Implementation Strategies

Hoover High School, Hoover City Schools

Hoover, AL

Grade(s): 9 – 12 Scenario: Computer Lab

Purpose: Exit Exam, Improve State Test Scores, At-Risk Students

ALEKS Portion of Curriculum: 50%

Time Spent in ALEKS: 4 hours per week, 72 hours per term

ALEKS Course: Algebra 1, High School Geometry

Robert Kyle McCartney, Assistant Principal

My goal is to increase graduation rates at our school. By passing the Alabama High School Graduation Exam (AHSGE) in the eleventh grade, students will be able to focus on advanced studies, dual enrollment programs, or cooperative education during their twelfth grade year. Our team, led by our math teacher, researched a math pre-test that was in line with the standards assessed on the AHSGE. We took a random sample of ten students who were selected from a population of students who had failed the tenth grade administration of the graduation exam during a previous school year. Each student was given two hours to complete the exam and the test was then graded by the math teacher and was given a score out of 100. The results of the exam were compiled and a counselor and administrator compiled a bar graph of the entire population of tenth grade students that did not pass the math portion of the graduation exam. The students for my project attended a remediation class for six months prior to the test. The class consisted of a 40 minute session every day for the first semester of the school year and students used ALEKS. The main focus of the project included indentifying students that needed early intervention and providing this intervention during the time frame. The students then took the math portion of the AHSGE the following day. In addition a pre-test was given to the students on the first day of the boot camp and a post-test was given on the last day of the boot camp to check for progress. Our final results show that 75 percent of all students in the class passed the graduation exam!

Scenario

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

Factors such as high transiency rates in and out of the school system deeply impact our ability to address the pass rate on the AHSGE. The team's preliminary data collection showed a high percentage of students who had not passed one or more sections of the graduation exam had not received all of their education at Hoover High School. The second obstacle the team identified is the limited monetary resources for remediation. Alabama has been cutting the budget during the school year, but the high standards still remain. Personnel reductions usually affect the support teachers in the school first. In addition, scheduling conflicts also hinder many of our students from having the opportunity to take an AHSGE remediation class. The team wanted to develop a plan to deliver the instruction in the normal school day without using class time and without using current personnel. The third obstacle is parental involvement and communication with parents. The team is working to develop a plan for communication with parents through the use of technology. The parents need to be more aware of the resources and classes offered at the school for remediation. I feel like the process has worked well and all team members have worked well together in developing the plan.

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?

ALEKS is used in our math remediation classes for students in grades 10–12.

Do you cover ALEKS concepts in a particular order?

The order is based on the student's pre-test results.

How do you structure your class period with ALEKS?

The class contains 20-25 minutes of mini-lessons in algebra and geometry, and 20-25 minutes of work in ALEKS.

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

I have modified instruction time from 45 minutes to 25 minutes to incorporate 20 minutes of ALEKS instruction.

How do you cultivate parental involvement and support for ALEKS?

I inform parents of a student's progress through a series of progress reports.

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.

How do you incorporate ALEKS into your grading system?

Fifty percent of a student's grade is based on participation in ALEKS.

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

Progress is based on the amount of time students spend engaged in the program.

Learning Outcomes

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

Students have been extremely excited about their progress throughout the school year. In part due to their use of ALEKS, 75 percent of students in my remediation class passed the graduation exam.

Best Practices

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

The program is most effective if used 3–5 times a week for 25–30 minutes a day. The program should also be used to supplement classroom instruction.