

Implementation Strategies

Memorial Middle School, Fitchburg Public Schools
Fitchburg, MA

Grade(s): 5 – 8

Scenario: Computers in Classroom

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

Time Spent in ALEKS: Varies.

ALEKS Course: Mathematics – LV 3 (with QuickTables), Mathematics – LV 4 (with QuickTables), Mathematics – LV 5 (with QuickTables)

Amy Redder, ESL Teacher

I teach newly arrived immigrants who are learning English. They come to me with varied academic skills. In math, my seventh and eighth grade students can have poor elementary-level skills. Due to the enormous gap in math skills and the missing English language skills, they are lost in the mainstream math classroom. Previously, I had scarce materials to really help them to make any serious progress in math. This is my first year with ALEKS, and I've seen how motivated even my lowest student has been to practice math. I appreciate how my students can access the program in Spanish, while I can access the English version instantaneously on a screen, if need be. My students with higher English skills can bounce back and forth, maybe only using the Spanish translation for a word or two. All of my students who have stuck with ALEKS have progressed. I appreciate how ALEKS knows when each individual student can progress, so I don't have to juggle the various math and English language skill levels among my ten or so students! I think my students feel in control of their own math learning.

Scenario

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

I had new students arriving throughout the year with varying levels of English (from none to some) and with varying levels of academic skills.

How many days per week is class time dedicated to ALEKS?

1–5 days per week.

What is the average length of a class period when ALEKS is used?

20–50 minutes.

Implementation

How do you implement ALEKS?

I had students who could NOT access their grade-level math curriculum and their mainstream math class, so I built a daily block into their schedule for ALEKS. This block is their main math instruction, with ESL teacher support. For the rest of my students, it is a matter of finding some time weekly for them to get on to work.

Do you cover ALEKS concepts in a particular order?

No. The students all work at their own pace. Sometimes, I suggest that they try to work in the pie piece that they're currently working on in their mainstream math class, but they don't always want to and I don't force them.

How do you structure your class period with ALEKS?

Some students have ALEKS designated on their daily schedule. Other students will jump on when their other work is done, or will choose to do it instead of our silent reading block (20–25 minutes). Mostly, one or a few students are working on ALEKS while the rest of the class is doing something else. On rare occasions, everyone is on ALEKS at the same time.

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

I don't feel as pressured to provide the core of math content instruction for those students who cannot access the grade-level curriculum due to lack of math and/or English skills. I used to scramble for materials, and felt I was either moving too fast or too slow. Now, I feel like a support, a coach. It's been a much better relationship with the students, too, because of this change in role.

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

I encourage them to do it as often as they can. Many of my students do not have access to computers or the Internet at home.

How do you cultivate parental involvement and support for ALEKS?

I haven't yet. However, I plan to include it in next year's letter home, and make it a part of their homework (especially for those who are not in a mainstream math class). However, there are those who don't have computer access outside of school.

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?**

None, currently. Maybe next year.

How do you incorporate ALEKS into your grading system?

I haven't this year, except to count the time spent actively working on the program toward their Class Participation grade.

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

No, but I give them feedback. I will give them a copy of their report at the end of the year. Next year, the reports may go home with progress reports and report cards so the parents can be more involved. The students who work on ALEKS see the results in their math grades and in their math homework being easier.

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

All students have progressed at their own rate. Students are more motivated to learn and practice math skills, and they feel in control of their own learning. I think the majority of them feel proud, because they "did it themselves;" it's their pie chart, and they feel responsible for their own learning. It is also MUCH easier for me!

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

Our school doesn't have a formal Response to Intervention (RtI) program for non-English speaking students; for this population alone, ALEKS has been a GIFT! For anyone in a similar situation, I would recommend it. It has been a joy for me to step back and watch my students take responsibility and control of their own math learning. How do you keep a student progressing in their math skills while helping them to speedily acquire the English language they need to access the mainstream curriculum? If they're already behind in said math skills, how can you continue to put them on hold, waiting for the English to catch up? You simply can't. ALEKS has enabled me to do this the most successfully to date.