When Kim Zeydel began working at Meridian Academy, a school for at-risk high school students near Boise, Idaho, she saw ninth graders doing simple arithmetic, such as “2 + 2,” on their fingers. But she wasn’t too surprised. A winner of the Presidential Award for Excellence in Mathematics and Science Teaching, Zeydel’s 25 years of teaching math, sociology training, and experience with at-risk children gave her the perspective and knowledge to seek a solution that would bring her students up to speed.

“Many of the students who come to Meridian Academy would have dropped out of school if they hadn’t received the intervention we provide,” she said. “When they reach us in ninth grade, many are still working at a fifth- or sixth-grade level. At the other end of the spectrum, we’ve got kids who qualify as gifted and talented but haven’t been able to succeed academically because of learning disabilities or behavioral issues. If you’ve got 23 kids in a class, you could be dealing with 23 different levels of math skills.”

Meridian Academy is one of three alternative high schools in the Meridian School District, which is the largest school district in Idaho. The school’s mission is to provide individualized support to each student and help them gain the skills they need to succeed. As chair of the math department, Zeydel began looking for an online tool that would address the varying knowledge levels of her students.

**Putting ALEKS to the Test**

Zeydel and Caroline Reese, Zeydel’s colleague in the math department, took a systematic approach to finding an online product that would serve their needs: they compared three online math programs to see which one would best help their students succeed.
First, Reese and Zeydel gave three Algebra I classes a pre-test. All three classes achieved similar results. Then, they implemented a different online math program in each class. When it came time for the post-test results, the winner was clear.

“The results from ALEKS were so much better than the other two that it wasn’t a hard choice to make,” said Reese. “Each of the students had made gains in the areas where they were lacking, and it helped the entire class to improve their scores. With that level of achievement, it meant that we could really move forward with the high school math curriculum instead of focusing on lower-level skills.”

The two teachers immediately implemented ALEKS into the Pre-Algebra and Algebra I classes, and quickly saw gains. Students regularly use ALEKS for long blocks of time – up to 70 minutes – without stopping. Because ALEKS uses artificial intelligence to rapidly assess what students already know, each student can choose from a number of topics that he or she is ready to learn. As the students at the school work with the program, Reese and Zeydel have a lot of time to answer questions and explain concepts one-on-one.

“I like how the people at ALEKS have really examined the basic skills and the thought processes that are needed to master each math concept,” said Zeydel. “ALEKS makes sure that kids know those skills before they move on to new topics.”

The students like using ALEKS as well. Reese noted they enjoy the flexibility to select the topics they want to tackle next, the chance to work at their own pace, and the ability to see their ALEKS Pie – the graphic chart that tracks their progress – fill in as they progress.

The students also feel the program is more “grown up” than others that address basic math skills.

“There aren’t balloons or ponies to teach math concepts,” said Reese. “Our students appreciate that. They don’t want to feel like little kids.”

**AYP, Common Core Gains: District Asks, “How Did You Do It?”**

Last year, Meridian Academy had higher Annual Yearly Progress (AYP) gains in math than any other school in the district as measured on the MAP test.

“The district asked, ‘How did you do it?’” said Zeydel. “I told them, ‘We did it. Two teachers and ALEKS.’”

Zeydel and Reese also saw significant improvements in students’ year-end MAP scores, which measures progress against Common Core standards. Growth goals for students ranged from three to nine points, depending on their previous scores. Students using ALEKS for the whole year improved an average of six points. Those using ALEKS for only one semester improved an average of three points, and those not using ALEKS showed a zero-point average growth.
“The way the questions are structured in ALEKS supports Common Core,” said Zeydel. “The students are getting a lot of practice with word problems and working on their reading and comprehension.”

So what’s next for the math department at Meridian Academy? Students may still come in to the school counting on their fingers, but as far as the Zeydel and Reese are concerned, ALEKS is the best way to directly address their knowledge deficits and get students on the path to learning the higher-level math skills requisite for success in college and career.

“ALEKS has been fantastic,” said Zeydel. “Students may come into the school with their own set of math skills, but ALEKS brings them up to speed and allows us to teach the math that they’re going to need for a successful high school career.”