

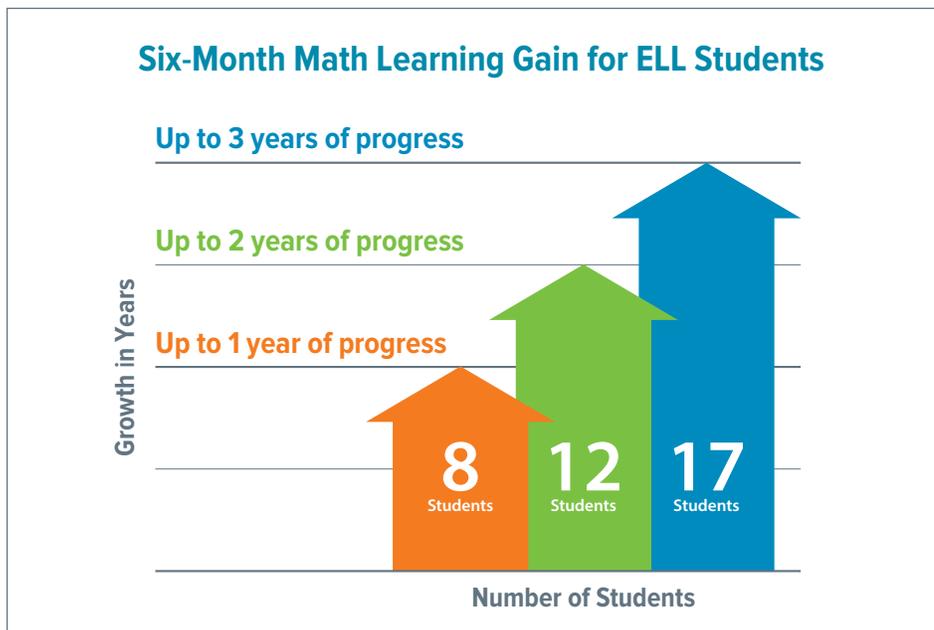
Sioux Center Community School District | Sioux Center High School, Iowa

ELL Students Back On Track for Graduation

Beating the Odds Through Personalized Math Learning

RESULTS AT A GLANCE

In less than six months, more than half of the 37 students in the Newcomers Program at Sioux Center High School who are enrolled in ELL Math have made gains between two and three years' worth of math learning. These students, many of whom have been living in the United States for less than a year, now feel more comfortable and confident in their mathematical abilities, leading several students to successfully transition into the high school's Pre-Algebra class.



“A little bit of success can go a long way in helping students reengage. When students who are ready to drop out come in to school earlier or find time to log in to DreamBox after school hours, something is working.”

*—Brad Larson,
Math Instructor
Sioux Center High School*

CHALLENGE

Closing math learning gaps for ELL students

High school students who have lagged in mathematical understanding year after year risk dropping out of school. The risk is compounded by the combined challenges of a language barrier and the added temptation to work rather than attend class so they can assist their families financially. So how do educators reengage this high-risk student population and put them on the path to high school graduation?

Administrators at Sioux Center Community School District in Iowa needed to identify a way to quickly prepare such students for Pre-Algebra course enrollment to ensure they would be on track to earn their diplomas. Many students who are on average 16 years old had learning gaps stemming from as early as third grade, requiring instructional materials that allowed the opportunity to fill those gaps in an age-appropriate environment that was also accessible to Spanish speakers.

SOLUTION

Offer personalized learning in both English and Spanish

After reviewing a number of digital math solutions, Brad Larson, an educator with over 35 years of experience teaching high school math, found DreamBox Learning. “We selected DreamBox Learning Math as part of our math instruction because it allows students to self-pace through instruction personalized to them and presented in an age-appropriate way,” says Larson.

Both Larson and Sioux Center High School ELL teacher Faby Castelan saw their students in the Newcomers Program thriving in math because DreamBox allows them to progress at their own pace and adjusts the learning path based on identified learning gaps. Those who were quickly mastering the concepts advanced to more challenging topics, while DreamBox allowed others to take the time to fully comprehend the concepts and learn without feeling rushed or pressured.

Larson is particularly impressed with the way students learn math through DreamBox. “The interactive nature of DreamBox allows students to explore concepts—like graphing, order of operations, and rate of change—in ways that they can’t do with paper and pencil,” he shares. “They are able to make the connection required for a real understanding of math, not just memorization. With long division and multiplication, DreamBox clearly shows all the steps needed to complete the action—whether it’s borrowing, carrying, et cetera. It allows our ELL students to focus on the concepts of mathematics without being hindered by the language barrier.”

“I like DreamBox because it makes math more interesting. The best thing about DreamBox is that it explains math using images and games.”

*—Student 1,
Sioux Center High School*

DREAMBOX LEARNING® MATH IMPLEMENTATION

- High-school level intervention programs
- ELL classroom with dual language instruction
- 1:1 implementation focused on personalized learning

SIOUX CENTER COMMUNITY HIGH SCHOOL FAST FACTS

- Grades 9-12
- Enrollment: 332 students
- Free and reduced lunch: 34.9%
- English language learners: 8.7%
- Students with IEPs: 12.7%



According to Larson, students respond well to the way lessons are presented. They enjoy the interactive, game-like nature of DreamBox, and benefit from the ability to solidify understanding using different problem solving strategies. The embedded scaffolding and adaptiveness provides students with the support they need to overcome barriers to learning. "The software seemed to intuitively know, preemptively, when a student is going to get stuck and what type of support that student will need to get through," he explains. Another feature of DreamBox that Castelan recognized is the software's ability for teachers to switch the language from Spanish to English. If a student's English language skills are progressing quickly and they want to use DreamBox in English, Castelan and Larson allow them to work in the language that works best for them.

Each student at Sioux Center High School is required to complete 10 to 15 lessons per week. Larson meets with each student three times per week and together they set learning goals. He monitors progress weekly and is able to pinpoint where students may need additional support, or when a pat on the back is warranted. "When students have struggled for so long in math, it is important to understand why they are struggling, how to help them, and to show how they are progressing. Every gain, even small steps forward, is important to building their confidence," says Larson.

RESULTS

From at-risk to engaged math learners

Success for Larson is measured by the gains his students are making in their math learning. In less than six months, many of his students have made gains equivalent to two or three years' worth of math instruction. "A little bit of success can go a long way in helping students reengage," says Larson. "When students who are ready to drop out, come in to school earlier or find time to log in to DreamBox after school hours, something is working." More than half of the 37 students in Larson's class have progressed to the school's Pre-Algebra class outside of the ESL program. "Because of DreamBox, many of these students have really come to enjoy math," says Larson.

"I like DreamBox because it is a different way to learn math and because there is a teacher there to help us if we need him. I also like DreamBox because it explains how to add and subtract using images."

—Student 2,

Sioux Center High School



For more information,
contact Client Success
at 877.451.7845, or visit
[DreamBox.com](https://www.DreamBox.com).