

Implementation Strategies

Sacopec Valley High School, Maine School Administrative District 55
Biddeford, ME

Grade(s): 8 – 12

Scenario: Computer Lab, Laptop Carts, Home Access

Purpose: Intervention, Special Education

ALEKS Portion of Curriculum: 12.5%

Time Spent in ALEKS: 3.65 hours per week, 32.85 hours per term

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

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My original exposure to ALEKS came when I was asked by one of my clients, a public high school, to design a math lab course. The purpose of the class was to bring entering freshmen who had tested below standard in math up to grade level. ALEKS was the corner stone of the design. Four sections of that lab were in place at the beginning of the implementation. The first year of implementation, my responsibilities were to set up the program, provide ongoing training for the teachers, and to be an in–class resource once a week. Because of a staff shortage, I taught 3 sections of the lab the second year. The program is now self–sufficient. I have also recommended ALEKS to other clients as support for individual students who are not successful in the standard math program. Currently, most of those students are Special Education.

Scenario

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

There had been an overall pattern of failure in the freshmen math classes. With the individual students, the impetus was a lack of prerequisite skills and knowledge for acceptance into the vocational program.

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

Varies.

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

88 minutes.

Implementation

How do you implement ALEKS?

It was used in a separate math lab course that was taken by identified students in addition to their regular math class.

Do you cover ALEKS concepts in a particular order?

The order was primarily determined by the individual student's needs, but the topic order in the regular math class also played a part.

How do you structure your class period with ALEKS?

On average, no less than 40 minutes of the 88–minute block was devoted to ALEKS. The rest of the time was used for whole class instruction of math topics that were shown to be a general weakness.

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

The regular math teacher would notify the math lab teacher about observed problem areas of individual students. The lab teacher would work with those individual students on those topics. The ability to design specific quizzes was very valuable. Most background weakness would be handled in the lab rather than in the regular class.

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

Each time the lab class met, there was either a specific assignment or suggestion for out of class work.

How do you cultivate parental involvement and support for ALEKS?

Parent letters were sent home the previous spring explaining what the math lab was and why the student had been selected for the lab. We also had an information table at the annual parent night.

Grading

How do you incorporate ALEKS into your grading system?

The lab was graded on a pass/fail standard. A passing grade required 85 percent completion of all assigned work.

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

There was no progress amount required for passing. However, if the report done by ALEKS showed little or no progress on the scheduled assessments, the lab teacher would conference with that student to determine why. No progress could lead to a failing grade if the cause was determined to be lack of student effort.

Learning Outcomes

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

Most of our students are encouraged by seeing their pies change. At the high school math lab, I maintained a database for two school years. Each year, I recorded the increase in each student's assessment score from the Initial Assessment to the last one of the year. The median increase was 22.2 percent for those two years.

Best Practices

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

I required each student to keep an organized notebook that included the work for each example done as the pie is navigated. I also used the quiz feature with the teacher review and then met with each student before a retake of the quiz. Again, recording all the work in the notebook shows the student error patterns. Assigning a teacher-developed questionnaire to be filled out by the student whenever a scheduled assessment is done was also helpful. This should include a review of the mastered topics of the last two assessments if the assessment grade has dropped. I found that many students became discouraged if their scores dropped. Looking at the mastered topic list allowed them to see why that happened.