



Naperville Central High School

Naperville, Illinois

PROFILE

School District: Naperville Community

Unit School District 203

District Enrollment: 17,431 students

School Enrollment: 2,938

Grades: 9-12

Low income: 6.5%

Ethnicity:

- 75% Caucasian
- 13% Asian
- 5% African American
- 5% Hispanic
- 2% two or more races

Challenges, Even in a Top School

At Naperville Central High School, a high-performing public high school located in suburban Chicago, students are typically high achievers. But even a school named one of America's top high schools by *U.S. News and World Report* and *Newsweek* has students that need extra help. Scott Miller, who oversees 25 teachers as the Instructional Coordinator for mathematics at Naperville Central, wanted a better way to address significant learning gaps. The issue was how to differentiate instruction for these students in order to fill their individual learning gaps.

"Our students come to school with varying levels of math readiness, and we needed a better way to measure what they know in order to better tailor instruction," said Miller.

Miller knew that an online product that

could be integrated into the school's existing curriculum would be ideal. He tried several options, looking for the right combination of instruction, content, and flexibility that would work with the school's curriculum.

"My counterpart at Naperville North High School saw ALEKS at a conference and told me about it. After we used it on a trial basis, we knew it was the right solution for us."

"I'd recommend ALEKS to any school that's looking for an online tool to help with mastery of math concepts."

Integrating ALEKS: Flexibility Aligned with Common Core

Naperville Central first implemented ALEKS into the school's Pre-Algebra course. The teachers had their students complete initial assessments, and then analyzed the results. Using this method, teachers found it easy to pinpoint specific learning gaps. They were then able to evaluate whether the whole class needed more practice on a concept, or whether small group or individual instruction was preferred. Students quickly acclimated to the program. Once they started using it regularly, both teachers and students enjoyed the flexibility ALEKS offers. ALEKS uses artificial intelligence to quickly and accurately determine exactly what a student knows and doesn't know, and then presents a personalized learning

path for the student based on the topics the student is most ready to learn. This approach means students only work on the topics they are ready for, which minimizes frustration and enables learning momentum.

“When a student takes an assessment, the ALEKS Pie is updated to reflect the number of topics within the course that the student has mastered, and what she’s ready to learn right now from the remaining material,” said Miller. “Students can choose which topics they want to learn next. Or, if a student is struggling with a topic, he or she can try another one and come back to the more difficult topic later.”

The flexibility of ALEKS was one of the major selling points for the teachers at Naperville Central because it gives both teachers and students a choice of where they want to concentrate their efforts. Teachers can customize the curriculum on their own by adding and removing ALEKS topics from a course, carving the course into objectives with due dates, or creating online assignments. Whether teachers use ALEKS for supplemental instruction, like at Naperville Central, or as a central component of coursework, the program’s artificial intelligence makes sure students are receiving personalized instruction tailored to their exact needs.

Results: Accelerated Learning

Naperville Central has now been using ALEKS for more than five years, and Miller has seen definite progress.

“It’s accelerating our learning, especially for students who struggle at first,” said Miller. “We’ve seen a clear increase in the number of students who’ve been able to complete ALEKS’ Pre-Algebra course and move onto Algebra 1. I think that’s exciting, because it translates into much higher success in the next school year.”

Miller is also working on expanding the use of ALEKS for specific groups of students. Some students who have significant gaps in their knowledge will use ALEKS extensively so they can catch up and join other, more advanced math classes. Other students who are looking for additional coursework can use ALEKS for acceleration into more advanced math concepts. And finally, ALEKS is helping the school to provide resources for students who, due to their schedule and timing, can’t work a certain math class into their schedule and instead can use ALEKS during independent study.

“We knew [ALEKS] was the solution for us.”

“I’d recommend ALEKS to any school that’s looking for an online tool to help with mastery of math concepts,” said Miller. “It’s easy to set up, has the content and flexibility that my teachers need, and teachers and students can use it as much or little as they need to. Most importantly, it works.”

As Miller expands Naperville Central’s use of ALEKS to reach a wider range of students, the school continues to be an evolving success story. The more students use ALEKS, the more opportunity they have to experience personalized instruction on the essential math concepts they need most.