

Implementation Strategies

Brookfield High School, Brookfield Public Schools
Brookfield, CT

Grade(s): 9 – 12

Scenario: Computers in Classroom

Purpose: Special Education

ALEKS Portion of Curriculum: 50%

Time Spent in ALEKS: 2 hours per week, 80 hours per term

ALEKS Course: Essential Mathematics (with QuickTables), Foundations of High School Math

Susan Stahley, Support Services Teacher

Teaching basic math skills to a diverse population of students with various disabilities is always a challenge. Having a class of 14 is an additional problem. I started the ALEKS program in my class this past December and five months later, I am proud to see the tremendous growth and pride my students have in their individual and collective math achievement. I set up the classroom so that seven students are actively engaged on ALEKS at their individual achievement levels; I work with the other seven students in a small group or individualized instruction. The situation has changed the overall climate in the room, reduced the noise level and most importantly, the students are IMPROVING their math skills. The reporting data is most useful in Planning and Placement Team (PPT) meetings when summarizing what each student has learned, what they are presently working on, and what they still need to learn. I plan to use two additional levels of the program next year!

Scenario

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

Having a class size of 14 was difficult to manage with students at different achievement levels and with varying disability concerns. Even with an aide in the room, it was very difficult to differentiate instruction to meet the needs of each student. The climate in the classroom was not always conducive to the optimum learning experience that each student deserved.

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

3 days per week.

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

40 minutes.

Implementation

How do you implement ALEKS?

I observed the ALEKS program within a mainstream Algebra 1 class. During a department meeting, a presentation was given to inform the group about ALEKS. I researched the materials and conferred with the Math Department Chair, the Special Education Department Chair, and the Principal. I decided to order and implement the program, and found it was easy to administer.

Do you cover ALEKS concepts in a particular order?

Due to the nature of having students with different goals, we cover topics on an individual basis. Group instruction relies on differentiated instruction.

How do you structure your class period with ALEKS?

Within an 83 minute period, half the class works on ALEKS and the other half work with me or support staff on individualized or small group instruction. We then switch half way through the period. This allows me to provide additional worksheets from ALEKS or teacher-directed instruction with curriculum materials.

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

I was able to move from a whole class teaching model to small group and individualized instruction, utilizing materials I have developed in tandem with materials from the ALEKS program. With an 83 minute block schedule, it is difficult to keep students engaged the entire period. With ALEKS, the students move from one activity to another and this keeps them interested and on task.

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

Students are encouraged to work on ALEKS at home. Few do, but for some students in our school they are required to spend time on ALEKS at home.

How do you cultivate parental involvement and support for ALEKS?

Parents love to see the Individual Student Pie Chart with attached achievement information. They can easily see what their child can do and what they are ready to learn. Reinforcement with real-life skills is encouraged at home.

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?

ALEKS progress growth and time on task is incorporated into my grading system. Due to the nature of the students' challenges, I look more toward growth and progress than grades. This method is complimentary to student Individualized Education Plan (IEP) goals using percentage of growth instead of grades.

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

No. I require and celebrate the progress and growth toward their goals. I also measure time on task.

Learning Outcomes

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

For students who have not had much success in math through the years, my students are proud of their achievement in ALEKS. Success breeds success! All students have seen an increase in their percentage toward goal in just five short months; some have even tripled their initial growth percentages. They are very proud to show me and their families their pie chart and learning progress after each assessment. Some students have seen such success that they are now ready to enter a mainstream Algebra class next year, but will remain with me as well for tutorial support via the ALEKS program. Some of our mainstream classes utilize this program as well, so my students will enter ahead of the game and feel comfortable with the transition. Other students have asked, via their PPT, to work on an advanced course in ALEKS during the next school year.

Best Practices

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

I encourage teachers to observe other classrooms using ALEKS. It is good to have a mentor at the start to help with set-up and navigating the program; although it is easy to work through the system on your own if you have the time. I wanted to set mine up as soon as possible and being a hands-on learner, it was timely to have another teacher walk me through the program set up. It works best for me to split the class and utilize a paraprofessional to aide in instruction and clarification. I also conference with each student on a regular basis to review success and plan goals for the next section. I have students print out the Individualized Student Pie Chart, review and take home "for the refrigerator."