



IT WORKED!

Teach One to Reach All: Coaching Teachers to Create a Mathematics Community

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Creating a math community has been a goal of mine since I took this job seven years ago. Typically, I have started with the team members and planned ideas from there. In the past few years, I have found success working one-on-one with teachers who have helped build the math community.

Last year, I co-planned with the gifted-and-talented teacher to implement math routines. Through routines, we could increase student demonstration of the Standards for Mathematical Practices, and better the teacher's instruction. It would have been easy for me to simply show her how to access the routines and tell her to try them, but instead, we did it together. We planned the routines. I implemented them, while she observed, and then we debriefed the effectiveness. We used "count around the circle" with place value and fractions standards; "eliminate it" with place value, fractions, and decimal concepts; and then "talk a mile a minute" that incorporated vocabulary from all domains. Students were engaged in learning with one another, actively listening. When I would see them in the hallway afterwards, they would ask when I was coming back. These were behaviors that I had not observed in previous warm-up activities. The teacher and I were able to take anecdotal notes as we observed, and use these notes when planning the next routine or her next set of lessons. After we stopped this collaboration, she continued to use the routines and accessed our county curriculum pages to learn more. This year, she is co-teaching with a fifth grade teacher, exposing her to these routines.

In a second one-on-one coaching situation, a Title I teacher and I co-planned and ran a book study based on *Putting the Practices into Action* by Susan O'Connell and John Sangiovanni. The book study spanned an eight-week time period, meeting once a week for one hour. That doesn't seem like a lot of time, but our focus was on breaking down the standards for meaning, introducing routines and lessons to implement the standards, and reflecting on their effectiveness. I was able to videotape the Title I teacher implementing activities that we would watch as a class, and reflect on how others would try them in their own classes. Since one of the authors of the book is a Howard County employee, we were able to have him come to a class to answer teachers' questions about the book, standards, and mathematics instruction in general. Including this teacher in this professional learning opportunity gave me access to teachers with whom she had developed good relationships. They might not have joined the book study otherwise. It also allowed us to easily classroom test the activities that were in the book and that we were recommending the teachers to try. They knew the activities worked because our video footage was from our school with students they knew. This year, I am following up on the book study by doing observations with some teachers and conducting brief planning meetings, detailing what practices I saw and discussing how to move forward. Eight of the twelve teachers who participated in the book study agreed to continue their involvement this year.

Currently, I am working closely with a first and a fourth grade teacher on implementing rigorous tasks. Together, we have attended two training sessions outside of the building, and worked together to bring the knowledge back to school. We thought about the level of knowledge of each grade-level team and developed presentations to do during grade-level long-range planning sessions. The first grade teacher planned with me for kindergarten, first, and second grades; the fourth grade teacher planned for third, fourth, and fifth grades. Both teachers are consistently and successfully implementing rigorous tasks. When teams were notified of the professional learning opportunity, I heard comments such as: "I cannot

wait to hear how ___ is using these tasks” or “We get to learn from someone who is doing it every day.” Teams were excited. The first grade teacher ended up doing the entire presentation to kindergarten and second grade by herself because I was sick, and the feedback was all positive. She helped them plan a lesson involving a rigorous task. The fourth grade team planned a lesson together, concluding with a formative assessment that they will eventually use for a data conversation. Third grade teachers also planned a lesson and were able to hear from the fourth grade teacher how the standard they were planning for progressed in fourth grade. Later, they asked for the opportunity to observe the fourth grade teacher doing a rigorous task. Part of our professional learning will allow the teachers to observe these two math leaders teaching a lesson, followed by a debriefing session.

In each situation, I was able to work one-on-one coaching a classroom teacher who was willing to better her instruction. Not everyone on a grade-level team is ready at the same time to try new things, or adjust his/her teaching. Working with a respected member of a team ensures that the ideas would get used, the team would hear about them, and try them when they are ready. Sometimes, strategies and practices travel best by word of mouth, and not mine. I get texts, emails, and pictures from teachers, with whom I have not worked one-on-one, who are excited to share with me something they have tried that came from a classroom math leader. When they see a math leader planning a lesson or trying a routine, they ask about it and try it themselves. Most importantly, in my building there are now more people than just me talking about exemplary math instruction.

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