Implementation Strategies

Liberty Junior School, Lakota Local School District

Liberty Township, OH

Grade(s): 7 - 8

Scenario: Laptop Carts

Purpose: Special Education, Intervention, At-Risk Students, Supplement

ALEKS Portion of Curriculum: 100% Time Spent in ALEKS: 3.5 hours per week

ALEKS Course: Middle School Math Course 2, Middle School Math Course 3

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I couldn't ask for a program that gives me a more detailed look at the specific objectives and topics that my students have mastered or are struggling with. The reports that ALEKS provides are extremely helpful during parent–teacher conferences, IEP meetings, and student–teacher conferences. Most programs only provide vague, all–encompassing topics where the student is not doing well. With ALEKS, I am able to pinpoint their strengths and weaknesses and adapt my teaching to fit their needs.

Another wonderful aspect of ALEKS is the ability for students to work at their own pace. I don't have to worry about keeping all of my students on the "same track." For some students, it might take them the entire class period to master one topic, where another student might work through three or four topics per day. It is differentiated learning at its best!

The biggest benefit of all is the growth that the other math teachers are seeing in their classrooms. We offer ALEKS in a supplemental class to students who are just above proficient, or not proficient (according to our state assessments). Through meeting with their regular math teachers this year, I am so proud to say that finally students are showing improvements in not only their basic math skills, but are applying this knowledge to higher level problem solving!

What a blessing for students who otherwise have only experienced year after year of failure and a lack of confidence in mathematics. It is so rewarding to see students make the transition from dreading math to feeling like they can be successful!

Scenario

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

Our school district bought ALEKS for all four junior high schools as a supplement to our intervention programs. Luckily, all staff members (administrators and teachers) were on board with using the program. The only challenge we had was finding the computers to use for the classes. Once we decided on the laptop cart and installed the wireless networking, all of the kinks were worked out and we now have six ALEKS class periods per day.

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? 42 minutes.

Implementation

How do you implement ALEKS?

For our school, this is an elective course that is completely separate from their regular math class. We purposely don't have the same teachers teaching the regular math class as the ALEKS class, so students are able to have two different math resources per day. Again, our program is one of remediation, so students are working in a course that is one grade level below in order to fill in their academic gaps.

Do you cover ALEKS concepts in a particular order?

No, I allow the students to pick the topics that they feel like working on that day. Sometimes they like me to suggest what they should work on next, or help them find something that is close to what they are doing in their regular math class at that time.

How do you structure your class period with ALEKS?

I have my students work on completing their pies Monday–Thursday and assign an assessment every Friday. At the end of every quarter, I assign a comprehensive assessment. During the class period, students are given small whiteboards and a dry erase marker to help them do their work. If they have a question about a problem, they are to first hit the "explain" button and then write their name up on the board if they need one–on–one help. I spend my time circling around to help the students in the order of their names on the board. Sometimes if there is a group of students with the same question, we'll pull together for a mini lesson on the topic.

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

I will say that, for me personally, it has taught me to take a moment to review the core topics that underlie the more difficult ones so that I can give the students a refresher instead of assuming that they have all mastered the previous information.

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

This was my first year using ALEKS and I decided not to require any work from home. I have left it up to the students if they want to practice at all from home and some have enjoyed being able to do that. It has been extremely helpful for a few students that have had a lot of attendance issues this year. They have been able to keep up from home, which is nice.

How do you cultivate parental involvement and support for ALEKS?

Having home access has really helped keep parents informed on their child's progress. The detailed reports help pinpoint the topics that students are struggling with. Internet access at home also helps the parent to see what their child is doing in class.

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?

This year it was not assigned as homework. I am considering it for next year and would like ideas from other teachers about how to implement it.

How do you incorporate ALEKS into your grading system?

I give students a practice grade every week based on the topics mastered per hour logged in to ALEKS, which accounts for 60 percent of their grade. The remaining 40 percent comes from their assessment grade each week. I give students a grade based on whether or not they meet, exceed, or fall below the expected percentage increase for that particular assessment.

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

Depending on the topics students are currently working on, I like for them to average four topics per hour logged in. If I know that they are working on some multi–step problems that require a longer time to work on, I'm a little flexible with their practice average.

Learning Outcomes

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

I am definitely impressed with the amount of progress my students have made this year by using ALEKS. When the school year started and the students in the class realized that they were now going to have two math class periods a day, I got the expected groans and eyerolls. It is a lot for any junior high student to have an hour and a half of math per day, but especially daunting to the student who considers math their "worst" subject. After a week or two, they slowly started coming around. I find that the small steps of completing a pie piece is a little bit of positive reinforcement for them on a daily basis. These are the students who aren't typically confident enough to speak up and answer questions in class; so to have a visual representation of progress (their ALEKS Pie) to look at every day, definitely does a lot to boost their self-esteem. Sure enough, after the first quarter, they all started bringing me their tests from their regular class and boasting about how they are getting A's and B's on quizzes and tests when they normally get D's and F's.

Best Practices

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

First, I would recommend using all of the "help" resources that ALEKS provides. It can be very intimidating at first, especially if the teacher isn't that technologically advanced in the first place. I commend ALEKS on their availability and ease of use when it comes to help. Another benefit is the ability to print out the detailed student reports and show these to the parents at the beginning of the year. Take the time to sit down with parents and interpret all that they are looking at because that data can be intimidating for them. In addition to the parents, sit with the students at the beginning of the year and show them what everything means. Their practice and hard work has more meaning when they have concrete data to look at to track their progress.

