Implementation Strategies

Merrill Middle School, Denver Public Schools Denver, CO

Grade(s): 6 – 8 Scenario: Laptop Carts, Home Access Purpose: Intervention, Improve State Test Scores ALEKS Portion of Curriculum: 33% Time Spent in ALEKS: 3.75 hours per week, 225 hours per term ALEKS Course: Mathematics – LV 3 (with QuickTables), Mathematics – LV 5 (with QuickTables), Middle School Math Course 2, Middle School Math Course 3, Pre–Algebra, Algebra 1

Laurie Breetz, Teacher

My overall experience with ALEKS has been very positive. The ALEKS program offers students individualized instruction as well as immediate feedback. It has given our school flexibility to have students from different grade levels use the program at the same time, making scheduling easier. Students have become so excited as their ALEKS Pie grows, and are so proud when they master all of the pieces of a pie. ALEKS has made intervention math classes more interactive and student–centered. ALEKS keeps my students engaged and on–task. I would recommend ALEKS for students on all parts of the continuum, not only students who are below grade–level. All of the customer service representatives that I've worked with via email or phone have been respectful, prompt and resourceful. I've been pleased with their help and friendliness. I'm so happy that my principal chose ALEKS as our Rtl intervention for mathematics. Thank you for the opportunity to use your program.

Scenario

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

Our school faced challenges with students under performing in basic math facts. We also faced challenges with students' proper use of rational numbers.

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?

My principal was required to select an intervention program from three options. She chose ALEKS and asked me and one other teacher to implement ALEKS in our math intervention classes. I attended a district–sponsored training and then began implementing the program with my intervention students in October 2009. It is the sole curriculum we use with our intervention math students.

Do you cover ALEKS concepts in a particular order? No.

How do you structure your class period with ALEKS?

Students enter my classroom and go to the laptop cart. They take their laptop (designated by numbers), take their seat, then turn on their computer and log into ALEKS. Students work on adding pieces to their pie and attempt to meet their self-selected goal for the day. If students meet their goal for the day, they place a sticker on our tracking chart and then enter QuickTables. My ALEKS classes are in addition to the students' 90 minute mathematics class.

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

Before I taught ALEKS, my class was not as differentiated. I assessed the students (which ALEKS does for me) and devised lessons to help the students improve. ALEKS takes a lot of the busy work out of teaching. It allows me to help students who need help and for the students to become their own teachers by clicking the explain button.

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

My students are encouraged to work on ALEKS at home. I decided that since they receive regular math homework from their primary math class, that my intervention students would only be encouraged to work on it at home, not required.

How do you cultivate parental involvement and support for ALEKS?

At the beginning of each trimester, I send home a letter to tell parents about ALEKS. I also meet with many parents at parent-teacher conferences and model how to log into the ALEKS program. Students often want to work in ALEKS at home and show their families what they are learning about.

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?

At our school, we use standards-based grading, not letter grades or percents. I meet with each student individually to look at the data under the Reports tab in ALEKS and together, the student and I agree upon his/her grade. Students earn a "1" for performing work that is below expectations, a "2" for performing work that partially meeting expectations, a "3" for meeting expectations, and a "4" for exceeding expectations. "Meeting expectations" in my classes means that the student meets his/her predetermined goal each day.

Do you require students to make regular amounts of progress in ALEKS? $N_{\mbox{O}}$

Learning Outcomes

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

Since using ALEKS, I've seen students retain the topics they have added to their pies. Their basic math fact fluency has increased thanks to QuickTables. Students have also learned to set achievement goals for themselves and are so proud when they meet those goals. Goal setting is a life skill which ALEKS inadvertently teaches. Many students who used ALEKS for two trimesters (October–May), at least three hours per week, moved up one proficiency level on our district assessment this year. Students feel proud of their progress in ALEKS. The colorful pie chart helps the students track their progress and, over time, they have become less fearful of math. Math is no longer the most "hated" subject because they can do math on the computer. Students' self–esteem has been lifted. For students who have "checked out" during regular math class, they are more excited to come to my class and do math. I've even had students ask if they can be in my ALEKS class next year!

Best Practices

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

Once I met with the students to agree upon a daily goal of pieces they'd add to their pie, students began adding more pieces each day. I also encourage students to help each other (except during assessments) and teach the students to utilize the explain button.