



# HAMTE Crossroads

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## INSIDE THIS ISSUE:

Indiana & CCSS 2

NCTM & AMTE Alerts 3

Algebra Remediation 4

HAMTE Elections 4

Summer Math Summits 5

ICTM Conference, HAMTE Elections 7

Campus Updates 8

### Newsletter Editor:

Travis K. Miller,  
University of Indianapolis  
tmiller@uindy.edu

## Reflections from the HAMTE President



As the last few months of my term as HAMTE president wind down, I reflect on our successes, challenges, and areas where we will need to continue to work to meet our potential as an organization. First, the good news! We have gotten the organization officially up and running, including affiliating with AMTE, establishing a constitution, setting up a treasury, producing a newsletter, and collaborating with ICTM's (Indiana Council of Teacher of Mathematics) annual conference. HAMTE currently has 52 members (37 faculty, 15 graduate students) representing 13 universities. Second, a research group of HAMTE members was formed last year and has developed a survey to investigate algebra remediation

currently in use in Indiana high schools; we are currently in the process of distributing the survey to principals for the Indiana Department of Education (IDOE). Third, we have begun to establish a mathematics education presence at the state level, including a joint HAMTE and ICTM meeting with Superintendent Glenda Ritz, participation in three summer math summits that brought together stakeholders to discuss K-12 mathematics instruction in Indiana. Our President-elect, Enrique Galindo, testified in support of CCSSM at the State House on August 5, 2013. These accomplishments are the result of work by many HAMTE members – thanks to everyone!

We have also faced several challenges and have more work to do in order to thrive as an organization. First, a major challenge has been the lack of continuity of individuals working in mathematics education at the IDOE. In my short tenure in Indiana, I have seen people in these positions come and go, most recently and sadly, Laurie Ferry and Heather Baker; it is difficult to collaborate with the Department given the ever-changing cast of characters. Second, the number of session proposals at our first HAMTE conference last October was somewhat disappointing; however, the good news is that participation for this year's conference is much improved, including 14 proposals representing 11 universities. Finally, we need to continue to work on ways to communicate more effectively and efficiently with one another...we currently use primarily group e-mails and the newsletter; we are investigating the possibility of developing a HAMTE website and/or using the Learning Connection more strategically.

On a more personal note, my election as HAMTE President was likely more because I organized the meeting in April 2011 and less a reflection of my vast experience and knowledge of Indiana. However, given the responsibility, I have learned a lot and had the opportunity to collaborate with and get to know mathematics educators around the state – what a wonderful group! When I began my job at Purdue five years ago, I thought it would be for the short term. I pictured myself eventually working back in Michigan, nearer to my home. My experiences with HAMTE have impacted my decision to hang around a little longer...Indiana is lucky to have such a committed group of mathematics educators and I feel lucky to be among them. I am excited to have the privilege to hand the gavel (so to speak) off to Enrique Galindo, with nearly 20 years of experience working in Indiana at the HAMTE business meeting in October...we will definitely be in competent hands! I'm also looking forward to attending the conference, seeing all of you, and having dinner with the HAMTE folks on Sunday evening – hope you can join us!

It has been a pleasure serving you and I look forward to many more years working with you all!

— Jill Newton

# Indiana and the Common Core Standards

— Enrique Galindo, HAMTE President-Elect

*“There is certainly a lot to be gained from moving away from Indiana’s current pass/fail ISTEP testing and embracing assessments aligned with CCSSM.”*

While many teachers and educators in Indiana have been working for several years on understanding the Common Core State Standards for Mathematics (CCSSM) and learning how to implement them, our legislature created a committee to study issues related to Common Core standards, and our state withdrew from the PARCC assessment consortium.

The legislative study committee is charged with completing their report by November 1<sup>st</sup> 2013, and the Indiana State Board must adopt college and career readiness educational standards by July 1<sup>st</sup> 2014.

The legislative committee has held hearings about Common Core and the HAMTE board has been following the hearings and submitting oral and written testimony. The first hearing was held August 5 and HAMTE board members Travis Miller and Jean Lee attended with me and I presented testimony. The second hearing was September 10 and HAMTE members Gina Borgioli Yoder and Kathryn Shafer attended and we submitted written testimony.

As HAMTE members may

recall, the HAMTE board polled the membership early this year and we received strong feedback indicating we should endorse Common Core. In August we saw more evidence that we are not alone in this effort as the Conference Board of the Mathematical Sciences (CBMS), representing mathematics-affiliated professional societies in the United States, released a "Statement by Presidents of CBMS Member Professional Societies" which supports the Common Core State Standards for Mathematics.

I organized my testimony around seven main reasons behind our support of CCSSM: 1) CCSSM are coherent, focused, and rigorous, 2) CCSSM are research based, 3) CCSSM include the standards for mathematical practice, 4) CCSSM are designed for college and career readiness, 5) CCSSM address equity, 6) The advantages of having common standards, and 7) CCSSM ensure competitiveness.

The focus of the second hearing was on assessment. The testimony submitted was based on three main issues: 1) New educa-

tional expectations require new means of assessment, 2) The majority of states are preparing for the new Common Core assessments, and 3) Current state assessments do not assess deeper learning skills. There is certainly a lot to be gained from moving away from Indiana’s current pass/fail ISTEP testing and embracing assessments aligned with CCSSM. A third and last hearing focusing on the cost of implementing Common Core is scheduled for October 1<sup>st</sup>, 2013.

Important legislative decisions are being made in Indiana that can have a lasting impact on the educational system in our state. HAMTE members have valuable expertise that can help ensure that our legislators make informed decisions. It is important that we all follow this process and contribute our expertise for the benefit of mathematics education in our state.

*Editor’s Note: The full text of Enrique Galindo’s testimony is available from HAMTE’s community on IDOE’s Learning Connection: <https://learningconnection.doe.in.gov>.*

# Hearings on Common Core in Indiana

During the “pause” on implementation of the CCSS in Indiana, the Interim Study Committee on Common Core Educational Standards has been conducting a series of public hearings in the Senate chamber of the Indiana State House. The first two hearings took place on August 5 and September 10.

One additional hearing remains scheduled for October 1st at 1 PM. HAMTE encourages our membership to attend.

The committee maintains a webpage of past hearing resources at <http://www.in.gov/>



**HAMTE President-Elect Enrique Galindo speaks at the August 5, 2013 hearing on Common Core in Indiana.**

[legislative/interim/committee/core.html](http://www.in.gov/legislative/interim/core.html). Included are notices, agendas, hearing minutes, and committee reports. Video recordings of the hearings are also available online at <http://www.in.gov/legislative/interim/committee/corevideo.html>. Tes-

timony from HAMTE President-Elect Enrique Galindo may be viewed on the August 5, 2013 video, beginning at the 6 hours and 40 minute marker. Testimony alternated between individuals speaking in favor of and opposed to adoption of the

CCSS in Indiana. The lengthy docket of speakers caused debate to extend into the evening hours, lasting over seven and a half hours.

## Zalman Usiskin at Purdue on September 26

On September 26, Zalman Usiskin will present a seminar entitled, “The Shape of Geometry and the Geometry of Shape.” All are welcome to attend.

In geometry, “shape” is usually mentioned informally with similar figures and not given a formal definition. In this talk I argue that four changes in recent decades in secondary school

geometry teaching – approaching congruence and similarity through transformations, integrating geometry with algebra, inserting applications into the geometry curriculum, and using dynamic geometry technology – can be viewed as ways in which the conception of “shape” affects the quality of the geometry experience in fundamental ways.

## PME-NA 2013

A reminder that PME-NA will meet November 14-17 in Chicago. There is still time to register! For more information, visit <http://www.pmena.org/2013/registration.html>.

## 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*. Lead presenta-

tion speakers will receive a complimentary registration. All co-speakers for a session must register and pay the appropriate registration fee. The deadline for proposals is September 30, 2013. More information will be available soon at [www.nctm.org/regionals](http://www.nctm.org/regionals)

## AMTE Essentials

The opportunity to volunteer to serve on AMTE committees ends Sept. 25. A webform is available at <http://www.amte.net/volunteerwebform2013> (you must sign in with your AMTE login).

AMTE elections will be held in November. The slate of candidates is available at <http://www.amte.net/election2013>.

The eighteenth annual conference will be held February 6 - 8, 2014 at the Hyatt Regency Irvine, Irvine, CA. Early registration ends Sept. 30. Visit <http://www.amte.net/conferences/conf2014>.

# Algebra Remediation Study Underway

*Doris Mohr, University of Southern Indiana — Jill Newton, Purdue University*

*Jean Lee, University of Indianapolis — Yi-Yin (Winnie) Ko, Indiana State University*

*Rick Hudson, University of Southern Indiana — Sheryl Stump, Ball State University*

The Algebra I End-of-Course Assessment (ECA) is a high-stakes test for students in Indiana. This test, along with the English 10 ECA, makes up the content of the Graduation Qualifying Exam (GQE). Students must pass both of these exams or qualify for a GQE waiver to meet the graduation testing requirement. The percentage of students passing the Algebra I ECA varies considerably. In the 2011-2012 school year, the passing rates among school corporations ranged from a low of 22.2% to a high of 97.7%. Clearly, many students need help in passing this high-stakes exam. And, more importantly, students need help in understanding the content taught in Algebra I so they can go on to succeed in higher-level math classes if they so desire.

Those students who do not pass the ECAs are entitled to remediation of some type as mandated by the No Child Left Behind Act of 2001. Remediation for Algebra I takes different forms. For example, schools may provide additional or extended algebra periods, assistance before or after school, or summer school. Specialized computer programs such as Aleks are also sometimes used to support remediation efforts. A group of researchers who are HAMTE members have taken on the challenge of investigating algebra remediation in Indiana. A survey was recently sent to all high school principals to collect data on the types of remediation being used, how those materials/models are being selected, who is facilitating the remediation, and how the remediation seems to be working. This survey is a first step toward a possible remediation model developed by the research team. The results of the survey will be shared at the ICTM/HAMTE conference to be held October 20-21 in Indianapolis.

## References

<http://doe.in.gov/assessment/statewide-eca-results>

<http://www.ed.gov/esea>

## 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: <http://hamte.wordpress.com/> (under construction)

Submit an article to the newsletter, *HAMTE Crossroads*. E-mail your submission to Travis K. Miller, Newsletter Editor, at [tmiller@uindy.edu](mailto: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 2013 Indiana Math Summits: Reflections from a Skeptical Educator

— *Betsy Berry, Assoc. Professor, Mathematics Education, IPFW*

When I received the information and invitation for the “Indiana Math Summits 2013” in early May, I was skeptical. The recent move by state legislators to put the Common Core Standards on hold in Indiana made me wonder what these summits could accomplish. I emailed Heather Baker at IDOE with questions, and she called me soon after with the answers that she could provide. My skepticism did not disappear, but it was joined by a strong desire to share my voice and to participate in one of the summits. Three sites had been set around the state. One was held June 17<sup>th</sup> in Plymouth, one June 20<sup>th</sup> in Huntingburg, and one June 27<sup>th</sup> in Indianapolis. I attended in Indianapolis.

The invitation described the goals of the meetings: *“The Indiana Department of Education is recruiting stakeholders who are willing to assist in the redesign and innovation of math instruction for the State of Indiana. The Summits are designed to elicit discussion about math instruction to help guide the development of an Indiana Math Framework.”* The format, participation, goals and outcomes seem to have been the same across the three sites. There were participants from several areas of stakeholders at the Indianapolis meeting including administrators, public and private K-12 educators, folks from the business community, politicians, as well as a large group from higher education.

I was heartened to find an article by Keith Devlin reviewing Jo Boaler’s book “What’s Math Got to Do With It?” in the registration materials and I was hopeful that the article and the book would have some bearing on the meeting. Also included was a chapter from the 2012 report from the Conference Board of Mathematical Sciences titled *The Mathematical Education of Teachers II (MET II)* which presents 4 recommendations for strengthening the mathematics education of teachers and 2 recommendations regarding the role of mathematicians and statisticians in accomplishing that process. I wondered how this information might be used in the meeting and I remained hopeful.

Lisa Palacios, Director Great Lakes Comprehensive Center, Glenda Ritz, Indiana Superintendent of Public Education and Frank DeRosa, State Manager Great Lakes Comprehensive Center each gave opening presentations that were meant to set the stage for our discussions at breakout sessions. Lisa reviewed the purpose of the meeting and went over the materials in the packet. In particular she referenced Devlin’s article and used several quotes from it including this:

*“Absent any clear evidence as to how best to proceed, the majority of teachers quite understandably default to more or less the same teaching methods that they themselves experienced. Overwhelmingly that is the traditional method, though the fact that no one has been able to make this approach work (for the majority of students) in three thousand years does make some wonder if there is a better way....Now, at last, there is evidence, and more is being gathered. This means that raw belief and blind faith can finally start to be replaced by a reasoned choice, based on the evidence. This will surely happen, but how long it will take, after such a bitter battle, remains to be seen. Most likely the conflict will be fully put to rest only after the same has happened to some of the more prominent proponents. Meanwhile, expect to see gradual change as more teachers, parents, and politicians become aware of the rising mass of hard data.”*

She noted from Devlin’s article that 98% of people of any age can face mathematical challenges in real world in contexts that have meaning to them, but when faced with the same mathematical challenges in a traditional paper and pencil classroom they perform at a 37% level.

Later, Glenda Ritz spoke regarding the data included in our packets. One document called “Vital Signs” highlighted a variety of STEM information from achievement gaps to teacher preparation. In She also used 2011 NAEP and ISTEP data to demonstrate what she called the “disconnect” between national and state results in mathematics for fourth and eighth graders. ISTEP results had 79% of Indiana 4<sup>th</sup> graders

## Indiana Math Summits *(continued from page 5)*

recorded at proficient, but NAEP results indicated that only 44% were proficient or advanced. Eighth grade results showed an even greater difference with 80% proficient on ISTEP scores and only 34% proficient or advanced on NAEP scores. As I reflected on this information I wondered how this “disconnect” would be addressed. If we must support a state-wide assessment program with such significant financial and teacher/student time resources, doesn’t it make sense to be part of a national or global plan rather than go it alone as some proposals seem to advocate?

Glenda also spoke extensively about Indiana Standards and the Common Core. She reminded us that the Indiana legislature was one of the first states to adopt the Common Core in 2010 and that one of the issues now being considered is the fact that it is copyrighted and therefore cannot be changed. She talked about college and career-ready standards and about building assessments here in this state. She stated that in this two-year moratorium on the continued implementation of the Common Core, Indiana would have three choices: continue to implement CCSS as written; add 15% to it of our own language and standards; or take the standards and reword them as we want and then vet them with schools and colleges to declare them college and career ready standards. She also talked about assessment and how Indiana should move from a “pass-fail” assessment to a “growth model” assessment and how that might mitigate the need for so much remediation at high school and college levels. She went on to speak about professional development and the fact that four years ago the **state cut out all financial support** to school districts for professional development. She said this year **all language referring to professional development was removed from state regulations.** She also stated how much she believed in the need for professional development, but that we would need to find financial resources elsewhere.

“The state cut out all financial support to school districts for professional development.”

Frank DeRosa started the next breakout session. We were separated into six “like-minded” groups that included elementary teachers, middle school teachers, high school teachers, higher ed, business and CTE, and administrators and we were asked to identify and describe the “characteristics of the ideal mathematics high school graduate”. In our higher education group there was a lively discussion, but we ended with a general consensus that the behaviors and attributes expressed in the Mathematical Practices of the Common Core were our primary criteria. We added content descriptors similar to those with which we are all familiar.

Glenda introduced our final breakout session as “Imagining the possibilities and making them happen” which seemed to be her motto and mantra for both the day and her term as superintendent. We were asked to reorganize into mixed groups for these last “think tank” discussions and to identify the challenges, explore the possibilities, and imagine models for making it happen. The report outs from each of the 6 groups all identified professional development as one of the most important aspects of future programs and future discussions.

Superintendent Ritz ended the day with some “Next Steps.” She said there would be a call for participants to serve on task forces to address the issues of the “delivery system” of mathematics instruction in Indiana and that it is important that we “get math right.” She encouraged us all to indicate our willingness to serve on these future task forces when we completed our evaluation forms, which I and others surely did.

Now nearly three months after these summits, I still feel skeptical. It is unfortunate that in Indiana we remain mired in the swamp of battling about standards and assessment, rather than moving on along a pathway to meaningful professional development for classroom teachers to help them provide rich and meaningful mathematical learning experiences for our students. And it concerns me to hear those learning experiences referred to as a “delivery system”. Still, I remain eager to be a part of the battle and the journey!

*Editor’s Note: HAMTE’s board provided input into the design of the summer summits at the invitation of the IDOE. Multiple individuals who attended the summits have reported recent requests from IDOE to join task forces that will further the work from this summer’s summits.*

## HAMTE at ICTM 2013

HAMTE sessions will be included in the ICTM schedule again this year. The conference takes place October 20-21, 2013 at the Sheraton Indianapolis City Centre Hotel.

HAMTE's annual business meeting will be held on Sunday evening, October 20 at the hotel. We will finalize the election for HAMTE secretary (see below), express appreciation for outgoing officers Jill Newton and Jean Lee, and discuss other matters.

Erik Tillema will be coordinating dinner out on the town after our meeting. He will e-mail additional information closer to the event.

**Please plan to attend!**

## HAMTE Secretary Election

The HAMTE Nominations and Elections Committee (Ron Benbow and Liz Brown) asks you to cast your ballot in the election for HAMTE secretary by 12:00 noon on Friday October 18, 2013. Results will be shared at the HAMTE business meeting on the evening of Sunday, October 20 at the annual ICTM Conference. Bios of the candidates appear below. To vote, please click here:

<http://www.surveymonkey.com/s/HAMTE2013>

**Kathryn Shafer** is an Associate Professor in the Department of Mathematical Sciences at Ball State University. Her research interests include the integration of technology in the K-16 mathematics classroom. She has consulted for Key Curriculum Press as a f2f trainer and as a moderator for the Fathom and TinkerPlots online courses. Kathy is also active in teaching and conducting action research. She has published articles in Contemporary Issues in Technology and Teacher Education, Teaching Children Mathematics, Mathematics Teaching in the Middle School and the Mathematics Teacher. Recent service includes participation as a math program reviewer for three NCATE SPA cycles and the creation and maintenance of the HAMTE community on the Learning Connection.

**Craig Willey** is an Assistant Professor of Teacher Education and Mathematics Education at IUPUI. His research focuses on all aspects of mathematics teaching and learning with Latinas/os through the framework of mathematics and language socialization processes, or Mathematics Discourse Communities. He teaches undergraduate methods courses, and also teaches in the Urban Education and Bilingual/ESL Masters programs. He is Associate Editor for the International Journal for Qualitative Studies in Education and lead investigator on a project for the Great Lakes Equity Center. Craig is an active member of AERA, the Hispanic Research SIG, SIG for Research in Mathematics Education, NCTM, AMTE, and TODOS: Mathematics for ALL. As a HAMTE Board Member, he would like coordinate communications broadly and efficiently, represent mathematics teacher educators preparing urban leaders, and serve as a liaison between HAMTE and other related organizations.

# Campus Updates across Indiana...

## **Ball State University**

*Summer institute.* "Engineering STEM Success," a Mathematics Science Partnership between Warsaw Community Schools and Ball State University commenced with a two-week summer institute in July. Mathematics educator Sheryl Stump and two science educators—Joel Bryan, and Tom McConnell—provided the professional development for teachers in grades 6-9 with support from three Warsaw math coaches—Christine Bonifield, Kyle Carter, and Lorinda Kline—and one middle school principal—JoElla Smyth. The institute focused on developing teachers' knowledge for teaching mathematics and science through inquiry and problem-based learning. They practiced using Lesson Study with summer school students and will repeat the process three times during the school year in their own schools.

## **Indiana University—Bloomington**

*Graduate student update.* Mi Yeon Lee has completed the doctoral program and has accepted a position as an assistant professor at Arizona State University

## **Indiana University—Southeast**

*Education program changes.* IU Southeast recently changed the education program to meet the state's 120 credit requirement and to address general education changes. Special education requirements have been added to all three "blocks" of the program, with middle school practicum experiences that focus on special education.

## **IUPUI**

*Doctoral degree in urban education.* Now in its second year, IUPUI's doctoral program in education seeks applicants particularly interested in mathematics education—a high need area within urban schools. Information may be found at <http://education.iupui.edu/programs/graduate/urbaneducation/overview.php>

## **Purdue University—Calumet**

*Faculty update.* Gayle Millsaps accepted a position at Eastern Washington University in Cheney. Her colleagues miss her.

## **Purdue University—Lafayette**

*New graduate students.* Purdue welcomes three PhD students (Andrew Hoffman, Betsy Kersey, and Murat Akarsu) and two Master's students (Zimo Yin and Andy Van Sistine).

*National graduate fellow.* Laura Bofferding was selected as a 2013 National Academy of Education/Spencer Postdoctoral Fellow. She will lead a research project that extends Siegler and Ramani's (2009) work around whole number understanding to the domain of integers. Over the next two years, she will investigate first-graders' (year 1) and kindergartners' (year 2) developing understanding of negative numbers as they move on a linear board game (with spaces from -10 to 10) compared to

## **Purdue University—North Central**

*Summer workshop.* David Feikes offered a July workshop focusing on how to incorporate print and new video resources with a perspective on how children learn mathematics in your courses. Each of the 14 participants received a copy of David's book with coauthors Keith Schwingendorf and Jeff Gregg entitled *Connecting Mathematics for Elementary Teachers (CMET)*. Perhaps more importantly, participants received access to newly developed videos from the Capturing Mathematical Learning (CML) Project which were previewed and discussed throughout the day. Based upon the positive feedback of workshop participants, David plans to repeat the workshop next May, so watch for future announcements. Information regarding the book and videos may be found on the project website <http://www.cmlproject.com>.

*Interim chair.* Dr. David Feikes has been named Interim Chair of the Education Department.

## **Taylor University**

*Elementary education program revisions.* The Mathematics and Education Departments of Taylor University worked last year to revise the math curriculum for elementary education teacher candidates. The new program, effective with the 2013-14 academic year, requires a three-course sequence of math courses: Explorations in Mathematics for Elementary Teachers (emphasizing algebra, probability, and data analysis), Number Concepts for Elementary Teachers, and Geometry and Measurement for Elementary Teachers. The previous program was comprised of two 4-hour courses. The new program increases the number of math course "contact hours" for teacher candidates to nine. The latter two courses are included in a junior-level practicum year in which candidates are immersed in an all-day field experience two days per week for the entire year.

## **University of Indianapolis**

*Faculty update.* Jean Lee has been promoted to Associate Director for the Woodrow Wilson Indiana Teaching Fellowship Program at UIndy.

## **University of Southern Indiana**

*SMP videos.* Rick Hudson, Doris Mohr, and Chris Walcott are collaborating with the IDOE staff to develop videos for the standards for mathematical practice. Further details will be available soon.