

# Ensemble-Led Collaboration and Learning Process Transforms Content Knowledge for Middle School Math Teachers

Ensemble invited leaders from Charter Management Organizations (CMOs) to come together and form a cohort focused on the challenge of increasing middle school math teachers' content knowledge. It focused on the challenge of increasing middle school math teachers' content knowledge.

**Over the course of several months, the cohort met in different cities around the country. Their working process included:**



- 1) Narrowing the challenge to hone in on one of the root obstacles to increasing middle school math achievement;
- 2) Reviewing research about different types of math content knowledge and what is required for teachers to successfully catch student misconceptions;
- 3) Learning from an outside expert about a process for supporting teachers to increase their content knowledge;
- 4) Running professional development sessions in each CMO based on research and expert trainings; and
- 5) Critiquing each other's work and providing feedback for moving forward.

Participant Stefani Rubenfeld, Senior Curriculum Coordinator for Uplift Education, said the opportunity to come together with other CMO leaders was invaluable:

"Charter school networks are so lean that you can feel that you're on an island while trying to do important work without the necessary thought partners because they're physically not available," she said. "With Ensemble, I got the opportunity to network and talk with like-minded experts in the field, even though we're across the country from one another. Through the cohort I got a chance to hear from them and learn from them, and leverage their best practices around these complex problems and challenges."

As a result of her participation in the cohort, Stefani developed professional development for Uplift's instructional leaders which walked them through the four domains of teacher content knowledge, to help them bring this to their work with teachers. The four domains of teacher content knowledge concept is one she learned from readings of Deborah Loewenberg Ball of the University of Michigan School of Education — the expert text Ensemble used to deepen the knowledge of the CMO cohort.

And the impact? Stefani reports: "I've seen a change in practice in the way our teachers are breaking down math content, between the departments that have worked with us on this professional development and the departments that haven't." She's also gotten feedback from teacher coaches saying how much the math teachers have improved their depth of knowledge. Additionally, she explains, "the level of clarity that we have for thinking about content knowledge, and the focus coaches now have around content knowledge is something we haven't seen in previous years."

For Uplift, Stefani feels the Ensemble learning opportunity "has been huge." "Charter networks have to have collaborative bodies to bring people together," she said, "and Ensemble is doing that."

Ensemble Learning, formerly The College-Ready Promise, is a national organization committed to fixing inequities in the education system by improving how schools serve students – especially our most underserved. To accomplish this, we work directly with charter school leaders to provide space, collaboration and resources they can leverage to address challenges at their schools with solutions they develop to meet their site's particular need.



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