

Implementation Strategies

Tartan High School, North St. Paul–Maplewood–Oakdale Independent School District 622
Oakdale, MN

Grade(s): 9 – 12

Scenario: Computer Lab, Home Access

Purpose: Intervention, College and Career Readiness, Exit Exam, Improve State Test Scores

ALEKS Portion of Curriculum: 30–40%

Time Spent in ALEKS: 2.5 hours per week, 25–30 hours per term

ALEKS Course: Algebra 1, Prep for GED Mathematics, Math Review for AP Calculus

Rachel L. Price, Teacher

I use ALEKS in conjunction with classroom teaching to help seniors who failed the statewide Graduation–Required Assessment for Diploma (GRAD) math exam. They spend two or more hours a week working on the individualized skills practice that ALEKS provides, and two hours a week in the classroom working on applications and extensions. I find that most students who really work hard in ALEKS have a greater increase in their understanding of math than those who receive only classroom instruction. They are also more likely to pass the GRAD retake exam. I have seen some students DOUBLE their scores on the GRAD exam in just four months with the combination of classroom instruction and ALEKS!

Scenario

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

If we did not have the ALEKS subscriptions, we would have a much more difficult time working with these seniors who have failed the statewide exam. I have had classes of seniors with math backgrounds from Algebra 1 to PreCalculus. Also, some seniors cannot fit the intervention class into their schedule, but still need something to help them pass this exam. A couple of times I have given these students an ALEKS login to use only from home – and it worked! I have also given a subscription to students in my regular math classes who transferred from different districts and might need to cover material that their previous school hadn't covered.

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

3 days per week.

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

45 minutes.

Implementation

How do you implement ALEKS?

After a training session and some collaboration with the other math teachers in my department, I started by bringing my class to the computer lab two days a week and giving paper quizzes in the classroom on Fridays. This was okay, but students surprised me by saying they wanted more time for ALEKS. The next term, I switched to three days a week in the computer lab and weekly quizzes in ALEKS. In addition to the quizzes being automatically graded, I am able to look at data from the quiz results and make conclusions about each student's abilities, as well as the abilities of the entire class.

Do you cover ALEKS concepts in a particular order?

No.

How do you structure your class period with ALEKS?

On Mondays and Wednesdays, students go to the computer lab to work on their pie. On Tuesdays and Thursdays we do classroom activities. On Fridays, students go to the computer lab to take the weekly ALEKS quiz, then work on their pie charts.

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

After the Initial Assessment, I look at the class's results by topic. The GRAD math exam covers all the math that students are expected to learn up until the eleventh grade. With so much material to cover in one trimester, I use the ALEKS assessments to guide my lesson plans. I typically go over one topic a week and use the Friday ALEKS quiz to determine if the week's objectives have been met. If the majority of the class meets the objective, I can pick another topic for the following week. If not, then I know I need to continue with the same topic for another week.

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

If students are absent, they need to make up an equivalent amount of time in ALEKS at home. Otherwise, they are encouraged to work from home but not required. I also teach a similar class for juniors who have not taken the GRAD math exam yet. It is held before school, and students can choose to work in ALEKS and take the quizzes from school or from home. I put time constraints on the quizzes to make sure that they are taken in a timely fashion.

How do you cultivate parental involvement and support for ALEKS?

I have had a multitude of parents contact me worried about their child's prospect of passing the state exam, and therefore being eligible to graduate. All parents want to know that there will be individualized instruction for their child. By including ALEKS in the curriculum, parents are relieved to know that their child's personal needs will be addressed. They are also happy to hear that they can use the program from home if they need more help.

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?

Not exactly. ALEKS is required, but is typically done in school.

How do you incorporate ALEKS into your grading system?

I assign points per minutes in ALEKS and for items mastered, which I add to their daily work grade. Quiz scores are also included in a separate grade category.

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

Progress is measured by each individual's abilities.

Learning Outcomes

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

My objective in using ALEKS is to increase the base knowledge of at-risk seniors who have not passed their state-mandated math exam. Since ALEKS focuses on individualized instructions and practice, I can clearly see a student's strengths and weaknesses. I can also see improvements they have made with just a glance. In addition to the individual practice, I give a weekly quiz that will tell me the class's strengths and weaknesses. This will guide what I will cover the following week during our classroom time. I find that students working hard in ALEKS are more confident and more likely to pass the retake exam. While some students find it difficult to focus on a computer program for long periods of time, most of them understand the principle behind individualized practice. I find that students who are willing to work hard in ALEKS are more confident and WILL pass the statewide exam! My students like that they can log in to ALEKS from any computer and that they can use it as much as they may need.

Best Practices

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

Play around with the program! Make sure that you have a student account so that you can see what the students see.