

# Implementation Strategies

**Altoona Area High School, Altoona Area School District**  
Altoona, PA

**Grade(s):** 7 – 12

**Scenario:** Laptop Carts

**Purpose:** Improve State Test Scores, At-Risk Students, Core Curriculum

**ALEKS Portion of Curriculum:** 85–90%

**Time Spent in ALEKS:** 3.5 hours per week, 27–30 hours per term

**ALEKS Course:** Algebra 1

**Anne Saclaro, Math Department Chair**

I rate ALEKS as excellent in meeting the needs of my adult learners who are returning to college and are finding that their mathematics skills are deficient. ALEKS also meets the needs of the 25 high school students who were performing below proficient in mathematics. ALEKS differentiates, motivates, reviews, and explains the requirements necessary to succeed in mathematics. Students are served a variety of learning exercises and are motivated by their improved retention after using ALEKS for a sustained period of time.

## Scenario

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

The challenge that our classes and our school in general faced in math prior to the use of ALEKS was the inability to find a textbook that could address the stratified skill levels of below level learners. Teachers were constantly producing worksheets and other support materials to address the slow learners and the learners with deficient skills. Mathematics retention is a big problem with the low achievers, and classes are often delayed in making progress because of this low retention.

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

5 days per week.

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

40 minutes.

## Implementation

**How do you implement ALEKS?**

Students work in the ALEKS program consistently in a Refresher Skills Mathematics class. ALEKS supplies grades, make-up work, tests, and class participation.

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

I allow the order of topics covered to be determined by the students. All of the math in the ALEKS Algebra 1 course is necessary to prepare students for the state tests. Allowing choice promotes individual achievement and progress without impediment. This is most successful in addressing the stratified skill levels of the 25 students assigned to this class.

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

I have full use of a laptop cart, consisting of 30 laptops for my 25 students. We use ALEKS nearly every day for 20–40 minutes.

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

When the ALEKS program was implemented, my co-teacher and I began a totally differentiated class of individualized and peer response/intervention as needed throughout the class session.

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

Since we use the program daily in class, my students are not encouraged to use ALEKS at home nor do they ask for ALEKS time at home.

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

Parent support has not been addressed during this session 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?**

No homework is assigned from the ALEKS program.

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

The class average on the Time and Topic reports and the improvement from the Initial Assessment to the latest assessment is set to 85 percent. The maximum in each category is 100 percent, while the minimum is 60 percent. Students are always evaluated in comparison to the class average, which is the most accommodating and fairest method of evaluation.

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

The grading system makes students achieve in ALEKS so that they meet or exceed the class average. The progress of the individuals who make up the class drives the progress of the whole class.

## Learning Outcomes

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

In just eight weeks, ALEKS students surpassed the achievement level of similar students who were in regular classes (textbook, paper and pencil) for a full year! Students are motivated by watching their progress bar and pie chart growth. Students and teachers alike appreciate the resources readily available in the ALEKS program. Students using ALEKS generally have good feelings about their progress in the program. They are always calling me over to their computer station to show me the latest results from their assessment, and they are proud of the reports that show clear growth.

## Best Practices

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

Differentiation in the mathematics presented, individualization in the assessment of the learner, and consistent/persistent review are the hallmarks of the ALEKS program. I deliver projects through a forum as attachments. Students share their project results by reattaching them to the forum, allowing students to share their pride in their achievements. When it comes to best practices, ALEKS allows the fullest extent of skill development by meeting the needs of the individual learner!