Implementation Strategies

Nex+Gen Academy, Albuquerque Public Schools

Albuquerque, NM

Grade(s): 9 – 12 Scenario: One-to-One Laptop Program Purpose: After-School, Improve State Test Scores, Core Curriculum, Supplement ALEKS Portion of Curriculum: 25% Time Spent in ALEKS: 2 hours per week, 35 hours per term ALEKS Course: Algebra 1, High School Geometry, Algebra 2

Andrew Chernow, Teacher

I teach Algebra 2 using a project–based learning model. I use ALEKS as a tool to increase math skills in a learner–centered environment and as a means to differentiate within my class during projects. The main learning outcome in my class is improvement in basic skills such as order of operations, fractions, and solving linear equations. I knew ALEKS was having a positive impact on my students the day we got back our Juniors' American College Testing (ACT) scores. When I asked them why they did well on the math portion, almost all of the students credited ALEKS as the main reason.

Scenario

What challenges did the class or school face in math prior to using ALEKS? The main challenge we faced was the ability to differentiate within a class. ALEKS has helped us with that.

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?

20 minutes.

Implementation

How do you implement ALEKS?

It is part of a weekly grade. Students must complete a certain number of topics per week to get credit for that grade. I also assign periodic worksheets for homework.

Do you cover ALEKS concepts in a particular order? No.

How do you structure your class period with ALEKS?

I designate part of every Friday just for ALEKS. Students must work on ALEKS during this time. I also have smaller chunks of time during the week that are more voluntary.

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

I did not modify anything other than designate a portion of one day per week for ALEKS.

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

They are required to complete a certain number of topics per week, which usually requires about one hour at home per week.

How do you cultivate parental involvement and support for ALEKS?

We have a parent-led math team that meets at our school once a week. We also discuss ALEKS at all student-parent conferences as well as open houses.

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?

ALEKS is about half of their homework load.

How do you incorporate ALEKS into your grading system?

ALEKS is about 30 percent of the total math grade.

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

I require a certain number of topics to be mastered each week. I have the students keep track of this in a notebook with an ALEKS tracking sheet. I monitor this as well and assign weekly grades. There are 30 weeks of school work time. We have about 240 topics, and the students usually begin at about 30. At that point, most students are required to complete seven topics per week.

Learning Outcomes

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

The main learning outcome in my Algebra class is improvement in basic skills such as order of operations, fractions, and solving linear equations. My top level students feel good about their progress.

Best Practices

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

Make sure to have a weekly check point and stick to it. Allow for time during class to do ALEKS so you can help students master difficult topics. Also, break it up a bit and use the worksheet function or the quizzes in ALEKS.