

Implementation Strategies

Connections Public Charter School, Hawaii Public Schools
Hilo, HI

Grade(s): K – 12

Scenario: Computer Lab, Computers in Classroom, Home Access

Purpose: Intervention, Enrichment/Gifted and Talented

ALEKS Portion of Curriculum: 30%

Time Spent in ALEKS: 2.5 hours per week, 25 hours per term

ALEKS Course: Mathematics – LV 3 (with QuickTables), Mathematics – LV 4 (with QuickTables), Mathematics – LV 5 (with QuickTables), Middle School Math Course 2, Middle School Math Course 3, Algebra 1, California Algebra 1, Traditional Algebra 1, High School Geometry, Algebra 2, Algebra 2 with Trigonometry

Pamela Thatcher, Teacher

I have had the same class of students for the past two years. We have eight computer seats in the classroom (two work stations with four seats each), and we also go to the lab once a week. I arranged the schedule so that each student spends 30 minutes per day on ALEKS. Because I have 18 of the same students from last year, I thought I'd do a little action research project to show the impact of ALEKS on our Hawaii State Assessment (HSA) scores. Students take this assessment online and have three opportunities to take it per year. The first opportunity is in November, the second is in February, and the third is in May. I compared scores and calculated the percent gain from November to February for both years. This year, 50 percent of the students made more gains on the second opportunity after only an average of 11 hours on ALEKS. We are about to take the third opportunity, and I am expecting many more gains on the HSA.

Scenario

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

Our curriculum was not really aligned to the HSA. ALEKS is really helping to fill in the gaps.

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?

30 minutes.

Implementation

How do you implement ALEKS?

Thirty-minute blocks on ALEKS are scheduled into intervention periods. The gifted group logs on for 30 minutes rather than going to another small group intervention.

Do you cover ALEKS concepts in a particular order?

No, I let the students choose. They enjoy the freedom of deciding. When they get to decide, it makes them want to watch their progress. They get really excited as they see their pies grow.

How do you structure your class period with ALEKS?

Groups are scheduled in during intervention blocks. One group is on an online reading program, and another group is on ALEKS. The gifted group goes on ALEKS during the small group intervention block. The last group goes on during silent reading time. Everyone is on 30 minutes per day. Some students login from home as well.

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

I reduced my very long block schedule period to a 45-minute math period. ALEKS is scheduled into that extra time.

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

I give them the option to work on ALEKS instead of doing the regular math review homework.

How do you cultivate parental involvement and support for ALEKS?

We have parent nights where students and parents can come in and log on to ALEKS. It is very helpful because not all parents are computer literate.

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?

It can't be a required assignment because Internet access is not available for all students. However, some students like to work on it at home.

How do you incorporate ALEKS into your grading system?

I do not incorporate ALEKS into my grading system.

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

No, but we track their progress by looking at their pies and at the reports I can generate. I really like the variety of reports I have access to.

Learning Outcomes

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

Fifty percent of my students have made more gains on the HSA this year compared to last year without using ALEKS. Students are very excited about their ALEKS Pies; they are motivated by the visual that tracks their progress. One of my students has finished her grade-level course and has moved on to the next level. She was so excited that she called me at home so I could move her to the next course!

Best Practices

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

It is helpful to monitor students as they work on ALEKS. It prevents "clickers" from clicking away without actually working through the problems. I also require them to have a paper and pencil to work out problems. It helps them to actually engage, especially for problems that are new to them. They use the Explain button a lot and work through new problems instead of just clicking out of it.