

MoCo Monday Minute

Monday, December 14, 2015

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MSE Glove Drive – A small group of 3rd grade girls have been involved in a book club this semester at MSE. The book club met each week with Mrs. Mays during lunch to read the book *Gideon's Gift* by Karen Kingsbury. In the story, a young girl gives hope to a homeless man by giving him a pair of gloves. The book club and the A-OK Kindness group joined in an effort to give hope to families, friends, and community members by collecting gloves to disperse to individuals who could be warmed by an extra pair of gloves. The book club and a few A-OK representatives will be taking a service field trip to share the gloves with residential facilities in Montgomery County.



Newsela in Your Community Contest Winners – Congratulations to Brianna Bryant, Rachel Blevins, and Emiley Mattingly, who are students in Mrs. Kim Barnes' class. They participated and have been named winners in the Newsela in Your Community Contest. Students wrote insightful responses about how they see their families, schools, and broader communities reflected in the news. [Click here](#) to view the winning entries.



Letters to Soldiers – Members of the Montgomery County FBLA recently collected letters and cards to send to soldiers that will be away from their families for the Christmas holiday; either overseas, active duty, or wounded and not able to be home for Christmas. They collected around 400 letters and cards to be distributed. This is the second year for the Letters to Soldiers campaign, and this year they exceeded last year's total! The letters were mailed to a distribution facility in California on December 9th, and will be sent across the world to soldiers

hoping to brighten their spirits during the holidays!



MC² Field Trip to MSU Space Science Center – The 7th and 8th grade students from MC² visited the Star Theater in Morehead State University's Space Science Center. The students learned about the latest scientific information in the world of black holes and how to locate constellations in the December night sky.

Vote for Your Favorite Banner – Each school district has been invited to design a banner for display at the 80th Annual Kentucky School Boards Association Conference scheduled for February 2016 at the Galt House in Louisville. The banners are a very important contribution to the conference, reminding attendees of schools' primary focus -- learning and learners. In order to be

displayed at the conference, the banner must identify the school district and depict the conference theme:

"From chalkboards to whiteboards: 8 decades of serving school boards"

Only one banner from each school district is allowed. Each school has created a banner and we are asking our students, staff, and community to vote for the one that will represent Montgomery County at the KSBA annual conference. Please [click here](#) to vote for your favorite choice. Voting will end Friday, December 18th at 4 p.m.

Student Attendance – MCIS had the highest one day attendance and highest weekly attendance percentage with 95.96% on Thursday, and a weekly average of 94.07%. Way to go!

ABC Channel 36 Teacher of the Week – Montgomery County High School art teacher, Jennifer Billings, was recently named Teacher of the Week by ABC Channel 36. In order to be selected, a student must nominate a teacher and submit a response on why the teacher deserves to be named "Teacher of the Week". The student who nominated Mrs. Billings mentioned how she is an exceptional art teacher with a passion to teach and also a passion for students to learn. She genuinely cares and wants her students to succeed in life. Mrs. Billings shows how art can shape



the culture around them and sees potential in every student. Mrs. Billings has taught for 17 years and the past 2 years with Montgomery County Schools. Congratulations, Mrs. Billings!

Leadership Montgomery County – December 10th was Education Day for the 2015 Class of Leadership Montgomery County. Participants toured Montgomery County Intermediate School, Mt. Sterling Elementary, Montgomery County High School, the Transportation Compound, and Agriculture Center.

Dates:

- Dec. 14 – McNabb SBDM Council Meeting, 4:00 p.m.
- Dec. 14 – Camargo PTO Meeting, 5:30 p.m.
- Dec. 15 – Lunch for Mapleton Staff Provided by PTO
- Dec. 15 – Writing Winter Wonderland, 6:00-7:15 p.m., MSE
- Dec. 15 – Board of Education Meeting, 6:30 p.m., MCHS Cafeteria
- Dec. 16 – Mapleton PTO Meeting, 4:30 p.m.
- Dec. 16 – Camargo “Best Christmas Pageant Ever” Play, 5:00 p.m.
- Dec. 17 – MCHS SBDM Council Meeting, 5:30 p.m.
- Dec. 17 – Camargo Holiday Celebration, 6:00 p.m.
- Dec. 18 – Winter Parties, MSE
- Dec. 18 – Polar Express Day/Parties, 1:30 p.m., Camargo
- Dec. 18 – Christmas Parties, 1:30 p.m., Mapleton
- Dec. 18 – MCIS SBDM Council Meeting, 5:00 p.m.
- **Dec. 21-Jan. 1 – Christmas Break**
- Dec. 27-29 – Gateway Holiday Classic, MCHS
- Jan. 8 – Camargo Reading A-Z Celebration
- Jan. 11- Camargo PTO Meeting, 5:30 p.m.
- Jan. 13 – Camargo SBDM Council Meeting, 3:00 p.m.
- Jan. 13 – MSE SBDM Council Meeting, 3:30 p.m.
- Jan 13 – Mapleton SBDM Council Meeting, 4:00 p.m.
- Jan. 20 – Mapleton PTO Meeting, 4:30 p.m.



McNabb STLP students went to Morehead State University for the Regional Competition with their "Duo Your Lingo" project.



First graders in Mrs. Cord's class bought and wrapped presents for their Angel Tree recipient.



Continuous Learning through Professional Literature

Getting Students Talking to Each Other About Math

In this *Elementary School Journal* article, Megan Franke, Angela Turrou, Noreen Webb, Jacqueline Wong, Nami Shin, and Cecilia Fernandez (University of California/Los Angeles) and Marsha Ing (University of California/Riverside) examine ways to get students to engage with each others' mathematical ideas. "Researchers increasingly recognize," say the authors, "that promoting mathematical learning requires teachers to engage students in 'productive struggle,' where students expend effort to make sense of mathematics and figure out something that is not immediately apparent. One way students can productively struggle with the mathematics is through their communication with others – both through explaining one's own thought processes (e.g.,

reasoning about mathematical concepts and how to solve problems) and discussing other students' reasoning process."

This sounds good in theory, but implementing it in classrooms is not a simple matter. It's relatively straightforward to get students talking about math problems, say Franke and her colleagues, but getting classrooms to the level of "productive struggle" is quite challenging. Here is a continuum of students' degree of engagement with other students' ideas, from low to high:

- Saying "I agree" or "I disagree" with an idea that was shared.
- Pointing to the strategy that most closely resembles their own strategy.
- Repeating the details of what a student shared.
- Explaining another student's strategy after it was written on the board.
- Adding further detail to another student's strategy.
- Providing a correction to a problematic portion of a student's solution.
- Proposing an alternative solution and explaining how it differs from the idea already posed.
- Co-constructing a solution with another student.

The researchers observed a number of teacher "invitations" designed to elicit higher-level mathematical discourse:

- Asking a student to explain someone else's solution – "Joey, can you explain what Natalia did?"
- Discussing differences between solutions – "Let's look again at what Dylan said. Dylan said it is a whole number. Stella, do you want to respond to that, given what you said to start with?"
- Making a suggestion to another student about his or her idea – "What is he going to have to do with that set of numbers, with 387? What does he have to do, Grayson?"
- Connecting students' ideas to other' ideas – "Joaquin, can you see what Enrique is doing or what Natalia is doing and see if it looks like yours? Or if it's different?"
- Getting a student to create a solution with another student – "Griffin, why don't you sit down and work on the problem together with Easton?"
- Using a solution that was shared by another student – "See how Paige counted? Could you take this problem and count like her?"

As they observed classrooms in a California elementary school, Franke and her colleagues noticed three challenges that teachers faced as they tried to orchestrate good mathematical discussions:

- Students sometimes seemed unable to engage with each others' ideas.
- Students sometimes provided little or no detail about others' thinking;
- At times, students provided details but didn't address the mathematical ideas underlying other students' strategies.

In other words, say the researchers, "just inviting students to engage with others will not guarantee that students will, in fact, engage with each other, nor necessarily engage in ways that are supportive of mathematical learning."

When discussions fizzled, there were big differences in how teachers reacted. Some provided their own solution. Some moved on to another topic. But some teachers had a broader repertoire of in-the-moment strategies: probes (pressing students to engage further); scaffolding (providing some information or clarification); and positioning (interacting with students in ways that

acknowledge the students' connection with the math idea being discussed – for example, “What Aaron’s saying is that four-fourths is a whole, or one. That’s what he says. What do you say to that?”). These teacher moves, say the authors, “require not only pedagogical skill and knowledge, but also pedagogical content knowledge and mathematical content knowledge, and well as identities as teachers who see each of their students as capable. We need to better understand how teachers draw on their knowledge and identities as they make their in-the-moment decisions.”

“We never saw a teacher use the same series of support moves more than once,” say the researchers, “even in response to the same kinds of challenges. This implies that the teacher support moves were not a set of fully planned actions that could be applied repeatedly in the same way, but rather served as a repertoire of pedagogical moves that teachers drew upon in the moment. Our findings resonate with those of previous researchers and suggest that understanding the teacher moves that support student thinking requires looking beyond the first move a teacher makes and toward how teachers extend their interactions with students to support opportunities for productive struggle.” This involves a sophisticated knowledge that takes into account the student, the math, and the context – something teachers develop with years of experience, interaction with colleagues, and high-quality professional development.

The researchers close with a description of what happens when classroom mathematics discussions are at their best: “Teachers learn about content, about the development of student thinking, about their students as mathematics learners and people, and about how to support their students. The students, while learning mathematical content, learn how to listen to one another, how to ask a question that moves the mathematics forward, and how to position their ideas in relation to others’ ideas. The interaction among the teacher and students supports students to learn to persevere as they communicate with each other and productively struggle to understand and articulate each others’ ideas.”

“Student Engagement with Others’ Mathematical Ideas: The Role of Teacher Invitation and Support Moves” by Megan Franke, Angela Turrou, Noreen Webb, Marsha Ing, Jacqueline Wong, Nami Shin, and Cecilia Fernandez in *The Elementary School Journal*, September 2015 (Vol. 116, #1, p. 126-148), available for purchase at <http://bit.ly/1NezQjd>

Be sure to notify the designated person at your school if you have calendar information that should be added to your website calendar.

Thank you so much for your effort and commitment to children. If you have questions about any of the information contained in this issue of The MoCo Monday Minute, please contact me at matthew.thompson@montgomery.kyschools.us.