



PENNSYLVANIA ASSOCIATION OF MATHEMATICS TEACHER EDUCATORS

Newsletter

Winter 2018

President's Message

As many of you may know, my family had the extreme fortune of spending the Fall 2017 semester abroad. Our home base was Saint Francis University's campus (a 12th century priory) in Ambialet, France, a small village along the Tarn River in the southwestern region of the country. Organized travel with the university students as well as a 10-day fall break allowed us to additionally experience the European cities of Toulouse, Barcelona, Paris, Athens, and Rome. In lieu of souvenirs in the suitcase, I brought back my PAMTE friends "Five Fun Finds" (see page 3) that I hope you will enjoy.

In this space, I share a brief field report from my three and a half months as a participant-observer, shall we say, of French primary education. I offer a full disclaimer in that I did not conduct a true scientific study. Rather, as an American mother and mathematics teacher educator, I remained intensely curious about the school system experienced by our children Abe (age 10) and Ruth (age 7). Additionally, I had the privilege of serving as a liaison between our university and the village school for the semester. The role entailed accompanying the university students to the school five times throughout the semester where they worked on English with small groups of children. I also organized a day of games/activities for the school children at the university (priory). I preface my anecdotal reporting by couching it in the framework of schooling as inherently cultural. To observe a school in action is to begin to get a very good sense of the attitudes, values, goals, and social practices of the community it serves. Schooling is both shaped by and a shaper of culture. And when one is immersed in a new culture, it is impossible not to have clearer eyes about one's own.

School Day and Calendar

Our family arrived in France on Friday, September 1st, just in time for *la rentrée scolaire* (a.k.a. first day of school) on Monday, September 4th. The day is a big deal. Contrary to the checkerboard of start dates in the U.S., ranging from early August to early September, every French child goes back to school on the same day. Indeed, for someone enculturated in local education, *rentrée* may have set the tone for participating in a nationalized system of education. The structure of the school day and school year is also of interest. The school day begins at 9 a.m. With the exception of Wednesdays, when all students are dismissed at noon,

students receive an hour and a half break from noon-13:30 (24 hour time!) for *dejeuner* (lunch) and recreation. While a handful of children at the Ambialet village school went home for this break, most ate at *l'école restaurant* (canteen). If you've read anything at all about schooling in France, you've likely read about the school lunches! Indeed, for 3.30 € a day, our children received a three course home-cooked meal served family-style, complete, of course, with bountiful baskets of French bread on the table. Dismissal on Mondays and Thursdays was at 16:30. We picked Abe and Ruth up at 15:00 on Tuesdays and Fridays, but most children stayed until 16:30 for sports, art, and music classes taught by guest teachers. Affordable early-morning and after-school day care were provided at the school and although we walked our kids to school, transportation was available for a cost in what might best be described as a shuttle system. Children got both a morning and afternoon recess, in addition to the lengthy one during the mid-day break. The school year runs through late June. However, pupils and teachers enjoy multiple two-week long *vacances scolaires*. The first, coinciding with *Toussaints*, is in late October/early November. A Christmas, winter, and spring break follow.

Teaching Situation

The Ambialet village school serves approximately 40 pupils from age three through 5th grade and has two full-time teachers. (Interestingly, almost 100% of France's three year olds are enrolled in school.) One teacher, who also served as the directress of the school, taught preschool, kindergarten, and 3rd grade with the help of an assistant. Our children were in the classroom of the second teacher, Maitresse Lorriene. She had 24 students in grades 1st, 2nd, 4th, and 5th. The classroom was organized in zones, such that children of the same age were grouped together for age appropriate instruction, but clearly there was much interaction between all children throughout the day. When I expressed my admiration to Maitresse for her facility in conducting a multi-age classroom, and additionally shared that this type of situation would be highly unusual in the U.S., she seemed genuinely surprised that what she was doing could be viewed as extraordinary. The classroom, no doubt, was often noisy. But it was clear from very early on that our children were in the hands of a capable teacher with an incredible sense of humor and in the company of happy schoolmates.

President's Message Continued

A Vignette

The day scheduled for the school students to visit the university priory for games, activities, and *dejeuner* dawned gray and rainy. We dropped our kids off at school at 9 a.m. wanting them to get the full experience of going on a field trip with their class and assuming they would ride the school shuttles up to the priory. About an hour and a half later, Maitress arrived at the priory with 22 students, all wet but mostly cheerful. They had *walked* the 1.5 miles up to the priory. This walk included passing through two narrow tunnels in the village and ascending a rocky cliff path. To avoid the slippery rock path on the way back to school later in the afternoon, the class took the road making the return trip roughly two miles, again in the rain. Suffice it to say, this scenario has long since resonated in my mind. The adventure of teacher and students seemed extraordinary to us, but just-so to them. Clearly, this was one instance of many that gave us pause to consider our own cultural expectations. What constitutes appropriate safeguards and what is a six-year old capable of? More generally, how often are our expectations reasonable and how often are they conformed to arbitrary standards?

Closing Thoughts

I will forever be grateful for this unique opportunity, which afforded me a glimpse of the French education system. In no way, though, does my limited experience nor my lack of fluency in the language allow me to make nuanced value judgments. I have no idea whether the children in the multi-age classroom were on grade level or if that was even a priority. Questions linger in my mind about issues of access and equity. What I can speak to with definitiveness, however, is the salubriousness of wholly removing oneself from an ingrained framework and stepping with both feet into another. Pleasantly, it granted gentle permission not to follow rhythms and routines in motion just because they are the way they are. There is much freedom and possibility in knowing that one's way is not the only way.

And so, I wish each of you in the New Year at least one experience—big or small, extended or brief, professional or personal—that spins you out of your own orbit and into the worlds beyond . . .

Peace,
Kate

Kate Remillard, *Saint Francis University*
PAMTE President

Mathematics Education in France

2015 saw France placing 26th (out of 72 countries) on the PISA Mathematics exam with a score of 493. This was slightly ahead of the OECD average (490) and 14 places ahead of the United States (470).

France boasts 12 Fields medalists, second only to the United States with 13. The vast majority of the country's recipients were schooled in "écoles normales supérieures (ENS)." This elite higher education system, which recruits France's brightest, clearly serves as an environment where mathematical talent can flourish.

Welcome New PAMTE Members!

- **Courtney Lynch**, *PSU Graduate Student*
- **J. Lyn Miller**, *Slippery Rock University*
- **Beth Zamboni**, *Carlow University*

Five Fun European Finds



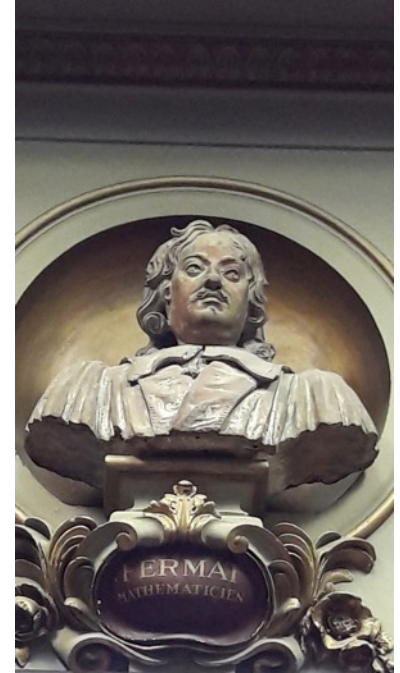
This is the *Arithmetic Tapestry*. It is dated between 1500 and 1550 and belonged to a series of seven tapestries depicting the Liberal Arts taught in medieval education (Grammar, Dialectics, Rhetoric, Astronomy, Geometry, Music, and Arithmetic). We found the tapestry in Paris housed in the Cluny Museum. Note that the central figure counting the money is a woman!



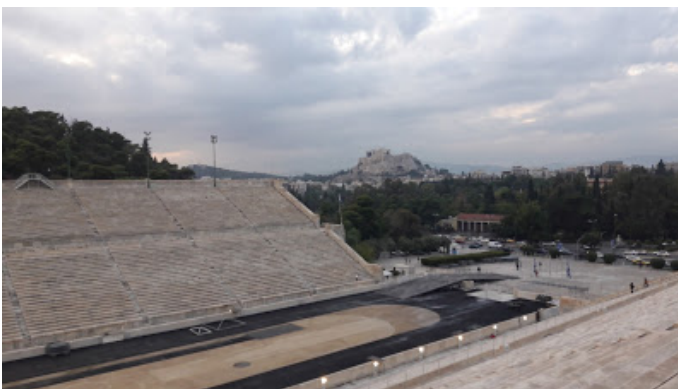
This magic square is from the basilica *Sagrada Familia* in Barcelona, Spain. The structure, designed by the fascinating Catalan architect Antoni Gaudi, is famous as it is the largest church in the world still under construction. Need a hint solving? The square is located on the Passion Façade of the structure.



Found in the Vatican Museum of Rome, *The School of Athens* (1509-1511) is one of the most famous works of the Italian Renaissance painter Raphael. The painting is quite a study in the golden ratio. Perhaps you can spot, too, Pythagoras? Euclid?



While we all know Pierre de Fermat for his contributions to calculus and number theory, he was also a lawyer in Toulouse, France. It was there that I bumped into him in the capitolium and snapped this photo.



See here two views of the Panathenaic Stadium in Athens, Greece. The grounds have an incredible history and the stadium, built entirely of marble, was the birthplace of the modern Olympics (1896) and a venue in the 2004 Games. There are no doubt multiple mathematical connections that could be made. But I share this more for the avid runners we have in the PAMTE group and as a nod to the upcoming Winter Olympics. It was totally cool!

PreService Teacher Day at Millersville University

Cynthia Taylor, *Millersville University*

On Saturday, October 21, 2017, 117 Preservice Teachers (PTs) from 10 different universities located in the eastern portion of the state attended Preservice Teacher Day held in conjunction with the Careers in Mathematics Conference (EPADEL section of the MAA) at Millersville University. The day started with a panel presentation with 15 mathematicians and classroom teachers who talked about their various jobs and career paths. There was then a question and answer session prior to attendees attending sessions geared specifically toward mathematics education and teaching.



PreService Teacher Day, October 21, 2017, Millersville University



Attendees hear about careers in mathematics at the morning panel discussion.

Three different sessions, 50 minutes in length, were offered and PTs had four different sessions to choose from for each time slot. A total of 13 presenters, comprised of K-12 classroom teachers, retired teachers, and university faculty, facilitated the sessions.

- Elementary topics included: number talks, incorporating the Rubik's Cube in math class, mathematical writing, differentiation in math instruction, and data in the classroom.
- Middle/High school topics included: exploring the Desmos graphing calculator and website; fostering a problem-centered classroom; misconceptions about roots, asymptotes, and inverse variation; exploring algebraic expressions, and classroom discourse and teacher questioning.
- General interest topics included: preparing for student teaching and preparing for interviews.

The day ended with over 60 prizes awarded raffle style, where PTs could choose from the selection of books, manipulatives, and other donated or purchased prizes.

A special thank you to the following sponsors: PCTM, PAMTE, NASCO, Heinemann, and EAI Education for their donations!



Nicole Reppert, a Gifted Support Teacher, facilitated a session on the Rubik's Cube.

See next page for PAMTE members' contributions to PreService Teacher Day at Millersville University

PAMTE Members at PreService Teacher Day – Millersville



PAMTE member Lara Dick facilitates a session on *Exploring Algebraic Expression Through Tiling Around a Square Pool* for grade 6-8 preservice teachers.



PAMTE member Janine Firmender facilitates a session on *Engaging Elementary Students in Mathematical Writing* for PTs interested in teaching grades K-5.



PAMTE member Sheri Stayton facilitates a session on *Common Misconceptions About Roots, Asymptotes, and Inverse Variation* for PTs interested in teaching grades 9-12.



PAMTE member Tom Evitts facilitates a session on *Persevere and Persist? No Problem!* for PTs interested in teaching grades 6-12.

2018 AMTE Winners of the NTLI Fellowship

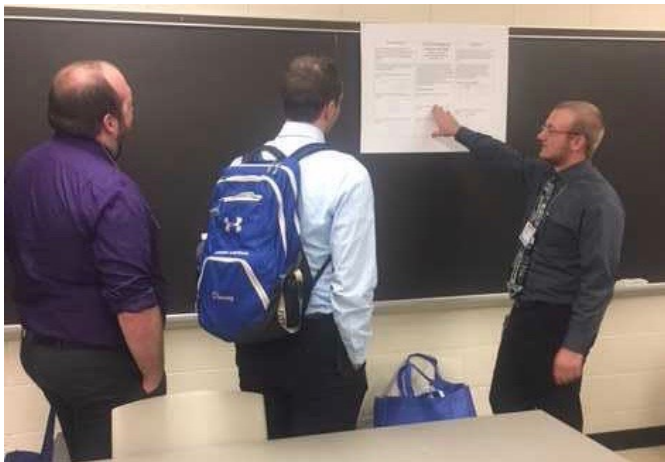
Congratulations to Jennifer N. Lovett, Middle Tennessee State University, **PAMTE member Lara K. Dick, Bucknell University**, Allison W. McCulloch, University of North Carolina at Charlotte, Milan F. Sherman, Drake University, and Kristi Martin, North Carolina State University, AMTE winners of the **2018 NTLI Fellowship** for their manuscript *Developing Preservice Teachers' TPACK of Function using a Vending Machine Metaphor Applet*. The NTLI Fellowships were established to recognize exemplary presentations related to integration of technology in core content areas at the annual meetings of each participating association. Learn more at <https://amte.net/node/567>.

PreService Teacher Day at Indiana University of PA

Nina Girard, *University of Pittsburgh Johnstown*

The Western PA Mathematics Teaching and Learning Conference, held in conjunction with the PA Council of Teachers of Mathematics' PreService Teacher Day and co-sponsored by the Laurel Highlands Mathematics Alliance and the PA Association of Mathematics Teacher Educators, was on October 21, 2017 at Indiana University of PA. The participants, consisting of 33 pre-service teachers, 31 K-12 teachers, and 19 university faculty/teacher educators attended a day of concurrent workshop sessions and a keynote speaker session. The keynote speaker Ms. Roxanne

Jenner, Director of Pitt-Johnstown's Coding Outreach for a Digital Economy Initiative, spoke on "Learning Math with Code". Other session topics included: Introduction to Desmos, Implementing Guided Math, Nearpod: An Interactive Presentation and Assessment Tool, Utilizing Formative Assessment Lessons in Middle and High School Math, Learning Math with Legos, Differentiated Instruction Strategies for Elementary Students, Interactive Notebooks and Foldables, Teaching for Engagement and Eliciting Evidence of Student Thinking, Number Talks, Population Education, Project-based Learning, The Lost Art of Conic Sections, among others.



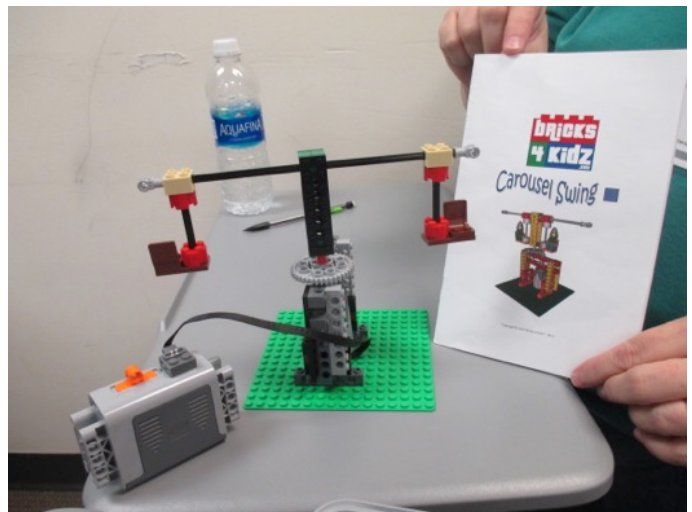
PSTs Jakeb Rising and Andrew Downey from Pitt-Johnstown listen attentively as Nicholas Cirrincione from Penn State Erie talks about his poster during the poster presentation session.



Roxanne Jenner, Director of Coding Outreach for a Digital Economy from Pitt-Johnstown, was the keynote speaker who presented on "Learning Math with Code."



Past PCTM President Marian Avery welcomes the PSTs and LHMA attendees.



Participant proudly displays their Lego creation from the "Learning Math with Legos" workshop.

Save the Date!
12th Annual PAMTE Symposium



May 16-17, 2018
Shippensburg University

- ❖ **Proposals Now Being Accepted!** Sessions are 30 minutes or 60 minutes in length. Please include in your proposal: title, format (presentation or roundtable), length of session (30 minutes or 60 minutes), names of presenters, date preference (May 16 or May 17), and a brief description.
- ❖ **Deadline:** March 14, 2018.

To submit proposals please visit
www.pamte.org and click on 'Symposium'

PAMTE at AMTE Annual Dinner

In a couple of weeks, many of us will be attending the 22nd Annual Conference of the Association of Mathematics Teacher Educators (AMTE) in Houston, TX. The conference will take place at the Westin Galleria Houston Hotel on February 8-10, 2018. PAMTE's tradition at the AMTE meeting is to enjoy Thursday night dinner together at a nearby restaurant. If you are attending AMTE and would like to be part of the dinner plans, read on.....

Members and friends of PAMTE are invited to the
PAMTE at AMTE Annual Dinner
Thursday, February 8th at 7 PM

The Cheesecake Factory, The Galleria 5015 Westheimer Road Houston, TX
(a five-minute walk from the conference hotel)
<https://www.thecheesecakefactory.com/menu>

Space is limited to 20...RSVP to cynthia.taylor@millersville.edu by Wednesday, January 31st if you plan to join us. Please provide names of attendees.

If you have any questions, please send your inquiries to Cynthia. Looking forward to seeing you there!

ESSA Update from PA Secretary of Education Pedro Rivera

Dear Friend of Education:

Late yesterday afternoon, I received notice that the U.S. Department of Education had approved Pennsylvania's ESSA Consolidated State Plan as revised. Approval of Pennsylvania's Consolidated State Plan is a significant moment for public education in Pennsylvania. The plan is shaped by the guiding principles of transparency, equity, and innovation, and underscores the commonwealth's commitment to creating more balanced and comprehensive school progress measures, reducing testing time, and supporting Pennsylvania's educators and school leaders.

Most of Pennsylvania's revisions to our September 2017 submission were technical in nature, and involved responses to USDE requests for clarification or additional detail on specific proposals. PDE will share specific information on revisions in the final approved plan in the coming days and weeks.

Early wins for Pennsylvania's students include:

- A 20 percent reduction in PSSA testing time to begin this year with the testing window pushed back next year
- Increased emphasis on growth in identification of schools that need improvement
- Expansion in the use of valid non-academic measures of school success
- Use of dashboard format to ensure full, fair and transparent presentation of school success
- Troops to Teachers grant awarded to support the transition of veterans into the educator workforce.

The Department is grateful to the thousands of Pennsylvanians who participated in shaping, reviewing, and commenting on plan proposals since ESSA was enacted in December 2015. We look forward to implementation of Pennsylvania's approved plan in our schools for the benefit of all of our students in Pennsylvania.

Sincerely,

Pedro Rivera, Secretary of Education
Pennsylvania Department of Education
333 Market Street
Harrisburg, PA 17126

ESSA Consolidated State Plan: <http://www.education.pa.gov/K-12/ESSA/Pages/Consolidated-State-Plan.aspx>

USDE's approval letter: <http://www.education.pa.gov/Documents/K-12/ESSA/Resources/USDE%20Approval%20Letter.pdf>

PAMTE OFFICERS AND COMMITTEE CHAIRS

PRESIDENT	Kate Remillard <i>Saint Francis University</i>
PRESIDENT-ELECT	Cynthia Taylor <i>Millersville University</i>
SECRETARY	Lynn Columba <i>Lehigh University</i>
TREASURER	James Preston <i>Slippery Rock University</i>
MEMBERS AT LARGE	Lara Dick <i>Bucknell University</i>
	Gina Foletta <i>Penn State University</i>
	Courtney Nagle <i>Penn State Behrend</i>
MEMBERSHIP	Jane Wilburne <i>Penn State Harrisburg</i>
NEWSLETTER	Sheri Stayton <i>Penn College of Technology</i>
WEBMASTER	James Preston <i>Slippery Rock University</i>

CALL FOR NOMINATIONS!

Although at the time of this writing the United States' government is shut down, PAMTE must continue to operate efficiently, effectively, and within budget!!

In May, the terms for three board members will end. It is now time to nominate candidates to fill these important positions. We are seeking individuals to serve as **Secretary**, **Member-at-Large (Private)**, and **Member-at-Large (Private or Public)**.

You may self-nominate or recommend someone for these positions. The deadline for this call is **Friday, March 9th**. Please send your nominations to Steve Williams at swillia6@lockhaven.edu. Voting will take place on March 19th.

CONFERENCE DATES

Feb. 8-10 2018	AMTE Annual Conference <i>Houston, TX</i>
Apr. 25-28 2018	NCTM Annual Conference <i>Washington, DC</i>
May 16-17 2018	PAMTE Annual Symposium <i>Shippensburg, PA</i>
Aug. 6-7 2018	PCTM Annual Conference <i>Harrisburg, PA</i>

PAMTE is now on Facebook
<https://www.facebook.com/groups/PAmatheduc/>

Visit the PAMTE website at
www.pamte.org