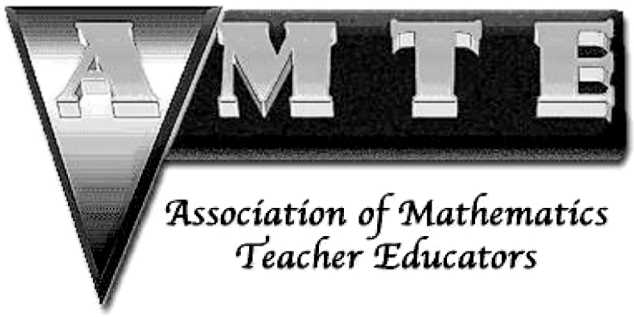

Association of Mathematics Teacher Educators

Twelfth Annual Conference

January 24 - 26, 2008

Renaissance Tulsa Hotel and
Conference Center
Tulsa, Oklahoma

2007 AMTE Board of Directors

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 13 affiliated organizations to its Twelfth Annual Conference.

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Acknowledgements

The Twelfth 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 Coordinator, Executive Director, Program Committee, Local Arrangements Committee, and Headquarters staff for providing the time and effort necessary to pull this conference together;
- Lori Albers, Mike Klass, Lisa Woodend, and Katherine Lopez-Ramos, San Diego State University, and Helen Kirk, Auburn University, for their support with registration and conference materials;
- Ingrid Peterson, University of Kansas, for coordinating arrangements for the preconference sessions; and
- the publishers who donated materials for the AMTE Browsing Room.

Conference Information

Conference Registration Desk

Please stop by the AMTE Registration Desk, located in the convention 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, January 24	8:00 a.m.– 6:45 p.m.
Friday, January 25	7:30 a.m. – 5:00 p.m.
Saturday, January 26	7:30 a.m. – 11:30 a.m.

Wireless Internet Access

For this conference, we are delighted to provide complimentary wireless internet access in the main convention center. After activating your computer's wireless access, click on your internet browser. If your system requires you to select a network, look for Wayport or ibahn in your list of available networks. You can receive assistance at the AMTE Registration Desk.

For conference attendees staying at the Renaissance Hotel, internet access is available in individual guestrooms for $9.95 per day (noon to noon). This fee includes unlimited local and long distance telephone calls. Directions are posted in your guestroom.

Hotel Parking Information

Parking: Self-parking is free. Valet parking is available for $8.00 per car per half day or $12.00 per car per day 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 Salt Lake City, UT in April, 2008
- AMTE Leadership for January 2007 through January 2008
- Call for Proposals for the 2009 AMTE Conference, to be held in Orlando, FL, from February 5 – 7, 2009 (deadline: May 2, 2008)
- Call for Manuscripts for the Sixth AMTE Monograph (deadline: June 1, 2008)
- Call for Nominees for the AMTE Award for Excellence in Teaching in Mathematics Teacher Education (deadline: October 15, 2008)
- 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.

Twelfth Annual Conference
SCHEDULE

January 24 – 26, 2008
Tulsa, Oklahoma

Thursday, January 24, 2008

8:00 a.m. – 6:45 p.m.	AMTE Registration Desk Open
1:00 – 2:00 p.m.	Thematic Presentations, Symposia or Working Groups
1:00 – 6:30 p.m.	Browsing Room Open
2:15 – 3:00 p.m.	Individual Sessions
3:00 – 3:30 p.m.	Break
3:30 – 5:00 p.m.	Thematic Presentations, Symposia or Working Groups
7:00 – 8:30 p.m.	Opening Session
8:30 – 9:30 p.m.	Reception

Friday, January 25, 2008

7:00 – 8:00 a.m.	Continental Breakfast
7:30 a.m. – 5:00 p.m.	AMTE Registration Desk Open
7:30 a.m. – 5:00 p.m.	Browsing Room Open
8:00 – 9:00 a.m.	Individual Sessions
9:00 – 9:15 a.m.	Break
9:15 – 10:45 a.m.	Thematic Presentations, Symposia or Working Groups
10:45 – 11:00 a.m.	Break
11:00 – 12:00 a.m.	Individual Sessions
12:00 – 1:15 p.m.	Lunch
1:15 – 1:45 p.m.	Individual Sessions
1:45 – 2:00 p.m.	Break
2:00 – 2:45 p.m.	Individual, Thematic Presentations, Symposia, or Working Groups
2:45 – 3:15 p.m.	Break
3:15 – 3:45 p.m.	Individual Sessions
3:45 – 4:00 p.m.	Break
4:00 – 4:30 p.m.	Individual Sessions
5:00 – 6:30 p.m.	Judith E. Jacobs Lecture
6:30 – 8:00 p.m.	Dinner

Saturday, January 26, 2008

7:00 – 8:00 a.m.	Continental Breakfast
7:30 – 11:30 a.m.	AMTE Registration Desk Open
7:30 a.m. – 1:30 p.m.	Browsing Room Open
8:00 – 9:00 a.m.	Individual Sessions, Thematic Presentations or Symposia
9:00 – 9:15 a.m.	Break
9:15 – 10:00 a.m.	Individual Sessions
10:00 – 10:15 a.m.	Break
10:15 – 10:45 a.m.	Individual Sessions
10:45 – 11:00 a.m.	Break
11:00 – 11:30 p.m.	Individual Sessions
11:30 – 1:15 p.m.	Lunch and Business Meeting
1:30 – 2:30 p.m.	Individual Sessions, Thematic Presentations or Symposia
2:45 – 3:30 p.m.	Closing Session

Overview of Thursday Afternoon, January 24, 2008

	1:00 - 2:00	2:15 - 3:00	3:30 - 5:00
Seville I	1. First-timers' Session – Bay-Williams & Bezuk	5. Curricular Knowledge for Mathematics Teachers: A Proportional Reasoning Example -- Chauvot	9. Learning to Teach Probability: Research and Practice in Teacher Education – Ives & Mojica
Seville II	2. At the Coalface with Alternatively Certified Teachers in Urban Schools: A Set of Case Studies – Henry, Gonzales, Meagher, & Fleshman	6. Toward Closing the Feedback Loop: Assessing Teacher Preparedness and Beliefs Among Math Teachers, University Faculty, and School District Administrators – Bernotsky & Merlino	10. Rational Numbers as a Site for Preservice Teachers' Reasoning and Justification – Rathouz, Cengiz, Flowers & Rubenstein
Seville III	3. What Makes Video-case-based Mathematics Teacher Education Effective? – Moeller & Cohen	7. Experiencing, Implementing, and Leading Mathematics Inquiry & Integration: Creating Change in Teachers, Students, and Schools -- Burton	11. Mathematics Courses for Elementary Teachers: An Overview of Current Research Projects – McCrory, Costner, Lovin, Beckmann, Moss, Pullano, Hill, & Smith
Salon VI	4. Reaching Teachers through Synchronous Online Courses – Cady, Hodges, & Strunk	8. A Collaborative Model for Developing Inservice and Preservice Teachers' Ability to Effectively Integrate Technology into Mathematics Instruction -- Harrington	12. The Pedagogical Preparation of K-12 Mathematics Teachers: A Working Group on Methods Courses and Related Work – Ronau, Burrill, Hegeman & Witherspoon
Madrid III	1:30 – 4:30 Technology Workshop (preregistration required) Preparing Teachers with Mathematics TPCK (Technological Pedagogical Content Knowledge) – Niess, Harper, Browning, Ronau, Flores, Kosheleva, Shafer, Pugalee, Driskell		

Opening Session — Salon V — 7:00 – 8:30 p.m.

Reception — Salon I — 8:30 – 9:30 p.m.

Thursday, January 24, 2008 1:00 – 2:00 pm

Session Number 1 **Seville I**

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 2 **Seville II**
Grades 9 - 12 Licensure Issues

At the Coalface with Alternatively Certified Teachers in Urban Schools: A Set of Case Studies

Shana Henry, *The Graduate Center/CUNY*
Lidia Gonzales, *The Graduate Center/CUNY*
Michael Meagher, *Brooklyn College/CUNY*
Paula Fleshman, *The Graduate Center/CUNY*

We present, as part of the MetroMath research, a set of case studies of alternatively certified teachers of mathematics in urban schools. Each case study has a different focus: (i) management and control; (ii) school structures; and (iii) traditional vs reform curriculum.

Session Number 3 **Seville III**
K-5 Teaching and/or Learning with Technology

What Makes Video-case-based Mathematics Teacher Education Effective?

Babette Moeller, *EDC/Center for Children & Technology*
Marvin Cohen, *Bank Street College of Education*

We will share video-case materials and learning experiences designed to help teachers to differentiate instruction in the mathematics classroom and discuss what we have learned about what types of learning experiences are most effective to effect changes in teachers' knowledge, skills and classroom practices.

Session Number 4 **Salon VI**
Grades 6-8 Teacher Professional Development

Reaching Teachers through Synchronous Online Courses

JoAnne Cady, *University of Tennessee*
Thomas E. Hodges, *University of Tennessee*
Kathy Strunk, *Appalachian Mathematics and Science Partnership*

In this presentation we share our rationale for the decisions we made in developing synchronous online courses to increase the mathematics content knowledge of middle school teachers. We also share our findings regarding the impact of these courses on participants.

Technology Workshop **Madrid III**
PREREGISTRATION REQUIRED 1:30 – 4:30 pm

Preparing Teachers with Mathematics TPCK (Technological Pedagogical Content Knowledge)

AMTE's Technology Committee:
Maggie Niess, *Oregon State University*
Suzanne Harper, *Miami (OH) University*
Christine Browning, *Western Michigan University*
Bob Ronau, *University of Louisville*
Alfinio Flores, *University of Delaware*
Olga Kosheleva, *University of Texas at El Paso*
Kathy Shafer, *Bethel College*
David Pugalee, *University of North Carolina - Charlotte*
Shannon Driskell, *University of Dayton*

Four components of TPCK suggest that teachers' knowledge and beliefs are consistent with: an overarching conception about the purposes for incorporating technology in teaching mathematics; knowledge of students' understandings, thinking, and learning in mathematics with technology; knowledge of curriculum and curricular materials that integrate technology in learning and teaching mathematics; and knowledge of instructional strategies and representations for teaching and learning mathematics with technologies. What do these components suggest for the mathematics teacher preparation program? Participate in developing TPCK standards for teaching mathematics and guidelines for a teacher preparation program directed by these standards.

Thursday, January 24, 2008 2:15 – 3:00 pm

Session Number 5 **Seville I**
Grades 6-8 Pedagogical Content Knowledge/Methods Courses

Curricular Knowledge for Mathematics Teachers: A Proportional Reasoning Example

Jennifer Chauvot, *University of Houston*

This session will provide analysis of student work from an assignment within a course for preservice/practicing 4-12 mathematics teachers about developing proportional reasoning intended to develop skills in analyzing and modifying a resource for implementation in practice. Attendees will be asked to share their instructional practices.

Session Number 6 **Seville II**
Grades 9 - 12 Assessment Issues

Toward Closing the Feedback Loop: Assessing Teacher Preparedness and Beliefs Among Math Teachers, University Faculty, and School District Administrators

Lorraine Bernotsky, *West Chester University of Pennsylvania*
F. Joseph Merlino, *Math and Science Partnership of Greater Philadelphia*

This is a report on year one of a two-year project involving the Math and Science Partnership of Greater Philadelphia. Year one involved benchmark surveys of current math teachers regarding pedagogical and assessment skills as well as teacher beliefs about quantitative literacy. The report includes a preview of year two which involves school and university partnerships.

Session Number 7 **Seville III**
K-5 Teacher Professional Development

Experiencing, Implementing, and Leading Mathematics Inquiry and Integration: Creating Change in Teachers, Students, and Schools

Megan Burton, *University of South Carolina*

A year-long inquiry based integrated mathematics and science experience that supported teacher learning, planning, and then leading other teachers at local and state levels will be explored. The challenges experienced, findings, and implications will be examined.

Session Number 8 **Salon VI**
General Teaching and/or Learning with Technology

A Collaborative Model for Developing Inservice and Preservice Teachers' Ability to Effectively Integrate Technology into Mathematics Instruction

Rachel Harrington, *Oregon State University*

Collaboration between licensure programs and K-12 schools supports preservice and inservice teachers learning to teach mathematics with technology. Preservice teachers bring technology skills, while inservice teachers provide content and pedagogy expertise. All gain knowledge, skills, and dispositions about technology integration.

Thursday, January 24, 2008 3:30 – 5:00 pm

Session Number 9 **Seville I**
Grades 6-8 Pedagogical Content Knowledge/Methods Courses

Learning to Teach Probability: Research and Practice in Teacher Education

Sarah Ives, *North Carolina State University*
Gemma Foust Mojica, *North Carolina State University*

Speakers and participants will discuss issues relating to the teaching and learning of probability. Results from several studies, involving preservice and inservice middle and secondary teachers will be shared, along with materials from an NSF-funded research and materials development project.

Session Number 10 **Seville II**
K-5 Teacher Content Knowledge/Content Courses

Rational Numbers as a Site for Preservice Teachers' Reasoning and Justification

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

Rational numbers are a central part of the school curriculum but often reasoning and justification about rational numbers are overlooked as a resource for deepening preservice teachers' understanding of mathematics. In our Mathematics for Elementary Teachers course we are exploring ways to make justification central. This session will engage participants in questions like the following: How can rational numbers be a site for preservice

teachers' work with justification? What types of tasks are productive for this work? How are such tasks orchestrated? What are reasonable expectations for preservice teachers in expressing their justifications?

Session Number 11 **Seville III**
General Assessment Issues

Mathematics Courses for Elementary Teachers: An Overview of Current Research Projects

Raven McCrory, *Michigan State University*
Beth Greene Costner, *Winthrop University*
LouAnn Lovin, *James Madison University*
Sybilla Beckmann, *University of Georgia*
Meg Moss, *Pellissippi State Technical Community College*
Frank B. Pullano, *Winthrop University*
Heather Hill, *Harvard University*
Stephanie Smith, *Georgia State University*

What are we teaching in undergraduate mathematics courses for elementary and middle school teachers, and what are students learning? How do mathematics departments design and support these courses? Several research projects are investigating these questions at institutions across the country. We present results from projects looking at these questions from various perspectives.

Session Number 12 **Salon VI**
General Pedagogical Content Knowledge/Methods Courses

The Pedagogical Preparation of K-12 Mathematics Teachers: A Working Group on Methods Courses and Related Work

Robert Ronau, *University of Louisville*
Gail Burrill, *Michigan State University*
Jennifer Hegeman, *Missouri Western University*
Mary Lou Witherspoon, *Austin Peay University*

Building on prior AMTE and NCTM discussions, this working group will refine previously developed goals for mathematics methods classes and create a research agenda and framework that would address our progress toward these goals as individuals and as a field.

OPENING SESSION
7:00 – 8:30 pm
Salon V

A National Conference on Doctoral Programs in Mathematics Education: Some Things that Happened and Possible Aftermath

Robert Reys, *University of Missouri-Columbia*
Glenda Lappan, *Michigan State University*
Diana Lambdin, *Indiana University*

A National Conference on Doctoral Programs was held in September 2007. This session will highlight some reports presented and issues discussed, including pros and cons of accreditation for doctoral programs in mathematics education.

RECEPTION
8:30 – 9:30 pm
Salon I

Have You Visited the Browsing Room?

In the Strasbourg 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 close of the AMTE Closing Session on Saturday afternoon.

What: Browsing Room
Where: Strasbourg Room
When: Thursday, 1:00 – 6:30 p.m.
Friday, 7:30 a.m. to 5:00 p.m.
and
Saturday, 7:30 a.m. to 1:30 p.m.

STOP BY AND TAKE A LOOK!

Overview of Friday Morning, January 25, 2008

	8:00 – 9:00	9:15 – 10:45	11:00 – 12:00
Seville I	14. Measuring Collegiality in "Online" Professional Development of Middle Grades Mathematics Teachers: Processes, Tools, and Results from a Study – Taylor, Cady & Hodges	25. Mathematics Coaches, Specialists, and Teacher Leaders: Professional Development in School Environments – Brosnan & Erchick	36. Improving the Learning Environment of Mathematics Students: How to Affect Levels of Engagement and Emotional Comfort -- Copes
Seville II	15. Considering Critical Features of Tasks that Support Preservice Teachers' Development – Van Zoest & Stockero	26. Using Rich Tasks to Define Content Knowledge for Teaching: A Look at the Understanding Used in Mathematics – Gilbert	37. Lesson Study: Building Mathematics Knowledge Usable in Teaching – Lewis, Watanabe, & Morris
Seville III	16. Beginning Teachers and Students' Errors: Any Role for Teacher Preparation Programs? – Haydar, Henry, Angulo & Vatuk	27. The Pedagogical Content Knowledge of Beginning Teacher Educators – Chval, Lannin & Arbaugh	38. Developing Future Leaders through NCTM Student Affiliates – Schneider, Williams, Schultz, Peterson & Speer
Salon II	17. Encouraging Undergraduate Research as a Prelude to Graduate Study in Mathematics Education – Liebars, Sabia, Shapiro & Cann	28. Parents, Teachers, and Reformed Mathematics: Building Productive Partnerships – Bartlo & Sitomer	39. Is There a Match Between What "They" Think and What "We" See? What Does the Research Show? – Powers, Margolin & Lambating
Salon III	18. Developing Mathematical Knowledge for Teaching Fractions: An Integrated Approach for Preservice Teachers – Kieboom & Laughlin	29. Connecting Content and Education for Preservice Mathematics Teachers: What Do Teacher Educators Want and Need? -- Lapp	40. Continuing the Conversation: Teaching and Learning in an Elementary Geometry Methods Course – Goodson-Espy, Schram, & Quickenton
Salon VII	19. Supporting Teachers' Transfer of Campus Learning and Technology Use to Classroom Practice with CPMP-Tools – Hirsch, Keller, Martin, & Zbiek	30. The Mathematical Preparation of Teachers: Teacher Educators and Mathematicians Working More Closely Together – Martin, Strutchens, Qazi, Stuckwisch, & Painter	41. Practice as Evidence of Learning: Using Performance Assessments in a Methods Course – Boerst, Sleep, Ball & Cole
Salon VIII	20. Mathematics Fellowships: Providing Mathematics Content to Middle-grades Teachers – McLeod, Schefelker, & Hedges	31. Lesson Study from Multiple Perspectives – Britt, Fugitt, Jones, Landry, Owens, Savich, Smith, Tate, Wagener, Waggoner, Zelkowski	42. Using Concept Maps to Assess Prospective Middle Grades Mathematics Teachers' Understanding of Function – Swarthout, Jones, & Klespis
Salon IX	21. Examining and Discussing Preservice Mathematics Teachers' Orientations – Pomerenke, Webb, Chval, Jackson, & Regis	32. Structure Matters! What Happens when Science, Technology, Assessment, and Mathematics Bond Together in Professional Development? -- Hendrix	43. Learning to Teach: Keeping in Tune with the Learners – Taube, Ortiz, & Patton
Madrid I	22. Shifting from Proving to Improving: Using Assessment as an Integral Part of Instruction – Charalambous & Silver	33. Lesson Study in Preservice Secondary Mathematics Teacher Preparation: Alternative Models of Student Teaching – Romagnano, Peterson, Leatham, Evans, Gilmore, & Takahashi	44. Learning Students' Mathematics – Abney, Rhodes, & Lee
Madrid II	23. The Challenges for Mathematics Education: Collaborations with and Recommendations for the National Council of Teachers of Mathematics – Kepner & Fennell	34. Developing Mathematical Knowledge for Teaching: How Does an "MKT Problem" Compare with a Regular Mathematics Problem? – Suzuka, Ball, Sleep, Lewis, Thames & Bass	45. Connecting "Best Practices" in Language Arts and Mathematics Instruction – Billings & Coffey
Salon V	24. The PRIME Leadership Standards: A Vision for Leading Improved Student Achievement -- Kanold	35. The Role of Mathematicians in the Preparation and Professional Development of Teachers – Burrill, Wald, Kepner, & McLeod	46. Challenges for Mathematics Teacher Education -- Fennell

Session Number 14 **Seville I**
Grades 6-8 Teacher Professional Development

Measuring Collegiality in "Online" Professional Development of Middle Grades Mathematics Teachers: Processes, Tools, and Results from a Study

P. Mark Taylor, *University of Tennessee*
JoAnn Cady, *University of Tennessee*
Thomas E. Hodges, *University of Tennessee*

Professional development focused on middle grades mathematics content had collegial interaction in site-based learning communities as a basic design principle for online courses. Participants will hear how it developed and become familiar with the tools used by the principle investigators in analyzing the data, including a taxonomy of collegiality.

Session Number 15 **Seville II**
General Pedagogical Content Knowledge/Methods Courses

Considering Critical Features of Tasks that Support Preservice Teachers' Development

Laura Van Zoest, *Western Michigan University*
Shari L Stockero, *Michigan Technological University*

We will use a task sequence model designed for our preservice secondary mathematics methods course as a context for discussing the development of mathematics-specific pedagogical understandings and abilities critical to becoming effective mathematics teachers.

Session Number 16 **Seville III**
Grades 6-8 Teacher Professional Development

Beginning Teachers and Students' Errors: Any Role for Teacher Preparation Programs?

Hanna Haydar, *Brooklyn College , CUNY*
Shana Henry, *The Graduate Center, CUNY*
Nieves Angulo, *Hostos Community College, CUNY*
Sunita Vatuk, *The Graduate Center- CUNY*

Drawing on data from a larger research project facilitated by Metromath, this study traces how beginning teachers change in the way they respond to students' mathematical errors. Presenters will share the coding system developed to analyze teachers' immediate responses, teachers' follow up and the error's correction process. They will discuss findings and implications for teacher preparation.

Session Number 17 **Salon II**
General Faculty Develpment

Encouraging Undergraduate Research as a Prelude to Graduate Study in Mathematics Education

Cathy Liebars, *The College of New Jersey*
Anthony Sabia, *The College of New Jersey*
Andy Shapiro, *The College of New Jersey*
Matt Cann, *The College of New Jersey*

Mathematics education majors at a liberal arts college were informed of the shortage of doctorates in mathematics education and presented with graduate school information. Interested undergraduates were encouraged to take an independent research course. A sample of undergraduate research projects will be reported on and discussed.

Session Number 18 **Salon III**
K-5 Pedagogical Content Knowledge/Methods Courses

Developing Mathematical Knowledge for Teaching Fractions: An Integrated Approach for Preservice Teachers

Leigh van den Kieboom, *Marquette University*
Connie Laughlin, *Marquette University*

This presentation describes how an integrated math content course and field experience guides preservice teachers in developing and using mathematical knowledge for teaching fractions. Presenters will use video clips to explain strategies used to develop preservice teacher understanding of fractions.

Session Number 19 **Salon VII**
Grades 9 - 12 Teaching and/or Learning with Technology

Supporting Teachers' Transfer of Campus Learning and Technology Use to Classroom Practice with CPMP-Tools

Chris Hirsch, *Western Michigan University*
Brin Keller, *Michigan State University*
Gary Martin, *Auburn University*
Rose Zbiek, *Pennsylvania State University*

This interactive session provides an overview of CPMP-Tools, an emerging suite of public domain, Java-based software that includes a CAS, spreadsheet, and interactive geometry and data analysis tools, and discussion of how the software can be used to support teacher preparation programs and knowledge transfer and application to school classrooms.

Session Number 20 **Salon VIII**
General Teacher Content Knowledge/Content Courses

Mathematics Fellowships: Providing Mathematics Content to Middle-grades Teachers

Kevin McLeod, *UW-Milwaukee*
Beth Schefelker, *Milwaukee Public Schools*
Melissa Hedges, *Milwaukee Public Schools*

We will discuss a collaboration between Milwaukee Public Schools and UW-Milwaukee, in which middle-grades teachers earned university mathematics credit, and district recognition, by taking courses originally developed at UWM for preservice elementary and middle-grades teachers.

Session Number 21 **Salon IX**
Grades 9 - 12 Pedagogical Content Knowledge/Methods Courses

Examining and Discussing Preservice Mathematics Teachers' Orientations

Sarah Pomerenke, *University of Missouri*
Matthew Webb, *University of Missouri*
Christa Jackson, *University of Missouri*
Troy P. Regis, *University of Missouri*
Kathryn Chval, *University of Missouri*

In this session we will introduce a video analysis tool and framework for analyzing preservice mathematics teachers' orientations toward the student's role, teacher's role, the nature of mathematics, and ideal images of teaching. Session participants will engage in analyzing data collected from preservice teachers in both traditional and alternative certification programs and discuss implications for their own courses and teacher preparation programs.

Session Number 22 **Madrid I**
Grades 6-8 Teacher Professional Development

Shifting from Proving to Improving: Using Assessment as an Integral Part of Instruction

Charalambos Charalambous, *University of Michigan*
Edward A. Silver, *University of Michigan*

The NCTM assessment principle recommends that assessment become an integral part of instruction rather than an interruption of it. In this presentation, we will share findings of our work with middle-school teachers that sought to help them reconsider their assessment practices.

Session Number 23 **Madrid II**
General Mathematics Education Program Issue

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

Henry Kepner, *University of Wisconsin-Milwaukee*
Francis (Skip) Fennell, *President*, *National Council of Teachers of Mathematics*

Participate in a session that will identify key directions and challenges for the National Council of Teachers of Mathematics (NCTM) in supporting and advocating students and their teachers of mathematics. The NCTM President and President-elect will seek input aligned with AMTE member contributions and perspectives in this collaborative effort. Major focus will be on accepting and reflecting upon AMTE members' recommendations, areas of expertise and contributions, and indications of support for planned and yet to be considered initiatives from NCTM, AMTE, and other sources.

Session Number 24 **Salon V**
General

The PRIME Leadership Standards: A Vision for Leading Improved Student Achievement

Tim Kanold, *President, NCSM*

This interactive session will provide an opportunity for you to react and respond to a draft of the about to be launched NCSM PRIME Leadership Standards. At our 40th Annual meeting in Salt Lake City on April 7th, 2008, NCSM will release its groundbreaking PRinciples and Indicators for Mathematics Education (PRIME) Leadership Standards. We value your input, ideas and insight to the document and its framework. We will also take time to discuss current in the field efforts to remove the barrier to teacher leaning and development caused by the isolation and privatization of teacher planning and practice.

Session Number 25 **Seville I**
General Teacher Professional Development

Mathematics Coaches, Specialists, and Teacher Leaders: Professional Development in School Environments

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

Participants will work on the development of an area of scholarship around professional development as delivered by mathematics specialists, coaches and teacher leaders; share program and research; and generate directions for scholarship on the coaching concept in schools.

Session Number 26 **Seville II**
Grades 9 - 12 Teacher Content Knowledge/Content Courses

Using Rich Tasks to Define Content Knowledge for Teaching – A Look at the Understanding Used in Mathematics

Michael Gilbert, *University of Hawaii*

This working session will examine tasks from the Mathematics Content Collaboration Communities, a project exploring content knowledge for teaching mathematics. We share some math and discuss ways teachers have engaged with the tasks to increase content knowledge needed for teaching.

Session Number 27 **Seville III**
General Pedagogical Content Knowledge/Methods Courses

The Pedagogical Content Knowledge of Beginning Teacher Educators

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

As we learn more about what constitutes the essential pedagogical content knowledge (PCK) of preservice and inservice teachers, little is known about the incoming PCK of teacher educators. In our session, we examine the incoming PCK of 12 beginning teacher educators (BTEs). We consider this knowledge by examining what BTEs attend to when assessing preservice teachers' coursework and effective use of video in the mathematics content and/or mathematics methods classroom.

Session Number 28 **Salon II**
General Equity Issues

Parents, Teachers, and Reformed Mathematics: Building Productive Partnerships

Joanna Bartlo, *Portland State University*
Ann Sitomer, *Portland Community College*

Over the last several years researchers have noticed that reforms in mathematics education have alienated various groups of parents. In this workshop, we will discuss work that has been done in this area, as well as implications for teacher education.

Session Number 29 **Salon III**
Grades 9 - 12 Teacher Content Knowledge/Content Courses

Connecting Content and Education for Preservice Mathematics Teachers: What Do Teacher Educators Want and Need?

Douglas Lapp, *Central Michigan University*

This session reports on and shares materials from an NSF teacher preparation program for secondary mathematics teachers. The project is making decisions related to materials and so video excerpts will be shared and feedback from session participants will be solicited.

Session Number 30 **Salon VII**
General School/University Partnerships

The Mathematical Preparation of Teachers: Teacher Educators and Mathematicians Working More Closely Together

W. Gary Martin, *Auburn University*
Marilyn E. Strutchens, *Auburn University*
Mohammed Qazi, *Tuskegee University*
Stephen Stuckwisch, *Auburn University*
John Painter, *Lee County (AL) Schools*

TEAM-Math, an NSF-funded MSP, has developed a number of mechanisms to enhance working relationships among mathematics teacher educators and mathematicians, including a joint seminar, an annual conference focusing on this theme, and work on redesigning the elementary mathematics content courses.

Session Number 31 **Salon VIII**
General Pedagogical Content Knowledge/Methods Courses

Lesson Study from Multiple Perspectives

Deborah Britt, *East Tennessee State University*
Jamie Fugitt, *College of the Ozarks*
Sherry Jones, *Glenville State College*
Geri Landry, *University of Tennessee*
Sharilyn Owens, *Wilkes Community College*
Paula Savich, *Mayland Community College*
Ronald Smith, *Harding University*
Brian Tate, *East Tennessee State University*
Jeremy Zelkowski, *West Virginia University*
Lauren Wagener, *University of Tennessee-Knoxville*
Debbie Waggoner, *Beaumont (KY) Middle School*

Several lesson study groups will present their research from a doctoral course assignment in the ACCLAIM program. Dr. P. Mark Taylor, the instructor of the course, will wrap-up the session with some thoughts about lesson study as teacher-educator-education. Lessons to be presented varied from elementary math methods class at a university to a secondary mathematics classroom to professional development for teachers. Here's your chance to see lesson study in multiple ways.

Session Number 32 **Salon IX**
Grades 6-12 Teacher Professional Development

Structure Matters! What Happens when Science, Technology, Assessment, and Mathematics Bond Together in Professional Development?

Timothy Hendrix, *Meredith College*

Mathematics-science partnership (MSP) projects nationally are trying a multitude of ways to deliver needed professional development. One such project, the STAMP MSP, has employed the use of technology and of formative assessment to promote the integration of mathematics and science content for middle school and high school teachers. Participants in this working group session will discuss opportunities and challenges in the MSP professional development model, participate in sample curricular activities, and examine products developed by MSP teacher participants. Finally, participants will have the opportunity to develop ideas based on this model for professional development of inservice teachers.

Session Number 33 **Madrid I**
Grades 9 - 12 Preservice Teacher Field Experiences

Lesson Study in Preservice Secondary Mathematics Teacher Preparation: Alternative Models of Student Teaching

Lew Romagnano, *Metropolitan State College of Denver*
Blake Peterson, *Brigham Young University*
Keith Leatham, *Brigham Young University*
Brooke Evans, *Metropolitan State College of Denver*
Don Gilmore, *Metropolitan State College of Denver*
Akihiko Takahashi, *DePaul University*

In this symposium two preservice programs offer alternative models of student teaching that incorporate features of Japanese Lesson Study to create experiences that anchor their reform-oriented visions of mathematics learning and teaching in collaborative practice.

Session Number 34 **Madrid II**
K-5 Teacher Content Knowledge/Content Courses

Developing Mathematical Knowledge for Teaching: How Does an "MKT Problem" Compare with a Regular Mathematics Problem?

Kara Suzuka, *University of Michigan*
Deborah Ball, *University of Michigan*
Laurie Sleep, *University of Michigan*
Jennifer Lewis, *University of Michigan*
Mark Thames, *University of Michigan*
Hyman Bass, *University of Michigan*

What kinds of tasks develop mathematical knowledge for teaching? How are these tasks different from "regular" mathematics activities? In this session, participants explore these questions through the analysis of materials that have been designed to develop MKT.

Session Number 35 **Salon V**
General Teacher Professional Development

The Role of Mathematicians in the Preparation and Professional Development of Teachers

Gail Burrill, *Michigan State University*
Jeanne Wald, *Michigan State University*
Henry Kepner, *University of Wisconsin-Milwaukee*
Kevin McLeod, *University of Wisconsin-Milwaukee*

Based on work with teachers in a variety of settings, we will consider some central mathematical concepts in the K-12 curriculum and why are they central and what are some ways to think about the curriculum to make these important mathematical ideas and their connections to each other visible to students.

Session Number 36 Seville I
General Teacher Professional Development

Improving the Learning Environment of Mathematics Students: How to Affect Levels of Engagement and Emotional Comfort

Larry Copes, *Institute for Studies in Educational Mathematics*

In developing scenarios for The Teaching Simulator™--computer-based simulations for use in preservice courses and professional-development workshops--our team has been thinking about choices teachers make that affect the engagement and emotional comfort of their students. Come mingle your ideas with ours!

Session Number 37 Seville II
General Pedagogical Content Knowledge/Methods Courses

Lesson Study: Building Mathematics Knowledge Usable in Teaching

Jennifer Lewis, *University of Michigan*
Tad Watanabe, *Kennesaw State University*
Kathy Morris, *Sonoma State University*

How do preservice teachers learn mathematics usable in instruction? In this interactive session, participants will consider the features of lesson study in a preservice math methods course that make it possible for preservice teachers to learn mathematics usable in instruction.

Session Number 38 Seville III
General Teacher Professional Development

Developing Future Leaders through NCTM Student Affiliates

Cynthia Schneider, *Charles A. Dana Center, The University of Texas at Austin*
W. Virginia Williams, *National Council of Teachers of Mathematics*
Kyle Schultz, *University of Georgia*
Winnie Peterson, *Kutztown University*
William Speer, *UNLV Center for Mathematics and Science Education*

The session will investigate the benefits gained by students, universities, and the professional community from the establishment of a Student Affiliate of NCTM. Presenters will share tips for forming a new Student Affiliate and discuss how Student Affiliates build future teacher leaders.

Session Number 39 Salon II
General Teacher Content Knowledge/Content Courses

Is There a Match Between What "They" Think and What "We" See? What Does the Research Show?

Joanne Powers, *College of Saint Rose*
Marcia Margolin, *College of Saint Rose*
Julita Lambating, *California State University at Sacramento*

How do mathematics preservice teachers perceive their knowledge of mathematics vis-à-vis the perceptions of their mathematics and pedagogy professors? We'll examine the discrepancies among student views, professors' insights, and course & test results as related to national standards and the implications for methods and other teachers.

Session Number 40 Salon III
K-5 Pedagogical Content Knowledge/Methods Courses

Continuing the Conversation: Teaching and Learning in an Elementary Geometry Methods Course

Tracy Goodson-Espy, *Appalachian State University*
Pamela Schram, *Appalachian State University*
Art Quickenton, *Appalachian State University*

This session continues the conversation about teaching and learning in an elementary geometry methods course. The speakers will provide salient information about the teaching and learning experiences in a course taught at their university. The participants will be engaged in discussions about what big ideas should be evident in a methods course for prospective elementary teachers which focuses on geometry.

Session Number 41 Salon VII
K-5 Pedagogical Content Knowledge/Methods Courses

Practice as Evidence of Learning: Using Performance Assessments in a Methods Course

Timothy Boerst, *University of Michigan & South Redford School District*
Laurie Sleep, *University of Michigan*
Deborah Loewenberg Ball, *University of Michigan*
Yaa Cole, *University of Michigan*

Focusing a methods course on practice creates unique challenges for assessing preservice teacher learning. In this session, participants explore video records and samples of preservice teachers' practice to analyze performance assessments designed to capture and evaluate the work of teaching.

Session Number 42 **Salon VIII**
Grades 6-8 Teacher Content Knowledge/Content Courses

Using Concept Maps to Assess Prospective Middle Grades Mathematics Teachers' Understanding of Function

Mary Swarthout, *Sam Houston State University*
Dusty Jones, *Sam Houston State University*
Mark Klespis, *Sam Houston State University*

Prospective middle-grades mathematics teachers created concept maps for the concept of "function" before and after instruction. We will share their understanding of functions and related concepts with the use of concept maps as an assessment tool.

Session Number 43 **Salon IX**
General Teaching and/or Learning with Technology

Learning to Teach: Keeping in Tune with the Learners

Sylvia Taube, *Sam Houston State University*
Rebecca Ortiz, *Sam Houston State University*
Barba Patton, *University of Houston-Victoria*

We present findings from our action research involving inservice and preservice elementary mathematics teachers. The first study focused on a field experience requirement that addressed the need to revise and re-teach a lesson based on students' feedback on the initial lesson. The second study addressed the need to provide continuing education for experienced mathematics teachers residing hundreds of miles from a university campus. This was completed with synchronous technology in which graduate students were able to see examples of various types of problems during the live sessions. Both studies provided directions for designing mathematics education courses that meet the needs of teachers, both novice and skilled.

Session Number 44 **Madrid I**
General Teacher Professional Development

Learning Students' Mathematics

Angel Abney, *Georgia College and State University*
Ginger Rhodes, *University of Georgia*
Hyung Sook Lee, *University of Georgia*

Teachers' understandings of their students' mathematics influences their instructional practices. We will present three research studies that focus on ways that teachers make sense of students' mathematics and how that understanding impacts their knowledge development and instructional decisions. Furthermore, we will share implications for theory and teacher education.

Session Number 45 **Madrid II**
General Pedagogical Content Knowledge/Methods Courses

Connecting "Best Practices" in Language Arts and Mathematics Instruction

Ester M. H. Billings, *Grand Valley State University*
David Coffey, *Grand Valley State University*

Reading and writing are regularly used in mathematics content and pedagogy courses. In this session we explore what research from these language arts disciplines advocate as best practices and reflect about ways that these practices may be transferred to the mathematics classroom.

Session Number 46 **Salon V**
General Mathematics Education Program Issue

Challenges for Mathematics Teacher Education

Francis (Skip) Fennell, *President, NCTM, and McDaniel College*

This session will discuss issues which AMTE may want to consider addressing that face teacher education in mathematics, including accreditation, teacher recruitment and retention, program development, alternative certification, and other challenges.

Notes

Overview of Friday Afternoon January 25, 2008

	1:15 - 1:45	2:00 - 2:45	3:15 - 3:45	4:00 - 4:30
Seville I	47. Two Preservice Elementary Teachers' Perceptions About Their Learning and Understanding of Fractions – Cavell & McLeman	58. Identities and Beliefs of Alternatively Certified Urban Mathematics Teachers: The Case of the New York City Teaching Fellows – Foote, Smith, & Chu	69. What Teachers Consider When Deciding Whether to Use Technology to Teach Mathematics – Weinhold	80. Characteristics of Mathematics Professional Development that Lead to Advancing Teacher Knowledge – Brown & Bush
Seville II	48. Understanding Teacher Candidates' Beliefs about Mathematics Teaching and Learning Through Metaphor Analysis – Reeder & Utley	59. Standards, Recommendations, Guidelines: Do They Help? – Franz, Crawford, & Dempsey	70. Preparing Secondary Mathematics Teachers to Work with English Language Learners – Kersaint & Thompson	81. The Analysis of Preservice Secondary Mathematics Teachers' Views on the Use of Advanced Calculators through Multiple Frameworks – Ozgun-Koca
Seville III	49. Developing an Online Statistics Course for Middle School Teachers -- White	60. The Affective Component of Teaching Conceptually Challenging Mathematics in Urban Classrooms – Schorr & Arias	71. Mathematics Teachers' Use of Knowledge in Context: Patterns and Justifications -- Li	82. Using Video-clips and Student Work Examples to Help Preservice Teachers Understand Student Thinking – Land & Drake
Salon II	50. Preparing the Next Generation of Teacher Leaders – Jacobs & Caldwell	61. A Teacher Knowledge Test for Primary Grade Teachers – Townsend, Rathmell, Leutzinger, & Gabriele	72. Meeting Diverse Learning Needs Through Differentiated Instruction in a Graduate Math Methods Class – Brown	83. Online Mentoring as a Site for Teacher Development – Silverman
Salon III	51. Lesson Study as a Framework for Preservice Teachers' Field-based Experiences -- Yu	62. Improving Teacher Knowledge in Geometry and Measurement: Sustained Content-Focused Professional Development Collaboration of Mathematicians, Mathematics Educators, and Teachers-in-Residence – Pruske, Huinker, & Mooney	73. Conversation Theory - Can it Help Develop Preservice Teachers' Conceptual Understanding of Mathematics? -- Morrow	84. Jobs in Higher Education for Doctorates in Mathematics Education: A Summary of Job Locations and Requirements -- Teuscher, Nevels, & Reys
Salon VII	52. Action Research Made Easy for Prospective Math Educators? Samples, Examples, and Pitfalls – Howard, Pickreign, & Rogers	63. Comparison of the Impact of Content Courses of Preservice Elementary Teachers' Mathematical Knowledge and Attitudes – Matthews & Rech	74. Videos, Voices, and Vison: What Do Student Teachers Identify as Their Own Best Practice? – Mau & Harkness	85. Teaching Mathematics to Diverse Populations: A Course for Elementary Mathematics Specialists -- Berry
Salon VIII	53. Assessing High School Teacher Candidates' Content Knowledge through Advanced Mathematics Portfolios – Koirala & Johnson	64. NAEP: Do Preservice Teachers Measure Up? – Bannister & Mariano	75. Collaboratively-planned Coursework: An Investigation of the Impact on Teacher Candidates' Beliefs, Lesson Design, and Instruction – Barlow & Dougherty	86. Assessing the Knowledge of Future Teachers by Lesson Design -- Sorto
Salon IX	54. The Alignment of Mathematics Textbooks and State Curriculum Standards: Implications for Teacher Education - Dingman	65. Tools of Engagement: Supporting Teachers' Mathematical Content Knowledge – Dean & Jeffries	76. Preservice Teachers in Research on Mathematical Thinking in K-3 Students – Wilkerson, Baker, Sharp, & Cooper-Twamley	87. An Analysis of Preservice Teachers' Level of Understanding of Mathematical Thinking -- Cooper
Madrid I	55. A Follow-Up Study: Can Dynamic Visualization of Limits Facilitate Enduring Conceptual Change? – Cory	66. The Depth of Dialogue in Secondary Teachers' Inquiry into Using Rich Mathematics Tasks to Stimulate Student Participation -- Slavit	77. Mentoring Preservice Teachers: Classroom Teachers as Partners in Teacher Education – Johanning	88. Culturally Responsive Mathematics Teaching: Empowering or Impossible? – Peterek & Adams

Madrid II	56. Adapting Instruction and Exploring Latino/a Students' Work: Teacher Study Groups Grapple with Issues of Mathematical Understanding and Language – McLeman, Musanti, Trujillo, & Kahn	67. Closing the Achievement Gap through Professional Development Partnerships – Gawronski, Klass & Bezuk	78. Teacher Content Knowledge and Growth in Student Learning: Making the Two-way Connection – Goodman & Campbell	89. Benefits and Challenges in Implementing Professional Learning Communities in an Elementary School – McDuffie
Salon V	57. Facilitating Students' Development of Mathematical Reasoning and Proof-making – Tarlow-Hellman	68. An Electronic Classroom Model for Content Courses: Influences on K-12 Classroom Teaching – Evans, Gilmore, Loats, & McKenna	79. Assessment of Elementary and Middle School Teachers' Knowledge for Teaching Algebra – Stump, Roebuck, & Bishop	90. Replication of a Model Teacher Preparation Program that Focuses on Undergraduate Math and Science Majors – Williams

The Judith E. Jacobs Lecture Salon V 5:00 – 6:30 p.m.

Session Number 47 **Seville I**
K-5 Teacher Content Knowledge/Content Courses

Two Preservice Elementary Teachers' Perceptions About Their Learning and Understanding of Fractions

Heather Cavell, *University of Arizona*
Laura Kondek McLeman, *University of Arizona*

The investigation of two preservice teachers' emergent perceptions about learning and understanding fractions while they engaged in fraction-based children's thinking activities in a content course. Varying perceptions emerged in regards to mathematical content, their own understanding of mathematics, and language.

Session Number 48 **Seville II**
General Pedagogical Content Knowledge/Methods Courses

Understanding Teacher Candidates' Beliefs about Mathematics Teaching and Learning Through Metaphor Analysis

Stacy Reeder, *University of Oklahoma*
Juliana Utley, *Oklahoma State University*

This session focuses on the results of a research study that used metaphors to provide insight about teacher candidates' conceptualizations of the role of the mathematics teacher and learner.

Session Number 49 **Seville III**
Grades 6-8 Teaching and/or Learning with Technology

Developing an Online Statistics Course for Middle School Teachers

Alexander White, *Texas State University*

We will discuss the steps needed to create an online statistics course for middle school inservice teachers, highlight how research on middle school student learning of statistics is incorporated, and demonstrate the most interesting learning activities.

Session Number 50 **Salon II**
General Teacher Professional Development

Preparing the Next Generation of Teacher Leaders

Judith Jacobs, *California State Polytechnic University, Pomona*
Janet Caldwell, *Rowan University*

Mathematics teacher educators are in a unique position to identify and mentor future leaders of NCTM and its affiliates. Come hear why we need to do this and how we can make it happen.

Session Number 51 **Salon III**
General Preservice Teacher Field Experiences

Lesson Study as a Framework for Preservice Teachers' Field-based Experiences

Paul Yu, *Grand Valley State University*

This session will look at video-taped data of preservice elementary teachers engaged in the planning, implementation, and debriefing of a 2nd grade CGI-based mathematics lesson on multiplication using lesson study as a curricular framework to guide their experiences.

Session Number 52 **Salon VII**
General Preservice Teacher Field Experiences

Action Research Made Easy for Prospective Math Educators? Samples, Examples, and Pitfalls

Keary Howard, *SUNY Fredonia*
Jamar Pickreign, *SUNY Fredonia*
Robert Rogers, *SUNY Fredonia*

This interactive session explores the process of incorporating action research projects for mathematics education students while completing their capstone student teaching placements. Samples of scaffolded assignments, examples of project choices/results, and the location of traditional pitfalls are highlighted.

Session Number 53 **Salon VIII**
Grades 9 - 12 Assessment Issues

Assessing High School Teacher Candidates' Content Knowledge through Advanced Mathematics Portfolios

Hari Koirala, *Eastern Connecticut State University*
Peter Johnson, *Eastern Connecticut State University*

This presentation will focus on two purposes of an advanced mathematics course developed in a university mathematics department: 1) To assess high school teacher candidates' mathematical content knowledge. 2) To use the assessment data to address the NCATE/NCTM program standards for teacher candidates. A detailed course syllabus, portfolio rubric, sample portfolio entries, and assessment data will be shared and discussed.

Session Number 54 **Salon IX**
General Pedagogical Content Knowledge/Methods Courses

The Alignment of Mathematics Textbooks and State Curriculum Standards: Implications for Teacher Education

Shannon Dingman, *University of Arkansas*

This session provides an overview of research examining the alignment between popular K-8 mathematics textbooks and state curriculum standards from the ten most populous states that produce grade-by-grade GLEs. Implications for preservice and inservice teacher education are considered.

Session Number 55 **Madrid I**
Grades 9 - 12 Teaching and/or Learning with Technology

A Follow-up Study: Can Dynamic Visualization of Limits Facilitate Enduring Conceptual Change?

Beth Cory, *Sam Houston State University*

This session focuses on how interactive dynamic sketches of the formal definitions of limit can deepen preservice teachers' understanding. A report on a fifteen-month follow-up study will discuss whether dynamic sketches of the limit concept promote enduring conceptual growth.

Session Number 56 **Madrid II**
K-5 Teacher Professional Development

Adapting Instruction and Exploring Latino/a Students' Work: Teacher Study Groups Grapple with Issues of Mathematical Understanding and Language

Laura McLeman, *The University of Arizona*
Sandra Musanti, *The University of New Mexico*
Barb Trujillo, *The University of New Mexico*
Leslie Kahn, *The University of Arizona*

This session will explore a multi-site collaboration between two teacher study groups. We will share findings about the challenges that elementary school teachers of Latino/a students faced as they adapted and implemented a mathematics task and analyzed student work.

Session Number 57 **Salon V**
General Teacher Content Knowledge/Content Courses

Facilitating Students' Development of Mathematical Reasoning and Proof-making

Lynn Tarlow-Hellman, *City College of the City University of New York*

Research indicates traditional demonstrations of axiomatic proofs that attempt to teach students proof-making have been generally unsuccessful. We will examine work of students who created sophisticated proofs that developed from deep mathematical understanding and discuss the learning environment that contributed to their success and the implications for teacher educators.

Friday, January 25, 2008 2:00 – 2:45 pm

Session Number 58 **Seville I**
General Mathematics Education Program Issue

Identities and Beliefs of Alternatively Certified Urban Mathematics Teachers: The Case of the New York City Teaching Fellows

Mary Foote, *Queens College*
Beverly Smith, *City College-CUNY*
Haiwen Chu, *The Graduate Center-CUNY*

In this session we present findings on the developing beliefs and identities of new alternatively certified urban mathematics teachers. We consider how teacher educators can help new teachers develop the cultural competence necessary for "hard to staff" urban schools.

Session Number 59 **Seville II**
General Licensure Issues

Standards, Recommendations, Guidelines: Do They Help?

Dana Franz, *Mississippi State Unversity*
Linda Crawford, *Augusta State University*
David Dempsey, *Jacksonville State University*

This presentation discusses how three universities used various standards and guidelines to improve their math education programs. Each presenter will discuss how they have maintained their NCATE accreditation using guidelines and recommendations of the math education community.

Session Number 60 **Seville III**
General Equity Issues

The Affective Component of Teaching Conceptually Challenging Mathematics in Urban Classrooms

Roberta Schorr, *Rutgers University*
Cecilia Arias, *Rutgers University*

Using video tapes and other artifacts, we investigate the occurrence and growth of urban students' mathematically powerful affect in relation to mathematics learning. By powerful affect we mean affect that contributes to mathematical engagement, persistence, problem-solving success, and achievement.

Session Number 61 **Salon II**
PK-3 Teacher Content Knowledge/Content Courses

A Teacher Knowledge Test for Primary Grade Teachers

Brian Townsend, *University of Northern Iowa*
Edward C. Rathmell, *University of Northern Iowa*
Larry Leutzinger, *University of Northern Iowa*
Anthony Gabriele, *University of Northern Iowa*

Discussion will include a description of the test, how the test will be used to create brief online professional development modules, and how AMTE members can test groups of their students online, with individual and group feedback, at no cost.

Session Number 62 **Salon III**
General Teacher Content Knowledge/Content Courses

Improving Teacher Knowledge in Geometry and Measurement: Sustained Content-Focused Professional Development Collaboration of Mathematicians, Mathematics Educators, and Teachers-in-Residence

Lee Ann Pruske, *University of Wisconsin-Milwaukee*
DeAnn Huinker, *University of Wisconsin-Milwaukee*
Mary Mooney, *University of Wisconsin-Milwaukee*

The Milwaukee Mathematics Partnership collaborated to build teacher content knowledge in geometry and measurement with alignment of teacher learning targets. The yearlong professional development used monthly meetings to work with district math teacher leaders on content and pedagogy.

Session Number 63 **Salon VII**
K-5 Teacher Content Knowledge/Content Courses

Comparison of the Impact of Content Courses of Preservice Elementary Teachers' Mathematical Knowledge and Attitudes

Michael Matthews, *University of Nebraska at Omaha*
Janice Rech, *University of Nebraska at Omaha*

Our research compares the impact of two mathematical content courses to the impact of only a general mathematics course (i.e. algebra) on preservice elementary teachers' mathematical knowledge and attitudes. Course descriptions, results, and implications for further research will be discussed.

Session Number 64 **Salon VIII**
Grades 9 - 12 Teacher Content Knowledge/Content Courses

NAEP: Do Preservice Teachers Measure Up?

Vanessa Pitts Bannister, *Virginia Tech*
Gina Mariano, *Virginia Tech*

In this session, we will discuss findings from a study that asked 59 preservice teachers to: (1) complete a NAEP exercise, (2) analyze student misconceptions regarding the exercise and (3) provide details of how they would address the student misconception. Implications for teacher education will be discussed.

Session Number 65 **Salon IX**
Grades 6-8 Teacher Content Knowledge/Content Courses

Tools of Engagement: Supporting Teachers' Mathematical Content Knowledge

Chrystal Dean, *Clemson University*
Rhonda Jeffries, *University of South Carolina*

In our individual session presentation, we will demonstrate how the manipulatives used during the professional development activities acted as tools to engage the teachers in mathematical investigations which supported their mathematical reasoning.

Session Number 66 **Madrid I**
Grades 9 - 12 Teacher Professional Development

The Depth of Dialogue in Secondary Teachers' Inquiry into Using Rich Mathematics Tasks to Stimulate Student Participation

David Slavit, *Washington State University Vancouver*

High school mathematics teachers collaboratively inquire into the impact of "rich tasks" on student motivation. Teacher group formation, dynamics, inquiry support, and the "inquiry cycle" will be discussed. The larger PD context (over 150 teachers) will also be described.

Session Number 67 **Madrid II**
General School/University Partnerships

Closing the Achievement Gap through Professional Development Partnerships

Jane Gawronski, *San Diego State Universtiy*
Steve Klass, *Encinitas School District*
Nadine Bezuk, *San Diego State University*

This session will describe essential elements for establishing successful professional development partnerships between universities and school districts. We will discuss the factors involved in developing partnerships with several districts to support professional development of mathematics teachers and increase student achievement.

Session Number 68 **Salon V**
General Teaching &/or Learning with Technology

An Electronic Classroom Model for Content Courses: Influences on K-12 Classroom Teaching

Brooke Evans, *Metropolitan State College of Denver*
Don Gilmore, *Metropolitan State College of Denver*
James Loats, *Metropolitan State College of Denver*
Patricia McKenna, *Metropolitan State College of Denver*

This session will outline and discuss Metro's Math for Rural Schools Program which was developed to offer rural teachers in Colorado an opportunity to take college-level mathematics content courses online and the unexpected influences on K-12 classroom teaching.

Friday, January 25, 2008 3:15 – 3:45 pm

Session Number 69 **Seville I**
Grades 9 - 12 Teaching and/or Learning with Technology

What Teachers Consider When Deciding Whether to Use Technology to Teach Mathematics

Marcia Weinhold, *Purdue University Calumet*

Participants will interact in discussion following a description of a design experiment focusing teacher work on a shareable tool for decision-making. Rich transcripts allow tracking development of the tool through four inquiry sessions, with implications for preservice and inservice teacher education.

Session Number 70 **Seville II**
Grades 6-8 Equity Issues

Preparing Secondary Mathematics Teachers to Work with English Language Learners

Gladis Kersaint, *University of South Florida*
Denisse R. Thompson, *University of South Florida*

Middle and high school mathematics teachers increasingly have students of varying levels of English language proficiency in their classroom. This session will share research and strategies that mathematics teachers need to consider to help such students be successful.

Session Number 71 **Seville III**
General Pedagogical Content Knowledge/Methods Courses

Mathematics Teachers' Use of Knowledge in Context: Patterns and Justifications

Xuhui Li, *California State University, Long Beach*

This presentation first reports some patterns observed from a research study on secondary school algebra teachers' use of mathematical knowledge in answering questions situated in various contexts, then discusses sources of justification for mathematics teachers' knowledge claims.

Session Number 72 **Salon II**
General Pedagogical Content Knowledge/Methods Courses

Meeting Diverse Learning Needs Through Differentiated Instruction in a Gradudate Math Methods Class

Sue Brown, *University of Houston-Clear Lake*

This presentation will describe the strategies used and challenges faced in attempting to meet the diverse learning needs of graduate preservice students who are not yet teaching and alternative certification students and experienced inservice teachers in the same cross-listed class focused on early childhood mathematics methods.

Session Number 73 **Salon III**
General Pedagogical Content Knowledge/Methods Courses

Conversation Theory: Can it Help Develop Preservice Teachers' Conceptual Understanding of Mathematics?

Jean Morrow, *Emporia State University*

Conversation theory is presented as a means of creating an active learning environment in elementary mathematics methods courses. The goal is to engage our candidates in the task of developing deep conceptual understanding to support the procedural knowledge most already have.

Session Number 74 **Salon VII**
Grades 9 - 12 Teacher Professional Development

Videos, Voices, and Vison: What Do Student Teachers Identify as Their Own Best Practice?

Sue Mau, *Indiana Univ. Purdue Univ. Fort Wayne*
Shelly Sheats Harkness, *University of Cincinnati*

Student teachers in our study identified segments of their own videotaped lessons as specific evidence of Indiana's teaching standards "in action" and then rated themselves on an evaluation continuum. Generally speaking, their evidence and ratings matched our own evaluations. However, student teachers saw evidence as either present or not; they did not see the evidence on a continuum. If we have one vision for best practice for veteran teachers and a different vision for student teachers, how does this impact our work? And, if we want to move student teachers to consider different visions of standards-based practice, ones that they clearly do not yet possess, what kinds of questions must we ask them which honor and respect their teaching self-concepts?

Session Number 75 **Salon VIII**
Grades 9 - 12 Pedagogical Content Knowledge/Methods Courses

Collaboratively-planned Coursework: An Investigation of the Impact on Teacher Candidates' Beliefs, Lesson Design, and Instruction

Angela Barlow, *University of Mississippi*
Barbara Dougherty, *University of Mississippi*

Presenters will share the research results of collaboratively-planned content and methods coursework for secondary mathematics teacher candidates. Analyses of data related to candidates' beliefs as well as their ability to plan and implement mathematics lessons will be included.

Session Number 76 **Salon IX**
PK-3 School/University Partnerships

Preservice Teachers in Research on Mathematical Thinking in K-3 Students

Trena Wilkerson, *Baylor University*
Betty Ruth Baker, *Baylor University*
Pat Sharp, *Baylor University*
Susan Cooper-Twamley, *Baylor University*

Presenters will share a partnership model between a university and professional development school that supports preservice teachers engaging in research of their teaching of mathematics and its impact on student learning of mathematics. Methodology, outcomes, and challenges will be discussed.

Session Number 77 **Madrid I**
General Preservice Teacher Field Experiences

Mentoring Preservice Teachers: Classroom Teachers as Partners in Teacher Education

Debra Johanning, *The University of Toledo*

This session will describe a graduate-level course for teachers who mentor preservice teachers and findings regarding their development as partners in preservice education. It argues that beyond knowing how to teach mathematics, a mentor needs specific knowledge and skills to support preservice teachers.

Session Number 78 **Madrid II**
K-5 Teacher Professional Development

Teacher Content Knowledge and Growth in Student Learning: Making the Two Way Connection

Terry Goodman, *University of Central Missouri*
Larry Campbell, *Missouri State University*

This session provides an update concerning a professional development academy for K-5 teachers and focuses on the dynamic relationship between teachers' content knowledge and their analysis of student growth in mathematical understanding. Implications for teachers' professional development will be discussed.

Session Number 79 **Salon V**
General Assessment Issues

Assessment of Elementary and Middle School Teachers' Knowledge for Teaching Algebra

Sheryl Stump, *Ball State University*
Kay Roebuck, *Ball State University*
Joyce Bishop, *Eastern Illinois University*

Our assessment framework combines aspects of mathematical knowledge for teaching with fundamental ideas of algebra. We will share assessment tools and discuss results from our assessment of both preservice and inservice teachers who were in classes and professional development experiences focusing on the development of knowledge for teaching algebra.

Session Number 80 **Seville I**
General Teacher Professional Development

Characteristics of Mathematics Professional Development that Lead to Advancing Teacher Knowledge

Elizabeth Brown, *University of Louisville*
Bill Bush, *University of Louisville*

The presentation will share preliminary findings of a survey about characteristics and processes of mathematical professional development. Data were collected from project directors of mathematics professional development, mathematicians, and mathematics educators that used the DTAMS assessment tool with teachers.

Session Number 81 **Seville II**
Grades 9 - 12 Teaching and/or Learning with Technology

The Analysis of Preservice Secondary Mathematics Teachers' Views on the Use of Advanced Calculators through Multiple Frameworks

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

This presentation will share the results of a study which utilized two conceptual frameworks—possible roles of advanced calculators in mathematics teaching and learning, as well as technological pedagogical content knowledge—to investigate the views of preservice secondary mathematics teachers on the use of calculators in mathematics instruction.

Session Number 82 **Seville III**
General Pedagogical Content Knowledge/Methods Courses

Using Video-clips and Student Work Examples to Help Preservice Teachers Understand Student Thinking

Tonia Land, *Iowa State University*
Corey Drake, *Iowa State University*

For this research project, preservice teachers in a methods course were presented with video clips and student work examples as prompts to discuss children's thinking. Preservice teachers' discourse during whole class discussions was analyzed to understand what preservice teachers noticed and thought about in the different contexts.

Session Number 83 **Salon II**
General Teacher Professional Development

Online Mentoring as a Site for Teacher Development

Jason Silverman, *Drexel University*

We will discuss our efforts to help teachers develop student-centered instructional practices through online mentoring that provides unique opportunities for teachers to hypothesize about, enact, and reflect on instruction that is attuned to students' current understandings and conceptions.

Session Number 84 **Salon III**
General Faculty Develpment

Jobs in Higher Education for Doctorates in Mathematics Education: A Summary of Job Locations and Requirements

Dawn Teuscher, *University of Missouri-Columbia*
Nevels Nevels, *University of Missouri-Columbia*
Robert Reys, *University of Missouri-Columbia*

This session will report results from a survey of over 150 institutions of higher education that announced positions in mathematics education for 2007-08. Information about the nature of the positions, job expectations, salaries and start up packages will be reported.

Session Number 85 **Salon VII**
K-5 Equity Issues

Teaching Mathematics to Diverse Populations: A Course for Elementary Mathematics Specialists

Robert Berry, *University of Virginia*

This session will focus on a course in which teacher leaders examined the mathematics issues of students from diverse populations. This session has significant implications for mathematics teacher educators and teacher leaders because it addresses an area often underserved in the preparation of teacher leaders.

Session Number 86 **Salon VIII**
Grades 6-8 Assessment Issues

Assessing the Knowledge of Future Teachers By Lesson Design

M. Alejandra Sorto, *Texas State University*

How can we assess content knowledge that is related to teaching? This session will engage participants in a lesson designed by preservice teachers and implemented in a 5th grade classroom. Aspects of assessment projects by lesson design will be discussed.

Session Number 87 **Salon IX**
K-5 Pedagogical Content Knowledge/Methods Courses

An Analysis of Preservice Teachers' Level of Understanding of Mathematical Thinking

Sandi Cooper, *Baylor University*

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

Session Number 88 **Madrid I**
General Equity Issues

Culturally Responsive Mathematics Teaching: Empowering or Impossible?

Emily Peterek, *University of Florida*
Thomasenia Lott Adams, *University of Florida*

The need for culturally responsive teaching in the context of mathematics is undeniable. In our quest to close the existing achievement gaps, however, how far should we go? Here, we will discuss several vignettes in which successful culturally responsive teachers have been faced with correct, but inappropriate work from students. We will discuss the ways in which these situations can be handled, and how such vignettes can be used in preservice programs.

Session Number 89 **Madrid II**
General Teacher Professional Development

Benefits and Challenges in Implementing Professional Learning Communities in an Elementary School

Amy Roth McDuffie, *Washington State University Tri-Cities*

This session presents a year-long study of a professional learning community involving all teachers and the principal from an elementary school. Teachers met in grade-level teams to analyze test data, design grade-level assessments, and discuss assessment results. The benefits and challenges experienced by this professional learning community will be discussed.

Session Number 90 **Salon V**
Grades 9 - 12 Preservice Teacher Field Experiences

Replication of a Model Teacher Preparation Program that Focuses on Undergraduate Math and Science Majors

Susan Williams, *University of Houston*

Detailed information will be shared about a model secondary teacher preparation program for undergraduate math/science majors, steps that led to the reform of the program, and the current process of replicating this program at ten universities across the nation.

Judith E. Jacobs Lecture
5:00 – 6:30 pm
Salon V

Mathematics Teacher Education in Dodge City: Desperately Seeking Wyatt Earp and Henri Poincaré

Ed Silver, *University of Michigan*

Teacher education has been called "the Dodge City of the education world... unruly and chaotic." In this talk, I will reprise some of the issues and concerns that give rise to this characterization, focusing on the ways in which these appear in mathematics teacher education. I will then sketch some ways that these criticisms might be addressed and the role that AMTE might play in this endeavor.

Overview of Saturday Morning, January 26, 2008

	8:00 – 9:00	9:15 – 10:00	10:15 – 10:45	11:00 – 11:30
Seville I	92. Connecting with Affiliates of AMTE – Winters, Cushman, Chappell	103. Continuing the Conversation with Affiliates – Winters, Cushman, Chappell	114. Introducing the Mathematics Education in the Public Interest – Spielman, Mistele	125. Mathematics Specialists: Who are They and Where Do They Come From? – Cicmanec
Seville II	93. The Beliefs of Mathematics Teacher Educators and the Implications for Mathematics Teacher Education – Lovin, Chauvot, Kastberg, Leatham, Norton, & Sanchez	104. Language and Mathematic Problem Solving: Exploring the Complexities of Bilingual Teachers' Growth – Musanti & Celedon-Pattichis	115. Developing Preservice Teachers' Conceptions of Numbers, Operation and Algorithms via Analysis of Children's Mathematical Thinking – Thanheiser	126. Perspectives on the Exploration of Patterns in Middle School Mathematics Curricula and Related Implications for Teacher Education – Olson, Regis, & Papick
Seville III	94. Opening Eyes: Preparing Teachers to Live the Equity Principle – Miller	105. Using On-line Tutoring to Strengthen Preservice Teachers' Mathematical Content and Pedagogical Knowledge for Teaching – Warshauer, Warshauer, & McCabe	116. Improving Middle School Mathematics Teachers' Use of Formative Assessments – Bush	127. Reflections on the Field Experience of Preservice Elementary Teachers: Bridging Between Craft Knowledge and Propositional Knowledge – Witherspoon & Wilson
Salon II	95. School Improvement in Mathematics Requires a New Examination: A Grounded-theory Needs Assessment – Johnston & Niess	106. The Power of Connections: Integrating Content and Pedagogical Knowledge in a New Middle Grades Math Course – Benbow & Colgan	117. Developing Mathematical Understanding in Preservice Elementary Teachers – Stienstra	128. Developing Preservice Teachers' Technology Pedagogical Content Knowledge with Advanced Technologies – Edwards, Meagher, & Ozgun-Koca
Salon III	96. Promoting Preservice Teachers' Reflective Thinking in Methods Courses – Reynolds, Liebars, & Bulgar	107. Making Mathematics Meaningful and Memorable – Corlyn, Pruske, Richards & Kepner	118. Elementary Mathematics Teacher Preparation Incorporating a Blend of Content-Methods-Practice, Lesson Study, and Competency Testing – Althoen & Wyneken	129. From Discourse Patterns to Practice: Scaffolding Preservice Teachers' Learning – Morris & Boerst
Salon VII	97. "They Say I Was Made For Teaching": A Project for Empowering Teachers of Mathematics – Adams, Peterek, & Laframenta	108. Using *Fathom* with Prospective Teachers – Driskell	119. Process Standards-based Portfolio as a Tool for Developing a Framework for Teaching Mathematics to Preservice Teachers – Jaberg	130. Beginning Elementary Teachers' Use of Virtual Manipulatives, Websites, and Applets in Math Instruction – Johnston
Salon VIII	98. Beginning Teachers and Non-routine Problems: Modified Lesson Study Group in an Urban Context – Zolkower & Haydar	109. An Evaluation of Mathematics Content Courses for Preservice Elementary Teachers – Gleason	120. Affordances & Constraints in Abstract Algebra: Are Prospective Teachers Connecting the Mathematics? – Henning	131. Improving the Learning of Preservice Secondary Mathematics Teachers through Engagement with Middle and High School Curriculum Materials – Mariano & Pitts-Bannister
Salon IX	99. Supports for New Teachers of Mathematics: Insights from an Urban District – Foote, Gningue & Smith	110. How Do Secondary Preservice Teachers in a Lesson Study Group Anticipate Student Responses to Prepare a Lesson? – Webb	121. GK-12 Fellows in the Middle: Partnerships for Inquiry and Interdisciplinary Middle School Science and Mathematics – Wolff	132. How Can We Best Inform and Support Mathematicians in Teaching Mathematics Content Courses for Preservice Elementary School Teachers? – Laurie
Madrid I	100. Building Teacher Leaders through Online Workshop Development – Alejandre & Silverman	111. Connections Between Courses Make Modeling Accessible to Middle School Preservice Teachers – Matthews & Reed	122. Professional Development for Technology-enhanced Classrooms: Lessons Learned over Two Years – Pape, Irving, & Owens	133. Connecting Content and Process Standards via Alternative Assessments – Cavey

Madrid II	101. New Handheld Technologies for Education Beyond the Graphing Calculator: Issues for Teacher Education – Dick & Burrill	112. Learning to Identify Family and Community Funds of Knowledge in an Elementary Mathematics Methods Course – Drake	123. Linking the Mathematics and Education Major– Undergraduate Research in Mathematics Education as an Alternative Capstone – Upton	134. After Time Passes, What Remains of Professional Development? – Niess, Harrington, & Johnston
Salon V	102. **Research Award Winner** - Reflecting on 40 Years as a Mathematics Educator: Teaching, Teacher Education, and Research – Lester	113. Developing Proof-writing Skills in Geometry through Technology, Scaffolding, and Dialog Writing – Caldwell	124. The Role of Professional Readings in Teacher Learning – Bay-Williams & Karp	135. Developing Preservice and Experienced Teachers' Mathematics Knowledge Side-by-side through Collaborative Planning – Suh & Parker

Notes

Session Number 92 **Seville I**
General

Connecting with Affiliates of AMTE

Jeremy Winters, *Middle Tennessee State University, TAMTE*
Jane Cushman, *Buffalo State College, SUNY*
Michaele Chappell, *Middle Tennessee State 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 93 **Seville II**
General Teacher Professional Development

The Beliefs of Mathematics Teacher Educators and the Implications for Mathematics Teacher Education

LouAnn Lovin, *James Madison University*
Jennifer Chauvot, *University of Houston*
Signe Kastberg, *IUPUI*
Andy Norton, *Virginia Tech*
Keith Leatham, *Brigham Young University*
Wendy Sanchez, *Kennesaw State University*

Findings from a collaboration amongst seven mathematics teacher educators (MTEs) at six institutions who engaged in self study of beliefs about mathematics teacher education will be shared. Commonalities and differences across MTEs and implications for various MTE programs are discussed.

Session Number 94 **Seville III**
Grades 9 - 12 Equity Issues

Opening Eyes: Preparing Teachers to Live the Equity Principle

Catherine Miller, *University of Northern Iowa*

Preparing teachers for meeting the challenges of diversity in the U.S. citizenry motivates this study. This goal aligns with the Equity Principle (NCTM, 2000). Research investigating how this goal is enacted in a secondary mathematics methods course will be shared.

Session Number 95 **Salon II**
General Teacher Professional Development

School Improvement in Mathematics Requires a New Examination: A Grounded-theory Needs Assessment

Tina Johnston, *Oregon State University*
Maggie Niess, *Oregon State University*

The process for improving mathematics achievement requires careful examination. A grounded-theory needs assessment process exposes a community culture leading to increasingly lower levels of mathematics achievement and needs for policy change and professional development.

Session Number 96 **Salon III**
K-5 Pedagogical Content Knowledge/Methods Courses

Promoting Preservice Teachers' Reflective Thinking in Methods Courses

Suzanne Reynolds, *St. Thomas Aquinas College*
Cathy Liebars, *The College of New Jersey*
Sylvia Bulgar, *Rider University*

This symposium will examine ways to promote reflection by prospective elementary teachers in the mathematics methods course. These include using a modified lesson study, using "fishbowl" lesson presentations, and analyzing mathematical tasks. Participants will be invited to discuss personal strategies.

Session Number 97 **Salon VII**
K-5 Pedagogical Content Knowledge/Methods Courses

"They Say I Was Made For Teaching": A Project for Empowering Teachers of Mathematics

Thomasenia Adams, *University of Florida*
Emily Peterek, *University of Florida*
Joanne Laframenta, *University of Florida*

The presenters will share three phases of a project to capture the effective mathematics instruction of a fifth-grade teacher in a low income, African American community. The presenters will focus on three components: development, implementation of and response to the project.

Session Number 98 **Salon VIII**
Grades 6-8 Teacher Professional Development

Beginning Teachers and Non-routine Problems: Modified Lesson Study Group in an Urban Context

Betina Zolkower, *Brooklyn College, CUNY*
Hanna Haydar, *Brooklyn College, CUNY*

In this study we describe how beginning middle school teachers interact with modified lesson study activities centered on the solving, teaching, and learning of non-routine problems (NRP). Findings regarding changes in lesson planning, unit planning modifications, and assessment will be discussed as well as implications for teachers' professional development.

Session Number 99 **Salon IX**
Grades 6-8 Equity Issues

Supports for New Teachers of Mathematics: Insights from an Urban District

Mary Foote, *Queens College-CUNY*
Serigne Gningue, *Lehman College-CUNY*
Beverly Smith, *City College-CUNY*

MetroMath researchers will present results that examine the supports available to eight teachers during their first one to two years of teaching mathematics in high needs middle and high schools in New York City. Particular attention will be paid to the gap between espoused and enacted structural supports.

Session Number 100 **Madrid I**
Grades 6-8 Teacher Professional Development

Building Teacher Leaders through Online Workshop Development

Suzanne Alejandre, *The Math Forum, Drexel University*
Jason Silverman, *Drexel University*

In this session, we discuss our recent efforts to catalyze the development of a cadre of school-based teacher leaders through online and face-to-face professional development. In particular, this presentation will focus on development of a sequence of online workshops that can be used as resources for professional development in participants' home districts.

Session Number 101 **Madrid II**
Grades 9 - 12 Teaching and/or Learning with Technology

New Handheld Technologies for Education Beyond the Graphing Calculator: Issues for Teacher Education

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

Since their introduction 20 years ago, graphing calculators have had a profound impact on mathematics education. How can the newest generation of handheld technologies vault forward through "hot linked" representational environments, raising new issues for mathematics educators and practitioners?

Session Number 102 **Salon V**
AMTE RESEARCH AWARD SESSION

Reflecting on 40 Years as a Mathematics Educator: Teaching, Teacher Education, and Research

Frank K. Lester, Jr., *Indiana University*

I will share some of my thoughts about the current state of mathematics education and offer my thoughts about where we've been and where we seem to be heading with regard to how we teach math, how we prepare teachers to teach math, and how research has contributed (or not) to both teaching and teacher education.

Session Number 103 Seville I
General

Continuing the Conversation with Affiliates

Jeremy Winters, *Middle Tennessee State University, TAMTE*
Jane Cushman, *Buffalo State College, SUNY*
Michaele Chappell, *Middle Tennessee State University*

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

Session Number 104 Seville II
PK-3 Teacher Professional Development

Language and Mathematics Problem Solving: Exploring the Complexities of Bilingual Teachers' Growth

Sandra Musanti, *University of New Mexico*
Sylvia Celedon-Pattichis, *University of New Mexico*

This session will present the outcomes of a sustained collaboration between two first grade bilingual teachers and three researchers as they engaged in developing students' problem solving strategies, explored students' thinking and the role of language in mathematics instruction in Spanish.

Session Number 105 Seville III
General Preservice Teacher Field Experiences

Using Online Tutoring to Strengthen Preservice Teachers' Mathematical Content and Pedagogical Knowledge for Teaching

Hiroko Warshauer, *Texas State University*
Max L. Warshauer, *Texas State University*
Terence McCabe, *Texas State University*

This project links prospective teachers in a math content course with elementary and middle school students who interact in asynchronous online tutoring. Through the MathNerds environment, prospective teachers are exposed to authentic and meaningful mathematical questions and opportunities to formulate appropriate responses. We include interaction transcripts and prospective teacher reflections.

Session Number 106 Salon II
Grades 6-8 Pedagogical Content Knowledge/Methods Courses

The Power of Connections: Integrating Content and Pedagogical Knowledge in a New Middle Grades Math Course

Ron Benbow, *Taylor University*
Mark Colgan, *Taylor University*

We will share what we learned in developing a standards-based, integrated content-methods course for teaching middle grades mathematics. Students deepened their understanding through hands-on activities, weekly field experiences, and the creative integration of theory and practice.

Session Number 107 Salon III
General Teacher Content Knowledge/Content Courses

Making Mathematics Meaningful and Memorable

Karen Corlyn, *Milwaukee Public Schools and University of Wisconsin*
Lee Ann Pruske, *Milwaukee Public Schools and University of Wisconsin*
Paige Richards, *Milwakee Public Schools and University of Wisconsin*
Henry Kepner Jr., *University of Wisconson - Milwaukee*

Mathematics teachers need knowledge well beyond the level they teach. Making the acquisition of this knowledge relevant to preservice teachers is the challenge University of Wisconsin – Milwaukee Teachers-in-Residence accomplished by linking the college curriculum to elementary textbooks and hands-on activities.

Session Number 108 Salon VII
Grades 9 - 12 Teaching and/or Learning with Technology

Using Fathom with Prospective Teachers

Shannon Driskell, *University of Dayton*

In our courses, we implement appropriate uses of various technological tools to enhance prospective teachers' knowledge of mathematics and technology applications. We will present examples of integrating *Fathom* with prospective teachers and initiate group discussion on its use in teaching.

Session Number 109 **Salon VIII**
K-5 Teacher Content Knowledge/Content Courses

An Evaluation of Mathematics Content Courses for Preservice Elementary Teachers

Jim Gleason, *The University of Alabama*

This is a longitudinal study designed to evaluate the effectiveness of increasing the mathematical knowledge for teaching and improving the mathematical dispositions of teachers during a three semester sequence of mathematics content courses for preservice elementary teachers.

Session Number 110 **Salon IX**
Grades 9 - 12 Equity Issues

How Do Secondary Preservice Teachers in a Lesson Study Group Anticipate Student Responses to Prepare a Lesson?

Matthew Webb, *University of Missouri*

In this session we will examine ways that preservice teachers under a lesson study model anticipate student responses as they design a lesson task. The questions we take up are: What does anticipating student responses mean to preservice teachers, and why do they do it?

Session Number 111 **Madrid I**
Grades 6-8 Teacher Content Knowledge/Content Courses

Connections Between Courses Make Modeling Accessible to Middle School Preservice Teachers

Susann Mathews, *Wright State University*
Michelle K. Reed, *Wright State University*

Teaching mathematical modeling should start in middle school mathematics, but teachers won't teach it if they haven't learned how. We will present the aspects of a program for preservice middle school mathematics teachers that makes modeling accessible to this population.

Session Number 112 **Madrid II**
K-5 Pedagogical Content Knowledge/Methods Courses

Learning to Identify Family and Community Funds of Knowledge in an Elementary Mathematics Methods Course

Corey Drake, *Iowa State University*

How do preservice teachers learn to identify the mathematical funds of knowledge available to children? In this session, activities from one elementary methods course will be shared, including community mathematics ethnographies, parent interviews, and Family Math and Literacy Nights.

Session Number 113 **Salon V**
General Teacher Content Knowledge/Content Courses

Developing Proof-writing Skills in Geometry through Technology, Scaffolding, and Dialog Writing

Janet Caldwell, *Rowan University*

Examples of instructional tasks used in a junior-level college geometry class for math majors will be given. Sample student work will illustrate how students' proof-writing skills develop over the semester. *Sketchpad* is used in multiple ways.

Session Number 114 **Seville I**
General Equity Issues

Introducing the Mathematics Education in the Public Interest

Laura Spielman, *Radford University*
Jean Mistele, *Radford University*

Introduces participants to the Mathematics Education in the Public Interest project, focused on equity and social justice. Describes a course for preservice elementary and middle grades teachers, Mathematics for Social Analysis, and communicates results from pilot program research examining students' learning.

Session Number 115 **Seville II**
General Pedagogical Content Knowledge/Methods Courses

Developing Preservice Teachers' Conceptions of Numbers, Operation and Algorithms via Analysis of Children's Mathematical Thinking

Eva Thanheiser, *Rutgers University*

I introduce my framework for preservice teachers' (PSTs') conception of numbers and share activities (including video clips) designed to help PSTs develop more sophisticated conceptions. Results from the application of those activities in my courses will be discussed.

Session Number 116 **Seville III**
Grades 6-8 Assessment Issues

Improving Middle School Mathematics Teachers' Use of Formative Assessments

William Bush, *University of Louisville*

This session describes a year-long professional development program designed to improve middle school teachers' use of formative assessments during instruction. The program helped teachers define important learning outcomes, ask good questions, use appropriate assessment tasks, analyze student work and thinking, provide effective feedback, and use student self- and peer assessment.

Session Number 117 **Salon II**
K-5 Teacher Content Knowledge/Content Courses

Developing Mathematical Understanding in Preservice Elementary Teachers

Wendy Stienstra, *Lakehead University*

This session will explore the landscape of re/learning basic mathematical concepts as an adult. Findings from a study that documented the developing mathematical understanding of fourteen preservice elementary teachers as they engaged in a constructivist-oriented (remedial) mathematics skills development course set at the grade 6-7 level will be shared.

Session Number 118 **Salon III**
K-5 Mathematics Education Program Issue

Elementary Mathematics Teacher Preparation Incorporating a Blend of Content-Methods-Practice, Lesson Study, and Competency Testing

Steve Althoen, *University of Michigan-Flint*
Matt Wyneken, *University of Michigan-Flint*

The School of Education and Human Services at UM-Flint has created an extraordinary opportunity for the development of eleven mathematics education courses. Courses require the demonstration of oral math competencies. Students' reflective practice is mirrored by our own collaborative course development.

Session Number 119 **Salon VII**
General Pedagogical Content Knowledge/Methods Courses

Process Standards-Based Portfolio as a Tool for Developing a Framework for Teaching Mathematics to Preservice Teachers

Patricia Jaberg, *University of Wisconsin-Stevens Point*

This session will share the results of a year-long research project that examined the effectiveness of using a portfolio in a mathematics education course to develop preservice teachers' understanding of the NCTM process standards and the relationship of the process standards to effective teaching.

Session Number 120 **Salon VIII**
Grades 9 - 12 Teacher Content Knowledge/Content Courses

Affordances & Constraints in Abstract Algebra: Are Prospective Teachers Connecting the Mathematics?

Cindy Henning, *Columbus State University*

Recent research conducted in an Abstract Algebra course examined how particular activities afforded or constrained the development of mathematical self-efficacy and perceived connections with high school algebra. In the sessions participants will be engage in selected activities and discuss the implication of the findings for secondary teacher preparation.

Session Number 121 **Salon IX**
Grades 6-8 School/University Partnerships

GK-12 Fellows in the Middle: Partnerships for Inquiry and Interdisciplinary Middle School Science and Mathematics

Kenneth Wolff, *Montclair State University*

This session provides an overview of the goals, training and assessment activities for a NSF Graduate Teaching Fellows in the Middle project that prepares research oriented graduate students to be middle school visiting mathematicians and scientists. Pre- and post-assessments for the graduate students, research advisors, teachers and school students will be presented.

Session Number 122 **Madrid I**
Grades 9 - 12 Teacher Professional Development

Professional Development for Technology-enhanced Classrooms: Lessons Learned over Two Years

Stephen Pape, *University of Florida*
Karen E. Irving, *The Ohio State University*
Douglas T. Owens, *The Ohio State University*

The CCMS project is a national study of teaching and learning facilitated by classroom connectivity technology. This presentation will report on professional development designed to support technology implementation. Participants will engage in lessons learned from two years of the program.

Session Number 123 **Madrid II**
General Mathematics Education Program Issue

Linking the Mathematics and Education Major– Undergraduate Research in Mathematics Education as an Alternative Capstone

Deborah Upton, *Stonehill College*

This session describes an undergraduate course in independent research in mathematics education. The rationale behind the course and its labeling as a "capstone" will be offered. Examples of research projects will be presented along with a discussion regarding the advantages and disadvantages of such a course.

Session Number 124 **Salon V**
General Teacher Professional Development

The Role of Professional Readings in Teacher Learning

Jennifer Bay-Williams, *University of Louisville*
Karen Karp, *University of Louisville*

Articles written for teachers offer one route to reflection and discourse about teaching. We have gathered articles that seem particularly strong for engaging educators in dialogue about effective practice. How do you organize professional development focused on reading(s)? This essential question will be discussed interactively.

Session Number 125 **Seville I**
General Mathematics Education Program Issue

Mathematics Specialists: Who are They and Where Do They Come From?

Karen Cicmanec, *Morgan State University*

The focus of the presentation will be on the preparation of mathematics specialists, the growth in numbers of doctoral mathematics educators produced, and the perceived potential to strengthen the link between research and practice.

Session Number 126 **Seville II**
Grades 6-8 Teacher Content Knowledge/Content Courses

Perspectives on the Exploration of Patterns in Middle School Mathematics Curricula and Related Implications for Teacher Education

Travis Olson, *University of Missouri - Columbia*
Troy P. Regis, *University of Missouri*
Ira J. Papick, *University of Missouri*

We analyze the development of patterns in a variety of MS curricula, paying attention to their mathematical treatment. We provide examples to support rethinking how the study of patterns is presented in MS curricula and the preparation of teachers.

Session Number 127 **Seville III**
K-5 Preservice Teacher Field Experiences

Reflections on the Field Experience of Preservice Elementary Teachers: Bridging Between Craft Knowledge and Propositional Knowledge

Mary Witherspoon, *Austin Peay State University*
Andrew T. Wilson, *Austin Peay State University*

Analyzing data from a two-experience field placement, participants will discuss how to help preservice elementary teachers gain a broader, more reflective, perspective of teaching mathematics. Data suggest many fail to see important pedagogical connections between the two experiences.

Session Number 128 **Salon II**
Grades 9 - 12 Pedagogical Content Knowledge/Methods Courses

Developing Preservice Teachers' Technology Pedagogical Content Knowledge with Advanced Technologies

Michael Edwards, *Miami University*
Michael Meagher, *Brooklyn College/CUNY*
Asli Ozgun-Koca, *Wayne State University*

We will examine students' relationship to the TI-Nspire calculator and the development of their technology pedagogical content knowledge in their preservice classes and field placements.

Session Number 129 **Salon III**
K-5 Pedagogical Content Knowledge/Methods Courses

From Discourse Patterns to Practice: Scaffolding Preservice Teachers' Learning

Kathy Morris, *Sonoma State University*
Timothy Boerst, *University of Michigan & South Redford School District*

Our work investigates what MTEs can make available for preservice teachers' learning from records of a routine instructional discourse practice. We will consider facets of the work of teaching through a sample classroom mathematics discussion led by an experienced practitioner.

Session Number 130 **Salon VII**
K-5 Teaching and/or Learning with Technology

Beginning Elementary Teachers' Use of Virtual Manipulatives, Websites, and Applets in Math Instruction

Christopher Johnston, *George Mason University*

This session presents the results of a study on elementary teachers' criteria for using virtual manipulatives, websites, 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 131 **Salon VIII**
Grades 9 - 12 Pedagogical Content Knowledge/Methods Courses

Improving the Learning of Preservice Secondary Mathematics Teachers through Engagement with Middle and High School Curriculum Materials

Gina Mariano, *Virginia Tech*
Vanessa Pitts-Bannister, *Virginia Tech*

In this session, we provide an overview of an ongoing NSF-funded mathematics teacher education project. In particular, we share purposes and strategies for using Standards-based curriculum materials in mathematics and methods courses for preservice secondary teachers.

Session Number 132 **Salon IX**
General Teacher Content Knowledge/Content Courses

How Can We Best Inform and Support Mathematicians in Teaching Mathematics Content Courses for Preservice Elementary School Teachers?

Cecelia Laurie, *University of Alabama*

We will present results from interviews of mathematicians engaged in teaching mathematics content courses for preservice elementary teachers. The presentation will center on the varied perceptions of the purpose/philosophy of such courses and what influenced these philosophies.

Session Number 133 **Madrid I**
Grades 9 - 12 Assessment Issues

Connecting Content and Process Standards via Alternative Assessments

Laurie Cavey, *James Madison University*

Looking for alternative assessment ideas? I will share two different ways to assess the connections prospective secondary teachers are making between their understanding of mathematics and how to teach. Preliminary results and rubrics will also be provided.

Session Number 134 **Madrid II**
General Teacher Professional Development

After Time Passes, What Remains of Professional Development?

Maggie Niess, *Oregon State University*
Rachel Harrington, *Oregon State University*
Tina Johnston, *Oregon State University*

A year-long professional development series worked to develop mathematical subject-matter knowledge and PCK in K-8 teachers. Two years later, can the voices of over 30 past participants provide insight into the lasting impact, if any, of such a project?

Session Number 135 **Salon V**
K-5 Teacher Professional Development

Developing Preservice and Experienced Teachers' Mathematics Knowledge Side-by-side through Collaborative Planning

Jennifer Suh, *George Mason University*
Jana Parker, *George Mason University*

This individual session will discuss a project involving preservice and inservice teachers working collaboratively on planning, teaching and reflecting on mathematics lessons. The talk will explore the question of "Are we challenging our preservice and inservice teachers to maximize on their planning processes to develop their mathematical knowledge of teaching as they engage in discussing and designing meaningful lessons, mathematically accurate explanations, conceptual models, and applications?"

Lunch & Business Meeting
Salon IV
11:30 am – 1:15 pm

Presiding: Jennifer Bay-Williams, University of Louisville

President, AMTE

Overview of Saturday Afternoon January 26, 2008

	1:30 – 2:30
Seville I	136. Publish or Perish – Hodges, Cady, & Landry
Seville III	138. Appropriate Mathematics for Middle School Teachers: Making an Impact on Elementary Certified Teacher Content Knowledge – Mikusa & Melillo
Salon II	139. Teacher Developers' Conceptions of Mathematical Knowledge for Teaching (MKT) – Schultz, Ricks, Allen, Wilson, & Kilpatrick
Salon III	140. The Lost Variable: Induction of Urban Mathematics Teachers – Gningue & Smith
Salon VII	141. An Evaluation of a School-Based, Practicum-Focused Project for Simultaneous Professional Development of Preservice and Inservice Elementary Mathematics Teachers – Bahr, Monroe, Anderson
Salon VIII	142. Linking College Courses to the Secondary School Curriculum – Norton & Galindo
Salon IX	143. Pointers for Submitting AMTE Proposals – Schrock, Cooper & Pape
Madrid I	144. Prospective Teachers' Development of Mathematical Knowledge for Teaching Related to Number and Operations – Andreasen, Roy, Safi, Tobias, Dixon
Madrid II	145. Teacher-Scholar Program: A Model for Developing Highly Qualified Secondary Teachers – McCrone, Langrall, El-Zanati, & Mooney
Salon V	146. Mathematics Teaching in the 21st Century: Benchmarking U.S. Mathematics Teacher Preparation through International Research - Schmidt

Closing Session Salon V 2:45 – 3:30 p.m.

Session Number 136 **Seville I**
General Faculty Develpment

Publish or Perish

Thomas Hodges, *University of Tennessee*
Jo Ann Cady, *University of Tennessee*
Geri Landry, *University of Tennessee*

Tips and practical suggestions for writing to publish such as peer editing, finding the "right" journal for your ideas, and creating time to write. This session targets neophyte professors and doctoral students and will include time for questions and discussion.

Session Number 138 **Seville III**
Grades 6-8 Teacher Content Knowledge/Content Courses

Appropriate Mathematics for Middle School Teachers: Making an Impact on Elementary Certified Teacher Content Knowledge

Michael Mikusa, *Kent State University*
Judith Melillo, *Kent State University*

The MIME Masters Program at Kent State Universtiy is a unique collaboration of Mathematicians and Mathematics Educators to provide necessary content knowledge and research based methods at the graduate level for teachers teaching but not licensed at the middle school level. The unique part of this program is that it is designed collaboratively and co-taught by one member of each department. We will share data from teachers as well as some advantages and challenges of co-teaching across departments. We invite discussion on course design, delivery, sequencing, and appropriate graduate level mathematics for teachers with insufficient backgrounds in mathematics.

Session Number 139 **Salon II**
General Teacher Professional Development

Teacher Developers' Conceptions of Mathematical Knowledge for Teaching (MKT)

Kyle Schultz, *University of Georgia*
Thomas E. Ricks, *University of Georgia*
Shelly M. Allen, *University of Georgia*
Patricia S. Wilson, *University of Georgia*
Jeremy Kilpatrick, *University of Georgia*

Using data from focus groups and from an online survey, we examine how teacher developers who had participated in an 8-day summer institute on MKT viewed that concept 2 years later and had used it in their practice.

Session Number 140 **Salon III**
General School/University Partnerships

The Lost Variable: Induction of Urban Mathematics Teachers

Serigne Gningue, *Lehman College/CUNY/MetroMath*
Beverly Smith, *City College/CUNY/MetroMath*

In this presentation, the New York City coaching model is studied. The roles of the coach as a professional developer, as a modeler and an observer of instructional practice, and as a mentor are described and analyzed.

Session Number 141 **Salon VII**
K-5 School/University Partnerships

An Evaluation of a School-Based, Practicum-Focused Project for Simultaneous Professional Development of Preservice and Inservice Elementary Mathematics Teachers

Damon Bahr, *Brigham Young University*
Eula Ewing Monroe, *Brigham Young University*
Linda Anderson, *Alpine School District*

This session presents a description and an evaluation of a project that involved weekly field practica as part of an elementary mathematics course conducted at reform-oriented elementary school sites in conjunction with professional development for all classroom teachers at those sites. Two meta-evaluative critiques will conclude the session.

Session Number 142 **Salon VIII**
Grades 9 - 12 Teacher Content Knowledge/Content Courses

Linking College Courses to the Secondary School Curriculum

Anderson Norton, *Virginia Tech*
Enrique Galindo, *Indiana University*

We invite discussion addressing perceived irrelevance of college mathematics courses in developing mathematical knowledge for teaching. We offer as a potential solution the implementation of "linking courses," which facilitate connections between particular college courses and secondary school curricula. Speakers from three universities will initiate participant discussion on implementing such courses.

Session Number 143 **Salon IX**
General

Pointers for Submitting AMTE Proposals

Connie Schrock, *Emporia State University*
Sandra Cooper, *Baylor University*
Stephen Pape, *University of Florida*

Come and visit with former, current and future program chairs to find out more about the program review process and what program committee reviewers are looking for in a proposal. Bring ideas you want to discuss.

Session Number 144 **Madrid I**
K-5 Teacher Content Knowledge/Content Courses

Prospective Teachers' Development of Mathematical Knowledge for Teaching Related to Number and Operations

Janet Andreasen, *University of Central Florida*
George Roy, *University of Central Florida*
Farshid Safi, *University of Central Florida*
Jennifer M. Tobias, *University of Central Florida*
Juli K. Dixon, *University of Central Florida*

Through a classroom teaching experiment with prospective teachers, whole number and fraction concepts and operations were examined. The development of Mathematical Knowledge for Teaching in these areas will be presented through the use of video clips and student work samples.

Session Number 145 **Madrid II**
Grades 9 - 12 Teacher Content Knowledge/Content Courses

Teacher-Scholar Program: A Model for Developing Highly Qualified Secondary Teachers

Sharon McCrone, *University of New Hampshire*
Cynthia Langrall, *Illinois State University*
Saad El-Zanati, *Illinois State University*
Edward Mooney, *Illinois State University*

Teacher-Scholars are teacher candidates who have experienced scholarship in mathematics that emphasizes interconnections among theory, procedures, and applications and who have developed habits of mind of a mathematical thinker. We will overview the development of the Teacher-Scholar program and share findings from the first cohort of students.

Session Number 146 **Salon V**
General

Mathematics Teaching in the 21st Century: Benchmarking U.S. Mathematics Teacher Preparation through International Research

William Schmidt, *Michigan State University*

This session details some of the surprising similarities and differences found in a small study that examined the preparation of middle school mathematics teachers in six countries: Germany, Bulgaria, Taiwan, South Korea, Mexico, and the U.S. Results from this study underscore the importance of the new IEA-sponsored Teacher Education Study in Mathematics (TEDS-M) conducted in the U.S. and more than 15 other countries which examines the preparation of mathematics teachers at both the elementary and middle school level. Findings from the earlier small study are used to foreshadow what may be learned in the larger study and to highlight policy implications.

Closing Session
Salon V
2:45 – 3:30 pm

Reflections on Our Field: A Dialogue about Research in Mathematics Teacher Education

Paola Sztajn, *National Science Foundation*
Denise S. Mewborn, *University of Georgia*

In this session we will take stock of where the field stands with regard to research in mathematics teacher education. We will identify robust lines of inquiry and areas where we see gaps in our knowledge base. We will describe inquiry and areas where we see gaps in our knowledge base. We will describe both new questions that are being investigated and new approaches to old questions.

AMTE Annual Meeting 2008
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AMTE's Thirteenth Annual Conference, February 2009

We invite you to plan to attend and speak at next year's Thirteenth Annual AMTE Conference, to be held February 5 - 7, 2009, at the Orlando Airport Marriott Hotel in Orlando, Florida.

The *Call for Proposals* will be available on the AMTE website (www.amte.net) by mid-February 2008 and in the next issue of *AMTE Connections*. Stephen Pape of the University of Florida will be the Program Chair. The deadline for submitting proposals is May 2, 2008.

We hope to see you there!

The 2010 Conference will be held somewhere in the western United States—stay tuned for more information!

AMTE Events at the 2008 NCTM and NCSM Annual Conferences in Salt Lake City, Utah

AMTE Special Interest Session at the NCSM Conference
Wednesday afternoon, April 9, 2008
location and time TBA

AMTE Reception at the NCTM Conference
Thursday, April 10, 2008
6:00 - 7:30 pm
Salt Lake City Marriott Downtown Hotel
Wasatch Room
All members and interested persons are invited to attend.

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

AMTE Leadership
January 2007 – January 2008

STANDING COMMITTEES

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

2006 - 2008
Chair: Jeremy Winters, Middle Tennessee State University, TN; jwinters@mtsu.edu
Tamas Szabo, Weber State University, UT; tszabo@weber.edu
Barbara Dougherty, University of Mississippi, MS; bdougher@olemiss.edu

2007 - 2009
Linda Zientek, Blinn College, Chappell Hill, TX; lrzientek@yahoo.com
Clara Nosegbe, Georgia State University, GA; cnosegbe@gsu.edu
Jane Cushman, Buffalo State College, SUNY; NY; cushmajr@buffalostate.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.

2006 – 2008
Chair: Jeffrey Wanko, Miami University – Oxford, OH; wankojj@muohio.edu
Barbara Reys, University of Missouri, MO; reysb@missouri.edu
Winnie Peterson, Kutztown State University, PA; wpeterso@kutztown.edu

2007 - 2009
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
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.

2006 - 2008
Chair: Janet Caldwell, Rowan University, NJ; caldwell@rowan.edu
Ginny Keen, Wright State University-Lake Campus, OH; ginny.keen@wright.edu
Travis Olson, University of Missouri-Columbia, MO; taox9c@missouri.edu
Al Otto, Illinois State University, IL; otto@ilstu.edu
Ingrid Peterson, University of Kansas, KS; peterson@math.ku.edu
Nadine Bezuk, San Diego State University, CA; 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).

2006 - 2008
Dana P. Franz, Mississippi State University, MS; df76@colled.msstate.edu
John Lannin, University of Missouri-Columbia, MO; lanninj@missouri.edu
Jane Wilburne, Penn State University/Harrisburg, PA; jmw41@psu.edu

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
Gary Martin, Auburn University, AL; martinwg@auburn.edu (AMTE Board)

Nominations and Elections

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

2007 - 2008
Chair: Peg Smith, University of Pittsburgh, PA, pegs+@pitt.edu
Robert Reys, University of Missouri, MO; reysr@missouri.edu
Bill Speer, University of Nevada, Las Vegas, NV; William.speer@unlv.edu
Richard Kitchen, University of New Mexico, NM; kitchen@unm.edu
Carol Fry Bohlin, Fresno State University, CA; carolb@zimmer.csufresno.edu
Sid Rachlin, East Carolina University, NC; rachlins@ecu.edu (AMTE Board)

Technology

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

2006 - 2008
Christine Browning, Western Michigan University, MI; christine.browning@wmich.edu
Suzanne Harper, Miami University, OH; harpersr@muohio.edu
Bob Ronau, University of Louisville, KY; bob@louisville.edu

2007 - 2009
Alfinio Flores, University of Delaware, DE;
Olga Kosheleva, University of Texas @ 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
Barbara Pence, San Jose State University, CA; pence@math.sjsu.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 - 2008

Gail Burrill, Michigan State University, MI; burrill@msu.edu
Viji Sundar, California State University Stanislaus, CA; VSundar@csustan.edu
Tom Bassarear, Keene State University, NH; tbassare@keene.edu (AMTE Board)

2007 - 2009

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

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.

Co-Chair: Susan Friel, University of North Carolina-Chapel Hill,NC; sfriel@email.unc.edu
Co-Chair: Peg Smith, University of Pittsburgh, PA; pegs@pitt.edu
M. Lynn Breyfogle, Bucknell University, PA; mbreyfog@bucknell.edu
Amy Roth McDuffie, Washington State University – Tri Cities, WA; mcduffie@tricity.wsu.edu
Kathy Morris, Sonoma State University, CA; Kathy.morris@sonoma.edu
Susan Hillman, Saginaw Valley State College, MI; shillman@svsu.edu
Babette Moeller, Bank Street College, NY; bmoeller@edc.org
Mary-Margaret Shoaf, Baylor University, TX; MM_Shoaf@baylor.edu (AMTE Board)
Tom Bassarear, Keene State University, NH; tbassare@keene.edu (AMTE Board)

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

Executive Committee (Charged with planning the design)
Francis (Skip) Fennell, McDaniel College, MD; ffennell@mcdaniel.edu
Bill Bush, University of Louisville, KY; bill.bush@louisville.edu
Virginia Bastable, Mount Holyoke College, MA; vbastabl@mtholyoke.edu
Madeleine Long, American Association for the Advancement of the Sciences
Judith Mumme, WestEd
Sid Rachlin, East Carolina University, NC; rachlins@ecu.edu (AMTE Board)

Field Testers (Charged with testing the feasibility of the design)
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Betsy Darken, UT-Chattanooga University, TN; betsy-darken@utc.edu
Michael Gilbert, Eastern Washington University, WA; mgilbert@mail.ewu.edu
Sue Brown, University of Houston Clear Lake, TX; browns@uhcl.edu
Lisa Carboni, Duke University, NC;

Corporate Sponsorship Task Force

Purpose: to design a strategic plan for seeking sponsorship from appropriate organizations to support the work of AMTE and its members.

Chair: Barbara Reys, University of Missouri, MO; reysb@missouri.edu
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Robert Reys, University of Missouri, MO; reysr@missouri.edu
Ed Rathmall, University of Northern Iowa, IA; Edward.Rathmell@uni.edu
Jenny Bay-Williams, University of Louisville, KY; j.baywilliams@louisville.edu (AMTE Board)

Equity Task Force

Purpose: to design a strategic plan for intentional ways that AMTE can advocate for equitable practices, including to support and increase the diversity of mathematics teachers and mathematics teacher educators.

Co-chair: Rochelle Gutierrez, University of Illinois at Urbana-Champaign, IL; rgutirrz@uiuc.edu
Co-chair: Edd Taylor, Northwestern University, IL; edd-taylor@northwestern.edu
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Susie Hakansson, University of California - Los Angeles, CA; shakans@ucla.edu
Lynn Stallings, Kennesaw State University, GA; lstalling@kennesaw.edu (AMTE Board)

Research Task Force

Purpose: to design a strategic plan a strategic plan for intentional ways that AMTE can meet the following organizational goal, which is, "to promote research and other scholarly endeavors related to mathematics teacher education.".

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Barbara Pence, San Jose State University, CA; pence@math.sjsu.edu (AMTE Board)

ANNUAL CONFERENCE COMMITTEES

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2008 Annual Conference – Program Committee

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Sandi Cooper, Texas Tech University, TX; sandi.cooper@ttu.edu

2009 Annual Conference – Program Committee

Chair: Stephen Pape, University of Florida, FL; spape@ufl.edu

PUBLICATIONS

AMTE Monograph Series

Denisse Thompson, University of South Florida, FL; General Editor; denisse@uchicago.edu

Series Editor (2008-2009): Marilyn Strutchens, Auburn University, AL; strutme@auburn.edu

Fourth Monograph

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Fifth Monograph

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Sixth Monograph

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Seventh Monograph

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Harper, Suzanne
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Horton, Robert M.
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Kosheleva, Olga
Manouchehri, Azita
McDuffie, Amy
Meltzer, Sarah
Niess, Margaret
Pateman, Neil
Polly, Drew
Pugalee, David
Rend, Jill Martin
Shamath, Jeffrey
Walmsley, Angela
Wu, Zhonghe
Zbiek, Rose

CALL FOR PROPOSALS

Association of Mathematics Teacher Educators (AMTE)

Thirteenth Annual Conference • February 5 - 7, 2009

Orlando Airport Marriott Hotel
Orlando, Florida

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 March 1, 2008 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 - 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 March 1, 2008.

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.

Proposals Must be Submitted Electronically by Friday, May 2, 2008.

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

Questions

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

Stephen J. Pape, Program Chair
School of Teaching and Learning
University of Florida
PO Box 117048
Gainesville, FL 32611-7048
Daytime Telephone: (352) 392-9191 x266
Email: amte2009@coe.ufl.edu

AMTE Association of Mathematics Teacher Educators	**Call for Manuscripts for** **Monograph VI:** ***Scholarly Practices and Inquiry in the*** ***Preparation of Mathematics Teachers***

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 2009 monograph, *Scholarly Practices and Inquiry in the Preparation of Mathematics Teachers*, will be the sixth 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 2009 monograph aims to include a range of manuscripts addressing various aspects of the scholarly practices of mathematics teacher educators. We welcome research articles, as well as articles that are descriptive in nature. Topics may include but are not limited to the following broad categories:

- Preservice teacher education
- Inservice teacher education
- Preparation/professional development of mathematics teacher educators
- Preparation/professional development of mathematics teacher leaders
- Innovative delivery methods (e.g., field-based, synchronous or asynchronous distance education)
- Innovative materials developed for K-12 mathematics teacher education (e.g., textbooks, cases, videos)
- Alternative routes to certification for mathematics teachers
- Educational policy with regard to mathematics teacher education
- Collaboration among various mathematics teacher educators

**Authors are encouraged to consider what other mathematics teacher educators can learn from the manuscript that will inform their own 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	Denise S. Mewborn, University of Georgia, dmewborn@uga.edu Hollylynne S. Lee, North Carolina State University, hollylynne@ncsu.edu
Series editor	Marilyn Strutchens, Auburn University
Panel members	Laurie Cavey, James Madison University Rebekah Elliott, Oregon State University Alfinio Flores, University of Delaware Suzanne Harper, Miami University of Ohio Kate Kline, Western Michigan University Johnny Lott, University of Mississippi Jennifer Luebeck, University of Montana Lew Romagnano, The Metropolitan State College of Denver Gideon L. Weinstein, Western Governors University
AMTE Board Liaison	Fran Arbaugh, University of Missouri

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. If copyrighted material is included in the manuscript and the manuscript is accepted for publication, it will be the authors' responsibility to secure the appropriate copyright permissions.

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: **Denise Mewborn**
Email: dmewborn@uga.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, 2008

Anticipated Publication Date: 2009

AMTE's Excellence in Mathematics Teacher Education Award

Description of Awards
The Board of Directors of the Association of Mathematics Teacher Educators has established an Award for Recognition of Excellence in Mathematics Teacher Education, to be awarded annually to a mathematics teacher educator of national recognition at the Annual Meeting of the AMTE. The purpose of this award is to recognize excellence in each area of mathematics teacher education (teaching, service, research). Areas of focus for the award will rotate each year. Awards will be rotated among Excellence in Teaching Mathematics Teacher Education (2006 winner: Randy Philipp; next award in 2009), Excellence in Service to Mathematics Teacher Education (2007 winner: Bill Bush; next award in 2010), Excellence in Scholarship in Mathematics Teacher Education (2008 winner: Frank Lester; next award in 2011). The winner will give a featured presentation at the AMTE Annual Conference in the year they receive the award.

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

Criteria
The nominee 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.

Award for Excellence in Teaching in Mathematics Teacher Education
The Excellence in Teaching Award is intended to recognize a colleague for a unique contribution to the pedagogy of mathematics teacher education. We invite nominations that highlight an individual's innovative practices in teaching. The following are examples of demonstrations of innovations in teaching preservice or inservice mathematics teachers:

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.

Documentation required for Excellence in Teaching in Mathematics Teacher Education:
a. Letter of nomination highlighting the innovative practices of nominee (no self nominations will be considered)
b. CV (highlighting teaching publications and presentations)
c. Documentation of innovative practice (e.g. publication, materials, video are some examples)
d. Documentation of effectiveness of innovative practice (e.g. evidence that preservice teachers apply ideas when teaching)
e. Three letters of support from former students – addressing how the innovative teaching impacted their learning about mathematics teaching
f. One letter of support from a peer who has witnessed the individual's teaching or has had former students of the nominee in their own classes and noted the impact of the nominee's teaching on those students.

Nomination Process
AMTE members may nominate a mathematics teacher educator who meets the criteria above. 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 Nomination

Nominations must be received by **October 15, 2008**.

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 in January. The award recipient will receive a plaque and give a presentation at the AMTE meeting in the year in which he or she receives the award.

CITE JOURNAL CONTEMPORARY ISSUES IN TECHNOLOGY AND TEACHER EDUCATION
http://www.citejournal.org

Call for READERS!

Read an article and post your comments online.

Call for REVIEWERS!

Review manuscripts and help determine whether they should be published.

Call for MANUSCRIPTS!

Share scholarly information about technology in mathematics teacher education.

The *CITE-Math Journal* provides a forum for a dialog about best practices in preparation of mathematics teachers who use technology. This call for papers encourages AMTE members, researchers, and mathematics teacher educators to submit articles addressing this topic. **Articles may address any area of technology and teacher education. Articles dealing with both preservice and inservice issues are welcomed.**

A wide range of formats and approaches to scholarship are accepted, including qualitative research, quantitative research, conceptual and theoretical pieces, case studies, and professional practice papers. 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 encourages inclusion of color graphics, photographs, and other media. Manuscripts may be submitted online through the journal web site. Inquiries about potential manuscript topics are welcomed.

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. It only takes a few minutes to become involved in this important professional endeavor. Your involvement will help make the journal strong.

CALL FOR COMMENTARY
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 on-line 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*:
Iris DeLoach Johnson (johnsoid@muohio.edu) or Virginia (Ginny) Keen (keenvirl@notes.udayton.edu).

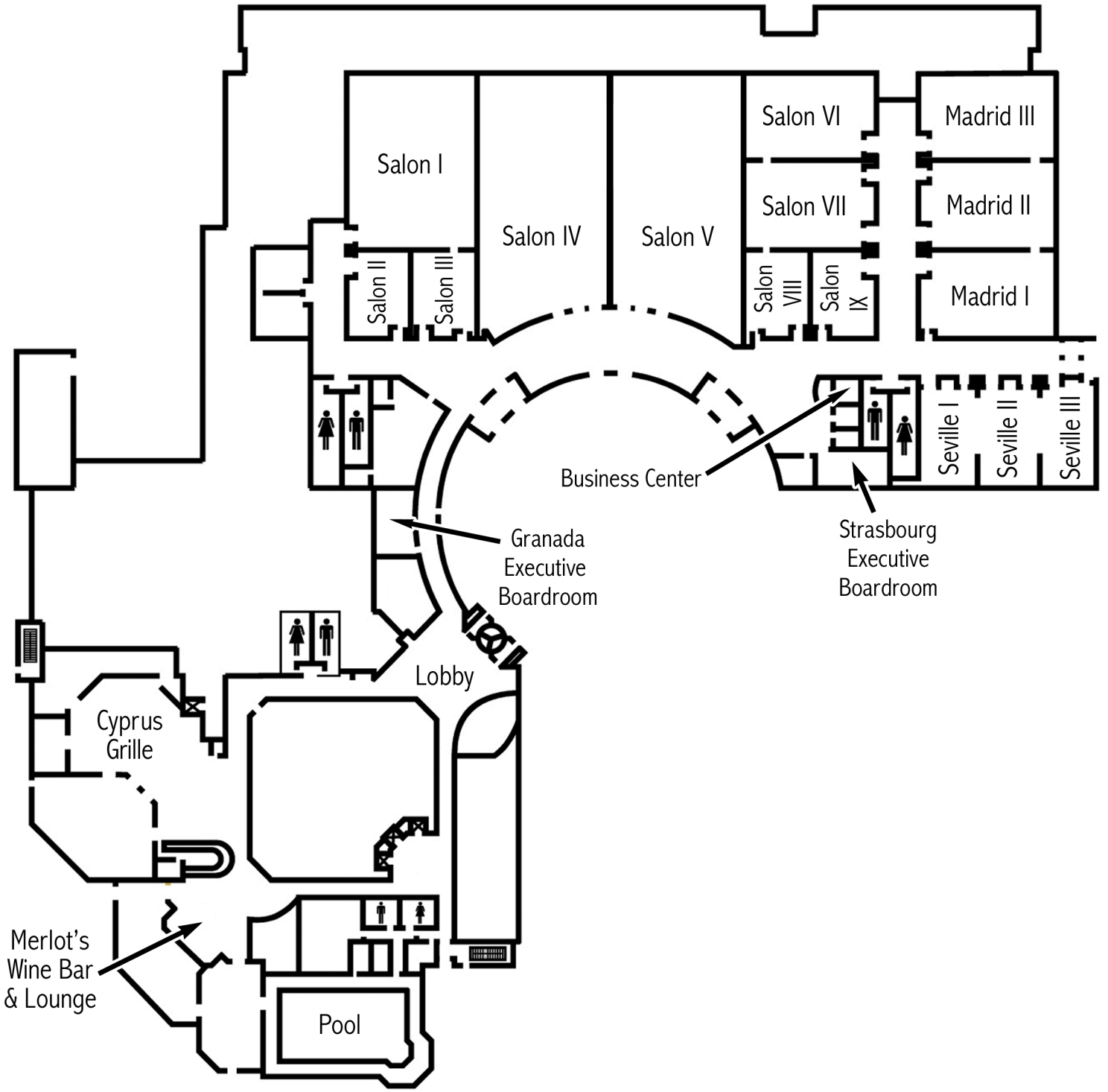
Learn more about CITE-Math: Watch for the CITE-Math podcast!

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

NOTES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Seville II
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Boardroom
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Cyprus
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Merlot's
Wine Bar
& Lounge
Pool