Mc Graw Hill ALEKS®

ALEKS Math
Effectiveness Study



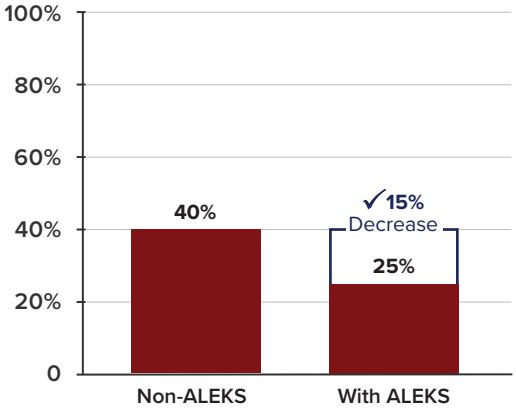
In math, having the answer isn't the same as understanding it.

Students today can find the answers they need anytime, anywhere, including from AI. So how does an instructor know whether a correct answer reflects real understanding or just a good prompt?

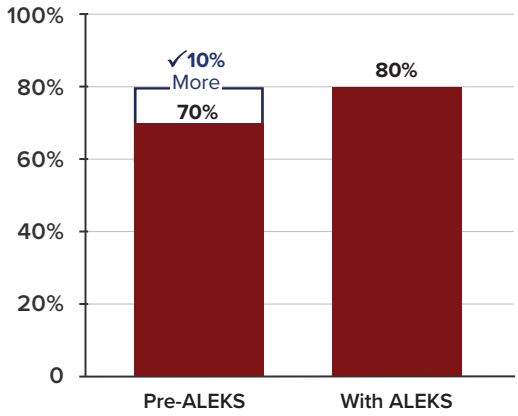
ALEKS can show them. Powered by AI, ALEKS identifies each student's knowledge gaps and creates a personalized learning path. It also breaks down exactly which skills each student has and hasn't mastered, making it easier for instructors to spot problem areas, offer timely support, measure progress, and trust that true learning—not just answer-gathering—is happening. The result: instructors have visibility into true understanding, and students build stronger foundations for success.

Better understanding leads to stronger outcomes.

DFW rate at Mississippi State University



Student success rate at Northern Arizona University



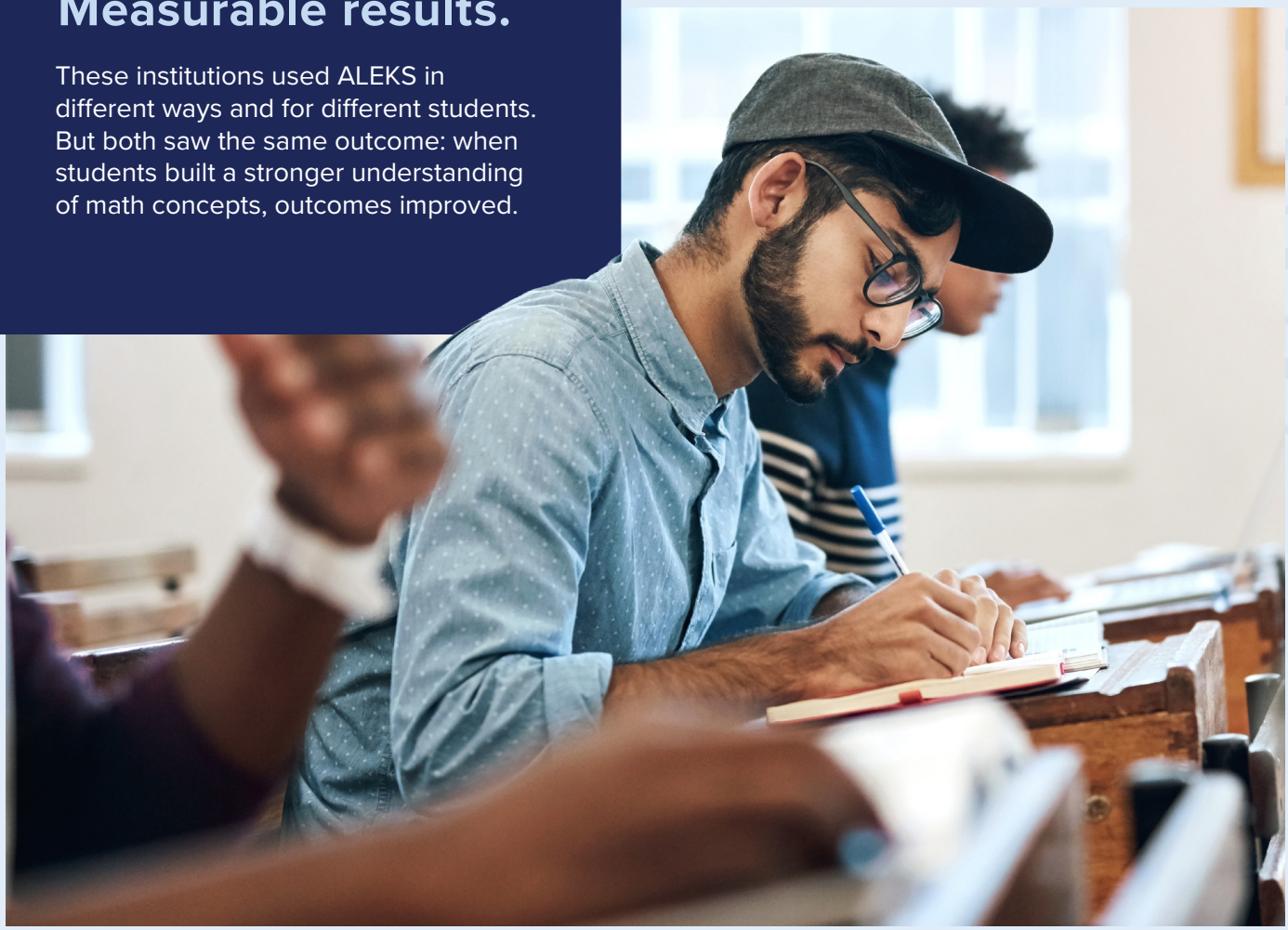
What Is ALEKS?

McGraw Hill's ALEKS is an AI-powered online learning platform for Math and Chemistry that blends adaptive learning with instructor-led assignments. Using more than 25 years of student data, it identifies knowledge gaps and guides each learner through the concepts they're ready to learn next. So correct answers reflect real understanding.

Some instructors use ALEKS as the primary learning platform; others combine adaptive modules with their own assignments. Either way, students get a more personalized path through the material, and instructors have visibility into every student's progress.

Real classrooms. Measurable results.

These institutions used ALEKS in different ways and for different students. But both saw the same outcome: when students built a stronger understanding of math concepts, outcomes improved.



As a teacher, ALEKS has really allowed me to focus on my students as individuals and support them in their success. It required a mind shift for both educators and students, but it's a shift that prepares students for future academic challenges."

–Dr. Gina Marie Nabours, Northern Arizona University

Spotlight on:

Mississippi State University

Course: College Algebra
Instructor: Professor Abigail Good

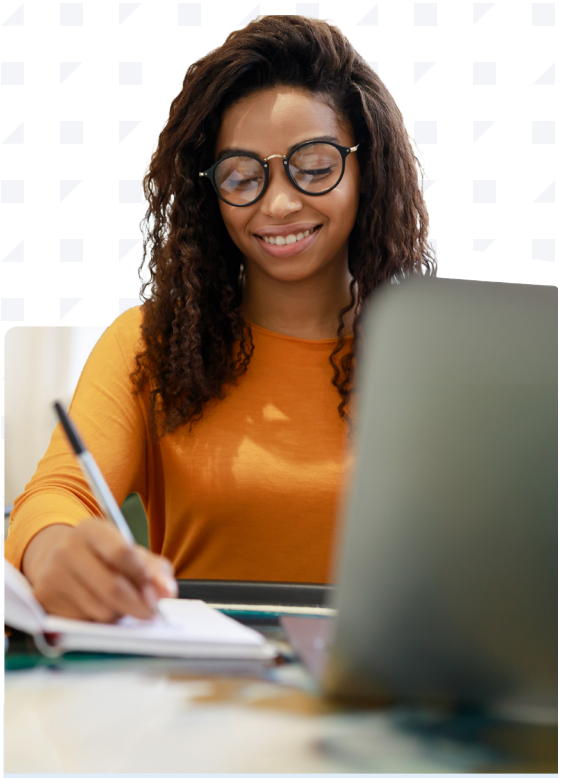
When Professor Abigail Good piloted ALEKS in a College Algebra section, she wanted to improve personalization, identify struggling students earlier, and help more learners build an understanding of the material.

By the end of the semester, the answer was a resounding yes. Students in the ALEKS section had a pass rate of nearly 75%, compared to less than 60% in the other section, with far more As and Bs and far fewer Fs and withdrawals.

But good grades were just the start. Professor Good also saw math confidence grow. One student started the semester having mastered just 2 of 144 topics on his Initial Knowledge Check (IKC) assessment. She noticed his numbers in ALEKS and intervened, which proved to be a turning point. By the end of the semester, he had mastered all 144 topics and earned a high A. He later said it was the first time he'd ever believed he could succeed in math.

ALEKS changed things for Professor Good, too. Its reporting gave her a snapshot into how each of the 100+ students in the course was progressing, so she could differentiate instruction at scale.

Read the full case study at
mcgrawhill.info/msu-case-study



72%+

of students preferred ALEKS over the prior platform.

I have seen students grow in confidence, taking ownership of their progress, and becoming more engaged in class."

–Abigail Good, Instructor of Mathematics, Mississippi State University

Spotlight on:

San Antonio College

Course: Elementary Algebra, College Algebra, Precalculus, & Elementary Statistics
Instructor: Dr. Henry Griffith

Each semester, students arrived in Dr. Henry Griffith's college-level math courses with varying levels of preparedness. And each semester, he watched those gaps widen. Traditional remediation often fell short, so Dr. Griffith piloted ALEKS in the courses to give students a chance to catch up.

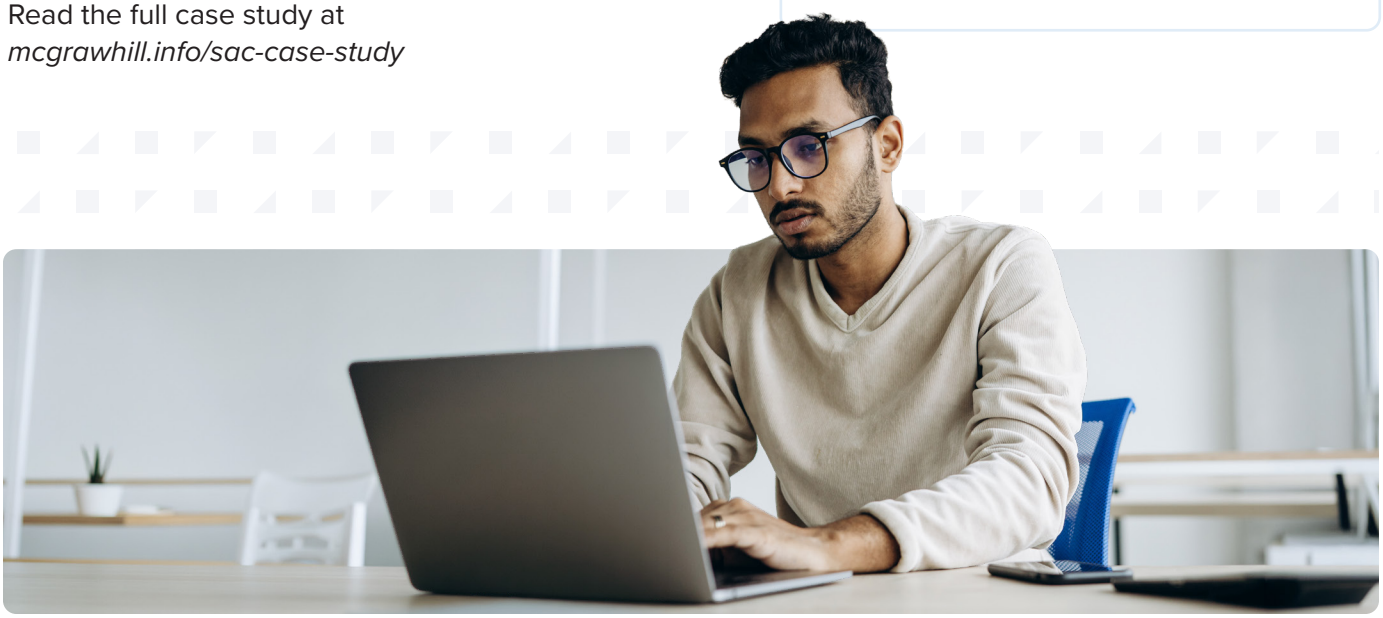
Students benefited in a couple of important ways. ALEKS' Initial Knowledge Check pinpointed where each learner needed more practice, then delivered targeted assignments to strengthen those skills. And because the platform adapted to meet students where they were, they weren't overwhelmed by the content and better retained it.

Understanding increased as a result. In all of Dr. Griffith's courses, more students earned As, Bs, and Cs, with improvements ranging from 4% to 10%. Elementary Statistics students saw the biggest jump.

ALEKS' reporting also showed Dr. Griffith where students were struggling, so he could tailor his lectures around the gaps. And with grading automated, he was able to provide more one-on-one time for students, even as class sizes grew.

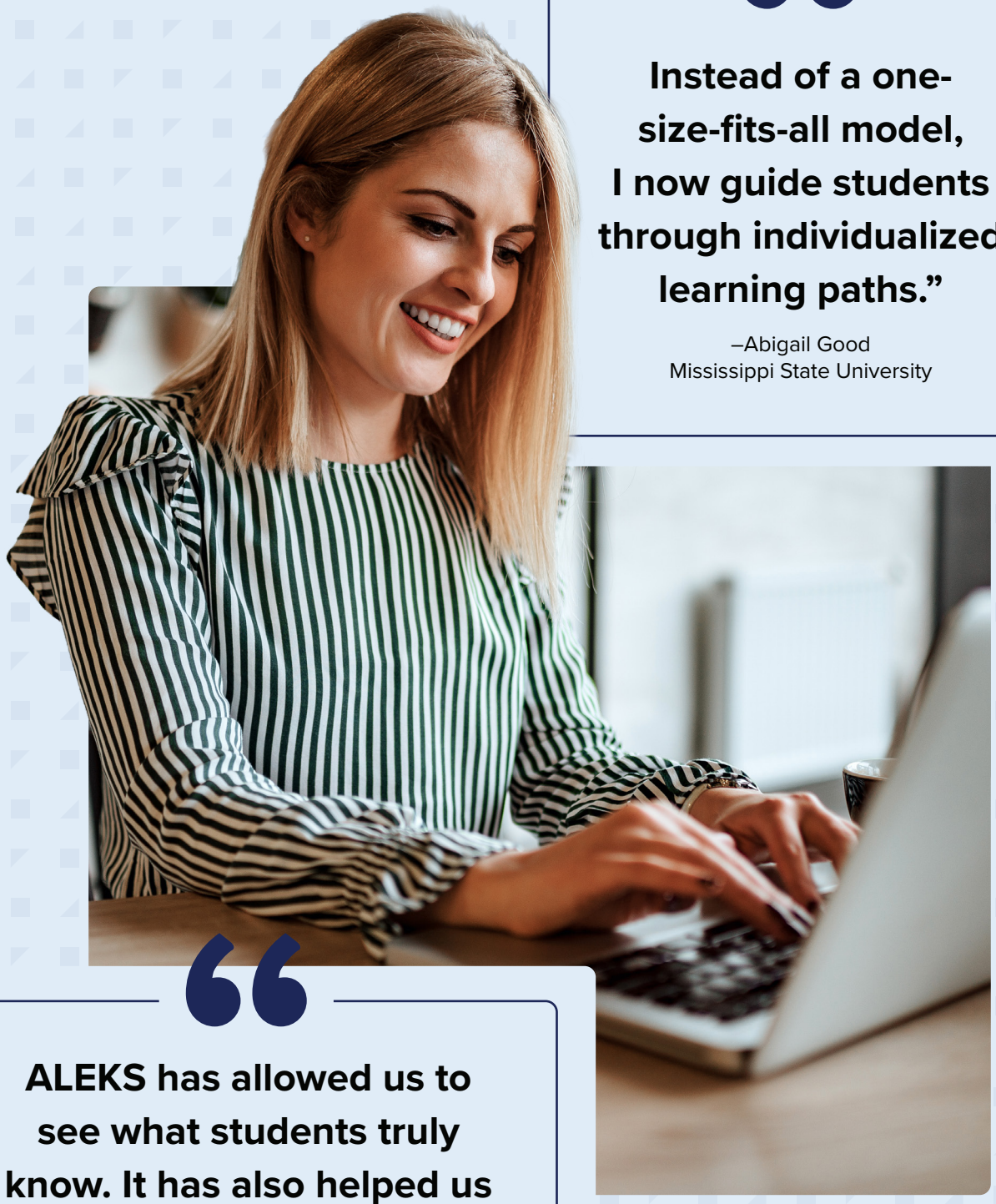
Read the full case study at
mcgrawhill.info/sac-case-study

> **"By automating the grading process, we have been able to increase class sizes, thereby positively impacting the budget of our institution, while still spending adequate time with each student outside of the classroom."**
>
> –Dr. Henry Griffith, Chair of Mathematics, San Antonio College



Instead of a one-size-fits-all model, I now guide students through individualized learning paths."

–Abigail Good
Mississippi State University



ALEKS has allowed us to see what students truly know. It has also helped us have conversations about study habits and success strategies that support them in future courses."

–Dr. Gina Marie Nabours, Northern Arizona University

Spotlight on:

Northern Arizona University

Course: Algebra for Precalculus
Instructor: Dr. Gina Marie Nabours



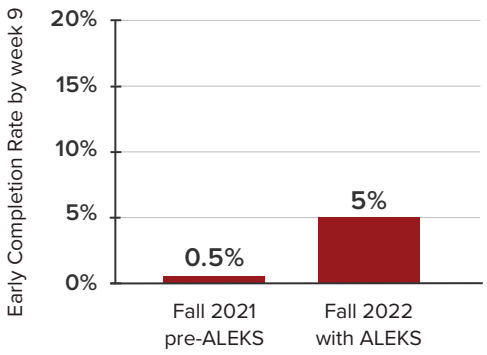
For years, success rates in the Algebra for Precalculus class swung from 62% to 70%, and faculty could see why. Students entered at different knowledge levels, lecture-based instruction didn't engage everyone, and classroom management wasn't always effective.

Looking for a solution, Dr. Gina Marie Nabours and her colleagues piloted ALEKS, eventually opening up the course to include 300 topics. Students worked through the topics at their own pace and proved mastery at three comprehensive Knowledge Checks spaced throughout the semester. This approach encouraged students to focus on retaining and building their understanding over time, rather than simply completing assignments in the short term.

As a result, student outcomes improved. Success rates climbed from 69.8% to 80.3%. Early course completion jumped from 0.5% to 5%. And withdrawal rates, which were once as high as 12.5%, dropped to 1.5%. "ALEKS has allowed us to see what students truly know," Dr. Nabours said. "It has also helped us have conversations about study habits and success strategies that support them in future courses."

Read the full case study at
mcgrawhill.info/nau-case-study

Increased Early Completion



> **I can see how long students have spent in the software, what Topics they worked on, and even how long they spent on each Topic. If I see a student learn a complex Topic in under a minute, I can address potential issues and guide them toward genuine comprehension."**
>
> –Dr. Gina Marie Nabours, Associate Teaching Professor, Northern Arizona University

The Takeaway

Across Mississippi State University, Northern Arizona University, and San Antonio College, one thing is clear: a student getting the right answer isn't the same as a student who understands the math behind it.

ALEKS helps students build understanding first through mastery-based learning before they move on to new concepts.



Help your students move beyond correct answers to demonstrate true understanding of math concepts.

Visit *mheducation.com/highered/digital-products/aleks* to learn more.