

# ALEKS<sup>®</sup> Case Study

## Cedar Valley College | Dallas, TX



**Course Name:** DMAT 0305 Developmental Math; DMAT 0310 Intermediate Algebra; MAT 1314 College Algebra

**Implementation:** Blended/Lab, Online

**Course Setup:** ALEKS 360 with Miller Beginning & Intermediate Algebra, ALEKS 360 with Miller College Algebra

**Avg Enrollment:** 505 students/semester in DMAT, 549 students/semester in College Algebra

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### **Prior to Using ALEKS**

The state of Texas changed the placement test and the rules governing it. In addition, several exemptions were added to math placement. These changes resulted in more underprepared students in mathematics classes, both developmental and college-level. We had been using MyMathLab for several years, but students with weak prerequisite skill and low confidence continued to struggle.

### **Why We Chose ALEKS**

We were attracted to ALEKS because of the ability to roll prerequisites into the course and meet students where they are mathematically. We didn't know it then, but this became a key benefit when the State of Texas mandated we move to co-requisites. What 'sealed the deal' for us is the science behind the truly adaptive nature of ALEKS; the Ready to Learn paradigm is unique and allows each student to legitimately have their own learning path.

### **Our Experience with ALEKS**

Our overall experience with ALEKS has been positive. It truly meets students where they are mathematically. Professor Mary Merchant noted, "I field fewer content questions from students, which, I believe, is because they are never presented with material they are not ready to learn." ALEKS has afforded us more insight into our students' progress, so that we can be more effective instructors. "It really shines the light on things we may not have been able to catch" boasts Merchant.

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– Mary Merchant, Professor

## Implementation

In the on-campus class, students meet in a lab arranged in eight “pods” that each have three computers. Classes meet twice a week for 1 hour and 20 minutes. This redesign has allowed for consistency across all sections with 1 instructor and 1 tutor per section. Instructors are encouraged to facilitate planned or just-in-time mini lectures. The online course has students working through the material on their own. Grading is comprised of weekly topic goals (10%), 5 pie progress goals (45%), and 4 exams (which are Comprehensive Knowledge Checks in ALEKS, at 45%).

## Results Achieved

For the past 3 years, pass rates have increased in all three course areas. Overall, Elementary Algebra success rates have increased by 15.8% and College Algebra by 13.9%. As Professor Merchant states, “this growth is incredible considering slightly less than half of the students enrolled should have been in the lower developmental courses we no longer offer.” As students work in ALEKS, they are motivated to gain topics in their pie and visualize their growth, compared to completing traditional homework. Students appreciate the non-punitive approach to learning and are subsequently more engaged in class.

Figure 1: Fall Success Rates at Cedar Valley

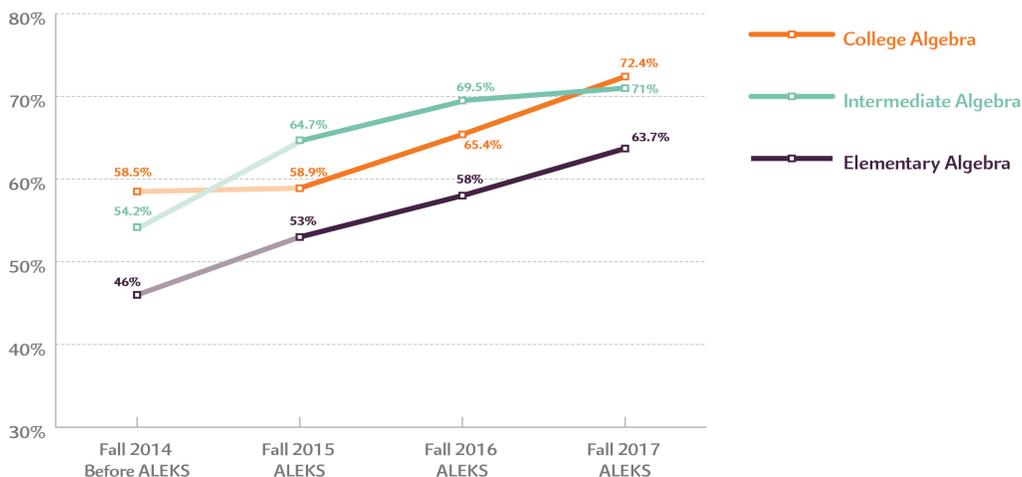


Figure 2: Enrollment by Course

Fall Term	Elementary Algebra Enrollment	Intermediate Algebra Enrollment	College Algebra Enrollment
2014 (Pre-ALEKS)	109	118	443
2015	195	119	510
2016	282	106	492
2017	371	134	549

## Driving With Data

Beginning on day one with the Initial Knowledge Check, we are using data to facilitate a more positive experience in math. We can easily identify if a student is placed too low or too high, and celebrate the fact that they are receiving credit for topics they already know. This goes a long way in boosting their confidence and motivation.

We also utilize data from the ALEKS Pie Report to fuel our time spent with students. This quick snapshot of class performance can drive our lectures, group activities, or even 1-on-1 interaction. Students quickly learn that instructors are monitoring their progress in ALEKS to help maximize their time. Because ALEKS helps students take responsibility in their learning and interactions with instructors, we are prepared to take on future curriculum changes as we increase our co-requisite offerings.



*“In general, students enjoy work in ALEKS. It doesn’t feel like homework, and they enjoy the organization of the ALEKS pie. Developmental students are not quick to offer unsolicited thanks to their instructors, but the lack of complaints this past semester is enough for me to know we made the right decision with ALEKS.”*

–Professor Mary Merchant

