

Implementation Strategies

Sky Islands High School, Blue Adobe Project
Tucson, AZ

Grade(s): K – 12

Scenario: Computer Lab, Computers in Classroom, Home Access

Purpose: Credit Recovery, College and Career Readiness, Improve State Test Scores, At-Risk Students

ALEKS Portion of Curriculum: 50%

Time Spent in ALEKS: 2–3 hours per week, 15–20 hours per term

ALEKS Course: Pre-Algebra, High School Preparation for Algebra 1, Algebra 1, High School Geometry, Algebra 2, Algebra 2 with Trigonometry, Integrated Mathematics I, PreCalculus

Sandra Rosado, Associate Director

This was our first year using ALEKS, and we received nothing but praise from our students. We use ALEKS as a resource for students who struggle with grasping math concepts. It allows these students to work independently and at their own pace while still under the direct supervision of a math teacher. This builds their confidence without making them feel that they are holding back the rest of the class. We are a small school without the teaching staff of the larger districts, so we are able to use ALEKS as a tool for students who need the more advanced math classes and can progress, again, under the direct supervision of only one math teacher for all the higher levels of math. Our Arizona's Instrument to Measure Standards (AIMS) scores have improved dramatically this year, and we hope this trend continues.

Scenario

What challenges did the class or school face in math prior to using ALEKS?

We are a small school and do not have enough students to make up an entire higher level math class. This made it difficult to offer the higher levels. With ALEKS, we can now accommodate those students ready to move beyond Algebra 2 without needing to add more staff.

How many days per week is class time dedicated to ALEKS?

2 days per week.

What is the average length of a class period when ALEKS is used?

45–60 minutes.

Implementation

How do you implement ALEKS?

We implemented ALEKS over the summer. We set up classes by grade level (Geometry, Algebra 1, and Algebra 2), and match the curriculum to the state standards for math.

Do you cover ALEKS concepts in a particular order?

It depends on the needs of the individual student.

How do you structure your class period with ALEKS?

The math instructor starts the class with a teacher-led assignment. Once the initial instructions are given, the students rotate from the teacher-led instruction to an ALEKS session.

How did you modify your regular teaching approach as a result of ALEKS?

I took advantage of the opportunity to get everyone started on an appropriate assignment for each class. I am able to move around the room and give assistance to those students who need more one-on-one attention while the others work on ALEKS.

How often are students required or encouraged to work on ALEKS at home?

Students are encouraged to at least check in and review what they did that day on a daily basis.

How do you cultivate parental involvement and support for ALEKS?

I steer parents to the webpage and have an informal parent meeting to show them the benefits of the program for their students.

Grading

Is ALEKS assigned to your students as all or part of their homework responsibilities? If so, what part of the total homework load is it?

Yes, it is assigned as homework on a 20 percent basis.

How do you incorporate ALEKS into your grading system?

Students are graded on the amount of time they spend in ALEKS independently as well as in class, which is on a 40 percent scale.

Do you require students to make regular amounts of progress in ALEKS?

Students are required to not only show progress through the built-in assessments, but must also show mastery on regular classroom assessments.

Learning Outcomes

Since using ALEKS, please describe the learning outcomes or progress you have seen.

Students' grades and assessment scores have improved. Students have expressed positive feedback about the program, and are excited that they are "for the first time ever" understanding math and coming to the realization that they can indeed do math.

Best Practices

Are there any best practices you would like to share with other teachers implementing ALEKS?

The best things for parents to know are that ALEKS can improve their student's AIMS scores, which is required for graduation, and that students are not limited to any level of math. Students are able to go as far as they want to. It allows teachers much more freedom and flexibility in their instruction to help students who might otherwise fall so far behind they will quit, while still allowing others to work to their fullest potential.