



OFFICIAL
NEWSLETTER
OF THE
HOOSIER
ASSOCIATION
OF
MATHEMATICS
TEACHER
EDUCATORS

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HAMTE Crossroads

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Reflections from the HAMTE President



HAMTE had a great start of its third year this last Fall. It was exciting to see many HAMTE members in attendance at our Annual Business Meeting in conjunction with the ICTM conference! We should be proud of our many accomplishments this past year. First, our presence at the State level continues to increase. We can see this from the number of HAMTE members who are involved in committee work with the Indiana Department of Education. Second, the number of HAMTE sessions at ICTM increased and we collaborated with ICTM to invite Cathy Humphreys as a plenary speaker. For the HAMTE strand sessions, we had a 200% increase in HAMTE speakers and 100% increase in higher education institutions represented from the year before.

Third, we launched our website and were more intentional trying to use our Learning Connection forum. See our website at: <http://hamte.org>. Fourth, the HAMTE research team collected survey results on the state of algebra remediation in Indiana, and they are now in the process of preparing a report. Fifth, we reviewed the draft of NCTM's "Principles to Actions: An Urgent Agenda for School Mathematics" and submitted feedback to the committee. Thank you to all of you who have been involved in these tasks.

The fall was also a time of transitions for our organization. Jill Newton is now Past-President and Jean Lee ended her term as Secretary. It will be hard to replace Jill's creativity, energy and enthusiasm, but I am glad she remains a member of our Board. Jean always kept us organized and on track, we will need to learn to do that on our own. Craig Willey ended his term as a member of the Nominations and Elections Committee, and started as our new Secretary. Finally, Ron Benbow and Liz Brown served in our Nominations and Elections Committee. Many thanks to all of them for their service.

While we should be excited about our accomplishments, there is also a lot of work our organization can still do. There are reasons to be optimistic about mathematics education in Indiana, such as having a new State Superintendent of Public Instruction. More recently Indiana's NCTM Representative for ICTM, Bill Reed, was appointed as Secondary Mathematics Specialist at the IDOE. Despite these advances, groups in the State continue efforts to threaten the quality of teacher preparation, such as the proposed REPA III legislation. Also, public education continues to face challenges, such as voucher programs that are not appropriately used. Lastly, the State has spent one year reviewing standards instead of devoting all of our efforts to implementation.

As I start my term as HAMTE President I wonder about our priorities. We should certainly continue and expand the good work we have been doing. We plan to reach out to NCTM to have a day for HAMTE sessions and our annual business meeting concurrently with the NCTM Regional Meeting in Indianapolis held October 29-31, 2014. We are also excited to be part of the Indiana Mathematics Education Research Symposium (IMERS) this Spring. More information on IMERS can be found on pg. 5. We also look forward to seeing those of you attending AMTE in February at the Affiliates breakfast on Saturday February 8, 2014. What are other tasks and efforts HAMTE should undertake? Please contact any of the HAMTE Board members and share your thoughts.

— Enrique Galindo

Best Practices for Online Teaching

— Kathryn G. Shafer, Ball State University

Editor's Note:

This is the first of three installments in which Kathy Shafer shares her suggestions for teaching mathematics online

I currently teach online graduate courses for BSU (Action Research, Technology for Mathematics Teachers, and Probability and Statistics). I have used Adobe Connect Pro and GoToMeeting as platforms for 90-minute weekly class sessions. In 2012, I produced webinars for Key Curriculum (GoToTraining) and also for faculty at BSU (Blackboard Collaborate). What follows are some tips and suggestions I have collected with regard to preparing for online teaching; many of these tips apply to the f2f (face-to-face) teaching environment when projecting your computer screen.

Preparing your Desktop

- Remove files, folders, and icons from your desktop. Consider moving program icons to the task bar (Windows) or the doc (Mac).
- Set your desktop's background to a solid neutral color. Refrain from using pictures of family members. You can look past the picture, but your students will focus on the image.

- Close Skype, Outlook or any other program that will cause pop-ups on your desktop and/or "dings" through your speaker.

- Close toolbars or tool ribbons that you don't need because they take up space on the screen and can be distracting.

- Hide your bookmark toolbar when you are showing a webpage because students will turn their focus toward looking at your list of bookmarks. [In Firefox, go to **View | Toolbars** to toggle off the bookmark toolbar.]

No matter what, make sure that everything on your screen is ready for politically correct public viewing. Back in 2011, a guest speaker had bookmarked a link to a site that was not PG-rated. I was informed the next day that my pre-service teachers visited the site DURING CLASS. It was a good lesson on what not to do. Since I have teachers screen share during class, I caution them to clean up their desktop before accepting the share setting.

Test the System

When teaching an online course, note that your stu-

dents might not be using the same technology you are using. Testing the program from different computers (Mac vs PC) with different browsers (Firefox, etc.) and from different locations (hard-wired and wireless) is important. The program GoToMeeting consists of a three leveled platform. The levels, from highest to lowest, are organizer, presenter, and participant. As a teacher, you will work from the organizer level. Program tools at each of these levels vary, so I suggest a few practice sessions with your colleagues or students where you take on each of the roles. Repeat this activity when new updates are released. In Adobe Connect Pro, I promote all students to presenters due to the tools available at that level.

In upcoming newsletters, I will share tips on audio and video communication, preparing class materials and class procedures.

IDOE Announces Secondary Math Specialist

Bill Reed has been named as the new Secondary Math Specialist of the Indiana Department of Education effective December 16th. Bill is a native Hoosier who grew up in Indianapolis. He attended Warren Central High School and received his Bachelors of Science degree in Mathematics from Butler University. He has 30+ years of teaching math at the secondary level. He began his teaching career at North Central High School in 1982. He taught math at the secondary and community college levels in Northern California for 13 years. For the past 14 years he has been a math teacher at Hamilton Southeastern High School.

He may be contacted at wreed@doe.in.gov or 317-232-9114.

Bill urges us to encourage our mathematics education students to nominate a high school math/science teacher that inspired them for a Presidential Award for Excellence in Math and Science Teaching (PAEMST). Please pass along the website <https://paemst.org> to your students. A flyer regarding the program is also included with the e-mail delivering this issue of the HAMTE newsletter.

HAMTE Provides Feedback on NCTM Draft

Several HAMTE members joined to provide feedback on the public draft of NCTM's Principles to Action: An Urgent Agenda for School Mathematics. A team was organized by current and past HAMTE Board members, each of whom reviewed one Principle and then shared the review with another HAMTE member who reacted to it. While led by HAMTE board members, the opinions in each review are those of the people who produced them. The feedback was passed on to the team of writers in early November was disseminated to the HAMTE membership via e-mail. We are excited about this new document from NCTM and look forward to its release.

Thank you to Rachael Aming-Attai, Betsy Berry, Enrique Galindo, Rick Hudson, Jean Lee, Sue Mau, Travis Miller, Doris Mohr, Jill Newton, Kathryn Shafer, and Craig Willey for providing this feedback under a tight deadline.

Connect with HAMTE!

Join us on IDOE's Learning Connections: <https://learningconnection.doe.in.gov> (Hoosier Association of Mathematics Teacher Educators Community)

Visit our website: www.hamte.org

Submit an article to the newsletter, *HAMTE Crossroads*. E-mail your submission to Travis K. Miller, Newsletter Editor, at tmiller@uindy.edu. We now publish three issues per year (September, January and May).

Become a member! Send a completed membership form and \$20 (\$10 for students and emeritus faculty) to HAMTE Treasurer Sue Mau, 2101 E. Coliseum Blvd., Fort Wayne, IN 46805. The membership year runs October 15 through October 15 (to coincide with our annual fall meeting).

Engineering STEM Success

— Sheryl Stump, Ball State University

Engineering STEM Success is a three-year Mathematics and Science Partnership with Warsaw Community Schools and Ball State University. The WCS leadership team members are instructional coaches Christine Bonifield, Kyle Carter, and Linda Kline, and middle school principal JoElla Smyth. The participants are mathematics and science teachers in grades 6-12. The Ball State team members are Sheryl Stump, Joel Bryan, and Tom McConnell.

The project commenced with a two-week summer institute in July 2013. Morning sessions were devoted to specific issues in mathematics or science.

Mathematics sessions, led by Sheryl, focused on fractions, proportional reasoning, and algebra as well as strands of mathematical proficiency, levels of cognitive demand, Common Core Mathematical Practices, and teaching mathematics through inquiry. Science sessions, led by Joel and Tom, focused on energy, static electricity, photosynthesis, electromagnetism, and biomass conversion, and included discussions about the nature of science and teaching science through inquiry. Mornings also included an introduction to Lesson Study with practice sessions conducted at Warsaw

Community High School. The afternoon sessions brought mathematics and science teachers together to focus on Project Based Learning. Joel, Tom, and Sheryl led the teachers through the various components of PBL and the teachers worked in teams to develop mathematics-and/or science-focused projects to be implemented in their classrooms.

During this academic year, the group is meeting to conduct two rounds of Lesson Study. Each round includes a half-day of release time for collaborative lesson development and pre-lesson discussion and another half-day for lesson implementa-

tion and post-lesson discussion. In between the two rounds, the group will meet for a full day to focus more deeply on teaching mathematics and science through inquiry.

Plans for the next two years include working to integrate mathematics, science, and engineering, with Warsaw engineers involved in the planning. Preliminary evaluation measures have been quite positive, most likely due to the highly collaborative *partnership* that has evolved between the WCS and BSU leadership teams.

2013 Indiana NAEP Scores Policy Brief Available

Mike Roach and Peter Kloosterman at IUB have prepared a policy brief on the 2013 Indiana NAEP scores. In addition to summarizing the results, the brief analyzes reasons why Indiana had substantial improvement in grade 4 scores between 2011 and 2013. Their conclusion is that Tony Bennet's claim that the gains were due to his teach-

er accountability policies is not supported by the data. Rather, the gains were due to the retention of weak students in grade 3 because of IREAD – with the students who did not pass IREAD removed from the grade 4 pool the average scores at grade 4 went up. The full brief is available on the IU-NAEP project website (<http://ceep.indiana.edu/ImplicationsFromNAEP/>)

NCTM Regional 2014

The 2014 NCTM Regional Conference will be held October 29-31, 2014, at the Indiana Convention Center in downtown Indianapolis. The focus of the conference will be *Reaching Today's Student through Innovative Teaching*.

Attending AMTE 2014?

Don't forget to join HAMTE at the Saturday morning affiliate breakfast and meeting! We hope to see you from 7-8 AM in Salon C/D.

REPA III

Public comments regarding REPA III may be submitted electronically through January 31, 2014 at <http://www.in.gov/sboe/REPAIIIcomment.htm>

Comments from Vic Smith and the Indiana Coalition for Public Education are available at <https://www.facebook.com/Ritz4Education/posts/340498402759455>

The REPA document may be accessed at <http://www.in.gov/legislative/iac/20131218-IR-511130399PRA.xml.pdf>

IMERS Research Symposium

The third annual Indiana Mathematics Education Research Symposium (IMERS) will take place on March 28, 2014 at IUPUI. The HAMTE board wishes to support this series, and HAMTE secretary Craig Willey has joined the IMERS organizing committee. The HAMTE board encourages the membership to participate in this event and to invite colleagues and graduate students to submit proposals.

Proposals should be submitted electronically (as a Word document) by Monday, February 24, 2014 to etillema@iupui.edu. If you need a copy of the call for proposals please contact Craig Willey (cjwilley@iupui.edu).



Willey

HAMTE ELECTION RESULTS

Craig Willey, IUPUI, was elected as the next HAMTE secretary. Ballots were cast online, and results were announced at the HAMTE business meeting on Sunday, October 20, 2013 during the ICTM Conference.

The HAMTE board also expressed its appreciation to Jean Lee, outgoing secretary and to Ron Benbow, Nominations and Elections representative.

Mathematical Practices in Action! Video Series

The Indiana Department of Education recently released a set of video-based professional development materials, entitled Mathematical Practices in Action! The videos are designed to help teachers understand the Common Core State Standards (CCSS) for Mathematical Practice.

Each session includes a supporting PowerPoint and a video of a K-6 Indiana classroom that is engaging in a Common Core lesson that embeds some of Mathematical Practices. The videos provide in-service or preservice teachers an opportunity to discuss implementation of the Mathematical Practices and how students engage in these practices.

When the series is finalized, it will include seven videos at six different grade levels, and will include lessons on number sense, whole number operations, fraction sense, measurement, and ratios.

The materials were developed by Heather Baker (Indiana Department of Education), Crystal Walcott (IUPUI-Columbus), Doris Mohr (University of Southern Indiana), and Rick Hudson (University of Southern Indiana). The authors welcome opportunities to discuss how other mathematics teacher educators and professional development providers are using these materials.

Campus Updates across Indiana...

Indiana University—Bloomington*

Differentiation Study. Amy Hackenberg and graduate students Fetiye Aydeniz, Ayfer Eker, Robin Jones, Serife Sevis, and Erol Uzan have begun the first year of project IDR²eAM [Investigating Differentiated Instruction and Relationships between Rational Number Knowledge and Algebraic Reasoning in Middle School]. The purposes of this 5-year project are to investigate how to differentiate mathematics instruction for middle school students at three different levels of reasoning and to understand how students' rational number knowledge and algebraic reasoning are related at each of these levels. The first two years of the project focus on design experiments with middle school students; years 3-5 involve classroom teachers in learning to differentiate instruction.

Indiana University—Purdue University Fort Wayne*

Fall Sabbatical. Jim Hersberger was on sabbatical during the fall semester of 2013. A portion of his plans included participating in the Realistic Mathematics Education Conference (RME 13) at the Freudenthal Institute-US at the University of Colorado, Boulder in September.

Spring Sabbatical. Betsy Berry will be on sabbatical during the spring semester. She will be working with Dr. Lyn English and Dr. Tom Cooper at the Queensland University of Technology in Brisbane Australia for several weeks.

Teaching Honors. In April 2013, Betsy Berry was awarded the IPFW Sigma Xi Science Teacher of the Year Award for 2013.

University of Indianapolis

100Kin10 Grant. The University of Indianapolis is among five of the Carnegie Corporation Competition Winners to be awarded a 100Kin10 grant. The grant will expand our Elementary Teacher Education program by developing a virtual community of practice among our teaching candidates, partner teachers, and faculty in order to impact candidates' and in-service teachers' pedagogical content knowledge and reasoning as defined by the Common Core State Standards for Mathematics (CCSSM). Contact the grant PI's John Somers (jsomers@uindy.edu) or Rachael Aming-Attai (amingattair@uindy.edu) for more information.

University of Southern Indiana

Recruitment Grant. The University of Southern Indiana recently received a grant for over \$835,000 from the Indiana STEM Teacher Recruitment Fund, administered by the Indiana Education Roundtable. The purpose of the grant is to increase the number of content-rich, classroom-ready science and mathematics teacher candidates graduating from USI.

* The editor expresses apologies for omitting these IUB and IPFW updates from the last issue.

Have news to share from your campus? Send an e-mail to tmiller@uindy.edu



HAMTE Members Pose at the October 2013 meeting with Cathy Humphreys (at left), the invited plenary speaker at ICTM's 2013 conference.