

Murch Elementary School (Washington, DC)

Helping Teachers Refine Their Instruction: A Principal's Story

We had the pleasure of talking with Principal Carolyne Albert-Garvey, teacher Jessica Franklin (both of Murch Elementary, a pre-K–6 school in the District of Columbia Public Schools), and Math Solutions Education Specialist Liz Stamson about the many successes brought about by their partnership in 2006–2007.

Clarifying Needs

For Murch Elementary Principal Carolyne Albert-Garvey, the decision to establish a partnership with Math Solutions was easy. After all, as a classroom teacher, Carolyne had seen how her own approach to math instruction was completely transformed when she attended a Math Solutions course taught by founder Marilyn Burns. And later, as an assistant principal, she saw other teachers experience the same sort of growth when Math Solutions Education Specialist Paula Snowdy provided school-based inservice in her building.

So when Carolyne came to Murch as principal, she immediately recognized both the problem with and the solution to the math instruction she observed in the classrooms: “Students were primarily engaged in traditional drill-and-practice exercises, and teacher instruction focused on procedures. Knowing what Math Solutions had done for me as a teacher and as an assistant principal, I knew they could teach us how to strengthen instruction at Murch.”

Carolyne knew her teachers were committed to teaching well, but many of them expressed concern about their level of confidence in their own mathematical understanding. She realized that the priority was to help teachers deeply understand the math concepts they were teaching and, at the same time, help them use instructional strategies that would support *all* students in learning math.

Not surprisingly, Carolyne saw that the best way to reach these goals was to establish a partnership with Math Solutions. “While our reading scores

had been consistent, our math scores were low for a school with a high achievement record,” Carolyne explained. “We realized math was an area of need and we wanted to do something about it. Parents, teachers—everyone was excited about this initiative.”

Developing a Plan

Math Solutions Education Specialist Liz Stamson was committed to developing a plan for Murch that reflected the needs and ideas of both the principal and the teachers. After beginning with classroom walk-throughs and informal evaluations, Liz and Carolyne moved on to meetings with teachers at each grade level to talk about specific grade-level needs. Liz explained: “In my early interactions with teachers, their interest in becoming stronger math teachers was apparent. They were willing to talk about their needs and challenges and were open-minded as we talked with them about possibilities for our work together. While each grade level had clear ideas about their needs and challenges, an overarching interest emerged from these conversations. Teachers were eager to know how best to use the textbook curriculum [*Everyday Mathematics*] and how and when to bring other resources to their instruction.”

The resulting plan grew out of an ongoing collaboration between teachers, principal, and consultant. Carolyne recounted: “Liz designed professional experiences *specifically* for Murch teachers, incorporating feedback from each session into her planning for subsequent sessions. For example, if a certain grade level was struggling with teaching a particular content area, she’d focus the learning experiences on teaching that content area.”

To deepen the experience, Liz modeled lessons with classes of Murch students, so teachers could observe and then dissect each lesson and discuss effective practice. Liz also presented lessons to teachers to help

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them develop content understanding and experience instructional strategies that were new to them. In effect, teachers took on the role of learners in these situations. “So,” said Carolyne, “our teachers got the best of both worlds; they got to see Liz in action with students and experience the lessons as learners themselves. The variety of instructional techniques they experienced, from two different perspectives, was powerful.”

This inservice training was successful because it was geared so closely to the goals and challenges facing Murch’s teachers and students. “Liz demonstrated a keen ability to build trust among the teachers,” Carolyne explained. “She could relate real-life stories into their learning sessions. She pushed them, but in a professional, productive, and nonthreatening way. And she helped teachers apply the new instructional practices they were learning in their use of our adopted curriculum, *Everyday Mathematics*. This put teachers at ease and built their confidence.”

Between learning experiences with Math Solutions, Carolyne’s faculty took several steps to keep the learning going. Teachers met on a regular basis to talk about instruction and support one another’s efforts to implement what they were learning during sessions with Liz. In grade levels, teachers began to collaboratively assess their students, talk about what they learned, and determine next steps for instruction. And to help teachers put their learning about differentiation into practice, Carolyne provided them with planning time to develop learning centers for their students.

Reaping the Benefits

Over time, both Liz and Carolyne have witnessed changes in math classrooms throughout the school. Carolyne reported: “I’m seeing a paradigm shift in how our teachers approach math teaching. It’s much richer. I see a lot fewer worksheets and more hands-on activities and use of the overhead

to model during lessons, before student practice. Teachers are developing and using learning centers and differentiating instruction. The fact that Liz has worked continuously with the teachers on how to intervene with struggling students, and how to extend instruction for students who need more challenge, is showing up in teachers’ instruction and in students’ learning.

“To top it off, teachers are *much* more excited about teaching math. They feel like they have more tools, more activities, and concrete ways to make difficult concepts become more real to students.”

Jessica Franklin, a third-year teacher with a grade 5 class at Murch, experienced the positive impact of professional development with Math Solutions. “Working with Liz this year has been an unbelievable experience!” Jessica said. “As a college student studying to be a teacher, I was taught methods, but when I landed in the classroom, I realized that I needed a deeper understanding of the mathematics to really help students learn.”

Jessica found herself wondering how best to help her struggling fifth-grade students. “Working with Liz, I learned multiple ways to present information to a diverse range of students,” she recalled. “Take fractions, for example. It’s a hard topic to teach and my students didn’t get it. Liz spent a day teaching us about fraction concepts and how to teach them using interesting problems, hands-on experiences, and games. I took my new learning back to the classroom, and pretty soon my fifth graders were adding fractions in their heads!”

The positive effects on Jessica’s teaching and students’ learning continued throughout the year. She explained, “My students this year scored higher on their benchmark tests than any other students during my first three years of teaching. Not only that, but the kids are feeling more confident and enjoying math lessons more.”

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Sustaining Change: Next Steps

Looking to the future, Carlyne has high hopes for the next steps in mathematics teaching and learning at Murch. “There are still so many areas on which we could focus,” she said. “I’d like to see us cover other content and pedagogical topics in depth. In the meantime, I see us providing teachers even more planning time to build comprehensive units of study, particularly for more difficult-to-teach topics like probability.”

Liz agreed and added, “I think teachers are ready to take the next step in their learning as a school community. In the near future, I see teachers taking

on the role of planning lessons together, teaching new lessons while colleagues observe, and reflecting afterward to refine the lesson and their instructional practices.”

Sustaining that kind of growth is never easy, but Carlyne Albert-Garvey’s leadership and Murch’s partnership with Math Solutions provide a strong foundation and a model for success.

For more information about Murch Elementary or other Math Solutions district partnerships, please call Colette FitzGerald or Alissa Crevier in our Client Relations Department at (800) 868-9092, ext. 138.