On October 22, 2018, UMF hosted the 9-12 Maine Mathematics Coaching Pilot Fall Dine and Discuss. The 9-12 MMCP Dine and Discuss provides an opportunity for high school coaching candidates and their administrators to learn and collaborate on improving the coaching programs in their schools and districts.

The first activity that attendees engaged in came from Everything You Need for Mathematics Coaching by Maggie B. McGatha and Jennifer Bay-Williams, and was designed to help deepen understanding of mathematical practices. Under the guidance of Michele Mailhot, mathematics specialist at the Maine Department of Education, the participants worked in pairs to match mini-vignettes to specific practices. This enabled them to discuss what to look for in regard to student engagement and how to support teachers.

Next, Gloria Jenkins presented on “7 Signs of a Coaching Model.” Participants completed a survey, and then were divided up so that coaches discussed their answers at one table, while administrators discussed at another. The focus of conversation was to highlight school strengths and to examine what structures districts have in place to support an effective coaching model.
After dinner, participants had the opportunity to observe a presentation by 9-12 Coaching Candidate Torrey Poland and High School Math Teacher Nate Pelletier, both from MSAD 17. Their presentation was built on skills learned during the Routines for Reasoning workshop that was hosted in their district last month. The presentation was well-received, and all those in attendance received a copy of *Routines for Reasoning* by Grace Kelemanik, Amy Lucenta, and Susan Janssen Creighton.

The next Dine and Discuss event for 9-12 MMCP will take place during the spring semester.

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**MMCP Fall Learning Lab/Dine and Discuss: Southern Region**

by Jenny Jorgensen, MMCP Field Coach on October 22nd

Nate Garnett (MMCP Cohort 3 Coaching Candidate) and Jenny Jorgensen, along with Peggy Brown (both MMCP Field Coaches), hosted a fall MMCP Learning Lab and Dine and Discuss at Freeport Middle School on October 16, 2018. Visiting coaches had time to read Nate’s Pre-Observation form before entering a sixth grade classroom for the observation. The lesson included the implementation of the routine “Connecting Representations” that Nate had shared with the teachers after attending the two day professional learning about *Routines for Reasoning: Fostering the Mathematical Practice in All Students*. The 12 coaches attending the Learning Lab had the opportunity to see Nate and his colleague, Mary, work together during the lesson.

The post conference with Nate and Mary provided the visiting coaches an opportunity to observe a coaching conference and provide Nate with feedback through the use of a protocol. The coaches and Nate were excited about the experience and both gained insight about the nuances of this work.

The mathematics teaching practice “Use and Connect Mathematical Representations” was the focus for the Dine and Discuss which followed the Learning Lab. It was attended by all
the visiting coaches as well as six administrators/curriculum coordinators. One participant reflected that they were reminded of the value and importance of representations and being flexible about making connections among and between them. Another said that “students must continue to learn new/different representations in order to deepen their understanding of math concepts.” Several participants shared the importance of students sharing their strategies and having the opportunity to “engage in discourse, problem solving and make connections.” While, yet another indicated that they will use the reading *Principles to Actions* with their staff.

The overall comment from the exit slips was that it was a productive afternoon. The connection between the Math Learning Lab and the Dine and Discuss made for a rich evening of sharing and learning.

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### MMCP Fall Learning Lab/Dine and Discuss: Northern/Eastern Region

by [Marshalyn Baker, MMCP Field Coach](mailto:marshalyn.baker@mmcp.org) on October 26th

MMCP’s fall Learning Lab/Dine and Discuss for the 2018-2019 school year took place on October 18, 2018, at Carmel Elementary School in Carmel. Thanks to Math Coach, Britney Taggett and fifth-grade teacher, Deb Colpitts, math coaches were treated to an excellent lesson, showcasing “Routines for Reasoning,” a protocol that they were introduced to in September at a workshop in Oxford Hills. The fifth graders’ lesson focused on place value and adding decimals. Students matched expressions with visual representations of the decimals. Communication and student reasoning were evident!

Following the classroom lesson, participants watched the post-conference between Britney and Deb. Susan O’Brien, Britney’s field coach, moderated a debrief with Britney and the other math coaches that were in attendance in Carmel. The coaches had the opportunity to ask questions and learn from one another. Also, Northern Maine coaches with their field coach, Marshalyn Baker,
Zoomed in for the Learning Lab as a pilot of the Zoom app we now have available. A Dine and Discuss followed in Carmel and Hodgdon.

Administrators joined math coaches for the Dine and Discuss. Participants worked on a “Bubble Gum” task, used NCTM's Principles to Actions, and watched a classroom video. All related to this year's focus: Use and Connect Mathematical Representations. Throughout the evening, student actions and teacher actions were discussed. It is through the process of sharing and learning together, that we deepen student understanding of mathematics.

Math Manipulative of the Month: Algebra Tiles

by Destiny Long, Administrative Specialist on October 30

Math manipulatives provide students of all ages the opportunity to move mathematical concepts from the realm of the abstract to the concrete. Educators who are interested in trying out manipulatives before purchasing have the opportunity to visit the Spenciner Curriculum Materials Center, here at the University of Maine Farmington. UMF students, faculty, and staff are allowed to borrow these materials, and area educators may apply for borrowing privileges as well. Those without a card have the option to preview materials within the Center.

This month, we are highlighting Algebra Tiles: Introductory Classroom Kit from EAI Education. The kit includes manipulative sets for up to 30 students and a book with lesson ideas. Students can use the tiles to build geometric models of polynomials, to better understand how to represent and solve algebra problems. This set can be used to work on a number of Common Core State Standards, from grade 6 through high school.

If you are interested in these, or any of the other materials in the collection, you can learn more by visiting the Spenciner Curriculum Materials Center website: http://www2.umf.main.edu/cmc/
Math Coaching In The News

by Emily Wilson, Administrative Aide on October 12

In order to improve AzMERIT scores, the Washington Elementary School District (WESD) in Phoenix and Glendale, AZ is working on improving the way they teach problem solving and inquiry math. They hope that the amount of eighth graders passing the AzMERIT exam in their district will increase to 69% by 2030, roughly 11 years from now. They started off by teaching one teacher from each grade level new skills and tools to use in their classrooms. This effort has been successful, as they are already seeing improvements in students’ benchmark assessments and AzMERIT passing scores. Their plan now is to train more of their educators, so that the success will become more widespread.

Read the full article online at the following link:
https://azednews.com/math-learning-improving-in-washington-elementary-school-district/

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MMCP Presentations at Conferences

October 18, 2018: Maine Association for Middle Level Education Annual Conference -

- “Cultivating Mathematics Leaders” by Morgan Marden (9-12 Cohort, MSAD 54) and Lindsey Bickford (Cohort 2, MSAD 11)

October 26, 2018: Maine School Management Association Fall Conference -

- “Why Should You Support Math Coaching Positions in Your District?” by Sandra MacArthur (UMF Director of Educational Outreach), Andrew Carlton (Superintendent, RSU 4 - MMCP member district), Deb Witham (Cohort 1, RSU 4), Cathy Jacobs (MMCP Field Coach), and Jeff Ireland

- “Mathematics: What are the Important Shifts in Teaching and Learning?” by Susan O’Brien (MMCP Field Coach), Amanda Grove (Cohort 3, RSU 22), Britney Taggett (Cohort 3, RSU 87), and Richard Lyons (Superintendent, RSU 22 - MMCP member district)
Upcoming Events

**MADSEC Workshop: “Best Practices in Mathematics Instruction for Students with Specific Needs”**: October 3rd, October 24th, and November 14th
visit: [www.madsec.org](http://www.madsec.org) for details - SOLD OUT

**MMCP Fall Learning Lab/Dine and Discuss (Carrabec)**: November 14th
Member districts will receive details by email.

**ZOOM Conference and Discussion with Diane Sweeney: “Building Principal and Coach Partnerships”**: November 20th
Member districts will receive details by email.

**ZOOM Conference and Discussion with Diane Sweeney**: February 12, 2019
Member districts will receive details by email.

**3rd Annual National Math Coaching Conference**: April 12, 2019
Save the date to spend the day working with Maggie McGatha.
We Want to Hear From You!

In the coming months, we will be reaching out to MMCP Coaches, Field Coaches, Instructors, and others to share their stories. Celebrate your successes, reflect on growth through challenge, review a great resource... or come up with your own idea! You can send contributions to Destiny, or to gradstudies@maine.edu (just remember to mention that it's for the MMCP Newsletter.)

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