



National Center for Teacher Effectiveness



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Beyond the Numbers Convening 2014 Updates

In our last newsletter, we shared some information and resources from our Beyond the Numbers Convening 2014, co-hosted with the Strategic Data Project. Throughout this academic year, we will take a deeper dive into some of the topics covered at the event, such as Common Core State Standards, digital video, and dual-purposing data for professional learning.

This issue will focus on dual-purposing data for professional learning. A key takeaway from the breakout session was that while teacher evaluation systems are a method to assess teachers, they can also be used to support and improve instruction when the data they collect is shared with teachers as constructive feedback. This concept is also aligned with the goals of NCTE's newest study, *Developing Common Core Classrooms through Rubric-Based Coaching*, which is further described throughout this newsletter.

Convening videos and resources: bit.ly/ncte-resources

What Participants Had to Say About Our Convening

While we are still collecting survey responses, we appreciate the positive feedback that we have received so far. Of those who have completed the survey, **97%** report having been able to connect the conference information to their work, and **98%** expect what they learned at the conference to contribute toward changes in the work of their agency going forward. Many of the respondents have also given us specific feedback on the strengths and weaknesses of our conference:

"This conference [...] helped me network with national research leaders who **extend my own research capabilities.**"

"I have used ideas shared during the conference to **drive data inquiry and to drive action steps** to improve reliability and quality of observations."

"The research insight is what we don't receive very often at work. It helps **elevate our work to a new horizon** if given more time to deep-dive and digest."

"The convening provided a **large and diverse amount of information and interpersonal resources** for understanding the interdependencies of empirical knowledge and organizational decision making. These were pertinent to our work on teacher and leader evaluation."

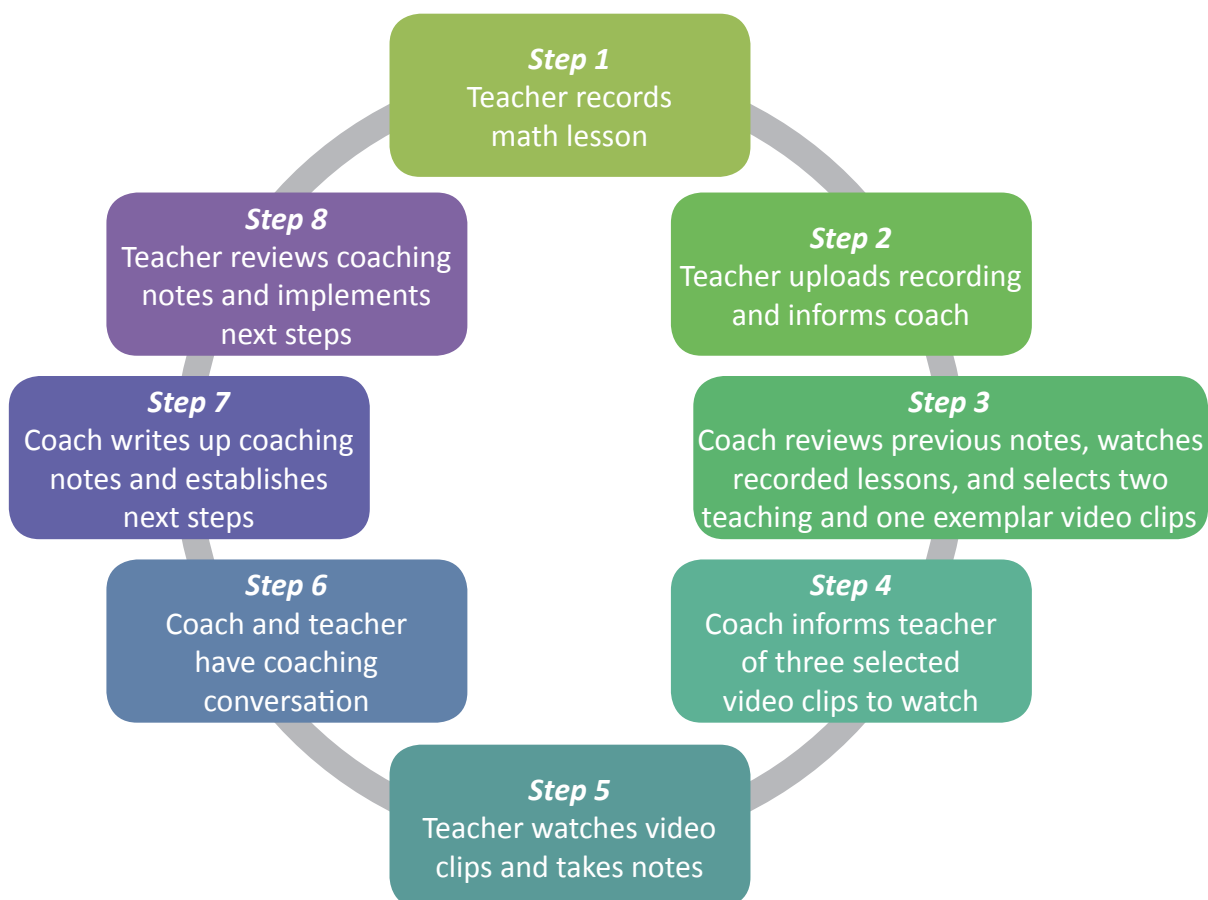
Developing Common Core Classrooms Through Rubric-Based Coaching

A new NCTE study, *Developing Common Core Classrooms Through Rubric-Based Coaching*, aims to deepen teachers' understanding of mathematics teaching through one-on-one virtual coaching structured around the Mathematical Quality of Instruction (MQI), a Common Core-aligned mathematics observation rubric. The project is led by Harvard Graduate School of Education Professor Heather Hill, Brown University Professor Matthew Kraft, and NCTE Director Corinne Herlihy. The 140 participating teachers will receive summer training on the MQI rubric, 15 coaching cycles (described below), and access to a video and practitioner article library developed to provide exemplars of Common Core-aligned practices.

To organize this work, we developed a simplified theory of action relating MQI coaching to practice and, ultimately, to student outcomes. The theory consists of an intensive and sustained observation and feedback cycle centered around three principles:

1. Providing teachers with a framework for planning, enacting, and reflecting on mathematics instruction through:
 - guidance on important dimensions of mathematics instruction (via the MQI rubric)
 - a norming process and exposure to a wide range of practice (via the library of exemplars)
2. Developing teachers' habits and abilities to reflect on their own practices and assess their own strengths and weaknesses
3. Providing teachers with individualized and actionable suggestions on how to improve their practices in ways that are designed to increase the mathematical quality of their instruction

Mathematical Quality of Instruction (MQI) Two-Week Coaching Cycle



Researcher Shares Insights on Teacher Coaching

Below is an excerpt from an NCTE interview with Dr. Matthew Kraft, Co-Principal Investigator of the NCTE project, Developing Common Core Classrooms Through Rubric-Based Coaching. Content has been edited for clarity and length. For the full transcript and audio of this interview, please visit bit.ly/ncte-news41.

Why are you doing research on teacher coaching?

The work with Heather [Hill] and Corinne [Herlihy] is drawing on the promising initial results of some early analyses of teacher coaching models and my own interests in professional development as a way to improve teacher effectiveness. I think that the conversations at the national and state level are largely focused on teacher evaluation. Does this mean that evaluation is for helping us to select the best teachers and retain them, deselect underperforming teachers and remove them from the profession, or potentially provide feedback to all teachers in the classroom and help them improve? And can we do those at the same time, or are they mutually exclusive? I think those are all interesting and open questions. Most of my work is focused on improving teachers' practice. We have 3.5 million teachers in the classroom—we can't fire and rehire them all, nor would I argue that we want to. Instead, can we leverage our emerging research base to find ways to develop sustained intensive cycles of observation and feedback?



Matthew Kraft
Assistant Professor
Brown University

Dr. Kraft's research and teaching interests include the economics of education, education policy analysis, and applied quantitative methods for causal inference. He was awarded a Spencer Dissertation Fellowship in 2012 for his work examining the relationship between changes in teacher effectiveness and the professional environments in which teachers work. Previously, he taught in Oakland USD and at Berkeley High School in California. He holds a doctorate in quantitative policy analysis in education from the Harvard Graduate School of Education, and a master's in international comparative education from the Stanford University School of Education.

“Can we leverage our emerging research base to find ways to develop sustained intensive cycles of observation and feedback?”

What have you learned from the coaching project so far?

One thing that is important and exciting is that our recruitment efforts to get teachers to sign on to participate in the study—to have the opportunity to receive coaching—have been very successful. I think there's something to learn from that. Teachers are willing and eager to receive what they perceive as high quality professional development. This project is an intensive process of up to 15 coaching cycles, where teachers are videotaping instruction, sending it to a coach and having bi-weekly conversations of up to an hour or more, and reviewing their own instruction and watching other teachers' short clips. These teachers are willing to give up their own time, 3–5 hours every two weeks, to participate in this program, not because their principal told them they had to, or their district said they should, but out of their own voluntary interest. I think that that speaks to the lack of quality professional development that they do have access to and the professionalism of teachers and their interest in improving their practice. *(Continued on the NCTE website)*



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Message from the Director

We are looking forward to an exciting year ahead. We are continuing analysis and dissemination of findings from our core NCTE study, *Developing Measures of Effective Mathematics Teaching*, and continuing to build on this foundational work. The analysis in the core study is now capitalizing on the third year of data where teachers were assigned (when possible) by lottery to classroom rosters. This will allow us to validate the measures while controlling for classroom composition. It is an important test, because we (researchers, policymakers, and education leaders) need to better understand how measures of teaching depend on the students being taught.

A key measure throughout our work is the Mathematical Quality of Instruction (MQI) rubric. Over the course of the project, the MQI was revised to better align with the Common Core and better facilitate the rubric's use in professional development settings. We are now launching a new professional development project uses the MQI as a framework for personalized coaching for mathematics teachers. The coaching is virtual—teachers will upload videos of their classroom instruction to share with their coach on a secure web platform. The goal of the project is to determine whether coaching affects outcomes for teachers and their students. The virtual nature of the project is exciting. If shown to be effective, this may be a way to provide support to schools near and far. You can learn much more about the project throughout the rest of the newsletter.

Finally, we will continue to update you on our findings, presentations, conferences, and research that we think will be relevant and interesting to you in the area of effective teaching. We hope to keep you engaged in our work and connected to research that supports what you do.



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