

Implementation Strategies

Robert Louis Stevenson Elementary School, Grandview Heights City School District
Columbus, OH

Grade(s): K – 3

Scenario: One-to-One Laptop Program

Purpose: Enrichment/Gifted and Talented, Core Curriculum

ALEKS Portion of Curriculum: 85%

Time Spent in ALEKS: 1.5 hours per week, 9 hours per term

ALEKS Course: Mathematics – LV 4 (with QuickTables)

Rita Glavan, Coordinator for Gifted Services

I was faced with a situation whereby two third graders were single subject accelerated in math. Although they were ready for the fourth grade curriculum, it was not feasible to transport them daily to the Intermediate building to participate in the fourth grade math class. This created a dilemma as I did not want the students to be held back, and also wanted to ensure that they received quality math instruction. In addition, I wanted them to be challenged and engaged. The classroom teacher and I have been able to individualize a math program with ALEKS as the foundational piece. Since ALEKS is aligned to the Ohio standards, we are confident that the students have access to the appropriate content. The program is interactive and motivational, and the students are most eager to complete the pie slices. I am able to create frequent assessments and quizzes as well as monitor progress. Thus, when the students meet with both myself and their classroom teacher, we are able to scaffold the instruction where needed and also provide appropriate extensions and enrichment activities. Overall, the teacher, parents, and students find ALEKS to be a very successful alternative to a traditional classroom experience. I see many additional applications for ALEKS that can be used to support the needs of gifted students.

Scenario

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

The greatest challenge was not being able to provide standards-based, rigorous content and curriculum to those students for whom acceleration was recommended. The challenge was due to shortage of funds and staff.

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?

20–30 minutes.

Implementation

How do you implement ALEKS?

ALEKS is used in addition to the regular math curriculum, and is specific to the students who are accelerated.

Do you cover ALEKS concepts in a particular order?

Generally, the students are instructed to work on a particular pie slice that is aligned with the fourth grade curriculum for each quarter of the year. As the fourth grade group moves through the curriculum, I am able to be sure that the third grade accelerated students are keeping pace and are learning the same concepts and skills as outlined in the Ohio standards. This also allows me to give the students the same end-of-unit assessments that the fourth grade students take. This is double insurance that they are mastering the fourth grade curriculum as taught in the district. The order is geometry, data, measurement, and number sense.

How do you structure your class period with ALEKS?

The students work on ALEKS on school laptops during the third grade whole class math instruction. This is generally a 30-minute period, three times per week. When the teacher completes the classroom instruction, the students participate in math games to reinforce basic computation and also work on challenging problems. Twice a week, they meet with the gifted teacher during their math time for one-on-one instruction and/or math-related projects.

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

The math program for these two students is individualized and independent of the regular teaching that is delivered to the classroom. The teacher has conferences with the students weekly during math time to check in on their progress with ALEKS and to reinforce concepts.

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

Students are not required to work on ALEKS at home but are encouraged to work on it periodically so that parents can be aware of the program components and content being covered.

How do you cultivate parental involvement and support for ALEKS?

In this unique situation, parents are informed about the math acceleration plan and that ALEKS will be the core of the program for the year. Parents are also provided with copies of the progress reports that I print and send 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, ALEKS is not used as a homework task at any time.

How do you incorporate ALEKS into your grading system?

Grading is based on summative assessments each quarter. I provide the teacher with the content and concepts covered and whether or not they have been mastered. This information is included in the student's report card.

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

This does not apply in that I have two gifted students using ALEKS as the accelerated option. Progress is not an issue.

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

The students have mastered the core curriculum of the fourth grade math. The help and explanations that ALEKS provides not only enable mastery of the learning outcome, but also help teach the students to be independent and responsible learners! This is a great benefit.

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

The following components of ALEKS constitute best practice: individualized instruction, formative assessments, progress monitoring, student self-assessment, student engagement, motivation to succeed, and alignment with state standards.