

Coaching Chronicles

News and Events for EMC Project Participants

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The PI's Corner: Our Standards Are Your Standards

BY ELIZABETH BURROUGHS

Happy New Year to all of our outstanding EMC Project participants! Thank you in advance for your continuing participation and hard work in 2012.

In our last edition of this newsletter, my co-PI John Sutton outlined the broad changes that the Common Core State Standards for Mathematics (CCSSM) continue to bring to our profession. The EMC Project, in particular, has experienced and embraced those changes, especially in the way we deliver professional development to our project coaches, who work in school districts across seven states.

When we first envisioned EMC back in the fall of 2008, CCSSM had not been released—even in draft form. When EMC leaders outlined the professional development that we would provide to all EMC coaches in both mathematics content and coaching knowledge over the five-year project, we relied on National Council of Teachers of Mathematics (NCTM) resources, such as the *Curriculum Focal Points* and *Principles and Standards for School Mathematics*.

Two short years later, the CCSSM had been released in draft form, revised, and re-released in final form. In summer 2010, when we offered our

first EMC professional development workshop, many states had already adopted CCSSM as their state standards. The EMC Project conducted a thorough review of our materials to ensure that we are meeting the needs of our participants in addressing CCSSM.

Other organizations did similar cross-checking. Achieve Inc., which was founded by the National Governor's Association and is the group initially responsible for authorship of CCSSM, conducted a review of the *Curriculum Focal Points* and the CCSSM and concluded: "The CCSS are similarly rigorous to NCTM's *Focal Points*. While some content occurs earlier in the CCSS, the two documents generally describe the same content." (You can read more [HERE](#).)

We at the EMC Project formulated a similar conclusion. Projects like ours, with participants from multiple states, find the synchronization of standards for all students satisfying. It has always seemed a little disingenuous that a student would move across state lines and suddenly find that different mathematics is defined as important to master! Of course, the rollout of standards takes effort, as curricula in different states are realigned to match the timing specified in



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CCSSM. But CCSSM are based on decades of standards-based mathematics instruction in the United States, going back to the 1989 NCTM *Curriculum and Evaluation Standards for School Mathematics*, making this rollout process easier than if starting from scratch.

Some specific content we address in the EMC mathematics professional development, for example, relates to a grade 3 CCSSM standard on understanding unit fractions: *Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.* To help coaches understand what kind of instruction will lead to this level of fraction understanding,

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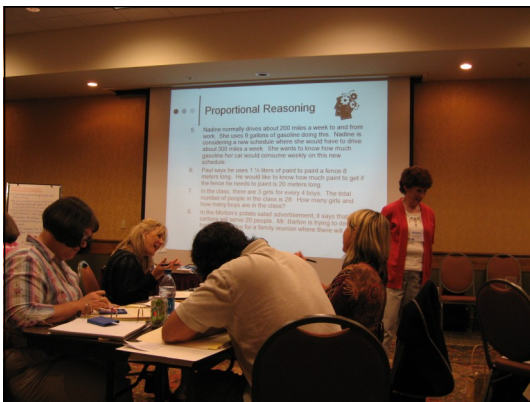


On the EMC Research Front

By David Yopp
EMC Principal Investigator

What constitutes effective coaching? The EMC Project's statistical exploration is showing great promise for answering that very question.

At the outset of the project, EMC researchers hypothesized that coaching effectiveness could be described by coach measures such as content knowledge assessments and self-assessment of coaching skills, and that these coach measures could explain changes in teacher measures such as content knowledge



EMC coaches discuss proportional reasoning at this professional development session in July 2010.

assessments and observations of teacher practice. (These are the assessments that our coaches and teachers take in the fall and spring, and EMC's classroom observations of teachers that take place each spring.) Preliminary investigation of this hypothesis using a tool called Structural Equation Modeling demonstrates that the EMC measures are a good fit for this model. This tells us that the measures are likely to be effective tools for predicting coaching effectiveness.

Even more promising trends are observed when we examine particular assessments.

Over the past two and a half years, EMC teachers and coaches have steadily improved their knowledge and practice. For coaches, differences in the two professional development cohorts are already apparent. Coaches in Group 1, who received mathematics professional development in the summer of 2010, have made strong gains in mathematics content and have maintained those gains over time. Coaches in Group 2, who received coaching knowl-

edge professional development in the summer of 2011, have made strong gains in their assessment of their coaching skills. So at this point in the project, coaches are gaining knowledge and feeling

more effective, and the gains are consistent with the types of EMC professional development they have attended.

EMC teachers also have improved their knowledge and practice, although it is a bit early to say that these gains are due to coaching in particular. Our teachers will take their second round of post-assessments this spring, and EMC researchers will take an in-depth look at that data. We will keep you posted as findings come in, so be sure to look for updates in future EMC newsletters. ▲

EMC TEACHER PROFILE: MARSHA STARK

Name: Marsha Stark

School: Fox Hollow Elementary, Grade 2; Idaho Falls School District 91, Idaho Falls, ID

EMC participant since: November 2009

EMC coach: Jenna Briggs

Principal: Lance Lindley

Family: "I have 11 children. Eight are married, one is in college, and two are still at home. There are 18 grandchildren, and that number continues to grow. I didn't birth all 11, but I mother them all. I was divorced with three daughters when I was set up on a blind date with a widower who had seven children.

Randy and I fell in love and have now been married for 14 years. We have a

'yours, mine, and ours' family."

Years as a teacher: "I've taught for 17 years. My first job was in 6th grade, where I taught for four years. I'm currently in my fourth year as a 2nd grade teacher."

What's one way that your coach has helped you in your mathematics classroom? "Jenna has been a real strength to me. She is able to help me see ways in which I can improve my teaching of mathematics. Her questions help me reflect on my lesson and identify what worked, what didn't work, and how to make it better. Some days can just be discouraging, but Jenna's positive attitude is so uplifting. Just knowing that she is always available for support and help to work through a problem is a great blessing."

What, in your opinion, is one of the biggest challenges that we face as mathematics educators today? "I feel that one of the greatest challenges as a mathematics educator is recognizing how our students are developing mathematically, then discovering ways to continue, encourage, and enrich that development."

Favorite pastime away from school: "Being a grandma. I remember my mother telling me that being a grandma was the best. I didn't quite believe her because I thought being a mom was the best. Now I realize that my mom was right—again."
What are you reading right now? *The Daily Five: Fostering Literacy Independence in the Elementary Grades* by Gail Boushey and Joan Moser. "It's changed the way I teach language arts. If you haven't read it—do!"

One goal for the second half of the school year: "I think as teachers, most of us are striving to improve our methods and our student achievement. I took a summer course called Mathematical Thinking for Instruction. Between this course and *The Daily Five*, my goal is to use these methods to become a more effective teacher and then enjoy my journey along the way." ▲



EMC COACH PROFILE: LINDA ACHONDO

Name: Linda Achondo

District: Wahluke School District, Mattawa, WA

EMC participant since: November 2009

EMC teachers: Troy Gibson, Michelle McEver, and Erin Tostenon, Morris Schott Elementary.

Family: “My husband, Michael, and I have been married for two years, and we have a nine-month-old daughter, Emma.”

Years as a

teacher: “I’ve taught for eight years in grades 2, 3, 4, and 6.”

Years as a

coach: “This is my third year as a coach.”

What do you find most rewarding about

being a coach? “The most rewarding part of my job is helping teachers find solutions to struggles they are having with instruction.”

What, in your opinion, is one of the biggest challenges that we face as mathematics educators today? “The biggest challenge that we face as mathematics educators, at least in my district, is developing rich mathematics classroom environments, allowing students to construct their own learning but holding them accountable to high standards.”

Favorite pastime away from school: “Spending time with my daughter.”

What are you reading right now? *Practicing the Art of Leadership* by R.L. Green.

One goal for the second half of the school year: “My professional goal is to complete meaningful coaching cycles with all teachers in my building.” ▲



The PI's Corner

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our professional development in mathematics focuses on the idea of “unitizing.” In the EMC coaching knowledge professional development, we spend significant time during the week practicing ways to recognize standards-based mathematics instruction so

that coaches can observe and support these practices in their work with teachers, focusing on the mathematical practices that are central to the CCSSM.

Working within these new standards is just one of the ways we try to support you as mathematics educators while also pursuing EMC’s research goals. We hope you will continue to let us know how we can help.

For now, we look forward to seeing you all in your schools this spring. ▲

Your EMC Calendar for Spring

Below is a quick summary of EMC Project activities for the last half of the 2011-12 school year. If you ever have questions related to the project, just send us an e-mail or check the “Participants” page on our Web site. Thank you in advance for your time and hard work!

Coaching sessions continue: Project coaches are well on their way to completing a total of *eight* three-part coaching sessions with each project teacher during the 2011-12 school year, or about one per month. Four of these sessions should cover mathematics content focused on number sense and operations. Remember, a single coaching session is made up of a pre-observation conference, an observation or model lesson, and a post-observation conference. Coaches: be sure to keep notes on your sessions, which will help you fill out the EMC Coach Reflection and Impact Survey, coming in April or May, depending on your district’s academic calendar.

Questions? Contact Project Director James Burroughs at emc@math.montana.edu.

Online coaches’ Moodle forum continues: Coaches in both professional development groups can continue to use their EMC online community for up-to-the-minute support

and thought-provoking discussion.

Teacher observations start in March: This spring, project staff will again contact all teachers to arrange a classroom observation at each teacher’s convenience. (*See “Teacher Observations: What Are They For?” in the [Fall 2010 edition](#) of the newsletter.*) Please note that teachers who joined the project last fall will be observed *twice* this year: once at the time they joined and again this spring with the rest of our project teachers.

Assessments for teachers return in April and May: Like last spring, project teachers will take all four of their online assessments near the end of the school year. The usual \$100 stipend will apply.

Professional development for “Group 1” coaches: Coaches in Group 1 (PD 2010/2012) have already received and confirmed their assigned dates for their second and final EMC professional development workshop, this time in Coaching Knowledge. These coaches will receive detailed information about the workshop in early April, followed by travel arrangements in early May. If you have any questions, please contact James Burroughs at emc@math.montana.edu. ▲

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