

Volume 23, Issue 1 – Fall 2013

Connections

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AMTE PRESIDENT'S MESSAGE

AMTE 2013 Spring and Summer "Happenings" Fran Arbaugh, Penn State University

The AMTE leadership and committee members have had quite a busy spring and summer. I want to take this opportunity to share with you some highlights of our work as well as information about a few resources that you may find useful in your work.

AMTE Board and Committee Happenings

While all of the AMTE leadership and committee members dedicate time during the spring and summer months to supporting this organization, I highlight here just a subset of the many "happenings" within the organization and give a shout out to some very deserving members for their contributions towards keeping the AMTE strong and thriving.

New Appointments to the AMTE Board. Since assuming the Presidency of AMTE, I have appointed three non-voting members to the Board (as a result of a natural progression of three Board members completing their terms). I am happy to communicate those appointments to you here and look forward to working with these three AMTE members in the coming months. The new appointees are:

- Kathleen Lynch-Davis (Appalachian State University), who began her term as *AMTE Sponsorship Director* on July 1, 2013;
- Joe Champion (Boise State University), who will begin his term as *AMTE Website Director* on September 1, 2013; and
- Babette Benken (California State University, Long Beach), who will begin her term as *Connections Editor* at the conclusion of the 2014 AMTE Conference.

Please join me in welcoming these new AMTE Board members as well as thanking the three outgoing Board members for their years of service and dedication to the organization: Jeff Wanko (Miami University), Tim Hendrix (Meredith College), and Trena Wilkerson (Baylor University).

AMTE Conference Leadership Team and Program Committee. The AMTE Conference Leadership team and Program Committee members have been hard at work developing the program for the 2014 AMTE Conference. We had a record number of proposals and are excited about the program that is starting to come together. Please join me in recognizing and thanking Shannon Driskell (University of Dayton, 2014 Program Chair), Suzanne Harper (Miami University, 2013 Program Chair), Dustin Jones (Sam Houston State University, 2015 Program Chair), Susan Gay (University of Kansas, Conference Director), and the 2014 Program Committee members for their efforts during the long days of summer.

AMTE Nominations and Elections Committee. The AMTE Nominations and Elections Committee has put together a very strong slate of nominees for *President-Elect, Secretary, and Board Member-at-Large.* The announcement of those nominees is on page 8 of this issue of *Connections* and can also be found on the AMTE website. Thank you to Maggie Niess (Oregon State University) and the members of this committee for their hard work putting together this slate of nominees. I encourage the AMTE membership to visit the AMTE website, read the nominees' bios, and take part in the election this fall.

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The Association of Mathematics Teacher Educators

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President's Message (continued from page 1)

AMTE Awards Committee. The AMTE Awards Committee members, under the leadership of Courtney Koestler (University of Arizona), have spent their summer reading applications for the *Elementary Mathematics Specialist Scholarship* and the *Susan Gay Conference Travel Scholarship*. The committee members read over 50 applications across the two scholarship programs and AMTE is proud to announce the recipients (see page 13 of this issue of *Connections* for the recipients' names and affiliations). Thank you to the committee members who dedicated much of their time in July to these efforts.

AMTE Leadership's Happenings with National Initiatives

As I described in my first President's Message (February 2013), AMTE has representation in a number of national mathematics education initiatives. I highlight happenings from three of these initiatives here in an effort to inform you of some of the things that the AMTE leadership is engaged in outside of the AMTE "borders" as well as pass on some information that I think you may find interesting and useful.

Conference Board of Mathematical Sciences (CBMS). In May 2013, Marilyn Strutchens, Nadine Bezuk, and I attended the semi-annual meeting of the Conference Board of Mathematical Sciences (http://www.cbmsweb.org/) in Washington, DC. The CBMS is

an umbrella organization consisting of sixteen professional societies all of which have as one of their primary objectives the increase or diffusion of knowledge in one or more of the mathematical sciences. Its purpose is to promote understanding and cooperation among these national organizations so that they work together and support each other in their efforts to promote research, improve education, and expand the uses of mathematics. (CBMS Website)

The agenda for the day-long meeting included a time for member organizations to share outreach efforts, and I thought you would be interested in hearing about outreach that I thought you might be able to use in teacher education courses or professional development. As my space is brief, I highlight a few of the efforts of two CBMS member organizations here.

On its website and available to the general public, the American Mathematical Society (AMS; www.ams.org) has a feature they call "Mathematical Moments." Resources include one-page "teasers" about mathematics found in the real world as well as podcasts of interviews conducted with everyday users of the mathematics. As I write this message, I am also listening to a podcast titled "Making Mathematics Come Alive" in which Academy Award winner Tony DeRose talks about the math used in movie animation. In addition to Mathematical Moments, AMS has a set of posters that can be ordered for hanging in classrooms and a features column, which contains monthly essays on mathematics.

The American Statistical Association (ASA; http://www.amstat.org/) has designated 2013 as the International Year of Statistics. On its website, you can find the "Statistical Significance Series" – a set of one-page essays on the important contributions that statisticians make to society. AMS and NCTM also recently published a joint position paper on the Statistical Education of Teachers.

One outcome of this meeting was a statement of support for the Common Core State Standards, signed by fifteen presidents of the professional societies that make up the Conference Board of the Mathematical Sciences. You can access that statement on the AMTE website.

Mathematics Common Core Coalition (MCCC). Also in May 2013, Marilyn Strutchens and I attended a meeting of the Mathematics Common Core Coalition (http://www.nctm.org/standards/mathcommoncore/). Members of the coalition are: the National Council of Teachers of Mathematics (NCTM), the National Council of Supervisors of Mathematics (NCSM), the Association of Mathematics Teacher Educators (AMTE), the Association of State Supervisors

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President's Message (continued from page 2)

of Mathematics (ASSM), the Council of Chief State School Officers (CCSSO), the National Governors Association (NGA), the SMARTER Balanced Assessment Consortium, and the Partnership for the Assessment of Readiness for College and Careers (PARCC).

Two items from the agenda of this meeting may be of interest to you. First, one outcome of the meeting was the development of a set of talking points about the CCSS-M, intended to provide fact-based information about the development and implementation of the CCSS-M. You can access that document on the AMTE website. Second, both SMARTER Balanced and PARCC announced that additional released assessment items are available on their websites.

NCSM/AMTE Collaboration on Formative Assessment. In Spring 2013, the AMTE Board approved engagement in a collaborative effort between the National Council of Supervisors of Mathematics (NCSM) and AMTE that focuses on the importance of formative assessment in mathematics learning. An important arm of these efforts focuses on educating teachers of mathematics about formative assessment practices and supporting the integration of those practices in classrooms. Marilyn Strutchens, Ed Silver, and Megan Burton represent AMTE on the steering committee of this joint project. Although early in its existence, this collaborative project has a number of initiatives in its headlights, the first of which is to develop and disseminate a survey intended to elicit information about how and to what extent various frameworks, tools, and approaches are treated in the preparation and continuing education of teachers of mathematics. Stay tuned for further developments that result from this cross-organization collaboration.

Concluding Remarks

As you can see from the contents of this message, the work associated with making sure AMTE is a functioning and useful organization for its members is a year-round endeavor. And much more work has been undertaken by AMTE volunteers than I could ever highlight in this message. I strongly encourage you to visit the AMTE Website for additional resources and information as you begin to plan your courses for the coming year. There is a wealth of information there, including archived copies of the AMTE Webinar Series, that you will find useful in your work. While you are there, don't forget to complete a new volunteer form – Marilyn Strutchens and I will be meeting later this fall to make committee appointments for 2014. In the meantime, I wish you a good start to the Fall 2013 semester and hope to see you in Irvine early in 2014!

CITE-Math Call for Manuscripts

Share research regarding issues of technology use, as well as innovative practices involving the use of technology, in mathematics teacher education in *Contemporary Issues in Technology and Mathematics Teacher Education (CITE-Math)*.

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

A wide range of formats and approaches to scholarship are accepted, including qualitative research, quantitative research, theoretical pieces, and innovative practice papers. Articles will be published in an electronic format as well as in corresponding versions (pdf) suitable for print. An electronic format allows articles to be published in a timely fashion and allows for the inclusion of various media including applets, color graphics, photographs, video, etc. Manuscripts may be submitted online through the journal website (http://site.aace.org/newpubs/index.cfm?fuseaction=Info.CITEEntrance). Inquiries about potential manuscript topics are welcomed.

See pages 4-7 of this newsletter for more information on the 2014 AMTE Conference.

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The Association of Mathematics Teacher Educators (AMTE) 2014 Annual Conference Update

Make your plans now to attend the 2014 AMTE Annual Conference in **Irvine, CA** on **February 6-8**, **2014**. The regular conference will begin on Thursday morning with sessions at 9:00 a.m. Lunch on Thursday is provided along with all of the other meals you are accustomed to having during the conference.

Early registration deadline for the 2014 Conference is September 30, 2013! The keynote speakers for the 2014 conference have been selected. Details on these speakers and information on their presentations can be found on page 6.

Thursday's General Session will feature Beatriz D'Ambrosio, Miami University, Oxford, OH. Friday's Judith E. Jacobs Lecture will be given by Barbara Reys, University of Missouri.

There will be two Learn and Reflect sub-strands at this conference. On Thursday, the Learn and Reflect sub-strand will occur within the Equity and Mathematics Education strand. This emphasis at the conference supports the AMTE Board of Directors' 2013 action priority to support equitable practices in mathematics teacher education. A special session featuring discussion about equity issues will be held Thursday afternoon. On Friday, the Learn and Reflect sub-strand will occur within the Preservice Teacher Field Experience strand. A special session featuring discussion about field experience issues will be held Friday afternoon.

Details of the February 2014 conference schedule include the following.

- Sessions start Thursday at 9:00 a.m.
- On Thursday, lunch and afternoon break will be provided and are included in the registration fee.
- The Thursday General Session will begin about 5:00 p.m. followed by dinner on your own.
- On Friday, continental breakfast, lunch, afternoon break, and dinner will be provided and are included in the registration fee.
- On Saturday, continental breakfast and lunch will be provided and are included in the registration fee.
- The business meeting will occur during Saturday's lunch.
- The conference will end approximately at 1:15 p.m. on Saturday.

The conference hotel is the Hyatt Regency Irvine located in Irvine, CA. The hotel room rate is \$165 for a single or double room. **Make your reservation by Saturday, November 30, 2013** to get our special conference room rates. Please be aware that the conference block of rooms may be sold out early. Once the room block is full, the hotel will accept reservations at the hotel's prevailing rate and only on a space-available basis. Hotel reservations can be made using the conference reservations link: https:// resweb.passkey.com/go/AMTE2014, which can also be found on the AMTE website. If further assistance is needed, please call (888) 421-1442. Be sure to mention "AMTE Conference" when you call. We encourage you to reserve your room soon.

Conference registration is now available on the AMTE website. The registration deadline is November **30, 2013. Early registration** at reduced rates is available through **September 30**. The speaker registration deadline is September 15, 2013.

Conference Information Page, http://www.amte.net/conferences/conf2014, for the latest updates.

We hope to see you in Irvine in February!

Susan Gay, AMTE Conference Director, sgay@ku.edu, University of Kansas, KS

AMTE 2014 Conference Registration

The Eighteenth AMTE Conference will be held February 6-8, 2014 in Irvine, CA. Online conference registration and payment is now available on the AMTE website. You can also download and print a registration form from the AMTE website to use if you are paying your registration fee by mail or fax.

There is **no on-site registration** available; you must register prior to the conference. Registration fees vary by deadline date. Conference registration is limited; please register early.

Remember: sessions start at 9:00 a.m. on Thursday.

Meals included as part of the registration fee: Thursday: lunch, afternoon break (Note: Dinner is on your own after the General Session.) Friday: continental breakfast, lunch, afternoon break, and dinner Saturday: continental breakfast and lunch

Registration for the 18th Annual AMTE Conference will follow the fee structure below (amounts listed are US funds).

	Early Registration (Postmarked by September 30, 2013)	Registration (Postmarked by November 30, 2013)	Late Registration (Received by January 24, 2014)
Regular Member			
Regular Member Registration	\$360	\$460	\$560
Registration and 1-year membership dues	\$440	\$540	\$640
Registration and 2-year membership dues	\$512	\$612	\$712
Registration and 3-year membership dues	\$576	\$676	\$776
Full-Time Graduate Student Member			
Student member registration	\$290	\$365	\$445
Student registration and 1-year membership dues	\$330	\$405	\$485
Emeritus Member			
Emeritus Member Registration	\$360	\$460	\$560
Registration and 1-year membership dues	\$400	\$500	\$600
Registration and 2-year membership dues	\$436	\$536	\$636
Registration and 3-year membership dues	\$468	\$568	\$668
Non-Member			
Non Member Registration	\$470	\$570	\$670

For more on various AMTE 2014 conference deadlines see page 13.

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NOTE: The deadline for speaker registration is September 15, 2013.

AMTE Connections Fall 2013

AMTE Conference Friday Session: Judith Jacobs Lecture

Barbara Reys, Professor of Mathematics Education University of Missouri-Columbia



Dr. Barbara Reys is a Curator's Professor and the Lois Knowles Faculty Fellow in Mathematics Education at the University of Missouri-Columbia. She also directs the Center for the Study of Mathematics Curriculum. Dr. Reys began teaching in 1974 in Blue Eye, Missouri. For the past 30 years she has combined her love of teaching with teacher preparation and research to inform and support classroom instruction. Dr. Reys served as President of AMTE from 2009-11, as a member of the NCTM Board from 2001-04, and as a writing group leader for the NCTM *Principles and Standards for School Mathematics*. She recently served as a member of the Mathematics Work Team for the development of the Common Core State Standards Initiative and on the Conference Board of the Mathematical Sciences Writing Team that developed the new guidelines for the preparation of K-12 teachers of mathematics (MET2). Her current research focuses on the role and influence

of official curriculum documents including curriculum standards, state-level curriculum frameworks, and district-adopted mathematics textbooks.

Session Information Mathematics Curriculum: A political hot potato or a tool for school improvement?

"Curriculum" is a broad term describing statements of what is to be learned in school (standards) as well as the instructional tools (textbooks, lesson plans/materials) that teachers use to teach. It is also a means to change and improve learning opportunities for students. This session will highlight issues/events that are impacting the school mathematics curriculum. It will also suggest a path for increasing emphasis on curriculum within mathematics teacher preparation.

AMTE Conference Featured Speaker Thursday General Session

Beatriz D'Ambrosio, Professor of Mathematics Miami University, Oxford, OH



Beatriz S. D'Ambrosio is a Professor of Mathematics Education in the Department of Mathematics at Miami University in Oxford, OH. Her research interests include the study of the complexities in the preparation and in-service of k-12 mathematics teachers, examining socio-cultural issues in mathematics education, and supporting teachers to engage in action research that enhances the children's construction of mathematical knowledge. She has served on the Board of Directors of the National Council of Teachers of Mathematics, on the Editorial Board of the *Journal for Research in Mathematics Education* (JRME), and as a guest member of the Editorial Panels of special issues on equity and diversity in mathematics education for both JRME and the *Journal of Mathematics Teacher Education*.

Committee Appointments Coming Soon!

Fran Arbaugh (President) and Marilyn Strutchens (Past-President) will be making new committee appointments in October. If you are interested in serving on a committee, please complete the *AMTE Volunteer Form* (http://www.amte.net/volunteerwebform) on the AMTE website under *Quick Links* by September 28. Member log-in required.

Register early for the AMTE 2014 Annual Conference! See page 5 for costs and deadlines.

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2014 AMTE Annual Conference Policy and Issues Breakfast to Expand

This year's annual Policy and Issues breakfast at the 2014 AMTE Annual Conference will offer three important presentations and, of course, opportunities for AMTE member questions and answers.

Speakers include:

Ken Krehbiel, NCTM, Associate Executive Director for Communications Patricia Johnson, United States Department of Education, Office of Elementary and Secondary Education Karen King, NSF, Program Director

This always popular breakfast session will be followed by a session designed to plan AMTE's first Advocacy Toolkit. Once completed, the 'toolkit' should be a helpful resource for national, state, and local policy points of interest and emphasis.

Francis (Skip) Fennell, Chair, Emerging Issues Committee, McDaniel College, ffennell@mcdaniel.edu

Special Welcome to Three New AMTE Board Members

We're pleased to welcome three new members of the AMTE Board of Directors.

Kathleen Lynch-Davis is the new Sponsorship Director, replacing Jeff Wanko. Kathleen is an associate professor and program coordinator of the elementary education program in the Department of Curriculum & Instruction at Appalachian State University. She teaches mathematics education and curriculum courses and works with K-12 mathematics teachers across the region. She holds a Ph.D. in Curriculum and Instruction/Mathematics Education from Indiana University. Her research interests include supporting teacher change in mathematics and the development of proportional reasoning for teaching. As the new AMTE Sponsorship Director, Kathleen is committed to expanding sponsoring of AMTE activities to provide additional resources to our members.

Joe Champion is the new Website Director, effective on September 1, replacing Tim Hendrix. Joe recently joined the Department of Mathematics at Boise State University, where he is an assistant professor of mathematics education. Joe held a similar position at Texas A&M University - Corpus Christi during 2010-2013, teaching mathematics content courses, developing teacher-led reform projects, and researching self-efficacy and performance in mathematics. He uses his experience in educational website development to build websites for mathematics teachers and teacher educators, including MathTLC.org, STaRFellows.com, and DoMathTogether.org. As the incoming AMTE Website Director, Joe looks forward to contributing to the online presence of the mathematics teacher education community.

Babette Benken will be the new *Connections* Editor, replacing Trena Wilkerson when her term ends in February 2014. Babette is an associate professor and graduate advisor for mathematics education in the Department of Mathematics and Statistics, as well as the Director of Graduate Studies in the College of Natural Sciences and Mathematics, at California State University, Long Beach. For over 25 years, Babette has been a mathematics and teacher educator, participating from multiple perspectives: as a secondary mathematics teacher (certified in math and English), K-12 administrator, in-service professional, university professor, state-level committee member, and educational consultant. Her research interests include exploring models of teacher education, how to best facilitate teacher learning, the role of the teacher in student learning, and the function that teachers' knowledge, beliefs, and context play in shaping practice. Having served the past few years on the *Connections* Editorial Board, Babette is eager to expand her role in AMTE and on the Board. Click here for a complete listing of the AMTE Board members and here for a listing of all AMTE committees and their members.

Page 8	Candidates for President-Elect, Secretary, and Board Member-at-Large AMTE 2013 Elections				
	In November 2013, AMTE members will be asked to vote for a President, Secretary, and a Board Member-at-Large. The election will be conducted online via the AMTE website. The newly elected officers will begin terms at the close of the 2014 AMTE Annual Conference. Further information about the candidates and the election process will be posted on the AMTE website in October. The slate for each office is listed below.				
Congratulations	Candidates for AMTE President-Elect Janet Caldwell, Rowan University, Glassboro, New Jersey Christine Thomas, Georgia State University, Atlanta Georgia				
to the EMS and Susan Gay Conference	Candidates for AMTE Secretary Nicole Rigelman, Portland State University, Portland, Oregon Michael Steele, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin				
Travel Scholarship award recipients! See	Candidates for AMTE Board Member-at-Large Julie Aguirre, University of Washington Tacoma, Tacoma, Washington Timothy Boerst, University of Michigan, Ann Arbor, Michigan				
page 13 for more information.	Submitted by Maggie Niess, Oregon State University Chair, AMTE Nominations and Elections Committee, niessm@onid.orst.edu				
	AMTE/NCSM Joint Partnership Focus: Formative Assessment				

AMTE is partnering with NCSM to bring formative assessment to the forefront of the mathematics education community. One way we would like to do this is by highlighting speakers on this topic at both NCSM and AMTE affiliate conferences. For that reason, we are working to accumulate a list of names of possible speakers on formative assessment for affiliate meetings of both groups. If you would be interested in speaking at an affiliate conference on formative assessment in mathematics education, please contact Megan Burton at Megan.burton@auburn.edu. Send information regarding your interest/ expertise in the area of formative assessment, locations you would be willing to travel, fee expectations, etc.

Mathematics Education Trust Grants and Awards Due November 8, 2013

The goal of NCTM's Mathematics Education Trust (MET) is to improve mathematics education for all students. To this end, they provide scholarships, grants, and awards each year to members of NCTM and to NCTM Affiliates and in particular AMTE. The Classroom Research Grants are open to mathematics educators in conjunction with classroom teachers. This a good place to obtain small research grants that can help you in your research agenda while assisting classroom teachers.

A brief listing of the awards that are available to NCTM members during the MET's summer and winter cycles is available online: http://www.nctm.org/resources/content.aspx?id=198#more.

Mathematics Teacher Educator Journal now accepting submissions. Learn more at http:// www.amte.net/ publications/mte.

Investigating the Impact of the Common Core State Standards for Mathematics (CCSSM) on Mathematics Teacher Preparation

Jill Newton, Purdue University Denise Spangler, University of Georgia Corey Drake, Michigan State University Marcy Wood, University of Arizona Patricia Wilson, University of Georgia Sarah Kasten, Northern Kentucky University

The adoption of the *Common Core State Standards for Mathematics (CCSSM)* (National Governor's Association Center for Best Practices, & Council of Chief State School Officers, 2010) by 45 states places demands on mathematics teacher educators (MTEs) to prepare new teachers for teaching in the context of *CCSSM*. With this in mind, we recently conducted a survey of MTEs in order to gauge the impact, to date, of *CCSSM* on the preparation of K-12 mathematics teachers. We utilized snowball sampling by sending the survey to individual mathematics teacher educators and mathematics education listserves, online communities, and professional organizations, and asking recipients to share the survey link with others involved in the preparation of mathematics teachers with the hopes of collecting responses from as large and diverse group of respondents as possible, including MTEs working in states that chose not to adopt *CCSSM* at this time. Because participants could choose whether or not to answer each question, the number of responses ranged from 56 to 370 per question (262 MTEs completed the survey). Therefore, we report the corresponding "*n*" when describing the survey results for particular questions. We appreciate the overwhelming number of responses of AMTE members and are using the *Connections* as a way to share our findings expediently.

The survey asked questions in several areas: (1) Participant information (e.g., How many years have you worked with pre-service teachers (PSTs)?) (2) Program information (e.g., Approximately how many secondary mathematics pre-service teachers graduate from your program each year?), (3) Participant's approach to and relationship with *CCSSM* (e.g., What are your goals for your pre-service teachers with respect to *CCSSM*?), (4) Resources used by participants (e.g., Which online *CCSSM*-related resources do you use?), and (5) Course and/or programmatic changes resulting from *CCSSM* (e.g., What kinds of changes have you made in your program/course(s) in response to the content and/or practices in *CCSSM*?). In addition, participants were asked to share and describe an activity related to *CCSSM* that they use with pre-service teachers. In this article, we share information about the survey participants and provide an overview of the results of the survey.

Survey participant information

The vast majority (93%, n = 370) of the responding MTEs held university positions housed in either an education or a mathematics department; the ratio of education to mathematics departments was approximately 5 to 4. Thirty-two percent (n = 369) were pre-tenure faculty in tenure-line positions and 46% were tenured faculty. The courses taught by the MTEs (n = 359) were well distributed over the categories (i.e., elementary/middle/high school, content and methods courses); most represented were elementary content (47%) and secondary methods (42%). An overwhelming majority of the MTEs (97%, n = 357) interacted with PSTs as course instructors and 60% (n = 359) had at least seven years of experience working with PSTs. Approximately 20% of the MTEs (n = 358) had no K-12 teaching experience; the other MTEs were nearly equally distributed across the following categories of years of K-12 teaching experience: 1-3, 4-6, 7-10, and 11+ years.

Research was a regular part of the job responsibilities of 74% (n = 359) of those who took the survey; most (96%) of those who conducted research (n = 258) reported a mathematics education area of research as at least one of their research areas. MTEs from 45 states responded to the survey (n = 339); however, the representation was uneven, ranging from seven states with one respondent to one state with 29 respondents; 21 respondents (n = 344) reported working in non-adoption states. Sixty-four percent (n =302) of the MTEs reported that efforts were being made to enact *CCSSM* in classrooms that their program uses for field placements; an additional 31% reported that the level of enactment varies by school district. A variety of program sizes were represented in the survey results; the dominating ranges were 26-200 elementary teacher education graduates, and 6-50 secondary mathematics teacher education graduates.

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Sixty-four percent (n = 302) of the MTEs reported that efforts were being made to enact CCSSM in classrooms that their program uses for field placements.

Investigating the Impact of the Common Core State Standards for Mathematics Continued from page 9

MTEs' relationship with CCSSM

Most responding MTEs indicated that they were familiar with *CCSSM*, with 65% labeling themselves as very familiar and 34% indicating they were somewhat familiar (n = 271); very few MTEs felt they were not at all familiar (1%). When asked about discussions involving *CCSSM* (n = 272), many respondents (82%) indicated that they have had conversations with colleagues from other universities or colleges. This was a higher percentage than those reporting conversations with colleagues in the respondent's own School/College/Department of Education (73%) or Mathematics Department (60%). Many MTEs also indicated they had conversations about *CCSSM* with K-12 colleagues (75%). When asked how they had interacted with *CCSSM* (n = 272), most responded that they had read the document (78%). Many others (67%) responded that they had attended professional development or meetings about *CCSSM* (18%); 3% of the MTEs said they had not interacted with *CCSSM*.

The MTEs were asked to respond to a series of statements about *CCSSM* on a five-point Likert scale from "strongly disagree" to "strongly agree." The majority of the respondents agreed or strongly agreed that (1) *CCSSM* is a political document (59%, n = 265), (2) *CCSSM* addresses both career and college readiness (66%, n = 265), (3) *CCSSM* is an improvement both on their own previous state standards (65%, n = 263) and on the system of each state having their own set of standards (83%, n = 263), and (4) the success and broader impact of *CCSSM* will depend on the associated assessments (73%, n = 263). When asked what PSTs should know and be able to do with *CCSSM*, several experiences emerged as "very important" to the majority of MTEs: (1) Awareness of *CCSSM* (90%, n = 263), (2) Use of *CCSSM* in lesson planning (73%, n = 262), (3) Opportunities to analyze other documents using *CCSSM* (57%, n = 261), and (4) Ability to enact *CCSSM* in their field placement classrooms (71%, n = 262).

MTEs' use of CCSSM resources

Approximately 20-25% of MTEs (*n* = 248-279) reported using the *Illustrative Mathematics Project* website, the *Smarter Balanced* website, *Progressions* documents, NCTM's *Common Core Tools*, the *Inside Mathematics* web site, the *Common Core Toolbox*, and *Tools for the Common Core Standards* with PSTs. However, greater numbers of MTEs reported being unaware of these resources (approximately 30-45%). More than half of the respondents were unaware of the existence of *Common Core Works*, the hexagon maps of learning trajectories, *Implementing the Mathematical Practices*, and *Common Core Conversation* web sites. (It is possible that because so many of these sites contain the word "tools" or "toolbox" respondents did not accurately distinguish between them.)

The most commonly used print resources, both with PSTs and for MTEs' own use, were the *CCSSM* document (60%, n = 329) and state versions of *CCSSM* (42%, n = 278). Resources developed by a particular state were the third most popular resource with approximately 30% (n = 273) of respondents saying they used them with PSTs and 27% saying they used them for their own use. Respondents were given an opportunity to identify other resources they use related to *CCSSM*; most did not specify whether they used them themselves or with PSTs. The most commonly cited resources were existing curriculum materials/K-12 textbooks, self-developed materials, and NCTM standards. Several respondents identified specific print and online resources, such as journal articles, books, and websites that they used; no particular resource was cited by more than one respondent.

Course and program changes resulting from CCSSM

MTEs were asked to report the amount of change that their program will require in terms of content preparation, pedagogical preparation, field experiences, and assessments in the context of *CCSSM*. About half of the programs (n = 235-252) sensed "some" need to change in all four areas; however, the

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2014 AMTE Annual Conference Information

See page 4 for more information.

Investigating the Impact of the Common Core State Standards for Mathematics

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most needed change was reported in the field experiences offered in the program. What is not clear from the survey data and would require further investigation is the nature of the perceived required changes to field experience. Is more time needed or different experiences needed or both? In addition, some programs may have said "none" or "little" changes are needed because changes have already been made.

More than half of the MTEs (n = 290) reported that their programs have begun to make changes in individual courses and/or more significant changes (i.e., coordinated changes in multiple courses and/or program wide changes). Twenty-four programs offered additional comments about their current level of changes. Of these, three MTEs stated that no changes have been made because they work in a non-adoption state. Another three MTEs reported that few changes have been made because their programs are basically already aligned with the vision of CCSSM; one of these added that, "We mainly have consulted the document when we are unsure if we should try to include a topic, such as boxplots." Three MTEs described changes that have taken place that may be partially a result of the release of CCSSM but also related to other state-led initiatives. For example, one respondent wrote "there is a sea change in [state name] regarding teacher preparation, and it is hard to separate the implementation of CCSS from all of the other initiatives that are coming down the pipeline." Six MTEs further commented on the extent of the coordination efforts at their universities, mentioning discussions across departments and planned upcoming work. Finally, four MTEs described particular changes being made (e.g., "Discussing changes to program to include a modeling course," "More professional development targeted to CCSS topics"). When asked about changes to their own courses, 91% of the MTEs (n = 226) reported making at least minor changes (24% reported making major changes). The most common types of change included adding attention to specific mathematics content or practices (73%) and linking already existing activities to CCSSM (62%).

Summary

Given the widespread adoption of *CCSSM* across the United States and its potential for placing new demands on K-12 mathematics teachers, it follows that teacher preparation programs would stay abreast of these new demands and modify programs to provide support to PSTs for this new context. This paper and the associated survey data collection was a preliminary step in examining the impact of this policy implementation on mathematics teacher preparation programs. More detailed analyses of this data (e.g., descriptions of the activities provided by MTEs) will be disseminated in upcoming venues, including conferences (e.g., PME-NA) and journal publications.

References

National Governor's Association Center for Best Practices, & Council of Chief State School Officers. (2010). *Common core state standards for mathematics*. Washington, DC: Authors.

Follow AMTE on Facebook and Twitter!

Visit the AMTE website to like us on Facebook (facebook.com/AMTE.net) and participate in discussions with hundreds of your colleagues. You can also follow AMTE on Twitter (@AMTEnews) for conference updates and other news.

Click here to

donate to the Susan Gay Travel Scholarship fund.

Check the AMTE website for the latest on • 2014

Conference Registration and Housing www.amte.net

AMTE Connections Fall 2013

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Page 12	Nominations Sought for AMTE's 2014 Early Career Award				
	The Early Career Award is intended to recognize mathematics teacher educators who, while early in their career, have made distinguished contributions and show exceptional potential for leadership in one or more areas of teaching, service, and/or scholarship.				
	Submitting Nominations: Electronic submissions should be sent to AMTE Webmaster Tony Nguyen at tonguyen@projects.sdsu.edu and must be received by October 15, 2013 . Details for submission can be found at http://www.amte.net/about/awards.				
Deadline	Nominations Sought for AMTE's 2014 Excellence in Scholarship in Mathematics Teacher Education Award				
Nominations for the 2014 Early Career	The 2014 AMTE Excellence in Scholarship Award is intended to recognize a colleague for a unique contribution in scholarship that has made a significant and lasting contribution to mathematics teacher education, directly and indirectly.				
Award must be received by October 15, 2013 and for	Deadline for Nominations Nominations for the Excellence in Scholarship in Mathematics Teacher Education must be received by September 30, 2013 .				
Excellence in Scholarship by September 30, 2013.	Submitting Nominations Electronic submissions should be sent to AMTE Webmaster Tony Nguyen at tonguyen@projects.sdsu.edu. Details for submission can be found at http://www.amte.net/about/awards.				
	Affiliato Nows				

Affiliate News

The **Hoosier Association of Mathematics Teacher Educators** (HAMTE) is planning for the fall conference, which we co-sponsor with the Indiana Council of Teachers of Mathematics (ICTM). We are looking forward to a visit from Cathy Humphries and a series of talks from mathematics teacher educators from across the state. HAMTE members participated in a series of summer mathematics education summits and are conducting research that investigates the models of algebra remediation across Indiana.

Visit the AMTE Website for information on future webinars for MTEs.

The Missouri AMTE affiliate, the **Missouri Mathematics Association for the Advancement of Teacher Training** (MAT)², will celebrate its 50th year as an organization this year. In May, the group invited mathematicians and mathematics educators to a joint conference to discuss the recommendations of the MET II document and the implications for teacher education. Jim Lewis from the University of Nebraska provided the keynote address for the conference. Participants from Missouri, Kansas, Iowa, and Nebraska attended the event and organizers are planning a similar conference for spring 2014. For more information about (MAT)² visit www.nwmissouri.edu/mathcsis/ matsquared.

Association of Mathematics Teacher Educators-Texas (AMTE-TX) will host its first annual Fall Conference on September 28, 2013 at the University of Houston, Cinco Ranch Campus in Katy, Texas. AMTE President Fran Arbaugh from Penn Sate University will be the keynote speaker. Information concerning sessions and registration can be found at http://www.amte-tx.org/. For more information contact Trena L. Wilkerson, President of AMTE-TX at Trena_Wilkerson@baylor.edu or Sandi Cooper, AMTE-TX Fall Conference Chair, Sandra Cooper@Baylor.edu.

Affiliate news submitted by Megan Burton, AMTE Affiliates Director, Auburn University, megan.burton@auburn.edu

Mathematics Teacher Educator-Call for Manuscripts

Did you teach this summer? Conduct professional development workshops? Analyze some data? Please remember *Mathematics Teacher Educator* as an outlet for your work! The turnaround time from submission to decision is less than 3 months and time to publication for accepted manuscripts is currently less than one year!

We seek manuscripts that explain how you have addressed a challenge or issue common to many mathematics teacher educators and the results of your efforts. You need not have conducted an IRB-approved research study from the outset; you may have evidence from student work, student comments, or other ways of demonstrating the results of your intervention. For a detailed description of how to think about "data" and "evidence" for *MTE* articles, see the editorial in the second issue, available as a free preview here: http://www.nctm.org/publications/article.aspx?id=35683.

MTE manuscripts are not limited to reports of "interventions" but may also include reports of how you used an existing tool (such as a video or observation instrument) in a new way or a scholarly take on a programmatic issue or external factor that affects mathematics teacher education (such as the *Common Core State Standards*, new accreditation standards, increasing numbers of English Language Learners in schools). See http://www.nctm.org/publications/content.aspx?id=29320 for the full call for manuscripts.

As an AMTE member, you have FREE access to *MTE*. If you are also an NCTM member, use your NCTM log in to access the journal online. If you are not an NCTM member, you should have received an email from NCTM@nctm.org with your log in information. If you did not receive that email or cannot find it, please email NCTM@nctm.org and ask for your log in credentials.

Watch your email for Volume 2 Issue 1, due out very soon!

EMS Scholarship & Susan Gay Conference Travel Scholarship Awardees Announced!

Congratulations to the recipients of the Elementary Mathematics Specialists Scholarships:

- Lindsey Atkinson, Arlington, VA
- Rebecca Fowler, Kansas City, MO
- Kellie Petrick, Hillsboro, OR

And the recipients of the Susan Gay Conference Travel Scholarships:

- Matthew Campbell, Oregon State University
- Jodi Fasteen, Portland State University
- Courtney Lynch, Pennsylvania University
- Amanda Sawyer, University of Georgia

Visit the AMTE website for more information on the award recipients and how to apply for the scholarship.

2014 AMTE Annual Conference-Irvine, CA Deadlines to Remember!

Registration Deadline for Speakers: September 15, 2013

Early Registration Deadline: September 30, 2013

Regular Registration Deadline: November 30, 2013

Deadline for Hotel Reservations: November 30, 2013

Conference Dates: February 6-8, 2014

Visit the AMTE Affiliates page for more information on affiliates, resources for affiliates, how to locate one near you, and the process for becoming an AMTE affiliate.

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Pinterest: What is all the Picture Buzz About?

It has been said a picture is worth 1,000 words, but what if that picture could connect you to over hundreds of different ideas and each of those pictures could connect you to thousands of more ideas? That's the idea behind the latest social media craze called, *Pinterest* (www.pinterest.com) (pronounced pin-ter-est). *Pinterest* is the third largest social network, behind Facebook and Twitter, with over 70 million users worldwide (http://thenextweb.com/socialmedia/2013/07/10/semiocast-pinterest-now-has-70-million-users-and-is-steadily-gaining-momentum-outside-the-us/), generating over 11 million visits per week (http:// news.cnet.com/8301-1023_3-57347187-93/pinterest-crazy-growth-lands-it-as-top-10-social-site/? tag=mncol:txt).

For more online mathematics teacher educator resources visit the AMTE website.

Nuts & Bolts: Pinterest is a social bookmarking site that captures photos from websites or uploaded by the user to "pin" them to "pinboards" (think along the lines of a vision board) that you create. The photos link back to the website. The social aspect, and arguably the most powerful, is the ability to follow other people and their boards, "re-pinning" and commenting on items. Once a user creates a board and adds pins, other users can "repin", meaning they can "pin" the image to their own boards. Once an image is pinned, other users can click to see who else has pinned it, where it has been pinned to, where the original pin is from, who has liked it, commented on it, repinned it, and even similar pins to the pin you are looking at.



Using it in your education courses: While early pins were more geared towards home decorating, fashion, etc., teachers began using *Pinterest* to collect thoughts and ideas for their classrooms. It became so popular, that *Pinterest* now has an "Education" Category on its main interest page. Educators can use pinboards to get ideas for lesson plans, classroom organization, bulletin boards, classroom management, etc. Educators can pin sites for later referral. You can even use it with student projects, having them pin and organize sources and collaborate on projects (http://www.zdnet.com/blog/igeneration/pinterest-as-a-learning-tool-do-the-two-compute/16100).

Limitations:

- Right now you can't pin to multiple boards at once. Although the boards act as "tags" to organize items, you have to re-pin multiple times to get the pin onto different boards within your account.
- Sometimes the pins don't link correctly to the original sources. *Pinterest* has done a nice job of putting measures in place (you can now report) to limit this, but it can still exist.

Getting started: Obtaining an account is free and easy. Just head to: http://about.pinterest.com/. You do not have to have a Facebook or Twitter account, although you can connect them if you wish. For popular education boards I recommend the following:

http://pinterest.com/ronnitallent/classroom/ http://pinterest.com/ginaw83/all-things-algebra/ <u>http://pinterest.com/numbrulemyworld/</u> http://www.pinterest.com/4mulaFun http://pinterest.com/alkerr1975/

Feel free to follow my board that I have my preservice teachers use as a resource: http://pinterest.com/magsondoodie/education/

Happy Pinning!



AMTE Connections Fall 2013

Margaret J. Mohr-Schroeder, University of Kentucky, *m.mohr@uky.edu* Chair, AMTE Technology and Mathematics Teacher Education Committee

Important Dates to Remember

<u>2013</u>			
September 27-29	4th International Realistic Mathematics Education Conference (RME4), Boulder, CO		
October 16-18	NCTM Regional Conference, Baltimore, MD		
October 23-25	NCTM Regional Conference, Las Vegas, NV	Online at www.amte.net	
October 31-November 3	AMATYC Annual Conference, Anaheim, CA		
November 6-8	NCTM Regional Conference, Louisville, KY	Membership/ Renewal Forms	
November 14-16	SSMA Annual Convention, San Antonio, TX		
November 14-17	PME-NA Conference, Chicago, IL	2014 Conference Information	
<u>2014</u>			
February 6-8	AMTE Annual Conference, Irvine, CA	Position Papers	
February 27-March 1	RCML Conference, San Antonio, TX	Award & Election Information	
April 7-9	NCTM Research Conference, New Orleans, LA	D	
April 9-12	NCTM Annual Meeting, New Orleans, LA	Resources	
June 26-28	TODOS Conference, Chandler, AZ	Webinar Opportunities	
October 29-31	NCTM Regional Conference, Indianapolis, IN	Othor	
November 12-14	NCTM Regional Conference, Richmond, VA	Opportunities	
November 13-16	AMATYC Annual Conference, Nashville, TN		
November 19-21	NCTM Regional Conference, Houston, TX		
<u>2015</u>			
February 12-14	AMTE Annual Conference, Orlando, FL		

Comments, questions, and submissions for AMTE *Connections* should be directed to: Trena L. Wilkerson, AMTE *Connections* Editor Baylor University Department of Curriculum & Instruction One Bear Place # 97314 Waco, TX 76798 Trena_Wilkerson@baylor.edu



