Implementation Strategies

Kennedy Middle School, Cupertino Union School District Cupertino, CA

Grade(s): 6 – 8 Scenario: Computer Lab, Laptop Carts, Home Access Purpose: Intervention, Special Education, Improve State Test Scores, At–Risk Students ALEKS Portion of Curriculum: 35% Time Spent in ALEKS: 1.5 hours per week, 25 hours per term ALEKS Course: Pre–Algebra, Algebra 1

Marc Kulla, Teacher

I use ALEKS for my students who are struggling with math in eighth grade. As you know, differentiation in the classroom is key to success; however, it is hard to differentiate effectively with students who have gaps in math spanning many years. ALEKS is an excellent way of filling the gaps in a student's math skills while continuing to learn new material. It ensures that the standards are met and does it in a very effective way!

Scenario

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

Differentiation in a math class where some students have gaps in their learning that spans many years is very challenging. ALEKS allows true differentiation by assessing students prior to teaching them new material. This is a key component to the system that other online systems do not take into account.

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? 51 minutes.

Implementation

How do you implement ALEKS?

ALEKS is used one day per week during my class. Students are able to use ALEKS at home to build their skills, since ALEKS is web-based and 100 percent of my students have Internet access and a home computer. Otherwise, they could use the school's facilities to gain access to it. I use ALEKS not only to teach the current curriculum, but also to be sure that students have no gaps in their math education. In this way, it serves two very useful purposes to me as an eighth grade math teacher.

Do you cover ALEKS concepts in a particular order?

I cover all of the ALEKS topics in my class, but they are not necessarily in the same order. Students can choose the order they accomplish the ALEKS tasks, so each student may go in slightly different paths. To me, this is an advantage and makes the ALEKS system so dynamic!

How do you structure your class period with ALEKS?

I use ALEKS in class one day per week. During this time I am able to work one-on-one with students who require my direct assistance while knowing that the other students are completely on-task with their math work. Students are also required to do 30 minutes of ALEKS per week as homework. ALEKS' great reporting system allows me to see not only the amount of time that students are using the system, but how productive they are while they are logged in.

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

My regular teaching has been modified by ALEKS because as the year progresses, there are less and less students with gaping holes in their prior knowledge. This allows me to move at a better pace through new material, knowing that the students are not falling behind.

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

My students are required to use ALEKS one night per week at home. However, I encourage all parents to push their children to use it as much as possible. I have had some students who used it daily! They do wonderfully with the system.

How do you cultivate parental involvement and support for ALEKS?

I send notes to parents weekly, outlining the work their children are doing and how they are progressing with ALEKS. I encourage them constantly to have their children do more and more ALEKS work, as I am a true believer in the benefits of the system!

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 assigned one day per week as homework for a minimum of 30 minutes. This is 20 percent of their homework load.

How do you incorporate ALEKS into your grading system?

The only part of ALEKS that is directly entered into my grades is the homework that I assign on it. However, there is a direct correlation between those students who spend more time in ALEKS and their overall test and quiz grades in my class!

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

I do not require set amounts of progress. I talk to students one-on-one about their progress in the system. ALEKS makes it completely clear which students are working hard on the system and which students are just "putting in their time." For those students that are not working hard, I talk to them about the benefits of the system and encourage them to make the most of it. I do this continually on a one-on-one basis.

Learning Outcomes

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

It is clear from looking at the detailed ALEKS results that students who devote time to the system accomplish much more in math, place higher on in–class testing, score higher in state testing, and feel more confident with their math skills. By clearly seeing the pie chart filling in as they go, students are very motivated to continue using the system. Those students that get a competitive feeling from the system really accelerate through the material. Even those students who start off with a very empty pie chart can see progress and become more motivated.

Best Practices

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

The most important part of ALEKS is getting the students and parents to believe in it. Use prior data to show them how other students have excelled in math by spending more time in the system. Get them onboard early with the system; it will not only make them successful in math, but will also make your teaching easier!