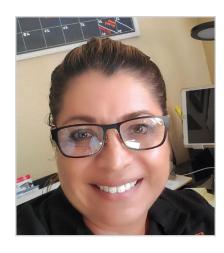


IXL Math: Building Skills for Success in Algebra and Beyond

Los Amigos High School, Garden Grove USD, Fountain Valley, California



Southern California near Anaheim, 15-20% of incoming 9th graders arrive lacking some of the skills necessary to succeed in high school math. Christine Montes, the Math Department Chair at Los Amigos, introduced IXL Math to give teachers a solution to address the learning needs of every math student and close their readiness gaps. She says, "IXL builds the foundation that our students need to succeed with higher-level math."

Each year at Los Amigos High School, a Title I school in

"We tried several programs out, but IXL really stood out for its ease of use and the way the skills are laid out. It's simple for the students to use and provides the practice and feedback they need to master the skills."

Christine Montes, High School Math Teacher and Department Chair

Addressing Skill Gaps for High School Math Students

Los Amigos serves a majority Hispanic population with a large number of non-native English speakers. Their students arrive from middle school with a broad range of academic backgrounds and math skill levels.

Christine says, "At the middle school level, many students move on to high school and some are ready and some are not. But we don't offer a remedial math course—all of our students start with Algebra. We have to be able to identify their skill gaps, get them up to grade level, and support them so they don't fall behind in their classes."

Christine learned about IXL Math at an edtech conference in 2015. She first brought the program to Los Amigos on a trial basis for a couple of algebra classes and the after-school tutoring and intervention program. After seeing how IXL Math helped students build essential math skills, the school purchased the program for all Algebra, Geometry, and Algebra II students.

Building Math Skills Through Targeted Practice and Instant Feedback

Students at Los Amigos use IXL Math both in the classroom and for homework. Teachers assign skills aligned to the unit they are teaching in their math textbook. In class, IXL provides an opportunity for immediate practice and feedback, so both teachers and students can check for understanding. Students continue practicing the skills at home over the course of each week and teachers keep track of student progress with IXL Analytics. Teachers assign skills directly in their Google Class via the IXL Google Classroom integration.



Students' work in IXL is part of their math grade. Teachers use the SmartScore to set goals for students. For most skills, students are expected to achieve a SmartScore of 80 or above, and some teachers give extra credit if they reach a SmartScore of 100. Students get instant feedback as they work through problems, so they know right away whether they are on track. When they get a problem wrong, IXL gives them a detailed explanation so they can understand where they made an error before trying again.

Christine appreciates the way IXL Math adjusts the difficulty of questions for each student's skill level. She also likes knowing that IXL provides an accurate view of students' knowledge. "They can't cheat their way around the program—and that's a good thing!" she says.

IXL Math is also used for intervention at Los Amigos. Students who receive a grade below "C" in their math class attend an after-school intervention program. In this program, students have the opportunity to use IXL to catch up on skills they may be struggling with.

Laying a Foundation for Success in Higher Math

Christine has seen a noticeable difference in student outcomes since introducing IXL Math. "There is definitely a correlation between grades and the amount of time students spend practicing in IXL," she says. Intervention students who completed their IXL assignments improved by at least a letter grade, on average.

Christine says that IXL Math has better prepared students for the computer-based state assessments in California and for success in advanced math classes. "It's about the repetition and the practice," she says. "IXL builds the foundation that students need before they go on to tackle more complex math."

Keeping Students on Track During Distance Learning

IXL Math was especially helpful in the spring and summer of 2020, when Los Amigos, along with schools across the country, moved to a distance learning model in response to the coronavirus pandemic. The school acted quickly, passing out Chromebooks for students to use at home and making sure students were able to get online for classes.

Math teachers at Los Amigos conducted live classes on Zoom and assigned homework on IXL. With distance learning, IXL Math is an even bigger part of students' learning experience. Students were given the opportunity to make up homework assignments missed earlier in the semester by completing extra work on IXL.

Teachers also used IXL Math for virtual summer school. Some teachers had students work on IXL during live class time. This allowed them to monitor how students were doing using Live Classroom and provide immediate intervention or reteaching opportunities for students who were struggling. Christine says, "Students definitely missed the opportunity to be in the classroom, but this has given them a chance to see what kind of learner they are and take charge of their own education. IXL allows them to work independently and continue making progress."



"IXL is a great resource to have, especially right now. Once we get back to the classroom, we are expecting to see a very wide range of skill gaps we are going to have to address. IXL is great because you can really individualize it to help kids catch up on what they are missing."

Christine Montes

A Model for Success at Los Amigos High School

Here's how teachers at Los Amigos High School are using IXL in the classroom:

- IXL Math is used for all students in Algebra, Geometry, and Algebra II.
- Students use IXL Math in class one to two times per week and at home for homework.
- Each week, teachers assign skills aligned to the lessons they are teaching, using IXL's Google Classroom integration. Students have all week to complete the skills.
- Teachers provide a SmartScore goal for each skill. For most skills, students are expected to get a SmartScore of 80 or higher and may receive extra credit if they achieve a SmartScore of 100.

- Students who perform poorly on a test may earn the opportunity to retake it by completing additional practice in IXL and earning a SmartScore of 100.
- Teachers use data from IXL Analytics to determine where they need to reteach and to see which students may need additional support or small-group intervention.
- Students who receive a grade below a "C" are assigned to an after-school intervention program. In this program, they use IXL Math to catch up on skills they are having trouble with.