

Implementation Strategies

Monmouth Regional High School, Monmouth Regional High School District
Tinton Falls, NJ

Grade(s): 9 – 12

Scenario: Home Access

Purpose: Summer School

ALEKS Portion of Curriculum: 10%

Time Spent in ALEKS: Varies.

ALEKS Course: PreCalculus, Math Review for AP Calculus

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My experiences with ALEKS have been great. I use it as a summer assignment for students entering AP Calculus the following school year. The program provides the truest and richest review of mathematics I have ever seen online. Some of the key components that make it so meaningful to students are the relevance of the initial assessment to the ensuing amount of work that follows, the concise and easily understandable pie chart, and the non–multiple choice format of the questions. I've always felt that students truly needed to engage themselves in the course in order to complete it. It cannot be easily "skimmed" through by clicking on a lot of multiple choice questions.

Scenario

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

I now save time both at the start of, and occasionally throughout, the school year. Where I used to spend a class to review important topics from PreCalculus, I find that I often no longer need to.

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

Varies.

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

Varies.

Implementation

How do you implement ALEKS?

It is used over the summer to prepare students to enter AP Calculus, but not in the classroom.

Do you cover ALEKS concepts in a particular order?

No. Students are free to complete their work at their own pace and in whatever order they wish. This serves as one of the advantages because students can choose from their pie what they want to work on that day.

How do you structure your class period with ALEKS?

It's used entirely over the summer, so there is no class time spent using ALEKS.

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

I can skip over some lessons that I used to give in the past that were not technically part of the AP Calculus curriculum, but instead were prerequisites. Now, I find that students have a better understanding of those prerequisites.

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

At the time ALEKS is assigned, I tell students that this is not something that can be completed in a day or two at the end of the summer. On average, it takes students anywhere between 20–40 hours to complete the program fully. So, I recommend that they pace themselves appropriately.

How do you cultivate parental involvement and support for ALEKS?

I don't. These are fairly high–level students whose mathematical and technological capabilities are frequently superior to that of their parents. At most, I will occasionally call home to inform parents of their child's progress if I feel it's necessary.

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?

I guess you could consider ALEKS one large assignment to be completed over the summer.

How do you incorporate ALEKS into your grading system?

At the start of the school year, I use the percentage of the work they completed as their first 2 test scores.

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

No, I do not set any timeline for the students. They are free to work at their own pace as long as it's completed by the start of the school year.

Learning Outcomes

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

Students seem much more prepared coming into AP Calculus. In fact, over the course of the school year, I will frequently hear students say, "I remember this from our summer work." At first, students may moan and groan a bit when they realize that ALEKS does not offer your typical review that uses multiple-choice questions; however, once they engage themselves, they really appreciate the richness and technological excellence of the program.

Best Practices

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

Take the time to get them started properly and stress the importance of the initial assessment, as it is used to set up the appropriate course for each student. Monitor progress frequently, as completing a course is something that cannot be done in a short amount of time.