

Implementation Strategies

Utterback Middle School, Tucson Unified School District
Tucson, AZ

Grade(s): 6 – 8

Scenario: Computers in Classroom, Home Access

Purpose: Enrichment/Gifted and Talented, After-School, Improve State Test Scores, Supplement

ALEKS Portion of Curriculum: 20–50%

Time Spent in ALEKS: 1–3 hours per week, 8–24 hours per term

ALEKS Course: Middle School Math Course 2, Middle School Math Course 3, Algebra 1

Kathleen Barber, Teacher

ALEKS has assisted all students who have spent more than one hour a week on it. ALEKS has been especially great for my students who need to be challenged with higher level mathematics. I teach eighth grade math and Algebra for high school credit to eighth graders. This year, I had three seventh graders in my eighth grade class; two of the seventh graders scored 23 percent on the Algebra Initial Assessment after using the ALEKS Middle School Math Course 3 for one quarter. We use the results of the Algebra Initial Assessment to measure readiness for the Algebra for high school credit class. I require my Algebra students to use ALEKS, and I assess their learning through ALEKS and with a paper and pencil test. Next year, I will print out their initial goals, require at least three hours a week for their weekly grade, and set specific goals for each quarter in order for them to receive high school credit for Algebra.

Scenario

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?

20–30 minutes

Implementation

How do you implement ALEKS?

I struggled at first but have learned that it is necessary to require students to commit to using ALEKS. I assigned ALEKS to students during afterschool tutoring and to the students enrolled in the Algebra for high school credit class. Next year, I will assign specific parts of the pie for students to work on that will complement our textbook's structure, and I will use progress as a measure to assess learning.

Do you cover ALEKS concepts in a particular order?

No, I allow my students to select which pieces of the pie they cover during independent study. Next year, I will ask students to select topics from ALEKS that support, teach, or extend their learning.

How do you structure your class period with ALEKS?

For full days and 85 minute periods: starter and objectives is 5 minutes; the lesson is 15 minutes; practice and ALEKS is 30 minutes (there are two groups of six students on ALEKS each day); and ALEKS and extension or practice is 30 minutes.

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

I am now using a more "center-like" approach to my teaching, such as using the computers as a "center" for the students. I am now making plans to change the seating in my classroom to tables and chairs instead of desks to support this "center-based" approach.

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

I encourage my students to work 15–30 minutes a day at home. However, many of my students do not have Internet access at home; therefore, I make myself available afterschool twice a week for an hour to allow them access to the Internet.

How do you cultivate parental involvement and support for ALEKS?

I am working on that.

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 50 percent of their homework responsibility.

How do you incorporate ALEKS into your grading system?

I have not used ALEKS for a grade this year. Next year, I will use student progress as a single test grade worth 100 points each quarter. If students achieve 25 percent in the first quarter, they will get 100 points; if they do not reach 25 percent, they will receive a percentage based on their level of attainment. I will pro-rate the score for the second, third, and fourth quarter accordingly with the attainment level I expect for a 100 percent by the end of the fourth quarter.

Learning Outcomes

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

Students who use the system from home or in afterschool tutoring at least twice a week have shown the most improvement. All students who use the system improved their classroom participation. I found that students like being able to compare where they are at in ALEKS; some students become competitive trying to attain the highest percentages in their pie!

Best Practices

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

Students should be encouraged to use ALEKS to help their learning. Some students will not use ALEKS effectively and will need more one-on-one assistance to get started. Allow students the freedom to compete with each other which makes ALEKS even more fun!