Spring 2014

EXAMINING MATHEMATICS COACHING

Coaching Chronicles

News and Events for EMC Project Participants

In This Issue:

The PI's Corner: EMC Results Are Coming Soon

BY DAVID YOPP

As EMC approaches the end of our final project year, I would like to thank our coaches, teachers, and supportive administrators for their dedicated participation during this important five-year study. Opening up your doors to our observers each year and taking our annual assessments are a true testament to your commitment to the profession of mathematics teaching. Together you have made this project a success, and I know I speak for the entire EMC staff when I say that we are most grateful.

Many of you have asked, "So now that we have done this for nearly five years, what have you found?"

EMC certainly wants to keep you informed of our findings, and you'll receive more information about that in an article in this, our final newsletter (see page 3). To date, though, the story is not yet finished! Our analysis is complete only for the first four years of the project. Data from Year 5—this current year, including the assessments you are taking right now—will be analyzed this summer, and *that* analysis will tell the whole story. We intend to send out a research brief this fall that will summarize EMC's final findings, and you will always be able to find the most up-to-date results on our Web site, even long after the project's end.

Meanwhile, we wish to highlight some of the things that we have learned so far. You'll recall that EMC explores the relationship between a coach's knowledge and skills and changes in the practice and knowledge of the teachers whom she or he coaches. In the beginning, we hypothesized that the greater the improvement in a coach's knowledge and skill, the greater the change in the corresponding teacher's measures. We have found this to be true for some EMC measures.

From the first four years of data, we have noted that changes in coaching "intensity," or how often a coach and teacher work together, and changes in coaching skills correspond positively to changes in teacher measures, such as our EMC observations of teacher practice. Said another way, as a coach reports increases in coaching skill or increases in the amount of time spent with a teacher, on average, the corresponding "coached" teacher's scores also improved.

Dr. David Yopp
EMC Co–Principal Investigator
University of Idaho

Again, these findings come from four years of information, and we are anticipating more observations from our analysis to come.

For now, we wish you a successful close to the school year and a wonderful summer. Thank you for everything you have done, and continue to do, to make the EMC Project a rousing success. I hope you will share in our pride in a job well done. ▲

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RMC RESEARCH

University of Idaho

NSF

EMC COACH PROFILE: TRACIE STAUFFER

Name: Tracie Stauffer
District: Adams 12 Five Star Schools, Thornton, Colo.
EMC participant since: October 2009
EMC teachers: Aaron Dees, Marcia Drogheo, and Kathy Schade, North Mor Elementary
Principal: Betsy Miller, Thornton Elementary
Family: "I'm a third-generation Colorado native. I've been married to Brent for almost 25 years. We have two amazing adult children who make us incredibly proud. Because Brent is also a teacher, we have a ton of fun traveling and working on projects during our time off."
Years as an educator: "I've been in education 17 years total. I was fortunate to be able to take time off when my children were little and returned once they were in school. The majority of my classroom experience was in third grade at a Title 1 school. Prior to this year I was an instructional coach for seven years."
This year you moved into the assistant principal position at Thornton Elementary. How's that transition been going? "Being a new administrator has been a great experience. I was blessed to be able to begin my new experience with my mentor principal, Betsy, whom I have worked with for many years. Her support and guidance have helped me to have the confidence to do what is necessary, and the comfort to ask questions if I need guidance. I love working at Thornton Elementary and feel that I have been part of a positive leadership team that will help support student growth and achievement."
You've been with EMC since the very beginning, and we're grateful that you've still found some time for coaching, even in your new role. What do you find most rewarding about being a coach? "The most rewarding part of being a coach is when trust and rapport have been built, and you can have an honest conversation about what can be gleaned from a lesson. Specifically with EMC, the biggest reward has been to see the growth and 'outside the box' thinking that my teachers have done over the last five years. I have truly appreciated the opportunity for my personal growth throughout the EMC experience. This has been a wonderful opportunity. Thanks to all!"
What, in your opinion, is one of the biggest challenges that we face as mathematics educators today? "Currently, I think the biggest challenge is that so many of our schools are focused on improving literacy achievement (which is necessary) that our math planning/lessons and professional development are not the priority that is required to really move students' mathematical thinking."

Favorite pastimes away from school: "Brent and I really like spending time at our 'Little House on the Prairie' in eastern Colorado. It's quiet and away from all of the hustle and bustle of our lives. We really enjoy sharing it with our children, parents, friends, and two dogs. We also enjoy home improvement and a multitude of projects that always pop up."
What are you reading right now? "I just bought my first book to read on my iPad. It's *The Daniel Plan: 40 Days to a Healthier Life* by Rick Warren, Daniel Amen, and Mark Hyman. It's a Christian self-help book. Our church is going to do a book study together, so check back to see if I'm healthier in 40 days!"
Any big plans for summer vacation? "We're going to take our daughter to Las Vegas for her 21st birthday. We also have a family reunion that will take us to Guntersville, Alabama. We are totally excited about both trips!"
What's one goal you have for the next school year? "I'm so excited to begin my second year as an administrator. My goal will be to focus on supporting teachers in their growth, and help build their capacity, so they can move our high-need students toward increased growth and higher achievement." ▲

Your EMC Calendar for Spring 2014

Here is your quick rundown of project activities for the last half of the 2013-14 school year.

Coaching sessions wrap up. Project coaches should continue toward the goal of completing a total of *eight* three-part coaching sessions with each project teacher during the 2013-14 school year. At least half of these sessions should cover mathematics content focused on number and operation. Coaches also should round up notes on the year's coaching sessions, which will help as they fill out the EMC Coach Reflection and Impact Survey sent earlier this month.

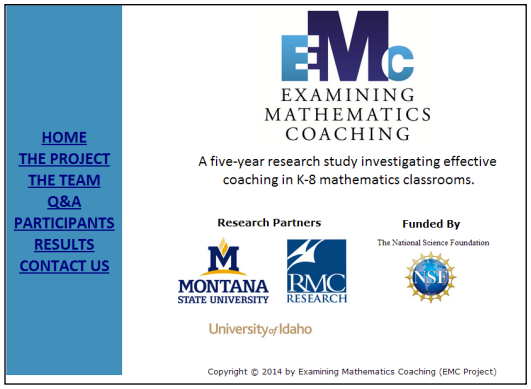
Teacher observations underway. This spring EMC Project observers are contacting all teachers to arrange their final annual classroom observation at each teacher's convenience. These observations are separate from coaches' classroom observations and occur only once each year in the spring. (For more info, see "Teacher Observations: What Are They For?" in this newsletter.)

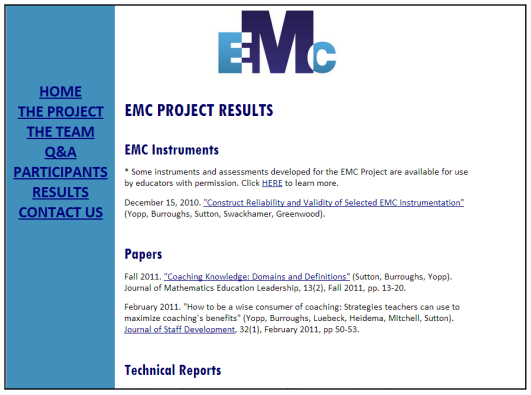
Assessments in progress. Project teachers received all four of their online assessments on April 1. Thank you for completing them promptly, before school finishes! The usual $100 stipend will apply. In addition, coaches are working to complete the "EMC Coach Reflection and Impact Survey," which reviews the year's coaching sessions. ▲

EMC Web Site Will Present Final Results

Long after the project coaching sessions and online assessments have ended, the significance of the EMC Project will live on through the dissemination of results among educators and scholars around the country. Participants and the public at large will find those results posted on the EMC Web site: http://www.math.montana.edu/~emc/.

For four years now, the "Results" page of the site has featured links to papers, reports, and presentations published or presented by EMC staff. As project researchers complete their work this summer and fall and begin to share the study's findings through final presentations and papers published in peer-reviewed journals, those results will continue to appear on the Web site for all to see—most notably our participants who made the work possible.





"We hope that all of our participants will visit the Web site from time to time later in the year," says co–Principal Investigator John Sutton. "In addition, we will assemble a 'research brief' that summarizes our findings and will share that directly with our coaches, teachers, and administrators by e-mail. Whenever we can, we'll also use e-mail to alert everyone of important new posts on the Web site."

The EMC e-mail address, emc@math.montana.edu, also will remain active, with Project Director James Burroughs working in a part-time capacity into 2015. We hope you will stay in touch. ▲

Classroom Observations: What Are They For?

(This article first appeared in the Fall 2010 edition of the EMC Newsletter.)

Last spring, EMC staff visited each project teacher and conducted a classroom observation, and the process will repeat this spring, when observers return to schools during the months of April and May. But just what are these observations all about?

In addition to being a great opportunity for project staff to visit with teachers in their element, the observations are used to collect very important information for our study. The EMC Project wants to determine how specific kinds of knowledge among coaches may influence mathematics teaching. Eventually making those connections in a scientific way means measuring a teacher's practices in the classroom over time using a standardized assessment created for that purpose. All EMC observers are trained in using this assessment and have established "rater reliability" to ensure consistency across observers and school sites.

So, in effect, when an EMC staff member observes a teacher, she or he is actually collecting data about the teacher's *coach*. That may help answer one question we've heard from several teachers: "Why can't my observer give me some feedback at the end of my class?"

"I understand the desire for feedback," says David Yopp, EMC co–principal investigator. "When I'm observed while I'm teaching, I always ask the observer to give me comments. I love to hear the impression of that 'other set of eyes.' However, because EMC is a research project, the observers can't give feedback because they would then be coaching, not observing." And that would taint the project's measures of the coach's effectiveness, Yopp explains.

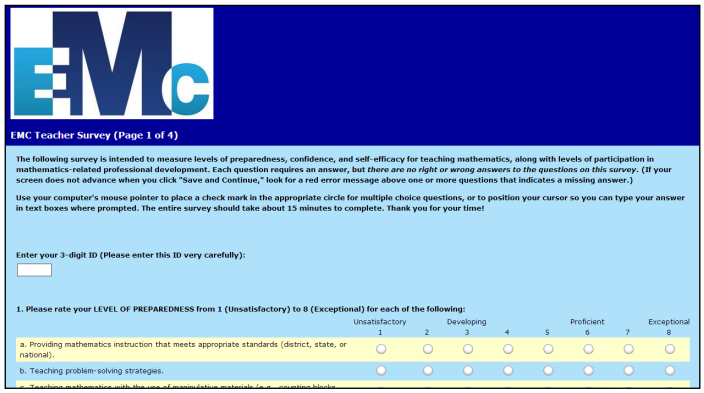
Instead, he says, the best source of guidance about a teacher's work in the classroom is the teacher's coach.

Teachers: Do you have any questions or concerns about EMC's observation of your class? Let us put your mind at ease! Contact your district's EMC observer, or e-mail Project Director James Burroughs. ▲

Final Teacher and Coach Assessments Are Underway

On April 1, all EMC Project teachers and coaches received their annual springtime assessments—project instruments that are a central part of our research efforts. With the end of the project rapidly approaching, this marks the final round of surveys for both teachers and coaches.

"We give these surveys toward the end of the school year so that our participants will have completed most of their coaching sessions for the year," says Principal Investigator Beth Burroughs. "We know it's a busy time for everyone with the end of school coming, which makes us all the more grateful for the timely responses that will help us begin our final work in the study."



EMC Teacher Survey (Page 1 of 4)

The following survey is intended to measure levels of preparedness, confidence, and self-efficacy for teaching mathematics, along with levels of participation in mathematics-related professional development. Each question requires an answer, but *there are no right or wrong answers to the questions on this survey.* (If your screen does not advance when you click "Save and Continue," look for a red error message above one or more questions that indicates a missing answer.)

Use your computer's mouse pointer to place a check mark in the appropriate circle for multiple choice questions, or to position your cursor so you can type your answer in text boxes where prompted. The entire survey should take about 15 minutes to complete. Thank you for your time!

Enter your 3-digit ID (Please enter this ID very carefully):

1. Please rate your LEVEL OF PREPAREDNESS from 1 (Unsatisfactory) to 8 (Exceptional) for each of the following:

	Unsatisfactory 1	2	Developing 3	4	5	Proficient 6	7	Exceptional 8
a. Providing mathematics instruction that meets appropriate standards (district, state, or national).								
b. Teaching problem-solving strategies.								

This spring teachers are again completing a group of four instruments: the EMC Teacher Survey, the Mathematics Knowledge for Teaching assessment, the EMC Teacher Reflection and Impact Survey, and the EMC Teacher Needs Inventory. As usual, the project will issue a $100 stipend to each teacher upon completion of all four surveys. (Please note: If you've moved since the last time EMC mailed you a check, you must notify us of your new address: emc@math.montana.edu. The Post Office does not forward or hold our stipend checks.)

Also this spring, coaches will again complete their final survey of the year, the EMC Coach Reflection and Impact Survey, on which they will report the year's coaching activity.

As usual, the project's goal is an average completion time of about two weeks after teachers and coaches receive the surveys. Please help us meet our goal by completing your surveys as soon as you can! ▲

Special Thanks to Our EMC Classroom Observers!

Each spring since 2010, 12 EMC staff members have traveled across 28 school districts in eight states to conduct the project's annual classroom observations among all participating teachers. To date, our observers have completed more than 700 observations, and by June, that number will top 850!

In addition, our observers conducted project orientation sessions in their districts at the beginning of the project, and each winter since 2010, they have met in Denver to undergo "inter-rater reliability training" so that their observations are consistent across the group.

We are *extremely grateful* for their time, hard work, and dedication to the project's success. Here they are, a special group, listed with the EMC states where they have worked tirelessly these past five years:

Elizabeth Burroughs (Montana)
Clare Heidema (Colorado, Georgia)
Jennifer Kosiak (Wisconsin)
Jennifer Luebeck (Idaho, Montana)
Connie Meade (Idaho)
Arlene Mitchell (Colorado)
Karma Nelson (Montana)
Janeen Norland (North Dakota)
Kathy Stover (Idaho)
John Sutton (Nebraska, Washington)
Judy Thomson (North Dakota)
David Yopp (Idaho, Montana)

EMC TEACHER PROFILE: SARA LINSACUM

Name: Sara Linsacum
School: Sunset Elementary, Grade 3; Moffat County School District, Craig, Colo.
EMC participant since: November 2009
EMC coach: Cassia McDiffett
Principal: Laura Vinger
Family: "I was very blessed to meet my best friend, my husband, Travis, seven years ago. We've been married for five years and have two amazing daughters, Jayden and Tinsley."
Years as a teacher: "This is my seventh year of teaching."
After teaching kindergarten for years, this year you switched to third grade. How's that going? "My original degree is in Physical Education and Health. When a kindergarten job opened at the school I student-taught at, I thought I would give it a try but go back to teaching PE when a job opened up. I feel in love with kindergartners and the amount of growth they make in a school year. Wanting to push myself, and liking change, when the third-grade position opened up in August I thought it would be a good fit for me. I absolutely love it! The kids are still making a tremendous amount of growth at this age, but they're able to guide their own learning process more. I enjoy watching them transfer and apply their knowledge to authentic real-life situations."
What do you find most rewarding about being a mathematics teacher? "I enjoy integrating math into all content areas. When you make math applicable, kids make deep connections that they can apply to their lives."
You've been with EMC since the very beginning. What's one way that your coach has helped you in your mathematics classroom over the course of the project? "Having Cassia allows me to think deeply about what I'm teaching, why I'm teaching it, and how to continually improve. Having someone to share my educational journey motivates and empowers me."
What, in your opinion, is one of the biggest challenges that we face as mathematics educators today? "In math, and overall in education, we're faced with an abundance of content to teach. As educators we must challenge ourselves daily to take a step back and put the importance of teaching for depth and transfer over high-paced 'coverage' of content."
Favorite pastimes away from school: "I love to do everything outdoors: hiking, biking, and running. I still get to bring in my love for sports by coaching cross country and track. I'm a cross-fit addict, and I'm always looking for my next challenge. I'm a lifelong learner and am super-passionate about student-centered learning, technology, and curriculum; therefore, I love to read current research and educational texts."

What are you reading right now? "I'm interested in the research on student success in correlation to 'grit.' I just finished reading Paul Tough's *How Children Succeed,* which was very inspiring. After watching Sir Ken Robinson present in L.A. at the ASCD conference, my next book will be *The Element: How Finding Your Passion Changes Everything*."
Do you have any big summer vacation plans? "I'm planning on a relaxing summer with my family in the wonderful Colorado mountains."
What's one goal you have for the next school year? "I want to spend more time documenting, journaling, and reflecting on my current classroom philosophy and practices. I'm also excited to take on coaching and leadership roles within our district." ▲

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