

Implementation Strategies

Prestonwood Christian Academy, Private
Plano, TX

Grade(s): K – 12

Scenario: Computer Lab

Purpose: Supplement

ALEKS Portion of Curriculum: 25%

Time Spent in ALEKS: 1–2 hours per week, 40 hours per term

ALEKS Course: Essential Mathematics (with QuickTables), Middle School Math Course 2, Middle School Math Course 3, Pre–Algebra, Algebra 1, High School Geometry, Algebra 2

Jacque Ferbrache, Teacher

I began using ALEKS in 2010 with some summer tutoring students who ranged from fourth grade to tenth grade. The experience was amazing; I was bragging about it daily! Cycling between learning and assessment to ensure mastery of topics is a strong positive of the program. In the Fall, we began a trial program with all of our seventh and eighth grade students, and I continued the program with my tutoring students. We enrolled in the program at the completion of the trial, and I have seen great success and students taking the initiative to solve new topics on their own. Since most of my students are at the end of their pie chart, they face some difficult concepts. I have them print out the explanation and bring it in, and I teach the concept to the class. The reasons I have them print out the explanation are so that they would be responsible for what they are accomplishing and would also have it for a reference. This has helped them over a couple of hurdles, and now they are continuing to move forward. One of my seventh grade students is addicted to ALEKS; he has completed two full courses and is now working on the Geometry course. I already have quite a few students lined up for summer. I also have people in our admissions office refer incoming students to the program as well as their own families. It is by far the best math program I have seen, and I have been teaching since 1981.

Scenario

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

Differentiating on multiple levels, and challenging the gifted and talented to strive for greater learning.

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

1 day per week.

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

45 minutes.

Implementation

How do you implement ALEKS?

Students are enrolled in an ALEKS course that is the same as the math course they are currently in. I had a few students that I moved to the Essential Mathematics course because of English as a Second Language (ESL) or they had a foundational topic that needed to be strengthened. I want them to see that they are capable of doing math. Some of my higher level students have moved through the first course and are now working in their second or third course.

Do you cover ALEKS concepts in a particular order?

At various times I will customize the program to line up with the current chapter I am teaching.

How do you structure your class period with ALEKS?

My students are required to accomplish ten topics per week. If they complete them in the lab when we have access to it that is great; if not, they must finish them at home or in the library. At times, I use the generated worksheets as a quiz. They also receive a test grade equal to 100 points at the completion of a course. If they have not quite completed their course at the conclusion of the school year, whatever percent they have attained is their test grade. Since this was the first year, it was a learning process. We are possibly going to have a laptop cart available for the classroom next year. This will enrich the program even more.

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

Any student that is unsure of how to do a topic can bring in the explanation, and I will either show them how to do the topic individually or present it to particular classes. I do not assign book homework because of the requirement of completing ALEKS topics on a weekly basis.

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

They receive two weekly grades for their completion of ALEKS assignments.

How do you cultivate parental involvement and support for ALEKS?

I send announcements and emails, and use word of mouth, mostly as encouragement given to the students.

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, 40 percent.

How do you incorporate ALEKS into your grading system?

They receive a double homework grade weekly for completing ten topics or five topics if they had to take an assessment. I also utilize the generated worksheets and use them for a quiz grade.

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

Ten topics weekly. Their grade is deducted by ten percent for each topic they do not complete. They can do more, but the amount does not carry over. They must use the program weekly.

Learning Outcomes

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

As I teach a lesson, a student will frequently remark "I just did this in ALEKS." Another might say "I tried this but couldn't understand it, and now I can do it." At times I customize the class so that they have to do the topics linked to the current chapter. I have learned how to make adjustments to best impact the students. The majority is well aware of their progress and become much more attentive to details when they are taking an assessment, so they do not have to redo topics they have already done in the past.

Best Practices

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

I really like customizing the program, but I learned to set the closing date for a few days after the test. Some of my students would get frustrated that ALEKS would not let them move on until they completed the quiz; however, we soon realized that once they completed the current chapter, the whole pie opened back up. The computer generated worksheets are great to do as a class, especially with some of my students that struggle with math. I put one of theirs up on the screen, and then we work each question out and talk about it. The reinforcement and the fact that there are no multiple choice answers are the facets I like the best. There is no room for guessing and getting credit for something you really do not understand.