Implementation Strategies

Palm Academy for Learning, Coronado Unified School District Coronado, CA

Grade(s): 10 – 12 Scenario: Computers in Classroom, Online School, Home Access Purpose: Intervention, Credit Recovery, Special Education, At–Risk Students ALEKS Portion of Curriculum: 100% Time Spent in ALEKS: 4–5 hours per week, 80 hours per term

ALEKS Course: Pre-Algebra, High School Preparation for Algebra 1, Algebra 1, High School Geometry, Integrated Mathematics I

Kevin Nicolls, Principal

As an administrator in an alternative school serving at-risk students in grades 10–12 who usually enter with significant credit deficits, I am VERY happy with ALEKS. From my own personal experience, I know what it's like to sit in an Algebra class doing your best to keep up, scrambling to get all of the notes and struggling to process new concepts. Like most high school freshman, I was self-conscious about stopping the teacher with all of my questions because it looked like everyone else was getting it. That is how many students start digging a hole and begin failing math. ALEKS allows students to rebuild their skills from the point they stopped understanding and re-learn math in a personalized way. The pace, sequence, and level of challenge adapts to the individual and instead of being overwhelmed by a page full of equations, ALEKS presents one problem at a time. The greatest aspect, in my opinion, is the instant feedback for each problem and the graphic representation of skill development (pie chart) that motivates the students to master concept areas.

Scenario

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

All of the students in our school are at different ages, grades, and skill levels which makes homogeneous teaching methods frustrating for staff and students. ALEKS allows the teacher to work with every student in any course at their own level and pace.

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

4 days per week.

What is the average length of a class period when ALEKS is used? 45–60 minutes.

Implementation

How do you implement ALEKS?

We have now added ALEKS as an option for ALL math students. It doesn't work for every student, but does for most of them.

Do you cover ALEKS concepts in a particular order?

Sequence is determined by each student's individual assessment and need.

How do you structure your class period with ALEKS?

Students use ALEKS for their first period of the day, for 45–60 minutes. Students log into ALEKS when they arrive and the instructor facilitates learning for all students in the room, regardless of their individual courses.

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

We trust ALEKS to guide and instruct the student, with teachers there to provide help as needed.

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

We do not require homework in our school so working on ALEKS at home is voluntary. The frequency of home use seems to increase towards the end of the grading periods.

How do you cultivate parental involvement and support for ALEKS?

We inform the parents that their child may not graduate on time if they do not accelerate their credit recovery with ALEKS.

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?

We do not assign homework. Use of ALEKS at home is voluntary.

How do you incorporate ALEKS into your grading system?

Grades are calculated based on the number of concepts completed.

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

We try, as we do in all subject areas. It is difficult to keep student attention when teaching at-risk high students, but ALEKS is like a laser pointer that holds their attention longer than other curriculum.

Learning Outcomes

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

ALEKS has dramatically increased the number of students who not only pass Algebra I, but also the number of students who earn higher grades, and do so in significantly less time than they took when using textbooks. Once students find their rhythm with ALEKS, it's hard to convince them to consider using textbooks again. They love seeing their pie grow!

Best Practices

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

We have found that when students are all seated at computers right next to each other, it works particularly well to allow them to use their headsets and iPods to filter out distractions. They stay focused and productive.