

Implementation Strategies

Novo Community School, Santa Clara County Office of Education
San Jose, CA

Grade(s): 8 – 12

Scenario: Computer Lab, Computers in Classroom

Purpose: Intervention, Core Curriculum, Improve State Test Scores, At-Risk Students

ALEKS Portion of Curriculum: 80%

Time Spent in ALEKS: 2.5 hours per week

ALEKS Course: High School Preparation for Algebra 1, Algebra 1, High School Geometry, Algebra 2, PreCalculus

Susan Stein, Teacher

Students are very engaged with the program. Even the "hard core" students have become very attached to their pies – they get excited to see it grow and upset when it shrinks! I am able to individualize the curriculum to a very diverse set of students. In any one class, I have students learning basic math through PreCalculus – all have the opportunity to learn at their own pace!

Scenario

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

Students' math backgrounds are so DIVERSE and there was no way to really give all students an opportunity to learn. Our student population is extremely transient, and keeping kids really on task with anything remotely meaningful was impossible.

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?

30 minutes

Implementation

How do you implement ALEKS?

I give students the core of their individualized program after California High School Exit Exam (CAHSEE) practice for the class. Most students use ALEKS, and a few prefer workbooks.

Do you cover ALEKS concepts in a particular order?

No. My students are primarily non-linear thinkers and have pretty short attention spans. They can move through concepts in any order they are ready for, which is less frustrating.

How do you structure your class period with ALEKS?

I begin class with a couple of CAHSEE practice problems and a discussion (about 10 minutes). The rest of the class period is mainly used for ALEKS for a majority of students (usually about 30 minutes).

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

I've made a complete change, and ALEKS actually fits my teaching style much better than traditional "stand and deliver" methods. I just set the students loose on the program and help out as needed. I also supplement with other computer programs and games for some variety.

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

I encourage them to use ALEKS whenever possible, especially if they are out of school for any reason. Some students even work a couple of hours at a time.

How do you cultivate parental involvement and support for ALEKS?

The parents often have more than one job, are hardly ever home, or are otherwise unavailable for their child. If the student is fortunate enough to have Internet at home, that is about the level of parent involvement.

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?

It all depends on whether the student even does any homework. I work at a community continuation school, so students usually refuse to do any work outside of school.

How do you incorporate ALEKS into your grading system?

For those who use the system, it is a balance between time spent on task each day, quality of work exhibited each day, and their class attendance.

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

I expect students who regularly use ALEKS to work at least 30 minutes per day with concentrated effort. I look at the number and type of topics students work on each day, and examine assessments regularly to see how the student is making progress. Most of the students are sent to this school because they have been expelled from their school districts, are truant, or are in and out of juvenile hall, so any regular efforts are a MAJOR accomplishment for these students!

Learning Outcomes

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

Students are much more focused on their work, care about their pies, and make all efforts to improve their learning. They call me over to show their growing pie pieces and compare with one another. They are very attached to their pies. These are pretty toughened and high-risk high school students, so I am amazed at these emotional attachments to the program!

Best Practices

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

The more freedom you give the students to work at their own pace and with their own process, the harder they try to work and to learn. Of course, they still need constant gentle guidance and require your help, monitoring, and positive feedback along the way. The stronger YOUR math skills are, the more success you will have with a strongly diverse classroom of learners. You need to be very flexible in how you work with each class – you can be teaching multiplication one minute and graphing inequalities the next! Since ALEKS is a computer program, it does not replace human interaction between students and teachers. You just have to be a different kind of teacher.