

Implementation Strategies

Bourgade Catholic High School, Diocese of Phoenix
Phoenix, AZ

Grade(s): 9 – 12

Scenario: Computer Lab, Online School

Purpose: Summer School

ALEKS Portion of Curriculum: 50%

Time Spent in ALEKS: 10 hours per week, 80 hours per term

ALEKS Course: Pre–Algebra, High School Preparation for Algebra 1, Algebra 1, High School Geometry

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I established the ALEKS program for students needing extra help in order to be successful in our math program. After seeing the results of having students use the program once or twice a week, we instituted ALEKS for use five times a week. Next, we established ALEKS as part of the summer school program, which I teach. During the summer school program, students have increased more than two years on a standardized test after only 40 hours on ALEKS, plus 40 hours of instruction. Students have become more responsible for their own learning. In addition, students have become more open to figuring out how to do something based on previous learning rather than immediately shutting down and claiming they do not know how to do the material. Overall, students are proud of their success. They are eager to get on the program each day.

Scenario

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

Students did poorly on standardized tests, particularly on fractions, decimals, and operations with integers. Students were taught but unable to internalize the material. They shut down on a test when they encounter new material rather than attempt to solve it based on what they know.

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

5 days per week.

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

120 minutes.

Implementation

How do you implement ALEKS?

Students are assigned a math lab period, as well as a math class.

Do you cover ALEKS concepts in a particular order?

I keep to the order in ALEKS as closely as possible.

How do you structure your class period with ALEKS?

One hour review of material, and then introduction to new material. We take a break, then they work for two hours in ALEKS, which is usually a required test on material presented in class. Students then use ALEKS according to their individual needs. After, we have a one hour review and reinforcement of material based on ALEKS test results, before introducing new material.

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

I spend more time giving individual reinforcement and praise. In setting up quizzes, I am more conscious of making sure that students have an opportunity to practice the material that they are being quizzed on.

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

Students were asked to put in at least one hour per week of work outside of the class period. Students were given homework sheets daily.

How do you cultivate parental involvement and support for ALEKS?

Parents are informed of the program and the goals of the program. Students are asked to show the program to their parents, and they receive points if they do this. At the end of the four weeks, some parents have asked how they can have their student continue on the program at home.

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?

For summer school, students are given worksheets created from ALEKS, and they are required to work on ALEKS for one hour per week.

How do you incorporate ALEKS into your grading system?

Progress in ALEKS accounts for 30 percent of the grade. Tests generated from ALEKS and teacher-made tests account for 40 percent. Finally, homework accounts for 30 percent.

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

In order to earn the 30 percent or 30 points, students must have reach the following percentages of mastery by the end of the term: 0–20 percent is an F; 21–31 percent is a D; 32–48 percent is a C; 40–74 percent is a B; and 75–99 percent is an A.

Learning Outcomes

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

During the summer school program, students have increased more than two years on a standardized test after only 40 hours on ALEKS, plus 40 hours of instruction. Students have become more responsible for their own learning. In addition, students have become more open to figuring out how to do something based on previous learning rather than immediately shutting down and claiming they do not know how to do the material. Overall, students are proud of their success. They are eager to get on the program each day.

Best Practices

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

Use the time while students are on ALEKS to meet privately with students to encourage and help them with the new material.