Since he began teaching, Marcel Marina has been looking for the “magic” technology that would help his special education students accelerate their progress in math. As an instructor at Ronald E. McNair Middle School in Lake City, S.C., he didn’t want drill-like software that students would plough through without thinking. He wanted something that could give students a strong foundation in the basics, while also adapting to students’ individual skill levels.

“This is the big problem in math – when the basic pieces are missing, you can’t complete the puzzle,” said Marina. “But some math software doesn’t teach the basics well. If students see multiple-choice, they just click-click-click and they’re done.”

However, when the school introduced ALEKS in 2010, Marina immediately saw the opportunity for his students to make major strides forward.

“When the students started using the program, it opened up a better dialog between us,” he said.

ALEKS is a web-based software that provides open-ended problems and uses artificial intelligence to assess each student’s math ability. It was a perfect learning tool for Marina’s classroom which included students with a wide range of math skills.

As the students began working on skills in ALEKS that matched their readiness level, Marina would teach those specific concepts to students individually or in small groups. Then, he’d let them practice and master the concepts on their own by logging on to their individual ALEKS accounts.

“Together, the students and I explore the concepts that ALEKS introduces,” he said. “When they work hard to figure something out, that information becomes strongly integrated.”
Success in progress, test scores

Marina has seen all of his students meet or exceed his expectations since starting to work with ALEKS. Some of his successes include:

- For two years in a row, his special education students have increased their scores on state tests. In 2012, 59 percent had increased their scores on the state test, and in 2013, 70 percent of students increased their scores from the previous year.
- All of his students have met or exceeded the goals set for them from the beginning of the year. A student who is asked to improve by five points achieves that – but it’s just as likely the improvement will be 7 to 10 points.

“When the students experience a small success, they gain courage and motivation, and they go for more,” said Marina, explaining why he thinks learning with ALEKS has been so positive for his students. “They’re coming to me to tell me they want to advance and apply what they’ve learned.”

From a teaching standpoint, Marina appreciates how ALEKS helps him plan. Since ALEKS is aligned to the Common Core State Standards, he can see where each student needs to improve and can work with the students on those specific skills.

“I’m not letting ALEKS do all the work,” he said. “ALEKS does a lot, but my special education students need more than that. I’m staying right with them as they learn. I want them to learn it right the first time. They learn the skill and then they practice. ALEKS is brilliant for this.”