



Kamiakin Math Department Embraces an Intervention Strategy that Sends Test Scores Soaring



“My students had an average math RIT gain of just over 20 points in the course of the year—almost triple what we expected.”

Joanne Butler-Kopriva, Teacher, Kamiakin Math Department

Named after Kamiakin, a chief of the Yakama Tribe in the 1800s, Kamiakin High School has earned a solid reputation for being one of the top public high schools in southeastern Washington. Until 2003 the Kamiakin Math Department had been putting struggling math students in an “extended integrated” math class. These students would use the same book as regular students, but harder material was removed and the class proceeded at a slower pace.

“This approach created major challenges,” reports Joanne Butler-Kopriva, a teacher in the Kamiakin Math Department. “Once a student develops a self image problem about being slow in math, it becomes very difficult to close learning gaps. More importantly, the old approach resulted in these students getting less math instruction, when they actually needed more to pass the standards-based Washington Assessment of Student Learning (WASL) test.”

Pilot Program to Close Achievement Gaps

Kopriva and one of her colleagues spearheaded a proposal to test a pilot program in the fall 2003 semester with two 9th grade classes involving approximately 40 students. The pilot introduced two math classes for struggling students: a regular freshman class and a second, follow-up class called Math Prep involving the Academy of MATH and more individualized attention. Several intervention solutions were considered but in the end Kamiakin High selected the Academy of MATH—in part because it features an individualized training program that adjusts to the needs of each student in real time.

Focus on:

Academy of MATH®

Fast Facts:

Location:

- Kennewick, WA

School:

- Kamiakin High School

Grades:

- 9-12

Number of Students:

- 1,558

Student Demographics:

- White: 85.3%
- Hispanic: 10.6%
- Black: 2.3%
- Other: 1.8%

Free and reduced lunch:

- 9.4%

Website:

www.ksd.org/kamiakin

Student Motivation

The new approach meant that students could sit in a regular class with their friends and peers. “We really wanted our students to realize, ‘Hey, I’m in a regular freshman class; I can swim with the big fish,’ but then give them the additional support they needed,” says Kopriva. “The challenge to the Academy of MATH was to see if the program could zero-in on each student’s learning challenges, based on their actual skill level and ability, and it did.”

Results Exceed Expectations

One of the local measures of success is the Rasche Unit (RIT)—which is a measure of a student’s active learning level, or the level at which he or she is able to answer about 50% to 60% of the test questions correctly. “At that time, we were expecting a 7 point RIT gain,” says Kopriva. “My Math Prep students had an average math RIT gain of just over 20 points in the course of the year— almost triple what we expected.”

Expanded Program

Based on the solid performance gains of the pilot program Kamiakin High has progressively expanded the use of Academy of MATH to include both freshman and sophomore classes. “What I really like about the program is that I can quickly and easily pull up reports and see the progress of each student without having to write things down, walk around the class, or look results up manually on paper,” says Kopriva. “It’s very teacher friendly. Progress and program accountability reports let us track each student’s results using a single management interface.”

Individual Successes

Like so many teachers, Kopriva gets excited by individual triumphs. “I’ve seen many students start the year saying ‘I can’t do math,’ and end up not only liking it but choosing to take more math than is required!” She singles out one boy from Central America who spoke no English when he arrived in the USA as a freshman. He was a senior, still struggling with English proficiency, and taking sophomore math along with Math Prep. He worked very hard and was making steady progress in the Academy of MATH, but still wasn’t quite ready at mid-year to pass the first semester of sophomore math.

“But I watched his grades go up...and up...and up!” says Kopriva. “At the end of the second semester, he retook the first semester math final and got an ‘A’, and he passed the second semester on time. He’s going to college on a soccer scholarship this year.”

Although just one heartwarming math story, the aggregate numbers also add up for Kamiakin High. In 2002, 42% of sophomore students passed the WASL test. By 2005 that number had climbed to 73%— making Kamiakin High the top academic school in southeastern Washington.

Through a potent combination of teacher dedication and the Academy of MATH, Kamiakin High is clearly helping more students fulfill the school’s inspirational motto: “Be the best you can be.”

About AutoSkill®

AutoSkill creates award-winning intervention solutions to help close the proficiency gap in K-12 schools. For over 15 years, its research-based programs have helped at-risk students to build fluency in the foundation skills of reading and math. The company’s core products, Academy of READING and Academy of MATH, deliver rapid, permanent gains so students progress in their education and administrators meet AYP targets. For more information, go to www.autoskill.com.

AutoSkill®

A helping hand for literacy ◀

AutoSkill International Inc.

555 Legget Dr., Tower B, Suite 600

Ottawa, Ontario, Canada K2K 2X3

Tel: 800 288-6754 Fax: 613 287-0990

Email: info@autoskill.com www.autoskill.com