Implementation Strategies

Cusick High School, Cusick School District 59 Cusick, WA

Grade(s): 9 – 12 Scenario: Computer Lab, One-to-One Laptop Program Purpose: Intervention, College and Career Readiness, At-Risk Students ALEKS Portion of Curriculum: 25% Time Spent in ALEKS: 3.75 hours per week, 65 hours per term ALEKS Course: Pre-Algebra, Algebra 1, High School Geometry, Algebra 2, Trigonometry, PreCalculus

Glenn K. Miller, Math and Science Department Chair

I use ALEKS as a remediation tool for students who need assistance with the basic skills of math, and as a primary instruction tool for students who register for independent math all the way up to PreCalculus. The students have improved greatly in all skills and seven out of eight of the remedial students are now ready to rejoin their classmates in the traditional classroom. The independent math students have gained the same skills as the students receiving direct instruction in the classroom. For all students, their confidence has improved greatly. Most students track their progress as I do, and are proud of the gains they have been able to make. Many of them were lost in the traditional classroom.

Scenario

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

The biggest challenge my students faced prior to ALEKS was a lack of the basic math skills that are required in Geometry classes and above. They were used to retaining information only long enough to take a test and did not retain the skills from year to year.

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? 45 minutes.

Implementation

How do you implement ALEKS?

Integrated the use of ALEKS for at-risk students as a remediation and with independent study students as the primary curriculum.

Do you cover ALEKS concepts in a particular order?

No.

How do you structure your class period with ALEKS?

Before the beginning of class I look at all student progress sheets to determine the number of topics they have already mastered. The goal is for every student to complete four additional topics during the period. During the class I monitor their progress; those who do not complete the required number of topics must come in before the next class period to reach their goal.

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

Independent students are out of the classroom, but complete weekly logs of their progress, especially assessments.

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

At least once a week.

How do you cultivate parental involvement and support for ALEKS?

Many of the parents use ALEKS as a learning tool for themselves so that they are then able to assist their students with the math.

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?

For independent math students, ALEKS is 100 percent of their workload. For remedial students, it comprises approximately 50 percent.

How do you incorporate ALEKS into your grading system?

Completion of five topics per hour of use earns 50 points toward their weekly problem set points. Fifty points is the max: four topics is worth 40 points, three topics are worth 30, etc. Completion of 3.75 hours earns 50 points toward weekly participation. Below 3.75 hours of participation earns partial credit. Assessments are included for their test points.

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

Yes, completion of five topics per hour of use earns 50 points toward their weekly problem set points.

Learning Outcomes

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

Remedial students have gained the basic skills necessary to return to the traditional math classroom. Independent math students have gained the same skills as the students receiving direct instruction in the classroom. For all students, their confidence has improved greatly. Most students track their progress as I do, and are proud of the gains they have been able to make. Many of them were lost in the traditional classroom.

Best Practices

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

For independent math students, we have developed a contract stating the specifics of how many hours the student needs to accomplish per week, how many topics per session, and how their test scores will be developed. This takes the randomness out of the situation and gives the students a very clear objective.