

# Implementation Strategies

**Scott M. Matheson Junior High School, Granite School District**  
Magna, UT

**Grade(s):** 7 – 9

**Scenario:** Computers in Classroom, Home Access

**Purpose:** Credit Recovery, Special Education, ESL Students, Core Curriculum

**ALEKS Portion of Curriculum:** 50%

**Time Spent in ALEKS:** 2 hours per week, 20 hours per term

**ALEKS Course:** High School Preparation for Algebra 1

## **David Albertsen, Special Education Teacher**

I use ALEKS for individualized assessment and remediation. It has been extremely successful in motivating and improving the skills of my special education class. The most important indicator to me is that the progress the students make in Learning Mode between assessments is maintained on the next assessment. In other words, the learning gains they are making are real and are not forgotten the next day or week! I also use ALEKS for regular education students who need to make up a failed credit of high school math. ALEKS has allowed me to work with a highly varied group of students and to show that their skills and proficiency are improving.

## **Scenario**

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

My class, like all math classes, had a wide range of students. Although they were all Special Education students, some were quite proficient but had aggression or anxiety problems. Some were English Language Learners, and some were non-readers. With ALEKS, all students made excellent progress.

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

2.5 days per week.

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

45 minutes.

## **Implementation**

### **How do you implement ALEKS?**

I implemented ALEKS primarily to provide progress monitoring and remediation. I use my own cooperative rich tasks for teaching the new, grade-level content. ALEKS is very successful at finding and correcting the minor misunderstandings in prior knowledge that limit their ability to learn the new content.

### **Do you cover ALEKS concepts in a particular order?**

No, I allow the students to choose whatever areas they need to work on. Since they are, on average, six years behind grade level, anything they work on is remedial and helpful.

### **How do you structure your class period with ALEKS?**

I provide a cooperative rich task for small groups comprised of half the class. The other half starts on ALEKS. At about half-way through the class period, the students switch. I am able to circulate between the table groups and the students on the computers, and to help any student with a question.

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

I need to have tasks ready for half the class that do not require much up-front, whole class explanations. The students who start on ALEKS can just login and begin without help. The concepts can be challenging but the instructions are clear. Lecturing from the front and working problems on the board are now things of the past.

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

I had planned to require one hour per week from home, but many of my students do not have Internet access or family support to get to a public library or school lab.

### **How do you cultivate parental involvement and support for ALEKS?**

I'll work on this for next year!

## 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 their entire homework assignment. My other activities are done in cooperative groups where students explain concepts to each other.

### **How do you incorporate ALEKS into your grading system?**

I give approximately double the points for ALEKS compared to my in-class assignments. Since I am getting my students used to the program, I use total time in the program to generate points (60 points per hour). My in-class activities are worth ten points each; this is less than ALEKS because students are less accountable for their individual learning in a group setting.

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

I had intended to grade based on number of topics completed but found that grading based on time in the program worked just about as well. A few students try to game the system and stay logged in without working, but the drop in number topics completed per hour is pretty clear. It would be simple to assign both a time and topic requirement per week.

## Learning Outcomes

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

My special education math students have demonstrated the ability to learn and maintain their learning using ALEKS. We are learning grade-level concepts, but I also need to remediate any gaps in their learning. ALEKS is very effective at finding and correcting missing or misunderstood concepts. Generally, the students are very excited about their progress. Of course, learning is hard work, but ALEKS breaks down concepts into little bits and gives students measures of success for each micro-concept.

## Best Practices

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

Use ALEKS as part of a larger instructional strategy. ALEKS is fast, efficient, and easy to use. However, students need to discuss the new ideas they are learning with other students. Having real tasks with rich layers of understanding and that are also in line with National Council of Teachers of Mathematics (NCTM) standards and the Common Core State Standards (CCSS) is just as important as getting students to generate correct answers to a given problem type. The flip-side is that cooperative groups and discussions cannot identify and remediate gaps in understanding. I recommend using both in tandem to achieve the best results.