In July, The University of Maine Farmington hosted the 5th annual Maine Mathematics Coaching Project (MMCP) Summer Institute. The theme for this year was “Connecting the Math Coaching Stars”, to incorporate the 5 coaching cohorts (four cohorts of K-8, plus our 9-12 pilot), and the 5th summer institute.

Our coaching candidates and continuing coaches attended two days of workshops, with their district administrators joining in for the second day. First day presenters included professionals from the Maine Department of Education, MMCP continuing coaches from Cohorts 1 and 2, and our UMF Field Coaches (faculty supervisors who work with the candidates in their districts).

The second day began with keynote speaker, Maggie B. McGatha, co-author of Everything You Need for Mathematics Coaching: Tools, Plans, and a Process That Works for Any Instructional Leader, Grades K-12. She delivered a presentation on “Connecting Teacher
Practice and Student Learning With Coaching” that incorporated resources from her book. This was followed by a presentation by Nicole Rigelman from Portland State University. In the afternoon, there were small group sessions with the UMF Field Coaches, as well as district planning time.

The smiling faces and animated conversations observed over the two days suggest that the 5th Summer Institute was a success. Coaches and administrators were given new tools and resources to build a successful 2018-2019 school year.

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**THIS MONTH'S STORIES**

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**Fostering Math Practices Workshop Reflection**

On September 17 and 18, MSAD 17 hosted a [Fostering Math Practices](#) workshop with Grace Kelemanik and Amy Lucenta, in cooperation with UMF. The following is a reflection on the experience by MMCP Cohort 2 alumna, Mary Merrill.

by **Mary Merrill, MMCP Cohort 2: MSAD 17** on September 25

As a math coach for the past three years, I have seen the importance of implementing routines in our mathematics instruction that foster both the use of representations and mathematical discourse in our classrooms. Grace and Amy have brought this to life for me in their workshop, Fostering Math Practices - Connecting Representations. The work that they are doing with routines is both challenging and extremely rewarding at the same time.

On day one of the workshop Grace and Amy were able to share with us the nuts and bolts of the Connecting Representations routine. During the day, we really dug into the math practices, how the routines connect to those and went through each phase of the routine
in depth together. They were able to give us concrete examples of the routine in action. This was the groundwork for us to be able to plan the use of the routines in our own classrooms.

Day two, for me, was the most powerful. My colleague and I were able to actually plan for and use the routine in her classroom while our colleagues attending the workshop could observe and give us feedback. This is where some deep learning and understanding took place. It is one type of learning to sit at a workshop and hear about, watch videos and discuss a new routine. It is totally another type of learning to be able to actually “try the routine on” with the creator(s) and colleagues there to provide feedback. This is what made this workshop so unique. How often do we get to experience what we have learned first hand and get to ask in the moment questions to the creators? It was some of the most nerve wracking, exciting and rewarding learning I have done yet this year!

Through this experience, we only solidified what we knew about our students and the level of learning that we need to help foster for them. Mathematical discourse, recognizing mathematical structure, the connection to representations are all key elements in the successful teaching of mathematics. These routines are a structured way to help our students maximize their learning. We are so thankful that we were introduced to this teaching practice and are excited to continue this work in our school!

Math Manipulative of the Month: Factor Triangles

by Destiny Long, Administrative Specialist on September 20

Math manipulatives provide students of all ages the opportunity to move mathematical concepts from the realm of the abstract to the concrete. They provide an opportunity to experiment, explore, and build confidence. The hands-on nature of manipulatives allows for more movement, which can stimulate the brain.

While some manipulatives are quite affordable, others can require a hefty investment. Fortunately, the University of Maine Farmington is home to the Spenciner Curriculum Materials Center. The Spenciner Curriculum Materials Center houses a wonderful selection of math manipulatives, most of which are part of the circulating collection. 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’s material is Factor Triangles from Lakeshore Learning. Factor Triangles meet the Common Core State Standard: Operations and Algebraic Thinking 4.OA.B.4. They are recommended for use in 4th-6th grade. As shown, students can use the triangles to find factors and prime numbers. The set contains 160 triangles, which are color-coded to help guide students.

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.maine.edu/cmc/](http://www2.umf.maine.edu/cmc/)

Math Coaching In The News

by Destiny Long, Administrative Specialist on September 20

In Education Week, Vol. 37, Issue 35 from June 2018, there was an article on Math Coaching titled “To Improve Math Teaching, Coaches Get Ongoing Lessons,” by Madeline Will. The article looks at an instructional coaching program that started in Tennessee 4 years ago, in partnership with the University of Pittsburgh. It discusses the importance of coaches receiving coaching--because making the transition from teaching children to adult learners poses unique challenges.

You can read the complete article online at the following link:


The Math Leadership Graduate Certificate Program

Since 2011, The Graduate Education Certificate in Mathematics Leadership (ML) has been offered at the University of Maine Farmington (UMF). Robert “Bob” Jenkins, MEd, and Margaret “Maggie” Griswold, PhD, the co-developers of ML also teach the cohorts of future mathematics leaders in Maine in a 4-course graduate program.
At the 2018 Spring Conference of the Association of Teachers of Mathematics in Maine (ATOMIM) in Portland, The Jacqueline Mitchell Mathematics Educator Award for outstanding contributions in mathematics education and mathematics leadership in Maine was awarded to Bob and Maggie. It was noted in the award that Bob and Maggie also maintain a Network of Mathematics Leaders that shares resources and information and seeks to support math leaders in the state.

Bob and Maggie have long careers in mathematics education in many arenas: classroom teaching, school/university partnerships and consulting, and university teaching at both the undergraduate and graduate levels.

The Certificate in ML boasts 100 participating teachers, representing all 9 Superintendent Regions in Maine. Graduates of the program serve in leadership positions in ATOMIM, including the president, communications director and four of the seven regional representatives. ML students use the 4-graduate courses in the program as a mathematics concentration for UMF’s Master of Science in Education (M.S.Ed) in Educational Leadership, and about 10% of the ML students are also math coaches in Maine Schools.

A new certificate cohort will be starting in January. Contact the Office of Graduate Studies for more information.

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 (Freeport):** October 16th
Member districts will receive details by email.

**MMCP Fall Learning Lab/Dine and Discuss (Carmel):** October 18th
Member districts will receive details by email.
9-12 MMCP Fall Dine and Discuss: October 22nd
Member districts will receive details by email.

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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