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...were...s was increasing. And state educati
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...Dr. S...Wightman and his sta...stayed foc
...ing...to turn around the students' math
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"We...to use Connecting Math Concepts
...n reports reviewing the program,"
...the U.S. Department of Education"

...sources that provided the data
...showed that CMIC has a proven
...mathematics achievement," he said.

Based on the positive data and reviews, Wightman selected CMIC
as the program to raise his students' math scores and unleash
their untapped potential in mathematics.

Direct Instruction

Letter

Asked why it was so important to implement a new mathematics curriculum, Wightman offers a number of statistics. Eighty-three percent of students who take algebra and geometry go on to college versus 36 percent for students who don't take those courses. Almost 90 percent of all new jobs require math skills above the high school level. And the majority of four-year colleges require three to four years of high school math for admission.

He even cites the everyday life skills that demand strong math skills, such as understanding graphs, charts and opinion polls in the media; calculating house and car payments; and figuring out which long-distance telephone service provider is the most cost-effective.

Knowing how important math skills are for his students, however, didn't mean that everyone at John R. Kment Elementary was on board with implementing Connecting Math Concepts: Comprehensive Edition. "Initially, the staff didn't like the idea of such a drastic change in the instructional delivery of math curricula," explained Wightman, referring to CMC's Direct Instruction teaching style. But the staff was committed to finding a way to turn around their students' math achievement scores. And after conducting an initial staff training and designing an ongoing professional development schedule with the help of McGraw-Hill Education, CMC was piloted at John R. Kment Elementary in the fall of 2013.

As a Direct instruction program, CMC focused on assessing the students' math skills. Explicit lessons that included elements such as timed activities, fast pacing throughout the lessons and incorporating repetition as a math skill-development strategy were then employed as instructional methods in the classroom.

Students are happy, their grade are improving. Parents are happy, their grade are improving. Teachers are happy, the program is working.

Dr. Shawn K. Wightman
Principal

Read

Although teachers were initially hesitant to use the instructional delivery method of Direct Instruction because of their inexperience with the teaching method, the results they experienced quickly transformed them into strong supporters. "They support Direct Instruction now," said Wightman. "Students are happy their grades are improving. Parents are happy that grades are improving. Teachers are happy the program is working." Wightman summed up his thoughts on the program, saying, "It's effective, easy-to-use and resulted in improved educator efficiency and increased student achievement." In addition to praising CMC's Direct Instruction delivery method, Wightman also referenced SRA 2Inform, a resource designed to monitor student progress and complement Direct Instruction programs as a major contributing factor to the success of CMC.

After one year of experiencing pilot program success, Roseville Community Schools adopted the CMC curriculum in all its elementary classrooms, providing a shared, consistent model for teaching mathematics throughout the district. "We now have a complete horizontally-and vertically-aligned curriculum that is consistently taught with fidelity," said Wightman.

Re ut

The increase in mathematics achievement demonstrated by John R. Kment Elementary students who were taught with Connecting Math Concepts: Comprehensive Edition was dramatic. According to AIMSweb®, a universal screening, progress monitoring and data management system that supports Response to Intervention and tiered instruction, 56 percent of John R. Kment Elementary students had a high probability of meeting proficiency standards on the state mathematics test when CMC was introduced in the fall of 2013. By mid-year, the AIMSweb® report jumped 21 percentage points in the same category, identifying 77 percent of the students as prepared to pass the test.

In one case, Wightman saw a previously struggling first-grade, special-education student score 24 out of 28 on the Math Computation (M-COMP) assessment—a collection of math computation probes that is consistent with the AIMSweb® assessment. This improvement was due to skill increases in both basic math computation and mathematics concepts and applications. The gains occurred simultaneously with a decrease in the number of student discipline referrals to the school office. Wightman believes that student discipline improved, “because students were experiencing more success in math.” He saw the rising tide of academic achievement as a mechanism that lifted students’ self-confidence in addition to their test scores.

After Connecting Math Concepts: Comprehensive Edition was implemented, the school experienced a reduced number of Tier 3 students, and an increasing number of Tier 1 students across all grade levels, even before one full year of instruction was complete. According to AIMSweb® statistics measuring the progress of John R. Kment Elementary students from fall through winter, there was a 56.1 percent average decrease in the number of Tier 3 students across grades two through six and an average increase of 77.4 percent in the number of Tier 1 students across the same grade levels. Third graders, whose progress is significant for all districts as they take the state competency test,

The Future

Connecting Math Concepts: Comprehensive Edition is now implemented in all K-5 classrooms throughout Roseville community schools. According to Wightman, "Student grades have improved, standardized achievement test scores have gone up and students are more engaged during lessons." Based on his experience with CMC, Wightman feels like he's making a difference in the lives of his students, which is one reason why he recommends it to other schools and districts. "Our success with Connecting Math Concepts: Comprehensive Edition is a prime example of why McGraw-Hill Education is a trusted provider of proven, powerful and innovative education solutions for all students," he said.

