research Centers (TERC)*
 Marion Reynolds, *Tufts University*

This interactive session will use in-press video and printed materials for inservice and preservice teachers to grapple with the challenges of ensuring access to mathematics for children with learning differences. Participants and speakers will analyze a video episode for examples of successful teaching strategies in a fifth-grade classroom.

Session Number 15 Marco B
Teaching and/or Learning with Technology

Virtual vs. Hands-on Manipulatives in Teacher Education: Is One Type More Effective than the Other?

Annita W. Hunt, *Clayton State University*
 Linda Nash, *Clayton State University*
 Kelli Nipper, *Clayton State University*

The teacher education classroom is the ideal setting in which to investigate the effectiveness of virtual manipulatives to teach conceptual understanding. In the process, preservice mathematics teachers build a deeper understanding of mathematics while participating in research regarding the pedagogical impact of both types of manipulatives.

Session Number 16 Marco C
Teacher Professional Development

Mathematics Coaches, Specialists, and Teacher Leaders: Redefining Professional Development for Student Achievement

Diana B. Erchick, Chair, *Ohio State University at Newark*
 Patti Brosnan, *Ohio State University*

Participants will have the opportunity to work in small groups on program and research agendas around professional development delivered by mathematics specialists, coaches or teacher leaders. Attendees will share updates on current efforts and work with others on relevant topics.

Session Number 17 Amelia
Teacher Content Knowledge/Content Courses

Essential Understandings in Mathematics Project: A New Resource for Enhancing the Mathematical Knowledge of Teachers

Patricia S. Wilson, *University of Georgia*
 Rose Zbiek, *Penn State University*
 Edward Rathmell, *University of Northern Iowa*

This session will include a brief description of the new books published by NCTM from the Essential Understandings Project and a discussion of how these materials could be used by teacher educators to enhance the mathematical knowledge of teachers in grades K-12.

Session Number 18 **Sanibel**
School/University Partnerships and Projects

Proficiency and the Relationship between High-school Mathematics Curricula and College Mathematics Performance

Thomas R. Post, *University of Minnesota*
William Bush, *University of Louisville*
Robert Reys, *University of Missouri*
Ke Wu Norman, *University of Montana*

This study considers the impact of three NSF-funded high-school mathematics curricula on college mathematics performance. HLM findings indicated that curriculum cohort was unrelated to: 1) the number of mathematics courses completed, 2) the pattern of grades earned over eight semesters and 3) the attained difficulty levels of the college mathematics courses completed.

Session Number 19 **Captiva B**
Pedagogical Content Knowledge/Methods Courses

STEM Undergraduate Teacher Preparation - Analyzing Student Work

Carl Lager, *University of California, Santa Barbara*

Learn about the research and development of an NSF-CCLI funded course for prospective secondary mathematics and science teachers (STEM undergraduates) that focuses on the analysis of representations, strategies, and language learners use to conceptualize and develop fundamental mathematics ideas.

Session Number 20 **Captiva C**
Mathematics Teacher Educator Development

Expanding the Power of Proof Beyond Verification

Usha Kotelawala, *Fordham University*
David Yopp, *Montana State University*

After working on a proof problem in small groups, participants will share methods and solutions on a non-conventional proving task. We will present existing research on proving in the classroom and discuss critical issues to address in teacher education.

Session Number 21 **Augusta**
Preservice Teacher Field Experiences

Developing Preservice Teachers' Understandings of Middle Grades Students as Learners of Mathematics

Oliver F. Jenkins, *Ball State University*

Knowledge of middle-school students needed by mathematics teachers to engage them successfully in standards-based instruction will be explored. "Listening interviews" are described and advocated as a means to further understandings of how young adolescents think and reason about mathematics.

Session Number 22 **Capri**
Community and Two-year Colleges

Preparing Mathematics Teachers of Quality for the Nation: Community Colleges at Work

Susan S. Wood, *National Association of Community College Teacher Education Programs*
Virginia Carson, *National Association of Community College Teacher Education Programs*
Richelle Blair, *American Mathematical Association of Two-Year Colleges*

The speakers will provide an overview of the preparation of teachers of mathematics in community colleges from the national perspectives of two "sister" organizations. Hear about embracing change and ongoing initiatives that address content, pedagogy, students, standards, and a wide variety of programs supporting mathematics preparation.

Break
3:00 – 3:30 pm

Session Number 23 **Vista AB**
Teacher Content Knowledge/Content Courses

A Capstone Course that Links Undergraduate Mathematics with 7-12 Mathematics and Pedagogy

Alice Artzt, *Queens College of the City University of New York*
 Alan Sultan, *Queens College of the City University of New York*

An innovative course where college juniors in a secondary mathematics teacher preparation program engage in experiences designed to enable them to learn mathematics for teaching in middle and high school as well as student-centered pedagogical and assessment strategies will be described. Participants will examine and discuss student work samples.

Session Number 24 **Vista CD**
Pedagogical Content Knowledge/Methods Courses

Connecting Children's Mathematical Thinking to Funds of Knowledge in Elementary Methods Courses

Corey Drake, *Iowa State University*
 Erin Turner, *University of Arizona*
 Alejandro Andreotti, *Iowa State University*
 Rodrigo Gutierrez, *University of Arizona*
 Tonia Land, *Iowa State University*

How do preservice teachers learn to use children's community and family mathematical funds of knowledge in instruction? Teacher educators from several universities have designed and piloted a set of extended learning activities to address this question. In this session, we will share the activities and initial results.

Session Number 25 **Marco A**
Teacher Content Knowledge/Content Courses

Assisting Elementary Teachers in Assessing the Mathematical Understanding of Struggling Learners in Number and Operation

Delinda van Garderen, *University of Missouri*
 John Lannin, *University of Missouri*
 Matt Switzer, *University of Missouri*

Elementary teachers identify working with struggling learners as a challenging aspect of teaching mathematics. However, students are often struggling mathematically for a variety of reasons. In this session, we examine student work to help teachers better identify the differences that exist within this group of students to meet their needs.

Session Number 26 **Marco B**
Pedagogical Content Knowledge/Methods Courses

Developing Prospective Teachers' Ability to Ask Questions That Support Student Thinking

Charlene E. Beckmann, *Grand Valley State University*
 Rheta N. Rubenstein, *University of Michigan – Dearborn*
 Denisse R. Thompson, *University of South Florida*

Many preservice teachers understand the value of worthwhile mathematical tasks and anticipating students' responses. What many still need is to learn how to question and support students without overly scaffolding the learning. This session will share a guide that assists prospective secondary teachers in planning such support.

Session Number 27 **Marco C**
Preservice Teacher Field Experiences

Action Research Projects in Teacher Preparation: A Potential Pathway

Pier A. Junor Clarke, *Georgia State University*
 Draga Vidakovic, *Georgia State University*
 Christine Thomas, *Georgia State University*
 Janice Fournillier, *Georgia State University*
 Reagan Costen, *Tech High School*
 John Bragelman, *Tech High School*

This symposium revisits the use of action research as a potential pathway to teachers' professional learning through open dialogue after three preservice secondary-school mathematics teachers present the dynamics of their engagement in action research projects.

Session Number 28 **Amelia**
Pedagogical Content Knowledge/Methods Courses

Detailing Teaching: How, Why, and Whether?

Kara Suzuka, *University of Michigan*
 Deborah Loewenberg Ball, *University of Michigan*
 James Hiebert, *University of Delaware*
 Jennifer Lewis, *University of Michigan*
 Laurie Sleep, *University of Michigan*
 Anne Morris, *University of Delaware*

This session showcases four teacher education projects that aim to develop what we are calling "specification" of the work of teaching. Efforts to unpack and work in detail on aspects of teaching practice will be examined in two preservice teacher education projects, an inservice professional development group, and a materials development program.

Session Number 29
Teacher Professional Development

Sanibel

Using Research to Bring About Important Teacher Change: Experiences from England

Jo Boaler, *University of Sussex*

England is a country with a long history of rigid ability-grouping. Mathematics teachers routinely talk about their “low-ability” students, holding and communicating low expectations for such students. This presentation will explore the ways in which a group of teachers in England was introduced to different ideas about students’ ability and how the teachers went through a process of change. The teachers were introduced to new conceptions of students and taught associated teaching approaches that aim to promote high achievement for all students; this resulted in significant changes in their practice. Given the well-documented challenges in changing teachers’ practice, this presentation will explore the particular features of the intervention that enabled teachers to change, and the implications of the teachers’ experience for beginning and practicing teachers in the United States.

Session Number 30 **Captiva B**
Teacher Content Knowledge/Content Courses

Defining and Developing Mathematical Content Knowledge for Teaching Elementary-school Mathematics

Eva Thanheiser, *Portland State University*
Christine A. Browning, *Western Michigan University*
Meg Moss, *Pellissippi State Technical Community College*
Randolph A. Philipp, *San Diego State University*
Tad Watanabe, *Kennesaw State University*

Our goal in this session is twofold: (a) define and discuss our joint definition of mathematical content knowledge for teaching elementary mathematics and (b) share results of our individual research projects focusing on helping preservice elementary teachers developing such knowledge. Specific examples from different content areas will be shared.

Session Number 31
Equity Issues

Captiva C

Multiple Perspectives on Affect in Urban Mathematics Classrooms

Cecilia C. Arias, *MetroMath, Rutgers University*
Jennifer V. Jones, *MetroMath, Rutgers University*
Lou Pedrick, *MetroMath, Rutgers University*
Cathleen F. Rossman, *MetroMath, Rutgers University*
Lisa B. Warner, *Rutgers University*
Roberta Schorr, *Rutgers University*

This symposium focuses on an NSF-funded study involving three urban teachers and their students. The presentations offer participants opportunities to view selected video used in the research, and to engage in discussion with presenters focused on the implications for teacher practice, reflection, and professional development design and content.

Session Number 32

Augusta

Committee Chairs’ Meeting

Jennifer Bay-Williams, AMTE President, *University of Louisville*
Nadine Bezuk, AMTE Executive Director, *San Diego State University*

This session is for AMTE committee chairs only and will provide chairs needed information for their 2009 committee work.

Session Number 33

Capri

Pedagogical Content Knowledge/Methods Courses

Using Tasks from DMI and Investigations in Developing Elementary Pedagogical Content Knowledge

Stephanie Z. Smith, *Georgia State University*
Marvin E. Smith, *Kennesaw State University*
Judith E. Jacobs, *Cal Poly Pomona*

This working group explores the question: How are tasks from *Developing Mathematical Ideas (DMI)* and *Investigations in Number, Data and Space (Investigations)* being used by teacher educators in developing elementary pedagogical content knowledge? If you are using tasks from these materials or want to know more, join our discussion. Example materials will be available.

***The Preparation Gap:
Teacher Education for Middle-school Mathematics in Six Countries***

William Schmidt, *Michigan State University*

MT21 is a cross-national study of the preparation of middle-school mathematics teachers. The results clearly suggest that teacher education as defined by the learning opportunities provided likely has an impact on what future teachers know and believe as they leave their teacher preparation program. The answer to the question of how to best prepare middle-school teachers is more complex than might be expected given differences in achievement across nations. The obvious solution of having U.S. future teachers of middle school take more mathematics appears to be the answer but it is only part of the answer. The differences in achievement between the Asian eighth graders and the U.S. eighth graders is likely related not only to the “curriculum gap” found in TIMSS but also to a “preparation gap” - the fact that teachers in those countries had a very different configuration of learning experiences as a part of their teacher preparation. The real question then is not whether such experiences are necessary but rather the nature and the extent of the learning opportunities in each of the three areas that should be available for future teachers. It is quite revealing that the countries whose middle-school students continuously perform well on the international benchmark tests have a coherent, focused and rigorous curriculum as well as teachers who have been trained with extensive educational opportunities in mathematics as well as in the practical aspects of teaching mathematics to students in the middle grades.

Have You Visited the Exhibits and the Browsing Room?

AMTE's Exhibits: New this year, in **Captiva A** there will be Exhibits where conference participants can meet with representatives from sponsors connected to mathematics teacher education to ask questions regarding their products and services. Exhibits are provided by CYBERCHASE—Thirteen/WNET, Pearson, ETA/Cuisenaire, and the National Council of Supervisors of Mathematics (NCSM).

Exhibit times are:

Thursday: noon to 5:15 p.m.

Friday: 8:00 a.m. to 5:00 p.m.

AMTE's Browsing Room: Located in the **Executive Conference Room**, you will find the latest textbooks, professional development support materials, and other resources for mathematics teacher educators. Get an advanced look at many of the prizes that will be given away at the conclusion of the AMTE Closing Session on Saturday afternoon.

Browsing Room times are:

Thursday: noon to 5:15 p.m.

Friday: 8:00 a.m. to 5:00 p.m.

Saturday: 8:00 a.m. to 11:30 p.m.

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Overview of Friday Morning, February 6, 2009

	8:00 – 9:30	9:45 – 10:45	11:00 – 12:00
Vista AB	34. <i>RME Sequences as Catalysts for Teacher Change</i> – Gregg, Stephan, McManus, Williams, Weinhold, Millsaps, & Snedden	44. <i>Connecting with Affiliates of AMTE</i> – Chappell, Cushman, Dean, Liebars, & Cooper	54. <i>Continuing the Conversation with Affiliates</i> – Chappell, Cushman, Dean, Liebars, & Cooper
Vista CD	35. <i>Exploring Issues of Diversity, Equity, and Social Justice in Mathematics Teacher Education Courses</i> – Koestler, Aguirre, Celedón-Pattichis, Chan, Park, & Turner	45. <i>The GAISE Document: Implications for Teacher Preparation Programs</i> – Jacobbe	55. <i>What Constitutes Mathematical Justification for Leaders: Exploring Sociomathematical Norms in Professional Development</i> – Lesseig, Elliott, Mumme, & Sztajn
Marco A	36. <i>Design Principles for Lesson Study: Variations and Commonalities Across Four Lesson Study Sites</i> – Lewis, Gottling, Leer, Takahashi, & Watanabe	46. <i>The Number Trick: Technology + Language + Teachers = Algebra for All</i> – Lutz & Lager	56. <i>Tasks, Talk, and Teachers' Expectations: Using a Research Tool to Assess (and Improve) the Quality of Mathematics Instruction</i> – Boston
Marco B	37. <i>Synchronous Online Mathematics Professional Development</i> – Stockero, Evans, & McKenna	47. <i>Institutional Collaboration in Researching Mathematics and Science Teacher Preparation</i> – Eddy	57. <i>Performance-based Hallmark Assessment Tasks (HATS): A Dynamic Continuous Assessment System</i> – Brown, Bay-Williams, & Karp
Marco C	38. <i>Creating an Effective and Cost-Effective Teacher Leader Network to Support School-based Reform in K-12 Mathematics</i> – Martin, Qazi, Norris, Hickman, Strutchens, & Lishak	48. <i>Electronic Quality of Inquiry Protocol (eQUIP): Development and Implementation of an Observational Protocol for Inquiry-based Mathematics Instruction</i> – Smart & Horton	58. <i>Comparing and Contrasting Video Formats that Develop Preservice Teachers' Mathematical Knowledge</i> – Kline
Amelia	39. <i>The National Research Council's New Report on Early Childhood Mathematics Education</i> – Ginsburg, Beckmann, & Clements	49. <i>The Challenges for Mathematics Education – Collaborations with and Recommendations for the National Council of Teachers of Mathematics</i> – Kepner	59. <i>Presentation by the Winner of the 2009 AMTE Outstanding Mathematics Teacher Educator Award: Developing Teaching Capacity to Reflect on and Learn from Teaching</i> – Smith
Captiva B	40. <i>Doing Mathematics in Professional Development: How Teacher Leaders Facilitate Mathematical Discussions Among Teachers to Develop Specialized Content Knowledge</i> – Kazemi, Elliott, Lesseig, & Sleep	50. <i>Qualitative Research Methods in Mathematics Education</i> – Adams, Aslan-Tutak, Peterek, & Laframenta	60. <i>Using a Practice-based Approach to Develop Mathematics Teacher Leaders</i> – Flowers & Cengiz
Captiva C	41. <i>Facilitating Video-based Environments for Mathematics Teacher Learning</i> – van Es, Santagata, & Philipp	51. <i>Intensive and Sustained School-Wide Professional Development to Improve Elementary-school Mathematics in an Urban Elementary School</i> – Dowshen & Zimmer	61. <i>Teacher Preparation Programmatic Features: Implications for the Development of Beliefs and Specialized Content Knowledge</i> – Swars, Smith, Smith, & Hart
Augusta	42. <i>Using Fraction Computation as a Site for Preservice Teachers' Reasoning and Justification</i> – Cengiz, Flowers, Rathouz, & Rubenstein	52. <i>Communicating Mathematically: Preparing Literate Mathematics Teachers</i> – Enderson, Chappell, Johnson, & Klerlein	62. <i>The Role of Reasoning in the Preparation of Elementary Teachers</i> – Sowder
Capri	43. <i>The Dilemma of the Launch: Why is it so Difficult for Mathematics Teachers?</i> – Chval, Arbaugh, & Lannin	53. <i>Orchestrating Rich Mathematical Discussions with K-12 Students and Teachers: Can the Same Set of Practices Support Learning at Both Levels?</i> – Mumme, Smith, Lappan, Phillips, & Carroll	

Session Number 34 Vista AB
Mathematics Teacher Educator Development

RME Sequences as Catalysts for Teacher Change

Diana Underwood Gregg, *Purdue University Calumet*
 Michelle Stephan, *Lawton Chiles Middle School/UCF*
 George McManus, *Lawton Chiles Middle School/UCF*
 Jeremy Williams, *Merrillville Intermediate School*
 Marcia Weinhold, *Purdue University Calumet*
 Gayle Millsaps, *Purdue University Calumet*
 Debbie Snedden, *Col. John Wheeler Middle School*

Researchers and middle-school teachers from two different states will present the results of collaborations that led to teacher change. Our conjecture is that RME-designed instruction, coupled with long-term, deep discussions with knowledgeable leaders, can give rise to changes in teaching practice consistent with reform recommendations.

Session Number 35 Vista CD
Equity Issues

Exploring Issues of Diversity, Equity, and Social Justice in Mathematics Teacher Education Courses

Courtney Koestler, *University of Wisconsin - Madison*
 Julia Aguirre, *University of Washington - Tacoma*
 Sylvia Celedón-Pattichis, *University of New Mexico*
 Angela Chan, *University of California Los Angeles*
 Jamie Park, *University of California Los Angeles*
 Erin Turner, *University of Arizona*

This session will feature different teacher educators' attempts at integrating issues of diversity, equity, and social justice into methods courses and present successes, tensions, and implications of this work. There will also be small-group discussions regarding pedagogies and theoretical perspectives that help frame and support these efforts.

Session Number 36 Marco A
Teacher Professional Development

Design Principles for Lesson Study: Variations and Commonalities Across Four Lesson Study Sites

Jennifer Lewis, *University of Michigan*
 Cecily Gottling, *George Washington School, Mahwah Township Schools*
 Mary Leer, *School District of Lancaster, PA*
 Akihiko Takahashi, *DePaul University*
 Tad Watanabe, *Kennesaw State University*

Lesson study is now widely practiced across the United States, but practitioners of lesson study can go through the motions but miss the potential for participants to develop mathematical knowledge for teaching and pedagogical skill. In this session, we look at lesson study across four widely different sites to determine design principles for its conduct.

Session Number 37 Marco B
Teaching and/or Learning with Technology

Synchronous Online Mathematics Professional Development

Shari Stockero, *Michigan Technological University*
 Brooke Evans, *The Metropolitan State College of Denver*
 Patricia McKenna, *The Metropolitan State College of Denver*

We present two synchronous classroom models that allow for face-to-face interactions as a means of making online mathematics professional development courses more closely parallel on-campus courses and for a more collaborative learning experience for participants. Attendees will discuss a number of issues related to online professional development.

Session Number 38 Marco C
School/University Partnerships and Projects

Creating an Effective and Cost-effective Teacher Leader Network to Support School-based Reform in K-12 Mathematics

W. Gary Martin, *Auburn University*
 Mohammed Qazi, *Tuskegee University*
 Pamela Norris, *Jeter Primary School*
 Beth Hickman, *Alabama Math, Science, and Technology Initiative*
 Marilyn Strutchens, *Auburn University*
 Lisa Lishak, *Loachapoka High School*

An NSF-funded partnership of two universities and 14 school districts in east Alabama has created a network of classroom-based teacher leaders as a part of its systemic change model. In this session, university faculty and teacher leaders discuss the successes, challenges, and lessons learned as a springboard for discussion by participants.

Session Number 39 Amelia
Math Education Policy and Program Issues

The National Research Council's New Report on Early Childhood Mathematics Education

Herbert P. Ginsburg, *Teachers College Columbia University*
 Sybilla Beckmann, *University of Georgia*
 Douglas H. Clements, *University at Buffalo, The State University of New York*

The session presents major findings from the National Research Council's new *Report on Early Childhood Mathematics Education*. Three of its authors discuss the need for improved teacher education, and for policies and teaching practices that can help all children, especially vulnerable children, get a strong start in learning mathematics.

Session Number 40 **Captiva B**
Mathematics Teacher Educator Development

Doing Mathematics in Professional Development: How Teacher Leaders Facilitate Mathematical Discussions Among Teachers to Develop Specialized Content Knowledge

Elham Kazemi, *University of Washington*
Rebekah Elliott, *Oregon State University*
Kristin Lesseig, *Oregon State University*
Laurie Sleep, *University of Michigan*

Participants will engage in discussion of data from a teacher leader development and research project focused on how teacher leaders use mathematical tasks in professional development. This session will help participants unpack the kinds of goals and practices leaders use to promote the development of mathematical knowledge for teaching.

Session Number 41 **Captiva C**
Teacher Professional Development

Facilitating Video-based Environments for Mathematics Teacher Learning

Elizabeth van Es, *University of California, Irvine*
Rossella Santagata, *University of California, Irvine*
Randolph Philipp, *San Diego State University*

This working-group session will address issues of facilitation of video-based learning environments for mathematics teacher education from three research projects. Video clips will be used to frame our discussions and engage participants.

Session Number 42 **Augusta**
Teacher Content Knowledge/Content Courses

Using Fraction Computation as a Site for Preservice Teachers' Reasoning and Justification

Nesrin Cengiz, *University of Michigan-Dearborn*
Judith Flowers, *University of Michigan-Dearborn*
Margaret Rathouz, *University of Michigan-Dearborn*
Rheta Rubenstein, *University of Michigan-Dearborn*

The format of the session will be an inquiry-based workshop. We will engage participants in questions, such as "How can fraction calculation be a site for preservice teachers' work with justification? How are discussions of tasks orchestrated? What are reasonable expectations for preservice teachers in expressing their justifications?"

Session Number 43 **Capri**
Pedagogical Content Knowledge/Methods Courses

The Dilemma of the Launch: Why is it so Difficult for Mathematics Teachers?

Kathryn Chval, *University of Missouri*
Fran Arbaugh, *University of Missouri*
John Lannin, *University of Missouri*

During this working session, participants will engage in discussion and generate new activities designed to support preservice and inservice mathematics teachers in learning to launch rich mathematical problems with students.

Friday, February 6, 2009

9:45 – 10:45 am

Session Number 44 **Vista AB**

Connecting with Affiliates of AMTE

Michaele Chappell, *Middle Tennessee State University*
Jane Cushman, *Buffalo State College*
Chrystal Dean, *Appalachian State University*
Cathy Liebars, *The College of New Jersey*
Sandi Cooper, *Baylor University*

Are you interested in establishing an affiliate group in your state? Interested in improving collaboration between AMTE and its affiliates? Want to discuss issues about existing affiliates with other states? If so, this is a session where you can meet with officers and others from affiliates in small-group sessions.

Session Number 45 **Vista CD**
Teacher Content Knowledge/Content Courses

The GAISE Document: Implications for Teacher Preparation Programs

Tim Jacobbe, *University of Florida*

This session will present research-based activities focused on statistics that may be included in mathematics courses for teachers. Activities were developed within a joint ASA/NCTM project to create materials that support the teaching and learning of data analysis, probability, and statistics in the K-12 setting.

Session Number 46 Marco A
Teaching and/or Learning with Technology

The Number Trick: Technology + Language + Teachers = Algebra for All

Mike Lutz, *California State University, Bakersfield*
Carl Lager, *University of California, Santa Barbara*

Participants will experience the Number Trick lesson as students and adult learners. Teacher and teacher leader facilitation strategies will be modeled and examined. Preliminary research findings on teaching teachers to integrate technology and language into algebra instruction will be shared.

Session Number 47 Marco B
School/University Partnerships and Projects

Institutional Collaboration in Researching Mathematics and Science Teacher Preparation

Colleen M. Eddy, *University of North Texas*

This session is about the longitudinal research agenda that is centered on the preparation of teachers to teach mathematics and science. The agenda is aggressive in that it includes elementary, middle, and secondary programs. The session will include the research agenda, theoretical framework, and preliminary findings.

Session Number 48 Marco C
Mathematics Teacher Educator Development

Electronic Quality of Inquiry Protocol (eQUIP): Development and Implementation of an Observational Protocol for Inquiry-Based Mathematics Instruction

Julie Smart, *Clemson University*
Bob Horton, *Clemson University*

This session will detail the development and validation of eQUIP, an Electronic Quality of Inquiry Protocol assessment tool. In addition, the session will allow for participants to interact with dimensions of the instrument and examine results of the implementation of this protocol in middle-grade settings.

Session Number 49 Amelia
Math Education Policy and Program Issues

The Challenges for Mathematics Education - Collaborations with and Recommendations for the National Council of Mathematics

Hank Kepner, *National Council of Teachers of Mathematics*

Participate in a session that will identify key directions & challenges for NCTM in supporting and advocating for students and their teachers. The NCTM President will seek contributions and perspectives from AMTE members in this collaborative effort.

Session Number 50 Captiva B
Mathematics Teacher Educator Development

Qualitative Research Methods in Mathematics Education

Thomaseia Lott Adams, *University of Florida*
Fatma Aslan-Tutak, *University of Florida*
Emily Peterek, *University of Florida*
Joanne Laframenta, *University of Florida*

The goal of this presentation is to share qualitative methods in the field. There will be four research presentations of qualitative methods: grounded theory, narrative analysis and discourse analysis. The participants will experience doing qualitative analysis with sample data and learn how to support doctoral students in doing qualitative studies.

Session Number 51 Captiva C
School/University Partnerships and Projects

Intensive and Sustained School-wide Professional Development to Improve Elementary-school Mathematics in an Urban Elementary School

Arlene Dowshen, *Widener University*
Janie Zimmer, *Research-Based Education*

This session will explore a partnership between a university and an urban school to increase teachers' knowledge in the areas of geometry, measurement, and pedagogy. Participants will discuss program design, data collected, challenges in working with an urban school district, and implications for teacher education.

Session Number 52 Augusta
Teacher Content Knowledge/Content Courses

Communicating Mathematically: Preparing Literate Mathematics Teachers

Mary C. Enderson, *Middle Tennessee State University*
Michael F. Chappell, *Middle Tennessee State University*
Jason D. Johnson, *Middle Tennessee State University*
Jacob T. Klerlein, *Middle Tennessee State University*

This session concentrates on communication as the focal point for course material in teacher preparation courses. Presenters will discuss how they cultivate communities of learners who develop the skills to dialogue in mathematics content courses and mathematics education courses.

Session Number 53
Teacher Professional Development

Capri

Orchestrating Rich Mathematical Discussions with K-12 Students and Teachers: Can the Same Set of Practices Support Learning at Both Levels?

Judith Mumme, *WestEd*
Margaret (Peg) Smith, *University of Pittsburgh*
Glenda Lappan, *Michigan State University*
Elizabeth Phillips, *Michigan State University*
Cathy Carroll, *WestEd*

A model describing practices for orchestrating productive mathematical discussions will be explored drawing on artifacts from K-12 classrooms and professional development. Participants will consider how the practices can be learned, compare similarities and differences across the two settings, and discuss the potential of the model to support learning at both levels.

Friday, February 6, 2009

11:00 am – 12:00 pm

Session Number 54

Vista AB

Continuing the Conversation with Affiliates

Michaele Chappell, *Middle Tennessee State University*
Jane Cushman, *Buffalo State College*
Chrystal Dean, *Appalachian State University*
Cathy Liebars, *The College of New Jersey*
Sandi Cooper, *Baylor University*

What can AMTE do for its affiliates? This session will collect needs and desires from affiliate groups on what AMTE can do to support its affiliates. Breakout groups will be formed to discuss specific needs and ideas.

Session Number 55

Vista CD

Teacher Professional Development

What Constitutes Mathematical Justification for Leaders: Exploring Sociomathematical Norms in Professional Development

Kristin Lesseig, *Oregon State University*
Rebekah Elliott, *Oregon State University*
Judy Mumme, *WestED*
Paola Sztajn, *North Carolina State University*

The practice of sharing solutions and giving explanations can be a high leverage activity in professional development for teacher learning. In this session we will examine how leaders negotiate ideas about what constitutes a sufficient mathematical justification for themselves and for teachers when doing mathematics in professional development and its relationship to sociomathematical norms.

Session Number 56

Marco A

Mathematics Teacher Educator Development

Tasks, Talk, and Teachers' Expectations: Using a Research Tool to Assess (and Improve) the Quality of Mathematics Instruction

Melissa Boston, *Duquesne University*

This session will introduce a tool designed to provide a reliable and direct measure of instructional quality in mathematics based on classroom observations and collections of students' work. Participants will be engaged in analyzing instructional tasks, a video-clip of classroom talk, and teachers' written expectations.

Session Number 57

Marco B

Preservice Teacher Field Experiences

Performance-based Hallmark Assessment Tasks: A Dynamic Continuous Assessment System

E. Todd Brown, *University of Louisville*
Jennifer M. Bay-Williams, *University of Louisville*
Karen Karp, *University of Louisville*

As a way to track mathematics teacher candidate success on standards throughout their program, we created an assessment system using assignments designated as Hallmark Assessment Tasks (HATS). We will share mathematics teacher-candidate HATS, share pros and cons of our system, and provide a forum for participants to discuss effective assessment for mathematics teacher education programs.

Session Number 58 **Marco C**
Pedagogical Content Knowledge/Methods Courses

Comparing and Contrasting Video Formats that Develop Preservice Teachers' Mathematical Knowledge

Kate Kline, *Western Michigan University*

In this session, we analyze two different types of videotapes that may be used with preservice teachers and discuss the advantages and disadvantages of each format.

Session Number 59 **Amelia**

Featured Session:
Presentation by the Winner of the 2009 AMTE Outstanding Mathematics Teacher Educator Award

Developing Teaching Capacity to Reflect on and Learn from Teaching

Margaret (Peg) Smith, *University of Pittsburgh*

Cultivating a habit of systematic and deliberate reflection may hold the key to improving one's teaching. This session will focus on how frameworks can help teachers learn to notice and reflect on important events in their classrooms.

Session Number 60 **Captiva B**
Teacher Professional Development

Using a Practice-based Approach to Develop Mathematics Teacher Leaders

Judith Flowers, *University of Michigan-Dearborn*
Nesrin Cengiz, *University of Michigan-Dearborn*

The format of the session will be an inquiry-based workshop. We will engage participants in the activities of a practiced-based professional development project that develops and supports mathematics teacher leaders to lead improvement efforts with colleagues. Our discussions will center around questions, such as: What was our thinking in designing the project?

Session Number 61 **Captiva C**
Teacher Content Knowledge/Content Courses

Teacher Preparation Programmatic Features: Implications for the Development of Beliefs and Specialized Content Knowledge

Susan Swars, *Georgia State University*
Marvin Smith, *Kennesaw State University*
Stephanie Smith, *Georgia State University*
Lynn Hart, *Georgia State University*

This session presents and discusses four facets of a longitudinal, multi-dimensional study: the Mathematics Endorsement Research Project. Specific features of a distinctive teacher preparation program are considered with implications for development of specialized content knowledge for teaching mathematics and beliefs.

Session Number 62 **Augusta**
Teacher Content Knowledge/Content Courses

The Role of Reasoning in the Preparation of Elementary Teachers

Judith Sowder, *San Diego State University*

Problems requiring reasoning in eight contexts will be solved, shared, and reflected upon after viewing a videoclip of prospective teachers struggling with a problem requiring a distinction between additive and multiplicative reasoning. Participants will investigate the role of reasoning in reconceptualizing mathematics for teaching.

LUNCH

12:00 – 1:30 pm

Conference Center Lobby

COMMITTEE MEETINGS

12:00 – 1:30 pm

Sanibel

Overview of Friday Afternoon, February 6, 2009

	1:30 - 2:00	2:15 - 3:00	3:15 - 3:45	4:00 - 4:45
Vista AB	63. <i>Articulating Beliefs as an Impetus for Action Research Projects</i> – Herbel-Eisenmann & Cirillo	72. <i>Ensuring Equity, Access, and Excellence for All Students: A Guide for Action from the NCSM PRIME Leadership Framework</i> – Belcher	82. <i>Developing Preservice Teachers' Responses to Children's Mathematical Thinking</i> – Land	92. <i>Assisting Preservice Teachers in Developing Curriculum Vision</i> – Cirillo, Drake, & Herbel-Eisenmann
Vista CD	64. <i>The Living Laboratory: Professional Growth for Practicing Teachers Through Action Research and Online Learning</i> – Luebeck & Burroughs	73. <i>Supporting Elementary Preservice Teachers to Develop the Geometric Knowledge Needed for Teaching</i> – Galindo, Ellison, Motoki, Tsegai, & Yang	83. <i>What Preservice Teachers Really Know – Questions that Continue to Uncover</i> – Upton	93. <i>Differentiated Instruction: Meeting the Diverse Needs of Prospective Teachers in Mathematics Classes</i> – Chamberlin & Breitstein
Marco A	65. <i>The Analysis of Mathematics Teachers' and Students' Initial Experiences with and Views on the New Generation of Graphing Calculator</i> – Edwards & Ozgun-Koca	74. <i>A "Radical" New Approach to Exploring Functions with Prospective and Inservice Teachers</i> – Garner, Teachey, & Ledford	84. <i>A Cross-cultural Comparison of Mathematics Teachers' Views on the Utilization of Computer Algebra Systems in Algebra Instruction</i> – Ozgun-Koca	94. <i>Involving Preservice Teachers in Meaningful Professional Development</i> – Goodman, Campbell, Combs, & Barnett
Marco B	66. <i>Preservice Elementary Teachers' Beliefs About Calculator and Computer Use: Measuring Beliefs Three Ways</i> – Johnson	75. <i>Preservice Teachers: Learning Mathematics and Pedagogy Through Reflecting on Mathematical Practices</i> – Hodge	85. <i>Technology's Cognitive and Mathematical Fidelity</i> – Bos	95. <i>Exploring the Role of Mathematical Context in Student Teachers' Support for Argumentation</i> – Conner
Marco C	67. <i>Another Piece of the Puzzle: Urban Parent Perspectives on Mathematics Education</i> – McVarish, Ely, & Matias	76. <i>Case Study: Discovering Mathematics Through Science and Technology Explorations Leads to Strengthening of Inservice Teachers' Mathematical Content and Pedagogy</i> – Kosheleva	86. <i>Preservice Elementary Teachers' Pedagogical Content Knowledge Related to Rates and Ratios</i> – Dogbey & Johnson	96. <i>Using a Train-the-Trainer Model in Scale-up: Fostering Strategic Similarities</i> – Dunn & Schorr
Amelia	68. <i>A Model of Online Inservice Mathematics Professional Development</i> – Signer & Mistretta	77. <i>Why Curriculum Matters in Teacher Education: Helping Future Teachers Expand Their Views of Mathematics Curriculum</i> – Reys, Lloyd, Chval, Bannister, & Switzer	87. <i>Examining Mathematics Student Teaching Post-lesson Conference Communications</i> – Fernandez & Erbilgin	97. <i>Preparing Elementary-school Mathematics Teachers and Leaders – Issues to Consider</i> – Fennell
Captiva B	69. <i>Triple-A Beliefs about Teaching High-school Geometry: Activities, Appreciation & Application, Abstraction</i> – Strassfeld	78. <i>Using GeoGebra in a Course on Technology in Mathematics Education</i> – Chavez	88. <i>Messages Teachers Interpret from Curricular Resources and Implications for Teacher Educators</i> – Graybeal	98. <i>Using the Ideas of Preservice Teachers to Understand Technology Specific Pedagogy</i> – Harrington
Captiva C	70. <i>Learning from Mistakes During Class Discussion of Mathematics: The Role of Teachers' Beliefs and Knowledge</i> – Bray	79. <i>Learning Mathematics as a Second Language</i> – Bossé, Adu-Gyamfi, & Preston	89. <i>Culturally Responsive Mathematics Teaching: A Grounded Theory Approach</i> – Peterek	99. <i>The Evolution of Professional Development Planners: Moving Beyond Diverse Agendas Toward a Common Vision</i> – Frost
Augusta	71. <i>Developing a Coherent and Intentional Mathematics Teacher Education Program</i> – Coomes & Dowd	80. <i>Strengthening Probability Understanding with Cylindrical Dice</i> – Jones, Cory, & Swarhout	90. <i>Students' Computational vs. Conceptual Justifications: What Can They Tell Us?</i> – Lee	100. <i>The Content Gap: Identifying and Addressing Preservice Secondary Teachers' Knowledge Gaps Before They Step into the Classroom</i> – Wilburne & Long

Capri		81. <i>Assessing Learning in Mathematics Courses for Future Elementary Teachers: Developing Common Standards, Building a Common Database</i> – McCrory, Matthews, Gleason, Lovin, Rech, Anderson	91. <i>Preservice Teachers' Instructional Decisions Based on Analyzing Student Work</i> – Cooper	101. <i>AMTE's Principles for Implementing Doctoral Programs: Analyzing the ACCLAIM Internship Program</i> – Landry & Long
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Friday, February 6, 2009

1:30 – 2:00 pm

**Session Number 63 Vista AB
Teacher Professional Development**

Articulating Beliefs as an Impetus for Action Research Projects

Beth Herbel-Eisenmann, *Michigan State University*
Michelle Cirillo, *Iowa State University*

How might mathematics teachers be supported to articulate their professed beliefs? In this session, activities from a long-term professional development project will be shared, including using readings, Post-it-note mappings, journaling, and considering conjectures from others.

**Session Number 64 Vista CD
Teacher Professional Development**

The Living Laboratory: Professional Growth for Practicing Teachers Through Action Research and Online Learning

Jennifer Luebeck, *Montana State University*
Elizabeth Burroughs, *Montana State University*

By drawing from real-time classroom experiences and by interacting online with peers from across the nation, inservice secondary teachers study mathematics content and pedagogy in this distance-based middle-school mathematics program. Examine samples and share your ideas.

**Session Number 65 Marco A
Teaching and/or Learning with Technology**

The Analysis of Mathematics Teachers' and Students' Initial Experiences with and Views on the New Generation of Graphing Calculator

Thomas G. Edwards, *Wayne State University*
S. Asli Ozgun-Koca, *Wayne State University*

This study used the Technological Pedagogical and Content Knowledge framework to investigate the views of preservice and inservice mathematics teachers' initial experiences with and views on the new generation calculator, TI-Nspire. Moreover, teachers' views were compared to those of students who had similar experiences with this novel technology.

**Session Number 66 Marco B
Teaching and/or Learning with Technology**

Preservice Elementary Teachers' Beliefs About Calculator and Computer Use: Measuring Beliefs Three Ways

Gwen Johnson, *University of South Florida*

To investigate preservice elementary teachers' beliefs about technology integration and to investigate the effects of various measurement systems, the researcher studied teachers' beliefs using three methods: a Likert-scale survey, interviews, and asking teachers to discuss their impressions of curriculum materials that involve calculator use.

**Session Number 67 Marco C
School/University Partnerships and Projects**

Another Piece of the Puzzle: Urban Parent Perspectives on Mathematics Education

Judith McVarish, *St. John's University*
Margot Ely, *New York University*
Belen Matias, *St John's University*

Parents of 30 elementary-school students who attend an urban after-school mathematics program speak out about impediments of and supports for the productive teaching of mathematics and their suggestions for what is needed to help promote such teaching at home and school. This qualitative research acknowledges parent voices in finding a common ground to negotiate potential conflicts and areas of dissonance in order to create meaningful mathematics teaching and learning for urban children.

**Session Number 68 Amelia
Teacher Professional Development**

A Model of Online Inservice Mathematics Professional Development

Barbara Signer, *St. John's University*
Regina Mistretta, *St. John's University*

A graduate K- 12 mathematics education course and geometry methods course designed and implemented using a model based on best practices of teacher education, technology education, and online education will be presented. The model's core components, interactions, and unique features along with findings of effective online instructor interactions will be shared.

Session Number 69 **Captiva B**
Teacher Professional Development

Triple-A Beliefs about Teaching High-school Geometry: Activities, Appreciation & Application, Abstraction

Brenda Strassfeld, *New York University*

There continues to exist a dilemma about how, why and when geometry should be taught. This session describes a study that examines high-school mathematics teachers' beliefs about geometry and its teaching with respect to its role in the curriculum, the uses of manipulatives and dynamic geometry software in the classroom, and the role of proofs.

Session Number 70 **Captiva C**
Pedagogical Content Knowledge/Method Courses

Learning from Mistakes during Class Discussion of Mathematics: The Role of Teachers' Beliefs and Knowledge

Wendy S. Bray, *Rollins College*

This session will present findings from a collective case study examining how four third-grade teachers' beliefs and knowledge influenced their treatment of students' mathematical misconceptions and errors that surfaced during class discussion of problem solving tasks. Implications for teacher education will be discussed.

Session Number 71 **Augusta**
School/University Partnerships and Projects

Developing a Coherent and Intentional Mathematics Teacher Education Program

Jacqueline Coomes, *Eastern Washington University*
Diane Dowd, *Eastern Washington University*

We will describe how we have altered our mathematics teacher education program supported by a *Partners in Learning* grant, and then will engage in an activity collaboratively created for preservice teachers to illustrate how literacy instruction can be effectively incorporated into mathematics classes and can support students' mathematical learning.

Friday, February 6, 2009

2:15 – 3:00 pm

Session Number 72 **Vista AB**

Ensuring Equity, Access, and Excellence for All Students: A Guide for Action from the NCSM PRIME Leadership Framework

Terri Belcher, *Executive Director, National Council of Supervisors of Mathematics*

The NCSM PRIME Leadership Framework describes 12 research-informed actions to increase student learning opportunities, the key to eliminating achievement gaps in mathematics. The Framework is intended for all leaders - aspiring, new, and seasoned - from all areas of mathematics education. This session will explore the implications for preservice and inservice teacher preparation. Imagine: your leadership "priming" aspiring, new, and seasoned teachers to significantly improve student learning in mathematics.

We share our experiences and findings from the development of a geometry content-and-pedagogy course for elementary preservice teachers. We present five brief reports on how different aspects of this development are working based on data from these classes. The audience will be invited to share their experiences with similar classes.

Session Number 73 **Vista CD**
Teacher Content Knowledge/Content Courses

Supporting Elementary Preservice Teachers to Develop the Geometric Knowledge Needed for Teaching

Enrique Galindo, *Indiana University*
David Ellison, *Indiana University*
Elizabeth Motoki, *Indiana University*
Samuel Tsegai, *Indiana University*
Kai-Ju Yang, *Indiana University*

Session Number 74 **Marco A**
Teacher Content Knowledge/Content Courses

A "Radical" New Approach to Exploring Functions with Prospective and Inservice Teachers

Mary Garner, *Kennesaw State University*
Angela Teachey, *North Carolina School of Science and Mathematics*
Sarah Ledford, *Kennesaw State University*

Inspired by national standards that advocate greater depth, we endeavored to deepen our students' knowledge of functions to prepare them for standards-based teaching. We will demonstrate how we presented radical functions from a fresh, new perspective using open-ended investigations, collaboration, technology, and multiple representations.

Session Number 75 Marco B
Teacher Content Knowledge/Content Courses

Preservice Teachers: Learning Mathematics and Pedagogy Through Reflecting on Mathematical Practices

Angie Hodge, *North Dakota State University*

Imagine pedagogy, content, and field experience integrated into one course. This session will discuss the value of a course in which preservice secondary mathematics teachers taught their own sections of college algebra and reflected upon their practices with their peers and a mathematics faculty member.

Session Number 76 Marco C
Teaching and/or Learning with Technology

Case Study: Discovering Mathematics Through Science and Technology Explorations Leads to Strengthening Inservice Teachers' Mathematical Content and Pedagogy

Olga Kosheleva, *University of Texas at El Paso*

This longitudinal study describes teachers' strengthening mathematical conceptual/pedagogical understanding with technology using physics, geophysics explorations and virtual simulations. Activities, students' works, reflections, and results from pre/post-tests will be discussed.

Session Number 77 Amelia
Pedagogical Content Knowledge/Methods Courses

Why Curriculum Matters in Teacher Education: Helping Future Teachers Expand Their Views of Mathematics Curriculum

Barbara J. Reys, *University of Missouri*
Gwen Lloyd, *Virginia Tech*
Kathryn Chval, *University of Missouri*
Vanessa Pitts Bannister, *Virginia Tech*
J. Matt Switzer, *University of Missouri*

This session will focus on one strand of teacher preparation -- knowledge of and facility with curriculum. Strategies will be shared for introducing and developing an understanding of curriculum goals (standards) and for reviewing and using mathematics curriculum materials (including textbooks).

Session Number 78 Captiva B
Teaching and/or Learning with Technology

Using GeoGebra in a Course on Technology in Mathematics Education

Oscar Chavez, *University of Missouri*

We will address the use of GeoGebra in an online course on technology in mathematics education for masters students and inservice teachers. GeoGebra offers an integration of some CAS capabilities within a dynamic geometry software.

Session Number 79 Captiva C
Equity Issues

Learning Mathematics as a Second Language

Michael J. Bossé, *East Carolina University*
Kwaku Adu-Gyamfi, *East Carolina University*
Ron Preston, *East Carolina University*

We synthesize research in language acquisition, learning theories, and hierarchical models of mathematical learning into novel stages which define mathematical learning and investigate implications of language acquisition on the learning of mathematics – for both traditional and ELL students – and how these implications affect classroom practices.

Session Number 80 Augusta
Teacher Content Knowledge/Content Courses

Strengthening Probability Understanding with Cylindrical Dice

Dustin Jones, *Sam Houston State University*
Beth Cory, *Sam Houston State University*
Mary Swarthout, *Sam Houston State University*

This session will focus on activities we have used with prospective elementary and middle-grades teachers. Specifically, we will address the teaching strategies that were incorporated to discuss fairness, the interplay between experimental and theoretical probability, conducting simulations, and mathematical modeling.

Session Number 81 Capri
Teacher Content Knowledge/Content Courses

Assessing Learning in Mathematics Courses for Future Elementary Teachers: Developing Common Standards, Building a Common Database

Raven McCrory, *Michigan State University*
Michael Matthews, *University of Nebraska at Omaha*
Jim Gleason, *University of Alabama*
LouAnn Lovin, *James Madison University*
Janice Rech, *University of Nebraska at Omaha*
Robin Anderson, *James Madison University*

This focused panel-discussion session will synthesize research projects using data gathered from the LMT (University of Michigan) measures with preservice elementary teachers.

Session Number 82 **Vista AB**
Pedagogical Content Knowledge/Methods Courses

Developing Preservice Teachers' Responses to Children's Mathematical Thinking

Tonia Land, *Iowa State University*

In this study, preservice teachers examined written examples of children's mathematical thinking. I will discuss how preservice teachers tended to describe children's thinking and development of their responses to children's thinking over the course of the semester.

Session Number 83 **Vista CD**
Teacher Content Knowledge/Content Courses

What Preservice Teachers Really Know – Questions that Continue to Uncover

Deborah Upton, *Molloy College*

Building on a prior AMTE presentation, this session continues the discussion regarding problems used in a preservice course for middle and high-school teachers to uncover conceptual misunderstandings of key mathematical ideas. New results obtained by the presenter and others will be discussed.

Session Number 84 **Marco A**
Teaching and/or Learning with Technology

A Cross-cultural Comparison of Mathematics Teachers' Views on the Utilization of Computer Algebra Systems in Algebra Instruction

S. Asli Ozgun-Koca, *Wayne State University*

This study provides a cross-cultural comparison of the views of teachers on the use of Computer Algebra Systems in algebra instruction. Differences and similarities in teachers' views will be highlighted in spite of the dissimilarities in their experiences with advanced calculators.

Session Number 85 **Marco B**
Teaching and/or Learning with Technology

Technology's Cognitive and Mathematical Fidelity

Beth Bos, *Texas State University*

The intent of this session is to make attendees aware of the importance of teaching inservice and preservice teachers of the significance of cognitive and mathematical fidelity when choosing and using technology. Focusing on websites we will evaluate which type has the greatest fidelity and should be used more frequently in mathematics classrooms.

Session Number 86 **Marco C**
Pedagogical Content Knowledge/Methods Courses

Preservice Elementary Teachers' Pedagogical Content Knowledge Related to Rates and Ratios

James Kwame Dogbey, *University of South Florida*
 Gwen Johnson, *University of South Florida*

The researchers used mathematical interviews and tasks to assess preservice elementary-school teachers' content knowledge and pedagogical content knowledge related to rates and ratios. We asked preservice teachers to solve problems from *Everyday Mathematics* student math journals and to discuss the educational purpose of guided discovery lessons.

Session Number 87 **Amelia**
Preservice Teacher Field Experiences

Examining Mathematics Student Teaching Post-lesson Conference Communications

Maria Lorelei Fernandez, *Florida International University*
 Evrim Erbilgin, *Florida Department of Education*

Dyad and triad post-lesson conferences can reveal important differences in the communications when led by cooperating teachers or university supervisors. Findings will be presented. Participants will engage in considering ways of improving the supervision of student teachers in light of findings.

Session Number 88 **Captiva B**
Math Education Policy and Program Issues

Messages Teachers Interpret from Curricular Resources and Implications for Teacher Educators

Christy D. Graybeal, *Hood College*

Results of a study that examined the messages that middle-school mathematics teachers interpreted from curricular materials, assessments, and professional development will be shared. Session participants will be asked to reflect on and share ideas about how teacher educators can best support teachers in making sense of and responding to messages.

Session Number 89 **Captiva C**
Equity Issues

Culturally Responsive Mathematics Teaching: A Grounded Theory Approach

Emily Peterek, *University of Florida*

Given the predominance of white, middle-class norms in the current school system, African-American students often experience cultural disconnects in learning contexts provided by mainstream schools. Here, we will explore the transformative and empowering pedagogical practices of one successful teacher of African-American children.

Session Number 90 **Augusta**
Teacher Professional Development

***Students' Computational vs. Conceptual Justifications:
What Can They Tell Us?***

Jean Lee, *Indiana University, Bloomington*

We will examine students' justifications of mathematical work on tasks targeting multiplication and division of fractions. We will discuss how justifications can better inform us of students' understanding, and how teachers can facilitate conversations that promote increased conceptual understanding of these ideas.

Session Number 91 **Capri**
Pedagogical Content Knowledge/Methods Courses

***Preservice Teachers' Instructional Decisions Based on
Analyzing Student Work***

Sandi Cooper, *Baylor University*

During this session, results from a study conducted in mathematics methods courses over two semesters will be shared. This study was designed to determine how experiences with the analysis of student work may impact instructional decision-making of preservice teachers.

Friday, February 6, 2009

4:00 – 4:45 pm

Session Number 92 **Vista AB**
Pedagogical Content Knowledge/Methods Courses

***Assisting Preservice Teachers in Developing
Curriculum Vision***

Michelle Cirillo, *Iowa State University*
Corey Drake, *Iowa State University*
Beth Herbel-Eisenmann, *Michigan State University*

In this session, we introduce the construct of curriculum vision. We present data related to teachers' discussions of their use of curriculum materials to illustrate this construct. Finally, a majority of the session will be spent in small- and whole-group discussion about assisting preservice teachers in their development of curriculum vision.

Session Number 93 **Vista CD**
Teacher Content Knowledge/Content Courses

***Differentiated Instruction: Meeting the Diverse Needs
of Prospective Teachers in Mathematics Classes***

Michelle Chamberlin, *University of Wyoming*
Alisa Breitstein, *University of Northern Colorado*

This session will share information about using differentiated instruction in a mathematics course for prospective elementary teachers to meet their diverse needs and improve their mathematical understandings and dispositions toward differentiated instruction.

Session Number 94 **Marco A**
Teacher Professional Development

***Involving Preservice Teachers in Meaningful
Professional Development***

Terry Goodman, *University of Central Missouri*
Larry Campbell, *Missouri State University*
Emily Combs, *Clinton, Missouri, Public Schools*
Joann Barnett, *Ozark, Missouri, Public Schools*

This session will provide an overview of how three Missouri mathematics academies have provided opportunities for K-12 preservice teachers to be involved in a variety of professional development activities, including mentoring by master teachers. During the session, two master teachers will share their experiences and insights.

Session Number 95 **Marco B**
Preservice Teacher Field Experiences

***Exploring the Role of Mathematical Context in Student
Teachers' Support for Argumentation***

AnnaMarie Conner, *University of Georgia*

Episodes from two different student teachers' classrooms will illustrate how each student teacher elicited, provided, or left implicit data and warrants for claims differently as mathematical ideas from algebra, geometry, and calculus were discussed in her class. Implications for preparing future teachers will be discussed.

Session Number 96 **Marco C**
Teacher Professional Development

***Using a Train-the-Trainer Model in Scale-up: Fostering
Strategic Similarities***

Margie Dunn, *Rutgers University*
Roberta Schorr, *Rutgers University*

Our study examines a Train-the-Trainer model to provide training to teachers involved in a scale-up study. Video clips that reflect both the variety and similarity of classroom implementations will be used to discuss plausible "strategic similarities", the significance of differences, and the influence of the teacher-training session attended.

Session Number 97 **Amelia**
Math Education Policy and Program Issues

***Preparing Elementary-school Mathematics Teachers
and Leaders - Issues to Consider***

Francis (Skip) Fennell, *McDaniel College and Past
President, National Council of Teachers of Mathematics*

This session will engage participants in reviewing and discussing NCATE/ACEI and NCATE/NCTM requirements in mathematics and mathematics education for preservice elementary classroom teachers and also for mathematics teacher leaders (specialist, coach, lead teacher) at the elementary-school level. What's the same? What's different? What's this mean?

Session Number 98 Captiva B
Teaching and/or Learning with Technology

Using the Ideas of Preservice Teachers to Understand Technology Specific Pedagogy

Rachel A. Harrington, *Western Oregon University*

Preservice teachers learn to teach with technology in coursework, field experiences, and peer interactions. As they participate in these contexts, their ideas help us understand what it means to learn to teach mathematics with technology. Building on this, teacher licensure programs can find ways to structure effective learning activities.

Session Number 99 Captiva C
School/University Partnerships and Projects

The Evolution of Professional Development Planners: Moving Beyond Diverse Agendas Toward a Common Vision

Janet Frost, *Washington State University Spokane*

This session will begin with a description of the evolution of a planning group for a professional development effort, including their struggles and gradual progress toward alignment of goals and priorities. Session participants will share perspectives on how this process can inform our work with diverse preservice and inservice teachers.

Session Number 100 Augusta
Teacher Content Knowledge/Content Courses

The Content Gap: Identifying and Addressing Preservice Secondary Teachers' Knowledge Gaps Before They Step Into the Classroom

Jane M. Wilburne, *Penn State Harrisburg*
Mike Long, *Shippensburg University*

This interactive session will focus on results of a research study that explored preservice secondary teachers' knowledge of content addressed on a state's eleventh grade assessment. Sample lessons that emphasize the weakest content strands will be discussed and shared.

Session Number 101 Capri
Mathematics Teacher Educator Development

AMTE's Principles for Implementing Doctoral Programs: Analyzing the ACCLAIM Internship Program

Geri A. Landry, *University of Tennessee*
Vena Long, *University of Tennessee*

This session will address the design and implementation of the Appalachian Collaborative Center for Learning, Assessment, and Instruction in Mathematics internship program. Participants will engage in thoughtful discussion and reflection on the quality of doctoral programs in mathematics education.

JUDITH E. JACOBS LECTURE

5:15 – 6:45 pm

Amelia & Marco ABC

Going to War With the Army You Have

Jeremy Kilpatrick, *University of Georgia*

With public education under fire and amid growing pressure, school mathematics has become trapped. On the one hand, mathematics teachers are expected to learn and be able to teach mathematics in greater depth, and on the other hand, they are increasingly being educated in briefer and less-demanding programs. Political and demographic pressures on schools are making it more difficult for those teachers to do a satisfactory and satisfying job. How can and should mathematics teacher educators respond?

DINNER

7:00 – 8:00 pm

Sanibel and Captiva

Overview of Saturday Morning, February 7, 2009

	8:00 – 8:45	9:00 – 10:00	10:15 – 10:45	11:00 – 11:45
Vista AB	102. <i>All in this Together: Inservice Teachers, Preservice Teachers, and Students Learning</i> – Yow	112. <i>Mission Possible: Overcoming Obstacles Faced in an Elementary Mathematics Methods Course</i> – Barlow, Steimle, Fillingim, Ivy, James & Wells	122. <i>Preservice Mathematics Teachers' Perception about Mathematical Definitions and Their Use of Definitions in Proof Writing</i> – Bayazit	132. <i>Pragmatic Methods Courses</i> – Tawfeeq, Jakubowski, & Yu
Vista CD	103. <i>Conceptualizing Teachable Moments in Mathematics Classrooms</i> – Leatham & Peterson	113. <i>Rethinking Worthwhile Tasks: Using Mathematical Knowledge for Teaching to Inform Problem Selection for Preservice Teachers and their Field Students</i> – van den Kieboom & Magiera	123. <i>What is Your Story? Geometry Learning Stories of Preservice Elementary-school Teachers</i> – Aslan-Tutak	133. <i>Analyses of Mathematical Thinking: Using Case Studies of Children's Mathematical Thinking to Explore Mathematics for Teaching</i> – Loats, Romagnano, & Brunsvold
Marco A	104. <i>What Does the Research Say About Mathematics Specialists and Coaches?</i> – McGatha	114. <i>Factors in Mathematics Teacher Education & Development: Implications from NAEP</i> – Mohr, Walcott, & Hudson	124. <i>Comparing Preservice and Beginning (Inservice) Elementary Teachers' Use of Virtual Manipulatives and Applets in Math Instruction</i> – Johnston	134. <i>Learning to Pose Cognitively Demanding Tasks through Letter Writing</i> – Norton & Kastberg
Marco B	105. <i>Project CRAFTeD: Remote Lesson Study and Its Impact on Preservice Teachers' Pedagogical Content Knowledge</i> – Edwards	115. <i>How Research Has Informed the Design of Content Courses for K-8 Teachers</i> – Moss, McLeod, Huinker, White, McCrory	125. <i>Prospective Teachers' Development of Number and Operations</i> – Tobias, Roy, & Safi	135. <i>Making Mathematics Teacher Education a Knowledge-driven Profession: Continuing the Conversation</i> – Ghouseini, Charalambous, & Silver
Marco C	106. <i>Problem-based Learning, Beliefs, and Elementary Teacher Candidates</i> – Powers	116. <i>Mathematics Teaching and Learning in a Single-Gender Educational Environment</i> – Che & Wiegert	126. <i>Novice Teachers' Evaluations of their Own Mathematics Teaching</i> – Jansen & Webel	136. <i>Tracing Teachers' Learning of Accountable Talk Through Coursework and Into Their Practice</i> – Hillen & Hughes
Captiva A	107. <i>Using Research Lessons to Link Methods Courses and Student Teaching to Thoughtful Practice</i> – Romagnano, Evans, & Burrill	117. <i>Partnerships between Universities and Districts: Case Studies from Two Urban Sites</i> – Liebars, Heinz, Walsh, Campanelli, Dougherty	127. <i>Changing Content Knowledge and Pedagogical Content Knowledge of Algebra Teachers</i> – Black & Westbrook	137. <i>Practicum: Connecting Theory, Practice and Reflection</i> – Jaberg & Hay
Captiva B	108. <i>I Can't Pass Mathematics for Elementary Teachers, but I Want to be a Teacher</i> – Hegeman & Lee	118. <i>A Characterization of Specialized Content Knowledge (SCK) and a Tool for Focusing PD Math Tasks on SCK</i> – Lenges, Coomes, & Gilbert	128. <i>Preservice Teachers' Beliefs: The Impact of Secondary Mathematics Methods Courses</i> – Smith	138. <i>What is "Secondary Mathematics Methods"? A Survey of Course Syllabi</i> – Newton, Wilson, Umbeck & Lappan
Captiva C	109. <i>Instructional Demands of Teaching Mathematics with English-Language Learners</i> – Sealy	119. <i>Cases of Reasoning and Proving (CORP): Materials for Secondary Mathematics Teacher Education</i> – Arbaugh, Smith, Steele, & Taylor	129. <i>Mexican American Preservice Teachers' Use of Language and Background Experiences</i> – Vomvoridi-Ivanovic	139. <i>Formative Assessment for Middle-school Mathematics Teachers</i> – Bush & McGatha
Augusta	110. <i>Improving Professional Development through Lesson Experiments</i> – Powers & Novak	120. <i>Durability of Learning Outcomes from Preservice Experiences with Practice-based Video Materials</i> – Van Zoest, Stockero, Taylor, & Kratky	130. <i>Standards-based Curriculum Modeling in Mathematics Content Courses for Preservice Elementary Teachers</i> – Kennedy	140. <i>The Importance of Sustained Professional Development: A Powerful Example Involving the Mode and Range</i> – Horton & Jacobbe
Capri	111. <i>Prospective Secondary School Teachers' Understanding of Complex Number</i> – Rasmussen	121. <i>Teacher-generated Classroom Scripts and What These Tell Us About Hypothetical and Realistic Mathematics Teaching Practice</i> – Crespo, Oslund, & Parks	131. <i>"For Better or For Worse," or Becoming One Community of Researchers in a Two-site Project: Lessons Learned from Cross-site Research...</i> – Menéndez-Gómez	141. <i>Teaching Teachers: A Workshop Session for New Mathematics Teacher Educators</i> – Bahr, Peterson, Reys, Lovin, Karp, Arbaugh, Corey, Burrill, Van Zoest & Hendrix

Session Number 102 Vista AB
Teacher Professional Development

All in This Together: Inservice Teachers, Preservice Teachers, and Students Learning

Jan A. Yow, *University of South Carolina-Columbia*

A mathematics teacher education program that integrates a summer institute for inservice teachers with a methods course for preservice teachers will be presented. Teachers work with middle-school students throughout the institute. The project's accompanying research will also be presented.

Session Number 103 Vista CD
Pedagogical Content Knowledge/Methods Courses

Conceptualizing Teachable Moments in Mathematics Classrooms

Keith R. Leatham, *Brigham Young University*
 Blake E. Peterson, *Brigham Young University*

Attendees will explore and discuss a conceptualization of teachable moments in math classrooms—those moments when students' thinking can be used profitably to develop understanding of significant mathematics. We will test and refine the conceptualization as we view and discuss video clips and lesson excerpts from novice teachers' classrooms.

Session Number 104 Marco A
Teacher Professional Development

What Does the Research Say About Mathematics Specialists and Coaches?

Maggie B. McGatha, *University of Louisville*

In this session we will examine the research on mathematics specialist/coaching programs. We will look at what the research says about (a) the role and responsibilities of the coach, (b) conditions that support coaching, (c) challenges involved in coaching, (d) improving instructional practice, and (e) gains in student achievement.

Session Number 105 Marco B
Preservice Teacher Field Experiences

Project CRAFTeD: Remote Lesson Study and Its Impact on Preservice Teachers' Pedagogical Content Knowledge

Michael Todd Edwards, *Miami University*

The project was implemented as a feasibility study with a high-school teaching collaborator to determine the effectiveness of off-the-shelf videochat software as a tool for conducting remote lesson study activities.

Session Number 106 Marco C
Teacher Content Knowledge/Content Courses

Problem-based Learning, Beliefs, and Elementary Teacher Candidates

Joanne Powers, *College of Saint Rose*

This research examined the results of implementation of a problem-based, peer-led program in mathematics for non-mathematics/science preservice elementary teachers and collaboration between educational psychology and mathematics departments in considering student beliefs and depth and extent of mathematical knowledge and understanding.

Session Number 107 Captiva A
Using Research Lessons to Link Methods Courses and Student Teaching to Thoughtful Practice

Lew Romagnano, *The Metropolitan State College of Denver*
 Brooke Evans, *The Metropolitan State College of Denver*
 Gail Burrill, *Michigan State University*

Collaborative research lessons in methods courses and student teaching help students build a language for analyzing practice and a different vision of the work of teaching. They also connect on-campus and field-based aspects of teacher preparation. We share how we incorporate research lessons and some preliminary findings on their effects.

Session Number 108 Captiva B
Math Education Policy and Program Issues

I Can't Pass Mathematics for Elementary Teachers, but I Want to be a Teacher

Jennifer Hegeman, *Missouri Western State University*
 Ken Lee, *Missouri Western State University*

This session addresses circumventions of the mathematics course for elementary-school teachers offered by the home institution's mathematics department, including course transfer credit, course substitution, and course waiver. Consequences of such practices will also be discussed.

Session Number 109 Captiva C
Teacher Professional Development

Instructional Demands of Teaching Mathematics with English-Language Learners

Jenny T. Sealy, *University of Michigan, Ann Arbor*

I present a synthesis of research on the mathematics teaching of English-language learners that highlights the instructional demands that emerge as teachers strive to support the mathematics learning of this growing group of students. Specific implications for teacher education will be explored.

Session Number 110 **Augusta**
Teacher Professional Development

Improving Professional Development through Lesson Experiments

Robert Powers, *University of Northern Colorado*
Jodie Novak, *University of Northern Colorado*

This session will provide information on lesson experiments and how we have used the process in our own practice to study and generate knowledge in grades 5 through 12 mathematics professional development. Participants will apply and critique a rubric to evaluate an actual lesson experiment and discuss applications of the lesson experiment process.

Session Number 111 **Capri**
Pedagogical Content Knowledge/Methods Courses

Prospective Secondary School Teachers' Understanding of Complex Number

Chris Rasmussen, *San Diego State University*

This research report will discuss findings from a three-week classroom teaching experiment designed to deepen prospective secondary school teachers' understandings of complex number. Advances in students' understandings will be detailed, including a surprising result that calls into question the claim that the multiplication by -1 rotation metaphor precedes geometric interpretations for multiplication.

Saturday, February 7, 2009

9:00 – 10:00 am

Session Number 112 **Vista AB**
Pedagogical Content Knowledge/Methods Courses

Mission Possible: Overcoming Obstacles Faced in an Elementary Mathematics Methods Course

Angela Barlow, *University of Mississippi*
Alice Steimle, *University of Mississippi*
Jennifer Fillingim, *University of Mississippi*
Jessica Ivy, *University of Mississippi*
Julie James, *University of Mississippi*
Elizabeth Wells, *University of Mississippi*

This session will describe challenges faced as the presenters worked to create and implement an elementary mathematics methods course that would provide quality field experiences with analysis of student mathematical thinking. Participants will engage in dialogue concerning avenues to overcome obstacles in elementary teacher preparation programs.

Session Number 114 **Marco A**
Teacher Professional Development

Factors in Mathematics Teacher Education & Development: Implications from NAEP

Doris Mohr, *University of Southern Indiana*
Crystal Walcott, *Indiana University Purdue University - Columbus*
Rick A. Hudson, *Indiana University - Bloomington*

Participants will engage in a work session to identify meaningful data from the mathematics teacher questionnaire of the National Assessment of Educational Progress (NAEP), along with providing suggestions for collecting additional data that could inform the future creation of quality teacher preparation and professional development opportunities.

Session Number 113 **Vista CD**
Pedagogical Content Knowledge/Methods Courses

Rethinking Worthwhile Tasks: Using Mathematical Knowledge for Teaching to Inform Problem Selection for Preservice Teachers and Their Field Students

Leigh van den Kieboom, *Marquette University*
Marta T. Magiera, *Marquette University*

This session describes how NCTM's (1991) notion of worthwhile mathematical tasks and mathematical knowledge for teaching (Ball & Bass, 2003) informs problem selection to assist preservice teachers in strengthening subject matter and pedagogical content knowledge of fractions in coursework and field experiences.

Session Number 115 Marco B
Teacher Content Knowledge/Content Courses

How Research Has Informed the Design of Content Courses for K-8 Teachers

Meg Moss, *Pellissippi State University*
Kevin McLeod, *University of Wisconsin-Milwaukee*
DeAnn Huinker, *University of Wisconsin-Milwaukee*
Diana White, *University of Colorado Denver*
Raven McCrory, *Michigan State University*

During this session various mathematics educators and mathematicians will discuss the methods used in content courses for K-8 teachers. The panel will focus on methods that work with students, ways to engage reluctant faculty, sequencing of concepts, and materials used.

Session Number 116 Marco C
Equity Issues

Mathematics Teaching and Learning in a Single-gender Educational Environment

S. Megan Che, *Clemson University*
Elaine Wiegert, *Clemson University*

This symposium discusses mathematics teaching and learning in a public, coeducational charter middle school conducting single-gender classes. This symposium addresses the efficacy of single-gender mathematics classrooms from a variety of perspectives.

Session Number 117 Captiva A
School/University Partnerships and Projects

Partnerships between Universities and Districts: Case Studies from Two Urban Sites

Cathy Liebars, *The College of New Jersey*
Karen Heinz, *Rowan University*
Caitlin Walsh, *Rowan University*
Jessica Campanelli, *The College of New Jersey*
Kathleen Dougherty, *The College of New Jersey*

This symposium will present descriptions of two partnerships, each involving a university and an urban district. Each case study will present information on successes and challenges, as well as the impact of the partnership on the participants, the district, and the university. Results of undergraduate research will also be shared.

Session Number 118 Captiva B
Teacher Professional Development

A Characterization of Specialized Content Knowledge (SCK) and a Tool for Focusing Professional Development Math Tasks on SCK

Anita Lenges, *The Evergreen State College*
Jackie Coomes, *Eastern Washington University*
Michael Gilbert, *University of Hawaii*

In this session we will share our characterization of specialized content knowledge tied to specific teaching practices. Additionally, we will share a tool we created for teacher educators to use as they design workshops to deepen teachers' specialized content knowledge.

Session Number 119 Captiva C
Teacher Professional Development

Cases of Reasoning and Proving (CORP): Materials for Secondary Mathematics Teacher Education

Fran Arbaugh, *University of Missouri*
Margaret (Peg) Smith, *University of Pittsburgh*
Michael Steele, *Michigan State University*
Cynthia Taylor, *University of Missouri*

In this working session, participants will engage with and reflect on beginning drafts of CORP (Cases of Reasoning and Proving in Secondary Mathematics) curriculum materials for teacher education, which are designed around artifacts of practice and focused on reasoning-and-proving.

Session Number 120 Augusta
Pedagogical Content Knowledge/Methods Courses

Durability of Learning Outcomes from Preservice Experiences with Practice-based Video Materials

Laura Van Zoest, *Western Michigan University*
Shari Stockero, *Michigan Technological University*
Cynthia Taylor, *University of Missouri*
James Kratky, *Western Michigan University*

Beginning teachers were assessed to determine the durability of learning outcomes documented when they used the Learning and Teaching Linear Functions professional development video curriculum early in their secondary teacher preparation program. We share our results and engage attendees in discussing issues raised by this work.

Session Number 121 Capri
Pedagogical Content Knowledge/Methods Courses

Teacher-generated Classroom Scripts and What These Tell Us about Hypothetical and Realistic Mathematics Teaching Practice

Sandra Crespo, *Michigan State University*
Joy Oslund, *Michigan State University*
Amy Parks, *University of Georgia*

This session explores what we might learn about beginning and experienced teachers when we ask them to generate hypothetical classroom dialogues for a given mathematical task. We use the analysis of such fictional dialogues to theorize a more generative than oppositional view about teachers' envisioned practice and their enacted teaching.

Session Number 122 Vista AB
Teacher Content Knowledge/Content Courses

Preservice Mathematics Teachers' Perception about Mathematical Definitions and Their Use of Definitions in Proof Writing

Nermin Bayazit, *Florida State University*

In this presentation, we will first talk about preservice mathematics teachers' perceptions about mathematics, mathematical definition and proof. Then, we will discuss how these thoughts would ground students' approaches to proof-writing as well as some characteristics of students' use of mathematical definitions in producing proofs.

Session Number 123 Vista CD
Teacher Content Knowledge/Content Courses

What is Your Story? Geometry Learning Stories of Preservice Elementary-school Teachers

Fatma Aslan-Tutak, *University of Florida*

This session will focus on discussion of preservice teachers' geometry content knowledge. The presentation will provide qualitative results (narrative analysis) of geometry learning stories of preservice teachers. Also, participants will experience how to design professional development activities to incorporate these results with students' work.

Session Number 124 Marco A
Teaching and/or Learning with Technology

Comparing Preservice and Beginning (Inservice) Elementary Teachers' Use of Virtual Manipulatives and Applets in Math Instruction

Christopher J. Johnston, *George Mason University*

This session compares the results of two studies on preservice and inservice elementary teachers' criteria for using virtual manipulatives and applets in math instruction, as well as teachers' evaluation of technology tools based on their criteria. Implications for teacher educators are discussed.

Session Number 125 Marco B
Teacher Content Knowledge/Content Courses

Prospective Teachers' Development of Number and Operations

Jennifer M. Tobias, *University of Central Florida*
 George J. Roy, *University of Central Florida*
 Farshid Safi, *University of Central Florida*

Whole number and rational number concepts and operations were examined through a classroom teaching experiment conducted in an undergraduate mathematics content course. Prospective teachers' development of each will be presented through the use of video clips and student work samples.

Session Number 126 Marco C
Pedagogical Content Knowledge/Methods Courses

Novice Teachers' Evaluations of their Own Mathematics Teaching

Amanda Jansen, *University of Delaware*
 Corey Webel, *University of Delaware*

We will present results from a study in which novice middle-school mathematics teachers evaluated the effectiveness of their own teaching. Discussion will address how these data inform design of mathematics methods course interventions.

Session Number 127 Captiva A
Teacher Content Knowledge/Content Courses

Changing Content Knowledge and Pedagogical Content Knowledge of Algebra Teachers

Joy W. Black, *University of West Georgia*
 S. Kathy Westbrook, *University of South Alabama*

Results from a research study involving 65 teachers to determine their content knowledge and pedagogical content knowledge of algebra will be presented. Four cases further provide insight into changes in both types of knowledge from professional development and implications of changes in their instructional practices.

Session Number 128 Captiva B
Pedagogical Content Knowledge/Methods Courses

Preservice Teachers' Beliefs: The Impact of Secondary Mathematics Methods Courses

Ronald Smith, *Harding University*

Findings from examining the practices of secondary methods teachers and their impact on the beliefs of preservice secondary teachers will be discussed. Results from a study across multiple institutions will be presented. Time will be provided to share practices that motivate preservice teachers to adopt reform-oriented beliefs and practices.

Session Number 129 Captiva C
Preservice Teacher Field Experiences

Mexican-American Preservice Teachers' Use of Language and Background Experiences

Eugenia Vomvori-Ivanovic, *University of Illinois at Chicago*

This presentation will share insights from bilingual Mexican-American preservice teachers' use of language and background experiences as they assist Latina/o elementary students in an after-school mathematics learning context, and will engage the audience in a discussion of the potential of such contexts for the development of bilingual mathematics teachers.

Session Number 130 **Augusta**
Teacher Content Knowledge/Content Courses

Standards-based Curriculum Modeling in Mathematics Content Courses for Preservice Elementary Teachers

Dave Kennedy, *Shippensburg University of Pennsylvania*

In this study, standards-based instruction was modeled in two course sections: "College Text" and "Middle-School Materials." The instructor's perspective on the differing demands of teaching with the two curricula will be shared. Findings on changes in preservice teachers' beliefs, attitudes, and mathematical content knowledge will be discussed.

Session Number 131 **Capri**
Mathematics Teacher Educator Development

'For Better or For Worse' or Becoming One Community of Researchers in a Two-site Project: Lessons Learned from a Cross-site Research Collaboration Based on Work with Teacher Study Groups

José María Menéndez-Gómez, *The University of Arizona*

This session will report on the lessons learned by two research teams from different universities collaborating in the study. The challenges that elementary-school teachers of Latino/a students faced as they adapted and implemented a mathematics task and analyzed student work will be presented. This presentation focuses on the methodological aspect of the collaboration.

Saturday, February 7, 2009

11:00 – 11:45 am

Session Number 132 **Vista AB**
Pedagogical Content Knowledge/Methods Courses

Pragmatic Methods Courses

Dante A. Tawfeeq, *Adelphi University*
Elizabeth Jakubowski, *Florida State University*
Paul Yu, *Grand Valley State University*

This presentation details the development of a pragmatic methods course for preservice teachers of mathematics who will instruct in large urban centers. Issues related to culturally relevant pedagogy and mathematical content knowledge guided this investigation.

Session Number 133 **Vista CD**
Teacher Content Knowledge/Content Courses

Analyses of Mathematical Thinking: Using Case Studies of Children's Mathematical Thinking to Explore Mathematics for Teaching

James T. Loats, *The Metropolitan State College of Denver*
Lew Romagnano, *The Metropolitan State College of Denver*
Dale Brunsvold, *The Metropolitan State College of Denver*

In our preservice elementary program, our students' capacity to problem solve in "common" mathematics serves as a foundation for them being able to learn the "specialized" math needed for teaching. This session is about our "number and operations" course, the third of our three courses.

Session Number 134 **Marco A**
School/University Partnerships and Projects

Learning to Pose Cognitively Demanding Tasks through Letter Writing

Anderson Norton, *Virginia Tech*
Signe Kastberg, *IUPUI*

Mathematical letter writing between preservice teachers (PSTs) and high-school algebra students provides a valuable context for PSTs to learn to pose cognitively demanding tasks. We share sample exchanges and

statistical analyses to support this claim and characterize PSTs' development.

Session Number 135 **Marco B**
Math Education Policy and Program Issues

Making Mathematics Teacher Education a Knowledge-Driven Profession: Continuing the Conversation

Hala Ghouseini, *University of Michigan*
Charalambos Y. Charalambous, *University of Michigan*
Edward A. Silver, *University of Michigan*

At last year's AMTE Conference, Edward Silver suggested that mathematics teacher education become a knowledge-driven profession. This symposium focuses on three teacher education interventions to consider what might count as shared knowledge in teacher education, how it is produced, and how it gets used to inform the design of teacher education interventions.

Session Number 136 **Marco C**
Pedagogical Content Knowledge/Methods Courses

Tracing Teachers' Learning of Accountable Talk Through Coursework and Into Their Practice

Amy F. Hillen, *Kennesaw State University*
Elizabeth K. Hughes, *University of Northern Iowa*

In this session, we consider how teachers' participation in a set of activities centered on a case provided opportunities to learn one way of supporting students' learning in discourse-oriented classrooms, accountable talk. We then examine the extent to which teachers who participated in a follow-up study used accountable talk in their practice.

Session Number 137 **Captiva A**
Preservice Teacher Field Experiences

Practicum: Connecting Theory, Practice and Reflection

Patricia Jaberg, *University of Wisconsin - Stevens Point*
Vicki Hay, *University of Wisconsin - Stevens Point*

In this session, we will discuss our evolving criteria for a field experience that requires elementary education majors to design conceptual lessons built on assessment of student thinking, and then reflect on their lessons and teaching. Current lesson and reflection guidelines and rubrics will be shared and anecdotal evidence will be discussed.

Session Number 138 **Captiva B**
Pedagogical Content Knowledge/Methods Courses

What is "Secondary Mathematics Methods"? A Survey of Course Syllabi

Jill Newton, *Purdue University*
Patricia Wilson, *University of Georgia*
Lindsay Umbeck, *Purdue University*
Glenda Lappan, *Michigan State University*

This session will include a summary of the findings of a survey of "Secondary Mathematics Methods" syllabi from universities across the United States, followed by responses from two experienced secondary mathematics teacher educators and audience discussion.

Session Number 139 **Captiva C**
Teacher Professional Development

Formative Assessment for Middle-school Mathematics Teachers

William S. Bush, *University of Louisville*
Maggie McGatha, *University of Louisville*

This session describes and presents results from a year-long professional development project designed to assist middle-school mathematics teachers in integrating formative assessment strategies into their teaching. Teachers participated in large- and small-group sessions focusing on questioning, analyzing student work, and giving feedback.

Session Number 140 **Augusta**
Teacher Professional Development

The Importance of Sustained Professional Development: A Powerful Example Involving the Mode and Range

Bob Horton, *Clemson University*
Tim Jacobbe, *University of Florida*

This session will present an example from a case study that explored elementary-school teachers' understanding of essential topics in statistics. One particular teacher revealed misconceptions regarding the mode and range during professional development; they were corrected, taught correctly in the classroom, and then resurfaced.

Session Number 141 **Capri**

Teaching Teachers: A Workshop Session for New Mathematics Teacher Educators

Damon Bahr, *Brigham Young University*
Blake Peterson, *Brigham Young University*
Robert Reys, *University of Missouri*
Louann Lovin, *James Madison University*
Karen Karp, *University of Louisville*
Fran Arbaugh, *University of Missouri*
Doug Corey, *Brigham Young University*
Gail Burrill, *Michigan State University*
Laura Van Zoest, *Western Michigan University*
Tim Hendrix, *Meredith College*

In this session, a number of seasoned mathematics teacher educators will present suggestions for engaging in the very challenging work of teaching teachers. The session will begin with a panel discussion, and then break up into small discussion groups led by panel members focused on various teaching-teachers contexts: elementary content, elementary methods, secondary content, secondary methods, elementary professional development, and secondary professional development.

LUNCH & BUSINESS MEETING

11:45 am – 1:15 pm

Amelia and Sanibel

Presiding: Jennifer Bay-Williams, University of Louisville
President, AMTE

Lunch Sponsored by CYBERCHASE/Thirteen—WNET

Mathematics Teacher Education in a Changing Policy Context: The Evolving Standards Movement, International Trends, and Research

Joan Ferrini-Mundy, *National Science Foundation*

The education of teachers of mathematics is a central concern for a wide range of stakeholders, including parents, the business community, mathematicians, policy makers, and funding agencies. What are the central issues and concerns of these communities, and how can mathematics teacher education initiatives have a leading role in framing the issues productively? We will discuss how the evolving nature of the standards movement, including state grade-level content expectations, assessments, and other national efforts specifying the content of K-12 mathematics might intersect with mathematics teacher education. With heightened US interest in international approaches to the education of mathematics teachers, we need to consider the implications of this for practice and research in mathematics teacher education. With current national focus on the preparation of a workforce capable of innovation and a population able to use quantitative, scientific, and computational reasoning in daily life, what are our challenges and opportunities in mathematics teacher education?

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AMTE Annual Meeting 2009

Lead Speakers'

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AMTE Events at the 2009 NCTM and NCSM Annual Conferences in Washington, DC

AMTE Special Interest Session at the NCSM Conference

Wednesday afternoon, April 22, 2009

2:30 – 4:00 pm

Washington Convention Center Room 144C

AMTE Reception at the NCTM Conference

Thursday, April 23, 2009

6:00 - 7:30 pm

Renaissance Washington DC Hotel

Rooms 12/13/14

All members and interested persons are invited to attend.

*For information on membership and other AMTE activities,
please see www.amte.net.*

AMTE's Fourteenth Annual Conference, January 2010

We invite you to plan to attend and speak at next year's Fourteenth Annual AMTE Conference, to be held January 28-30, 2010, at the Hyatt Regency Irvine Hotel in Irvine, California.

The *Call for Proposals* will be available on the AMTE website (www.amte.net) by April 1, 2009 and in the next issue of *AMTE Connections*. Jennifer Chauvot of the University of Houston will be the Program Chair. **The deadline for submitting proposals is May 1, 2009.**

We hope to see you there!

The 2011 Conference will be held somewhere in the southern part of the central United States—stay tuned for more information!



AMTE Leadership January 2008 – February 2009

STANDING COMMITTEES

Affiliate Connections

Tasks: Promotes the development of, provides support to, and facilitates communication among AMTE affiliate groups.

2007-2009

Linda Zientek, Blinn College, Chappell Hill, TX; lrzientek@yahoo.com

Clara Nosegbe, Atlanta Public School System, GA, cnosegbe@yahoo.com

Chair: Jane Cushman, Buffalo State College, SUNY; NY; cushmajr@buffalostate.edu

2008-2010

Chrystal Dean; Clemson University, Clemson, SC; chrystd@clemson.edu

Maria Fung, Western Oregon University, OR; fungm@wou.edu

Cathy Liebars, The College of New Jersey, NJ; liebars@tcnj.edu

Sandi Cooper, Baylor University, TX; Sandra_cooper@baylor.edu

Michaele Chappell, Middle Tennessee State Univ., TN; chappell@mtsu.edu (AMTE Board)

Awards

Tasks: Solicits nominations and selects AMTE members for awards recognizing outstanding teaching, research, and service in mathematics teacher education.

2007 - 2009

Chair: Kate Riley, California Polytechnic State University, CA; kriley@calpoly.edu

Randy Philipp, San Diego State University, CA; rphilipp@mail.sdsu.edu

David Slavit, Washington State University, WA; dslavit@wsu.edu

2008 - 2010

Stacy Reeder, University of Oklahoma, Norman, OK; reeder@ou.edu

Thomasenia Lott Adams, University of Florida, FL; ta@coe.ufl.edu

Joanna Masingila, Syracuse University, NY; jomasing@syr.edu

Fran Arbaugh, University of Missouri, MO; arbaughe@missouri.edu (AMTE Board)

Constitution and By-laws

Tasks: Revisits the constitution and by-laws making suggestions and changes as needed.

2008-2010

Chair: Sue McMillan, Buffalo State College, NY; mcmillse@buffalostate.edu

E. Todd Brown, University of Louisville, Louisville, KY; etbrow01@louisville.edu

Bonnie Oppenheimer, Mississippi University for Women, MS; boppen@muw.edu

Nadine Bezuk, San Diego State University, nbezuk@mail.sdsu.edu (AMTE Board)

Membership

Tasks: Works on issues associated with AMTE membership, including benefits of membership and increasing the number of members (e.g., attract members from our affiliate organizations).

2007 - 2009

Chair: Tim Hendrix, Meredith College, NC; hendrixt@meredith.edu
LouAnn Lovin, James Madison University, VA; lovinla@jmu.edu
Susan Ross, Southern Mississippi University, MS; susan.ross@usm.edu

2008 - 2010

Jill Drake, University of West Georgia, Carrollton, GA; jdrake@westga.edu
Jenna Seymour, Iowa State University, Ames, IA; jseymour@iastate.edu
Michael Matthews, University of Nebraska-Omaha, NE, michaelmatthews@mail.unomaha.edu
Gary Martin, Auburn University, AL; martinwg@mail.auburn.edu (AMTE Board)

Mentoring

Tasks: seeks ways to mentor new faculty and doctoral students in teaching, scholarship, and professional responsibilities while networking with other mathematics teacher educators.

2007 - 2009

Maggie McGatha, University of Louisville, KY; maggie.mcgatha@louisville.edu
Chair: Damon Bahr, Brigham Young University, UT; damon_bahr@byu.edu
Judith Jacobs, Cal Poly Pomona, CA; jejacobs@csupomona.edu
Angel Abney, Georgia College and State University, GA; angel.abney@gcsu.edu

2008 - 2010

Mary Enderson, Middle Tennessee State University, Murfreesboro, TN; mcenders@mtsu.edu
Margaret Mohr, University of Kentucky, Lexington, KY; m.mohr@uky.edu
Doug Jones, Appalachian State University, Boone, NC; jonesd@appstate.edu
Tom Bassarear, Keene State University, Keene, NH; tbassare@keene.edu (AMTE Board)

Nominations and Elections

Tasks: Solicits nominations and compiles a slate of nominees; prepares the content for the ballot

2008 - 2009

Chair: Cynthia Langrall, Illinois State University, Normal, IL; langrall@ilstu.edu
Lynn Columba, Lehigh University, Lehigh, PA; hlc0@lehigh.edu
Amy Roth McDuffie, Washington State University – Tri Cities, WA; mcduffie@tricity.wsu.edu
Tad Watanabe, Kennesaw State University, GA; twatanab@kennesaw.edu
Mike Lutz, California State University, Bakersfield, CA; plutz@csub.edu
Christine Browning, Western Michigan University, MI; Christine.browning@wmich.edu
Barbara Reys, University of Missouri, MO; reysb@missouri.edu (AMTE Board)

Technology

Tasks: Recommends policy related to the AMTE website, NTLI, and technology issues.

2007-2009

Alfinio Flores, Arizona State University, AZ; alfinio@asu.edu
Olga Kosheleva, University of Texas at El Paso, TX; olgak@utep.edu
Chair: Maggie Niess, Oregon State University, OR; niessm@ucs.orst.edu
Kathryn Shafer, Bethel College, IN; shaferk@bethelcollege.edu

2008-2010

Christopher Johnston, George Mason University, Fairfax, VA; cjohnst2@gmu.edu
Michael Mikusa, Kent State University, Kent, OH; mmikusa@kent.edu
Nikita Patterson, Kennesaw State University, GA; npatte10@kennesaw.edu
Gladis Kersaint, University of South Florida, FL; kersaint@coedu.usf.edu (AMTE Board)

TASK FORCES

Teaching Resources Task Force

Purpose: to identify essential readings in the field of mathematics teacher education and to communicate critical books, journals, and documents to the membership and other interested individuals.

Chair: Kathy Morris, Sonoma State University, CA; Kathy.morris@sonoma.edu
M. Lynn Breyfogle, Bucknell University, PA; mbreyfog@bucknell.edu (AMTE Board)
Susan Hillman, Saginaw Valley State College, MI; shillman@svsu.edu
Amy Roth McDuffie, Washington State University – Tri Cities, WA; mcduffie@tricity.wsu.edu
Babette Moeller, Bank Street College, NY; bmoeller@edc.org
Nicole Miller Rigelman, George Fox University, Newberg, OR nrigelma@georgefox.edu

TE-MAT Task Force

Purpose: to establish procedures for identifying and reviewing mathematics professional development materials, with the understanding that the reviews will be considerably briefer than those currently in TE-MAT, and will be limited to describing rather than evaluating the materials.

Chair: David Pugalee, University of North Carolina—Charlotte, NC; dkpugale@email.unc.edu
M. Lynn Breyfogle, Bucknell University, PA; mbreyfog@bucknell.edu (AMTE Board)

TE-MAT Field Testers:

Sue Brown	Tracy Goodson-Espy	Diana S. Perdue`
JoAnn Cady	Patricia Jaberg	Drew Polly
Lisa Wilson Carboni	Elizabeth Jakubowski	David Royster
Karen Cicmanec	Signe Kastberg	Paola Sztajn
Linda Crawford	Marshall Lassak	James Telese
Betsy Darken	Susan McMillen	Trena Wilkerson
Corey Drake	Shelby Morge	
Mike Gilbert	Stephen Pape	

Equity Task Force, Established December 2007

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Marta Civil, University of Arizona, AZ; civil@math.arizona.edu
Susie Hakansson, University of California – Los Angeles, CA; shakans@ucla.edu
Lynn Stallings, Kennesaw State, GA; lstalling@kennesaw.edu (AMTE Board)

Research Task Force, Established October 2007

Chair: Ed Silver, University of Michigan, MI; easilver@umich.edu
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Karen King, New York University, New York, NY; Karen.d.king@nyu.edu
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UPCOMING ANNUAL CONFERENCE COMMITTEES

Conference Director: Susan Gay, University of Kansas, KS; sgay@ku.edu
Assistant Conference Director: Carol Lucas, University of Central Oklahoma, OK;
clucas@uco.edu

2010 Annual Conference – Program Committee

Chair: Jennifer Chauvot, University of Houston, TX; jchauvot@uh.edu
Assistant to the Chair: Michelle Chamberlin, University of Wyoming, WY;
mchambe5@uwyo.edu
Ann Bledsoe, Columbia College, MO; ambledsoe@ccis.edu
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Stephen Pape, University of Florida, FL; spape@ulf.edu
Jeff Wanko, Miami University of Ohio, OH; wankoji@muohio.edu

PUBLICATIONS

AMTE Monograph Series

Series Editor (2005-2008): Denisse Thompson, University of South Florida, FL;
thompson@tempest.coedu.usf.edu
Series Editor (2008-2011): Marilyn Strutchens, Auburn University, AL; strutme@auburn.edu

Fifth Monograph

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Sue McMillan, Buffalo State College, NY; mcmillse@buffalostate.edu
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Sixth Monograph

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Seventh Monograph

Co-editors: Johnny Lott, University of Mississippi, University, MS; jlott@olemiss.edu & Jennifer Luebeck, University of Montana, MT; luebeck@math.montana.edu
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Carol Malloy, University of North Carolina, NC; cmalloy@email.unc.edu
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Dorothy White, University of Georgia, GA; dywhite@uga.edu
Trena Wilkerson, Baylor University, TX; Trena_Wilkerson@baylor.edu

Newsletter

Editor: Lynn Stallings, Kennesaw State University, GA; lstalling@kennesaw.edu (2005-2009)
Co-Editor: Libby Knott, University of Montana, MT; Knott@mso.umt.edu (2009-2011)

Newsletter Editorial Panel

2006-2009

Laurie Cavey, James Madison University, VA; caveylo@jmu.edu
Kathleen Lynch-Davis, Appalachian State University, NC; lynchrk@appstate.edu
Troy Regis, University of Missouri, MO; tprb62@mizzou.edu
Tracy Rusch, Wright State University, OH; tracy.rusch@wright.edu

2007-2010

Teresa Gonske, Northwestern College, MN; tlgonske@nwc.edu
Traci Salinas, Appalachia State University, NC; salinastm@appstate.edu

CITE Journal Editors (2008-20011)

Co-editors: Christine Browning, Western Michigan University, MI;
christine.browning@wmich.edu & Mark Klespis, Sam Houston State University, TX;
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CITE Reviewers:

Berlin, Donna	Johnston, Chris	Pateman, Neil
Chamblee, Greg	Jones, Dustin	Pugalee, David
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Cory, Beth	Kersaint, Gladis	St. John, Dennis
Garofalo, Joe	Kosheleva, Olga	Shafer, Kathy
Goodson-Espy, Tracy	Lapp, Doug	Shamatha, Jeff
Harper, Suzanne	Meltzer, Sarah	Sorto, Angela
Hjalmarson, Margret	Niess, Margaret	Walmsley, Angela
Horton, Robert M.	Nillas, Leah	Zbiek, Rose
Johnson, Gwendolyn	Ozgun-Koca, Asli	



CALL FOR PROPOSALS

AMTE's 14th Annual Conference

January 28 - 30, 2010

Hyatt Regency Hotel

Irvine, California

Recommended Formats for Presentations

The AMTE Board of Directors believes that the AMTE Annual Conference should provide participants with an opportunity to examine and discuss current issues in mathematics teacher education and professional development and share related ideas and information. Therefore, all sessions must provide opportunities for all participants to be actively engaged. The details on how you will involve participants in your session must be included in your proposal.

Thematic Presentation. Thematic presentations are designed to include either one substantive presentation or a panel discussion. With one main presentation, there should be two prepared critiques or responses. Panel discussions should formulate the salient points related to an issue of current concern to mathematics teacher educators with a moderator to foster interaction among the panelists. A total of at least 20 minutes must be allocated for participant interaction.

Symposium or Working Group. Symposia include several presentations focusing on the same issue from different perspectives or related aspects with a minimum of 30 minutes allocated for participant interaction. Working group sessions are designed to permit significant interaction among session organizers and participants on a particular topic of interest to AMTE members. Indicate the preferred time length for the session with a brief outline of how the time will be used. Note, however, that the program committee reserves the right to adjust session lengths to fit the confines of the program.

Individual Session. Individual sessions allow for project overviews and updates, local and state initiatives, and brief research reports that would be of interest to mathematics teacher educators.

Session Duration

The program committee will assign sessions to 30-, 45-, 60-, or 90-minute time slots. Proposals should include a suggested amount of time and clearly delineate how this time will be used including the amount of time participants will be engaged during the session.

Materials to Submit with a Proposal

Submit proposals by completing the *Proposal Form* available online after April 1, 2009 at www.amte.net and uploading your proposal on the web. Submit the following for each proposed session:

Presenter Information: Provide information for the session contact person and all presenters (name, affiliation and position, mailing address, phone numbers, fax number,

and e-mail address.) Additionally, describe the role of each presenter (e.g., speaker, moderator, discussant, or a combination of these roles).

Session Information: Indicate type of proposed format, length of session, strand, level of teacher education addressed, and equipment needs (see the online Call for Proposals for more information)

Session Description: Provide a descriptive title and a 30-to-40-word description of the session to be listed in the program.

Abstract: Provide a one-page abstract of your proposed session. The abstract should describe background information on the proposed topic, provide evidence of its educational significance, describe how the session will be organized and how it will promote participant interaction (question-oriented, short presentations and discussion, position statements), and outline the desired outcomes of the session. Include a rationale for the type of format selected. Be sure to address the implications of the session for teacher education. Please do not include any names or information that might identify the authors.

Submissions: All submissions will be electronic. Please follow the submission guidelines on the AMTE website available after April 1, 2009.

Limits on Participation

Each individual may serve as lead speaker for no more than one session and can appear no more than twice on the program.

The lead speaker/contact must personally certify that all listed presenters have confirmed their willingness to participate in the session.

<p>ALL PRESENTERS (including speakers, moderators, and discussants) MUST BE REGISTERED FOR THE CONFERENCE BY THE EARLY REGISTRATION DEADLINE (see the AMTE website for that date) OR THEIR SESSION WILL BE CANCELLED.</p>

Proposals Must be Submitted Electronically by Friday, May 1, 2009.

All proposals will be submitted online at www.amte.net.

Questions

If you have questions regarding proposal topic, format, or submission, contact:

Jennifer Chauvot, Program Chair
256 Farish Hall
Department of Curriculum and Instruction
University of Houston
Houston, TX 77204-5027
713-743-9864
amte2010@gmail.com



CALL FOR MANUSCRIPTS

for Monograph VII:

Mathematics Teaching: Putting Research into Practice at All Levels

Background

The Association of Mathematics Teacher Educators (AMTE) is an organization designed to bring together individuals interested in mathematics teacher education in order to promote and improve the education of preservice and inservice teachers of mathematics. Two of its goals are to facilitate communication and to promote collaboration among mathematics teacher educators, including those in Colleges of Education, in Departments of Mathematics, and outside higher education settings. In an effort to support these goals, AMTE published its first monograph in 2004. The 2010 monograph, *Mathematics Teaching: Putting Research into Practice at All Levels*, will be the seventh volume in the series designed to be a forum for mathematics teacher educators to exchange ideas about their work with preservice and inservice teachers and about their collaborative efforts with others who play significant roles in mathematics teacher education (e.g., content faculty, clinical faculty responsible for mentoring student teachers).

Anticipated Audience

The anticipated audience for this monograph includes individuals responsible for the professional development of mathematics teachers, such as college or university faculty, community college faculty, or professional development specialists. Hence, the focus of the monograph is on issues related to the development of mathematics teachers, practices in post-secondary classrooms (content or pedagogy) for mathematics teachers, or practices that help individuals responsible for the preparation of mathematics teachers gain knowledge they need to be more effective in their work.

Possible Topics

The 2010 monograph aims to include manuscripts addressing aspects of the practices of mathematics teacher educators. In particular, we welcome research studies, as well descriptions of mathematics teaching practice informed by research. Topics may include but are not limited to the following broad categories:

- The mathematics needed for preservice and inservice teacher education;
- Preparation/professional development of mathematics teacher educators and teacher leaders (content or pedagogy);
- Innovative delivery methods for content and programs, including alternative routes to certification in mathematics;
- Innovative materials developed for K-16 mathematics teacher education; and
- Collaboration among various mathematics teacher educators, e. g., mathematics/science partnerships or professional learning communities.

******Authors are encouraged to consider what other mathematics teacher educators can learn from the manuscript to inform personal practice with preservice and/or inservice teachers.

Preparation of Manuscripts

Any questions about possible topics for inclusion may be directed to one of the co-editors of the monograph. Editorial decisions will be made by the co-editors and members of the Editorial Panel:

Co-editors	Jennifer Luebeck, Montana State University, luebeck@math.montana.edu Johnny W. Lott, University of Mississippi, jlott@olemiss.edu
Series editor	Marilyn Strutchens, Auburn University
Panel members	Carol Malloy, University of North Carolina Melfried Olson, University of Hawaii Trena Wilkerson, Baylor University, Texas Laura Spielman, Radford University, Virginia Eric Milou, Rowan University Dorothy White, University of Georgia Jane Keiser, Miami University of Ohio Amy Hillen, Kennesaw State University, Georgia Sheri Stockero, Michigan Technological University
AMTE board liaison	Marilyn Strutchens, Auburn University

Manuscripts should be completed in APA-style, double-spaced in 12-point font using 1 inch margins, and should not exceed 15 pages in length, including references, tables, and figures.

Submission of manuscripts will be accepted electronically, as instructed below. Authors submit two electronic versions of their manuscript; one copy should include a cover page with all appropriate author information (name, address, phone, fax, and email); the other copy should allow for blind review. Please name your WORD document files as follows:

Identifiable copy: LASTNAME.doc

Blind copy: LASTNAMEblind.doc

Send both electronic files to: Johnny W. Lott
Email: jlott@olemiss.edu

***AMTE is planning for an online submission system. Please check www.amte.net for details. If the system is ready, manuscripts will be accepted either by email or through the online system.**

Submission Due Date: June 1, 2009

Anticipated Publication Date: 2010



AMTE'S AWARDS:
The *Excellence in Mathematics*
Teacher Education Award

and the

Early Career Award

Description of Awards

The Board of Directors of the Association of Mathematics Teacher Educators has established two awards to be given annually to two mathematics teacher educators of national recognition at the Annual Meeting of the AMTE. The purpose of these awards is to recognize excellence in each area of mathematics teacher education (teaching, service, research). The purpose of the first award, the **Excellence Award**, rotates every three years, focusing on a different area: **Excellence in Teaching**; **Excellence in Service**; and **Excellence in Scholarship**. The second award, the **Early Career Award**, recognizes a mathematics teacher educator who, while early in his/her career, has made distinguished contributions and shows exceptional potential for leadership in these areas.

Recipients of AMTE Awards are:

Excellence in Teaching in Mathematics Teacher Education (next award in 2012)

- Margaret (Peg) Smith (2009)
- Randy Philipp (2006)

Excellence in Service in Mathematics Teacher Education (next award in 2010)

- Bill Bush (2007)

Excellence in Scholarship in Mathematics Teacher Education (next award in 2011)

- Frank Lester (2008)

Early Career Award (awarded annually)

- John Lannin (2009)

Complete information on these awards is available on the AMTE website at www.amte.net.

**2010 Award for Excellence in
Service in Mathematics Teacher Education**

The 2010 Excellence in Service Award is intended to recognize a colleague for a unique contribution in service should have made a significant and lasting contribution to mathematics teacher education, directly and indirectly. The nominee shall have demonstrated commitment to mathematics teacher education through one or more of the following areas:

- a. Active participation in advancing the development and improvement of mathematics teacher education (e.g., membership and leadership roles in state, national, and international organizations).
- b. Active promotion and participation in activities promoting quality mathematics teacher education (e.g., creator of programs, coordinator of programs, writing and participating in grants, conferences, symposia, academies, supervisor of a student affiliate organization)

- c. Active participation in the governmental and political areas to promote and protect beneficial legislation, to promote better awareness, and/or to build better communication
- d. Active promotion and participation in school-university-community-government partnerships that have advanced mathematics teacher education (local, state, national level)
- e. An unusual commitment to the support of mathematics teachers in the field (such as distinctive mentoring experiences).

Criteria for Excellence in Service Award

The nominee of the Excellence in Service Award should be an active member of the mathematics teacher education community and have at least five years of commitment to mathematics teacher education. He or she should have made unique contributions to the field of mathematics teacher education. Unique contributions should be considered in the broadest sense possible.

Documentation required for Excellence in Service Award:

- a. A current vita of the nominee, focused on excellence in service to mathematics teacher education (5 page limit)
- b. A letter of nomination documenting the nominee’s eligibility for the award, related to the criteria listed above
- c. Additional letters of support (no more than four) for the nomination from individuals knowledgeable of the nominee’s contributions relative to one or more of the criteria stated above

2010 Early Career Award

The Early Career Award is intended to recognize a colleague's contributions in their program of teaching, service, and/or scholarship within the first decade after receiving a doctoral degree. We invite nominations that highlight an individual’s innovative contributions in one or more areas of teaching, service, and/or scholarship.

Criteria for Early Career Award

The nominee for the Early Career Award should be a mathematics teacher educator practicing in the field no later than 10 years after receipt of a doctoral degree.

Teaching: Contributions in the area of teaching preservice or inservice mathematics teachers may include one or more of the following areas:

- a. Implementation of effective and innovative teaching practices.
- b. Demonstration of innovative teaching methods (e.g. publications, materials, video)
- c. Recipient of awards in teaching from department, college, university and/or national entities.

Service: Contributions in the area of service to mathematics teacher education may include one or more of the following areas:

- a. Active participation in advancing the development and improvement of mathematics teacher education (e.g., membership and leadership roles in state, national, and international organizations).
- b. Active promotion and participation in activities promoting quality mathematics teacher education (e.g., creator of programs, coordinator of programs, author of and participant in grants, conferences, symposia, academies).
- c. Active participation in the governmental and political areas to promote and protect beneficial legislation, to promote better awareness, and/or to build better communication.
- d. Active promotion and participation in school-university-community-government partnerships that have advanced mathematics teacher education at the local, state, and/or national level.
- e. An unusual commitment to the support of mathematics teachers in the field (e.g., distinctive mentoring experiences).

Scholarship: Contributions in the area of scholarship to mathematics teacher education may include one or more of the following areas:

- a. Dissemination of research findings offering unique perspectives on the preparation or professional development of mathematics teachers.
- b. Publication of materials useful in the preparation or continuing professional development of mathematics teachers.
- c. Design of innovative preservice or inservice programs.
- d. Contribution of theoretical perspectives that have pushed the field forward.

Documentation required for Early Career Award:

- a. Current vita of the nominee.
- b. Letter of nomination documenting the nominee's eligibility for the award.
- c. Three letters of support for the nomination from individuals knowledgeable of the nominee's contributions relative to one or more of the criteria stated above.
- d. Evidence of at least three contributions of the nominee's teaching, service, and/or scholarship in mathematics education in one or more areas as outlined above.

Nomination Process for Excellence Award and Early Career Award

AMTE members may nominate a mathematics teacher educator who meets the criteria of the award. Self-nominations will not be considered. Nomination materials should include those stated in each section above. The committee will review applications in an electronic format. Therefore, applicants are encouraged to submit all application materials electronically.

Electronic submissions should be sent to Mike Klass at mklass@projects.sdsu.edu

If applicants wish to include large documents in hard-copy form, we will be able to scan documents of up to 50 pages in length. Applicants may submit DVDs, CDs, or videotapes, but each clip submitted should be no more than 20 minutes long. Hard copy submissions should be sent to:

Mike Klass
c/o Nadine Bezuk
Attn: AMTE Award Nomination
6475 Alvarado Rd., Suite 206
San Diego, CA 92120

Please be sure that all items in the nomination materials are clearly labeled with the name of the nominee.

Deadline for Nominations

Nominations for the **Excellence in Service Award** must be received by **September 30, 2009**. For the **Early Career Award**, nominations must be received by **October 15, 2009**.

Procedure for Review of Materials

The AMTE Awards Committee, a seven-member committee, will review the materials and select the award winner yearly. Nominations will be reviewed by the committee, and the award recipient will be notified by late November, so that the person can have time to make arrangements to attend the AMTE conference.

The award recipients will receive a plaque and be recognized at the AMTE meeting in the year in which he or she receives the award. The winner of the Excellence Award will give a featured presentation at the AMTE Annual Conference in the year they receive the award. The winner of the Early Career Award will be recognized at the annual AMTE meeting and asked to contribute an article for the Summer *AMTE Connections* Newsletter and to lead a mentoring session for other early career mathematics education faculty at the annual AMTE meeting.

Call for MANUSCRIPTS!

Share research to push our thinking forward regarding issues of technology use in mathematics teacher education.

The *CITE-Math Journal* provides a forum for a dialog about best practices of utilizing technology in the preparation of mathematics teachers. Papers may address any area of research in technology and mathematics teacher education, dealing with either preservice and inservice issues. Papers will be reviewed on the following criteria: relevance to technology and mathematics teacher education, originality, clarity of expression, and literature support.

A wide range of formats and approaches to scholarship are accepted, including qualitative research, quantitative research, and theoretical pieces. Articles will be published in electronic format as well as in corresponding versions (pdf) suitable for print. An electronic format allows articles to be published in a timely fashion and allows for the inclusion of color graphics, photographs, video, and other media. Manuscripts may be submitted online through the journal website. Inquiries about potential manuscript topics are welcomed.

Call for REVIEWERS!

We need more reviewers to meet with the increase of submitted papers.

Your help is needed. As a peer-reviewed journal, reviewers are an important part of the publication process. Please consider volunteering your time to serve as a reviewer for the journal. Reviewers will generally be sent no more than two to three articles each year, unless they indicate a willingness to review additional manuscripts. **All articles and reviews are submitted online.**

To become a reviewer, go to <http://www.aace.org/newpubs/index.cfm?fuseaction=Info.Entrance>. Go to Publications, enter your email address, and create an AACE login. Have a copy of your vita ready, and complete the reviewer information online. Be sure to select the *CITE-Math Journal* for reviewing. It only takes a few minutes to become involved in this important professional endeavor. Your involvement will help keep the journal strong.

Call for READERS!

Read an article and post your comments online in response to published articles in CITE-Math

The CITE Journal has a unique Commentary feature which permits readers to author short responses to published articles. This feature takes advantage of an interactive medium, which is designed to encourage ongoing, peer-reviewed dialog. Readers are encouraged to provide scholarly responses to a published article using an online commentary strand linked to the article. Comments will be peer reviewed prior to publishing.

BONUS JOURNAL FEATURES

The journal's online medium also allows and encourages authors to demonstrate the technologies about which they are writing, including video and audio segments, animation, virtual reality, web links, and simulations.

FOR MORE INFORMATION

For further information, please feel free to contact one of the co-editors of *CITE-Math*:

- Christine Browning (christine.browning@wmich.edu), or
- Mark Klespis (klespis@shsu.edu).

***CITE Journal* SPONSORS**

The *CITE Journal* is an online, peer-reviewed journal, established and jointly sponsored by five professional associations:

- **AMTE** – Association of Mathematics Teacher Educators
- **ASTE** – Association of Science Teacher Educators
- **CEE** – Conference on English Education of the National Council of Teachers of English
- **NCSS-CUFA** – College and University Faculty Assembly of the National Council for the Social Studies
- **SITE** – Society for Information Technology and Teacher Education