Implementation Strategies

Kapolei High School, Hawaii Department of Education

Kapolei, HI

Grade(s): 9 - 12

Scenario: One-to-One Laptop Program

Purpose: Core Curriculum

ALEKS Portion of Curriculum: 100%

Time Spent in ALEKS: 2 hours per week, 21–25 hours per term

ALEKS Course: Pre-Algebra, Algebra 1, High School Geometry, Algebra 2

Rachel Fronzo, Teacher

The individualized curriculum that ALEKS offers has been very beneficial for both teachers and students. Some students that were struggling in traditional math courses have been given access to ALEKS as a tutoring device at home and are very pleased with how much they are learning.

Scenario

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

I teach in an alternative program that services students at many different levels in one class. This has been very difficult to teach using lectures in small groups.

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

3 days per week.

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

60 minutes.

Implementation

How do you implement ALEKS?

ALEKS is used in conjunction with consumer math readings and worksheets. The consumer math consists of a daily 10–15 minutes of reading and exercise. The rest of the 70–minute period is spent working on ALEKS. Homework is also done through ALEKS.

Do you cover ALEKS concepts in a particular order?

No, I do not cover the concepts in any order. I think it's important that the students take responsibility for their own learning and pick what they want to work on. I also think this is important for students that become frustrated with one concept, because they are free to switch to something else rather than giving up. I do appreciate that some topics cannot be chosen until others are mastered.

How do you structure your class period with ALEKS?

The first 10 minutes are spent completing a consumer math activity (usually a reading and exercises). For the next 5–10 minutes, students are then given announcements hand in their homework, and are assigned new homework. The next 40–50 minutes are spent using ALEKS individually.

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

Our class focus is purely ALEKS with individualized instruction.

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

Students are required to log in to ALEKS a minimum of two hours per week. If we were unable to work during class time, they are required to make up the time at home.

How do you cultivate parental involvement and support for ALEKS?

The program was explained to the parents on the first day of school at orientation. Parents have been very supportive of the students using 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?

Yes, 75 percent.

How do you incorporate ALEKS into your grading system?

Grades are based on the following breakdown: progress in ALEKS is 25 percent; homework is 25 percent; class work is 25 percent; ALEKS tests/quizzes is 25 percent.

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

Students must complete as least 25 percent of their current ALEKS course each quarter in an effort to make sure they complete the course within the year. They are highly encouraged to finish more each quarter in an effort to complete more than one course in the year. Students feel like they are really learning and like the idea that with everyone working on the computer the teacher is free to helps students individually.

Learning Outcomes

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

I have noticed that struggling students are now confident in helping other students with concepts that they have already mastered, because everyone is picking concepts in a unique order that fits their learning needs. I have also noticed a lot of improvement in student ability and motivation.

Best Practices

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

My recommendation is to spend as much time as you can getting the students to use ALEKS and offering help as they work on their concepts. The one–on–one time spent with each student motivates them and creates a great working relationship.