

Implementation Strategies

Warsaw Community High School, Warsaw Community Schools
Warsaw, IN

Grade(s): 9 – 12

Scenario: Computer Lab, Computers in Classroom, Online School

Purpose: Intervention, Improve State Test Scores

ALEKS Portion of Curriculum: 80%

Time Spent in ALEKS: 2–2.5 hours per week, 25 hours per term

ALEKS Course: Algebra 1

Gregg Straits, Teacher

We have had really good success using ALEKS to reach a large group of students with varied needs and weaknesses. The program tests them and then creates a personal curriculum for that person, reaching the topics of need in that person's background, while doing the same for twenty other students that have varying other topics of needs. The Reports section helps me to be able to group students by topics that need to be addressed and also provides example problems that I can use to work with students in a small group while the rest of the class can progress at their pace in getting ready for the End-of-Course Assessment (ECA). From the Reports sections, I can access the accumulated class details including the topics they are ready to learn. The program has a wealth of examples and can regenerate several examples of one type of problem if my students are not grasping the concept. This allows me to project the problem onto the screen on the front board and work through those examples with the class, which is great for large group instruction. We use the ALEKS program for personal, small group and large group instruction and have yet to exhaust the possibilities. Overall our experience has been very positive and the results verify that it is working.

Scenario

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

Meeting the state requirements and addressing each individual for ECA intervention with such a variety of needs across the population of students, while not forcing them back into a course that they have previously passed.

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

3–4 days per week.

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

42 minutes.

Implementation

How do you implement ALEKS?

It is basically an intervention, so it is the curriculum. Students must have previously passed the Algebra 1 course, but not passed the ECA exam, so this is not their first time through the material. It works as a supplement or as a refresher.

Do you cover ALEKS concepts in a particular order?

Yes, the topics are grouped in clockwise fashion. To give students ample practice, I begin covering systems and quadratic equations in their varying approaches earlier than they appear in ALEKS. This allows me to address the larger portions of these topics covered on the Indiana ECA, which occurs before and during the time they get to the topics in ALEKS.

How do you structure your class period with ALEKS?

The students take their laptops to their desks, login, and begin by using the pie chart to tell them where they need to work. I have pushed them to work around the pie chart in clockwise fashion starting with the green and red sections as many topics in the other sections won't open until those sections are addressed. I monitor their progress, walk among their desks, answer individual questions, and keep encouraging them to press on. One day a week I usually instruct the whole class. One day a week, we practice on paper and pencil test.

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

I have to be a monitor, more like the Credit Recovery approach, where students are working at their pace on the topics of their choice so as to allow for the differing needs in the room.

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

I prod them to do so weekly, and encourage parents to get their students to work at home.

How do you cultivate parental involvement and support for ALEKS?

I communicate via letters, emails, and parent–teacher conferences, showing them what their students are doing and how they can get them working on ALEKS at home. I send the plug–in address home to allow them to access their account on their personal computers at home the first day of the term.

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?

This is a class where all work is done in class, so it is not official homework.

How do you incorporate ALEKS into your grading system?

This class, being intervention, is a pass/fail class. It works in our system as an elective credit, not as a math credit. I base it somewhat subjectively on attendance and focus on the day. If I catch them doing something other than ALEKS, they get a zero for the day in my gradebook. I put the goal of five topics per day before them, but the object is to keep them moving/progressing.

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

Yes. I put the goal of five topics per day before them, but the object is to keep them moving/progressing.

Learning Outcomes

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

Overall our experience has been very positive and the results verify that it is working. Our students who have not passed the ECA are now passing at a rate of 65 percent or more after one semester! The students really enjoy using ALEKS, especially having no homework or quizzes. The tests they take are all online and seems painless to the students as they don't receive anything but constructive feedback. The students feel successful as they see their numbers increasing, and we feel that they are gaining confidence in addressing those topics they didn't get in Algebra 1 the first time it was presented by a teacher.

Best Practices

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

I like using ALEKS as a large group and small group demonstration tool, but the individual terminal is the most productive. I keep the time and topics mastered up in front of my monitor and refresh regularly, walk among the desks regularly, play music to keep them awake, and keep showing them the numbers of where they are and how much they have yet to cover. Those students that have mastered 70 percent of the ALEKS course are nearly all passing the ECA state exam, which is our goal. For the student that is enrolled a second semester, I put the goal of 80 percent before them and push to get those numbers up.