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EVALUATION BRIEF

What Accelerates a Community of Practice? Inflection Points That Changed the Course of the Math in Common Initiative

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This report is part of a series summarizing learnings from the five-year Math in Common (MiC) initiative. During MiC, teams from 10 diverse California school districts engaged in learning about and sharing best practices for implementing the Common Core State Standards for Mathematics (CCSS-M) in grades K–8.

In the education field, policymakers, researchers, and funders have begun investing in professional learning communities composed of educators from districts and schools, with the hope of enacting change in education. The MiC initiative had a community of practice (CoP) at its center, one of the first large-scale, multi-district learning communities of its kind. Through the CoP, the 10 MiC districts shared instructional materials, best practices, and lessons learned about implementing the CCSS-M. Lessons learned from the CoP's work can be relevant and useful to new CoPs and to districts enacting new standards.

Findings on the Community of Practice

This report traces the development of the MiC CoP as it honed its focus over the five years of the initiative. It begins by describing actions taken early in the initiative that laid important foundations for the CoP. During the first phase of the CoP (2013–2015), the convening agency, California Education Partners, worked to develop the CoP's structure, offering a range of potential focal ideas and building trusting relationships across the districts.

The report identifies seven inflection points that occurred roughly midway through the CoP, altering its trajectory by accelerating learning, and leading to more productive collaborative work. These inflection points prompted a shift in the CoP, from thinking broadly about implementation to focusing on far more specific aspects of districts' shared work to implement CCSS-M–aligned mathematics instruction. We hope that as CoPs become more common in education, new collaborative communities can learn from the inflection points described in this report:

- Inflection point 1, spring 2016: Annual planning and goal-setting process is strengthened and clarified by being tied more closely to theories of action and a shared data set
- Inflection point 2, spring 2016: New analyses of statewide assessment data allow the community and individual districts to discuss investments and results with greater specificity
- Inflection point 3, fall 2015: CoP organizers invite leadership team coordinators to take greater ownership over the direction of the CoP
- Inflection point 4, fall 2016: Principals are more widely integrated into the CoP
- Inflection point 5, spring 2015: Thoughtfully designed observation tools become a key focus for understanding and sharing implementation progress
- Inflection point 6, spring 2015: After years of exploring multiple instructional topics, the CoP identifies *academic discourse* as a common area of focus
- Inflection point 7, spring 2015: Districts converge on site-based professional development as a key area of common work and learning

Recommendations for the Field

While there is significant literature about the promise and potential of CoPs, there are few examples of how the work of these CoPs plays out in the context of school districts meeting the real challenges of educational improvement. MiC was a pioneering initiative in its use of a CoP that brought together districts across California to support one another as they implemented the CCSS-M.

The inflection points identified in this report suggest that the work of the MiC CoP started to cohere and accelerate as the CoP developed targeted foci: classroom observation tools, academic discourse, and professional development structures.

The following list provides four recommendations for future CoPs, based on some of our observations and learnings from the MiC CoP:

- **Focus on making incremental changes in order to reach the ultimate goal.** Improving student achievement in mathematics involves transformation in all aspects of complex district systems. But achieving such improvement cannot be done in a single step; it requires a clear theory of improvement and small steps along the way. With energy devoted to incrementally reviewing, testing, and adapting such theories over time, it may be possible to fundamentally transform district systems.
- **Identify key areas of focus.** It is impossible for complex change efforts to focus on all aspects of change simultaneously. Future CoPs may find value in spending significant time, early on in a change initiative, to understand the systems that participants are hoping to change. From there, the CoP can select a few high-leverage aspects of those systems as shared goals to work toward together.
- **Use diverse expertise to understand common focus areas.** Developing an effective CoP is difficult because its success is dependent on individual and organizational learning and change and because all participants have different expertise. When the diverse MiC CoP participants focused their joint attention on a few shared problems of practice, all participants were able to learn more deeply by comparing and contrasting their work on these issues. Evaluators can help district educators reflect on how their theory of improvement connects with their programs, policies, and practices.
- **Employ multiple forms of data to assess improvement.** Although data was intended to be an important part of the district MiC leadership teams' annual improvement cycles, the early forms of available data did not adequately support improvement. Future CoPs focused on districtwide systemic changes may want to employ different practical measures that improvement scientists recommend attending to, such as process measures that assess how well parts of a system are functioning. Support should be offered to help practitioners incorporate data inquiry more regularly into their district routines, to support ongoing data-informed improvement.

WESTED'S EVALUATION

WestEd's formative evaluation over the five-year initiative period draws on an array of data sources, including annual surveys of teachers and administrators, focus groups on topics of interest, classroom observations, district grant reports, student achievement data, and observations of learning events held across the five years. This report draws primarily upon grant reports, focus groups, community of practice participant reflections, and observations.

WHAT IS MATH IN COMMON?

The Math in Common initiative provided funding to 10 school districts to support their efforts to implement the CCSS-M. With support from California Education Partners and WestEd, the 10 districts were organized into a community of practice, to accelerate their learning about standards implementation. The best practices identified by the community of practice are intended to be shared broadly to support standards implementation and math improvement in all California districts. For more information about the Math in Common evaluation, see https://www.wested.org/project/math-in-common-evaluation/.

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