Blended Professional Development for Improved Middle School Math

Killeen Independent School District

Professional Learning Model: Coaching, PD In Focus
Focused Area of Need: Understanding by Design® (UbD®), Differentiated Instruction
Type: Medium/Large

The relationship between the faculty at ASCD and our staff has been by far the strongest piece. Even when coaches weren’t here, the coaches would e-mail and call, and if we needed a resource, they would provide it.

—Melissa Holt, Killeen ISD

Declining math test scores among middle school students—coupled with the simultaneous challenges of implementing a new state assessment in math—led Killeen Independent School District (ISD) to partner with ASCD Professional Learning Services in 2013. Supported by tailored professional development (PD) activities, ASCD worked with the district to strengthen and align the curriculum by:

- Creating a coaching program to help teachers implement differentiated instruction strategies in math
- Introducing strategies to ease the transfer to block scheduling
- Working with teachers in groups and one-on-one to develop effective classroom management strategies

Today, 8th grade math scores are at or above average. And individual schools are independently funding ASCD Faculty to provide similar services in other disciplines.
BACKGROUND

ASCD began working with Killeen ISD in 2011 to offer the Professional Development in Focus (PDIF) web-based streaming media application that provides on-demand videos, activities, and other materials aimed at improving teacher practice, to staff districtwide. Killeen implemented PDIF in all of its elementary schools and 17 secondary schools, helping 3,600 educators meet PD goals and develop strategies to advance student learning.

In 2013, the district was updating the math curriculum and instructional time frame in its middle schools to help Killeen students meet the challenge of the new state assessments. They contracted with ASCD, whose Faculty tailored their offerings to build the effectiveness of principals and teachers in each school with a combination of coaching for differentiated instruction in math, block scheduling, and classroom management. Eighth grade math scores in Killeen ISD are now at or above average, and some schools have invited the ASCD Faculty—funding the effort themselves—to handle professional learning in subjects other than mathematics.

CHALLENGE

In 2011, Killeen ISD consulted with ASCD to implant PD resources into the district’s professional learning communities. And the solution needed to be flexible to meet the needs of staff while supporting the district’s educational model, which combines top-quality curriculum, expert instructional delivery, and ongoing assessment. Over two years, ASCD’s Faculty developed a PDIF platform that responded to both needs and became entrenched in Killeen’s PD culture.

By 2013, Killeen ISD’s concerns had turned to implementing the new state math assessment at a time when the district’s scores had started to see slight declines. The district had underperformed historically, and the new test added to the district’s struggles, said Patricia Reynolds, an ASCD Faculty member who worked in three of the district’s schools. They began to consider overhauling the curriculum, moving to a block schedule, and refocusing on teacher effectiveness, in part because some of its current staff had received alternative certification or not previously taught math specifically.

“We were looking for ways to, overall, improve instruction in math and bring about better outcomes for our kids,” said Melissa Holt, director of secondary curriculum and professional development for Killeen ISD. “The ‘a-ha moment’ was that lack of ongoing growth with math, and this fear of what was to come. We knew that giving kids more time in math was good, but it had to be productive time. . . . We didn’t want 45 minutes of instruction and 55 minutes of sit-and-do-your-homework.”

“...Because some of them really struggled with classroom management. And some kids were not motivated to learn.”

Developing partner relationships with principals was critical to meet these challenges.

DISTRICT PROFILE (2014–15 data)

KILLEEN ISD

- 42,581 students
- 6,100 staff members
- 57% economically disadvantaged
- 8.6% English language learners
- 11.2% special education
- 29% Hispanic
- 26% white
- 34% black
- 12% other/mixed ethnicity
- 59 total campuses: 33 elementary, 14 middle, 11 high school, and 1 special
Reynolds noted that ASCD tailored its offerings to a districtwide effort to improve math performance. “We had to integrate our efforts with the bigger strategic plan,” she said. “We had to make sure we understood the other pieces of the puzzle.”

**ASCD SOLUTION**

The highly customizable nature of PDIF met many of Killeen ISD’s original challenges. The solution’s search capabilities and tagging allows users to quickly find materials most relevant to their needs, accessible from any web-enabled device including phones and tablets.

In 2013, as the district focused on building teacher skills and effectiveness in its middle schools, teachers began working closely with ASCD coaches on lesson design and delivery, Holt said. The initiative aimed to strengthen the curriculum and help teachers deliver differentiated instruction, use the 100-minute block efficiently, and manage classrooms. ASCD introduced Understanding by Design®—a framework that underlies a series of ASCD programs, products, and services based on curriculum design concepts and methodologies authored by Grant Wiggins and Jay McTighe—to establish the lessons and curriculum before focusing on differentiated instruction.

ASCD Faculty developed implementation plans based on specific campus needs—whether those were differentiated instruction, lesson design, or the nitty-gritty details of teaching in 100-minute blocks. Each month, an ASCD Faculty member visits each campus to assess progress and tweak the plan. “Every year,” says Reynolds, “we set two or three substantial goals for improving instruction, considering how we did last year, what went well, and what we should work on.”

Reynolds worked with teachers to grow their practices. “I modeled instructional strategies for them—watched ASCD videos of good instructional practice, tried things on for size together,” she said. “I would demonstrate with their students how to do something,” then put the teacher back in charge and provide immediate feedback and resources to reinforce the changes.

“Whatever area they don’t have expertise in, they find it. . . . And we know that person is going to be a quality, engaging presenter, who is knowledgeable.”

—Melissa Holt

ASCD also has provided depth of knowledge in subject matter, Holt points out. “Whatever area they don’t have expertise in, they find it,” she continues. “Say we want to do something about XYZ, [ASCD] will find us a person who is an expert in that area. And we know that person is going to be a quality, engaging presenter, who is knowledgeable.”

They needed good lesson plans, thoughtfully planned out, so the kids had direct instruction…. My biggest focus all three years has been, ‘Do they have a clearly defined target, and are they focused on it?’

—Carol O’Connor, ASCD Faculty member
RESULTS

Math scores for students improved in the majority of middle schools during the first two years of the contract, and eighth-grade scores for 2015–16 have put Killeen ISD at or above the state average. “That’s substantial, because those are the kids who were impacted by the project for a full three years,” Holt says.

Furthermore, by the second year of the project, individual schools were contracting with ASCD coaches—at their own cost—to work with science or English-language arts teachers. According to Holt, teachers “have found the value of [ASCD] support to be immeasurable.”

Another outcome is the increased effectiveness of individual teachers, Holt reports. “The growth in our teachers is the key for us. That’s not really something you can measure. It’s just something you see.”

ASCD and the schools forged solid bonds. “By year 3, you’re like a member of the team,” Reynolds says. “The relationship between the ASCD faculty and our staff has been by far the strongest piece,” Holt agrees. “Even when coaches weren’t here, they would e-mail and call, and if we needed a resource, they would provide it. That relationship was the springboard that allowed us to make the changes.”

O’Connor reports seeing “great growth” among the schools and individuals with whom she worked, especially in the schools with the more seasoned principals and with the newer teachers. Both principals “were open to ideas and welcomed anything I could give them,” she said. “I would send them articles to share with their faculty. . . . I heard stories from both principals about how much they appreciated my ideas and input.”

Reynolds has received “tons” of anecdotal feedback from teachers telling her how helpful the coaching had been in improving their instructional techniques and content knowledge. “Today I just got an e-mail from a teacher I worked with saying she had just gotten an assistant principal job, and she just wanted to thank me so much,” she says.

ASCD Faculty members’ honesty and ability to stretch us to become facilitators versus just teachers was awesome! I will continue to include text structures in the problem-solving modeling, as well as include more differentiation for each class.

—teacher leader, Audie Murphy Middle School

Dr. Reynolds was so open about discussing options that fit with my comfort zone of teaching. She knew I was not very open to some ideas and she gave alternative solutions to help me adjust slowly for my students. I have already implemented new ways to do small groups, collect data faster, and various changes to assist the learning environment.

—teacher, Rancier Middle School

LET’S BUILD A PLAN JUST FOR YOUR SCHOOLS.
Contact ASCD Professional Learning Services today:
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PERCENT OF EIGHTH GRADE STUDENTS ACHIEVING FINAL LEVEL II PHASE IN MATH, STAAR TEST

(Killeen ISD Versus Texas)