Implementation Strategies

Starmont Elementary School, Starmont Community School District Arlington, IA

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Grade(s): K – 6 Scenario: Computers in Classroom Purpose: Intervention, Special Education, Supplement Time Spent in ALEKS: 1.5 hours per week, 15 hours per term ALEKS Course: Mathematics – LV 4 (with QuickTables)

Courtney Bentley, Special Education Teacher

As a special education teacher, it is sometimes difficult to find a math program that works for students and is motivating, self-directed, and easily implemented. ALEKS is a wonderful tool for my students because they can work on it anywhere there is Internet access. I can monitor progress at any time, and students feel they have free choice about what to work on in the pie chart. The tutorials explain to students what it is they are doing wrong so they may immediately correct their work, and the open-response questions take away the possibility of students guessing their way through a lesson. While it does not replace direct instruction, it is a wonderful tool for repeated practice and supplements instruction.

Scenario

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

It was difficult to implement research-based programs that can be used with little supervision, so ALEKS was a nice choice for us.

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?

We began using ALEKS with six students who are all identified with special needs in math for extra practice to reinforce the general education curriculum. We have added three more students to my class (there are more school–wide) who are included in the rotation.

Do you cover ALEKS concepts in a particular order?

While I give my student free choice to choose which pie slices to work on (to maintain motivation), I also require them to work on pie slices that are being covered in the general education math curriculum.

How do you structure your class period with ALEKS?

Students rotate through my room on a six-day cycle. They use ALEKS three out of the six for 40 minutes at a time. They also have their login to use at home, which is encouraged but not required.

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

I look at which objectives we will be covering and make sure my students practice that part of their pie for that week. I use the teacher data to decide if their progress is sufficient.

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

Students are encouraged to work in ALEKS every night. However, there is no way to require this. Some parents really support it, others do not.

How do you cultivate parental involvement and support for ALEKS?

I send home an initial letter to parents at the beginning of students' enrollment. I then visit with them about it at Parent–Teacher conferences. I then send home letters reminding parents of the program's existence and encouraging its use.

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?

I do not assign ALEKS as homework at this time. This will be something I will work into the next school year.

How do you incorporate ALEKS into your grading system?

I do not currently include ALEKS in the grading system. We consider it a supplemental program.

Do you require students to make regular amounts of progress in ALEKS? No.

Learning Outcomes

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

The nice thing about ALEKS is that each pie has specific learning objectives that allow the student to see what they can work on. When I am teaching geometry and we are working on sliding, rotating, and flipping shapes on a grid, for example, my students can go to that very same objective on the program to reinforce what they are learning in class. It's a wonderful repeated practice piece that reflects at the end of the unit in assessments. Every single special education student in my math class this year went up significantly (5+ points) on the Northwest Evaluation Association's Measures of Academic Progress (NWEA MAP) test! The pie chart is very motivating and they like to see the pieces fill in as they work. It helps to send students emails, create tutoring groups to give some students an opportunity to be "teachers" in an area they do well in, and offer incentives for completing tutorials.

Best Practices

Are there any best practices you would like to share with other teachers implementing ALEKS? Constant feedback and encouragement is vital to keep the program going.