

New ALEKS Student Module

CHALLENGE

In a traditional classroom, an instructor teaches to the entire class in a lecture-style format. Individualizing instruction for a large number of students is challenging, especially when students have vastly different knowledge of the same course material. Students who are behind can experience anxiety trying to keep up; students who are advanced can become bored. How can students be engaged and work on content they are ready to learn?

SOLUTION

ALEKS (Assessment and LEarning in Knowledge Spaces) is an online, adaptive assessment and learning program for math and chemistry. Using artificial intelligence to determine precisely which topics each student knows and doesn't know in a course, ALEKS provides students in grades 3-12 and Higher Education with individualized learning paths optimized to what they are most ready to learn.

Based on extensive research with students and educators, ALEKS has created a new user interface that engages students and presents an individualized learning path to each student. The New ALEKS Student Module keeps students focused on their optimal learning path; it directs them to the precise topics they are most ready to learn. After being guided through the interface, students complete an Initial Knowledge Check to determine what they know, don't know, and are ready to learn next. Results are displayed in a pie chart—a visual representation of the course material. Students work through learning the course material efficiently; the easiest topics are queued up first. From the homepage, students can see their timeline of what's due/expected in the near future. We found in our research that students need transparency of their progress toward milestones—especially grades —in order to be fully engaged with the program. The New ALEKS Student Module provides transparency to the student regarding their progress through the course and reassures them that they are on the right path. The New ALEKS Student Module is accessible on tablets and personal computers, making it conveniently available to students at optimal learning moments.

LEARNING IMPACT OUTCOMES

Students are learning faster with the New ALEKS Student Module, and instructors are benefitting from more engaged, well-prepared students. For example:

"I have learned more in the couple of months I have used ALEKS than in my 4 years of high school combined." | HE Math Student

"Students have much more information and control as they move through topics. The interface seems more 'personal,' and students get a sense that ALEKS really 'cares' about their learning." | HE Math Instructor

RETURN ON INVESTMENT

When instructors and institutions implement ALEKS, they are better able to meet the individualized needs of their students. The tangible returns include higher graduation rates, improved retention of course material, and well-prepared students in current and future courses. With ALEKS, students save time and money achieving their educational goals by focusing on their individualized learning path.