

Product Used **MyMathLabPlus**
 Course Names **Prealgebra, Beginning Algebra, Intermediate Algebra**
 Credit Hours **Three**



KEY TAKE-AWAY

Significant increases in pass and completion rates after MyMathLabPlus implementation indicate that requiring MyMathLab homework and lab time helps CTC's on-site and online students get the practice they need to succeed in math.

Textbooks in Use

Prealgebra, 5e, Elayn Martin-Gay; *Beginning Algebra*, 5e, Elayn Martin-Gay; *Intermediate Algebra*, 5e, Elayn Martin-Gay

Course Implementation

Course Design

Courses are offered both on-site and online. Students in on-site courses meet for 65 minutes, Monday through Thursday, and are required to spend a minimum of 12 hours per semester in the math lab.

50 percent

Departmental final exam

For Intermediate Algebra, the 50 percent is split into a midterm worth 20 percent and a final exam worth 30 percent.

Assessments

15 percent Homework
 (for online courses, also quizzes)
For all courses, homework in MyMathLabPlus is required.

Use of MyMathLabPlus

MyMathLabPlus homework is required in all courses; online courses also require quizzes. Students are encouraged to use the Study Plan. Grades are imported from other sources.

Use of MyMathLabPlus contributes 15 percent to a student's final course grade.

35 percent Chapter tests
In classroom, on paper, for each chapter.

Results and Data

The positive change in pass and withdrawal rates illustrated in table 2 indicates that required use of first MyMathLab and now MyMathLabPlus increases both student success and retention rates.

Additional departmental data collected fall 2008 through summer 2011 indicates that use of the programs also contributes to increased subsequent success.

- 61 percent of students who successfully completed Prealgebra earned an A, B, or C in Beginning Algebra.
- 83 percent of students who successfully completed Beginning Algebra earned an A, B, or C in Contemporary Mathematics.
- 66 percent of students who successfully completed Beginning Algebra earned an A, B, or C in Elementary Statistics.
- 71 percent of students who successfully completed Beginning Algebra earned an A, B, or C in Intermediate Algebra.
- 84 percent of students who successfully completed Intermediate Algebra earned an A, B, or C in Contemporary Mathematics.
- 77 percent of students who successfully completed Intermediate Algebra earned an A, B, or C in Elementary Statistics.
- 83 percent of students who successfully completed Intermediate Algebra earned an A, B, or C in College Algebra.

		A	B	C	69% or Below	Student Withdraw	Drop or Incomplete	Total Number	Passing Number	Completion Number	Pass Rate	Completion Rate	D/W Rate
ON-SITE	Prealgebra	200	477	560	606	227	580	2,650	1,237	1,843	46.7%	67.1%	30.5%
	Beg Algebra	152	241	623	794	280	645	2,835	1,116	1,910	39.4%	58.4%	32.6%
	Inter Algebra	75	222	391	684	309	447	2,128	688	1,372	32.3%	50.1%	35.5%
ONLINE	Prealgebra*	–	–	–	–	–	–	–	–	–	–	–	–
	Beg Algebra	2	23	10	22	10	19	66	15	37	22.7%	40.5%	43.9%
	Inter Algebra	1	3	4	13	16	19	56	8	21	14.3%	38.1%	62.5%

Table 1. Success Rates before MyMathLab** Implementation, Fall 2002–Summer 2004 (n=7,735)

*Taught only with MyMathLab support.

**Prealgebra taught with MyMathLabPlus since fall 2010, Beginning and Intermediate Algebra taught with MyMathLabPlus since fall 2011.

		A	B	C	69% or Below	Student Withdraw	Drop or Incomplete	Total Number	Passing Number	Completion Number	Pass Rate	Completion Rate	D/W Rate
ON-SITE	Prealgebra	525	917	1,061	1,008	448	952	4,911	2,503	3,511	51.0%	71.5%	19.4%
	Beg Algebra	324	644	1,057	1,232	398	679	4,334	2,025	3,257	46.7%	75.1%	15.7%
	Inter Algebra	276	536	773	643	472	560	3,260	1,585	2,228	48.6%	68.3%	17.2%
ONLINE	Prealgebra	120	196	139	99	124	230	908	455	554	50.1%	61.0%	25.3%
	Beg Algebra	22	73	118	166	116	234	729	213	379	29.2%	52.0%	32.1%
	Inter Algebra	8	36	47	122	169	206	588	91	213	15.5%	36.2%	35.0%

Table 2. Success Rates after MyMathLab* Implementation, Fall 2004–Summer 2011 (n=14,730)

*Prealgebra taught with MyMathLabPlus since fall 2010, Beginning and Intermediate Algebra taught with MyMathLabPlus since fall 2011.

The Student Experience

Jenny Shotwell, professor, cites a number of ways that MyMathLabPlus's design and underlying pedagogy positively impact her students.

- The individually tailored study plans make good just-in-time teaching tools for students working at home or otherwise not in a classroom environment.
- For those students who are intimidated by asking questions in class, MyMathLabPlus provides a variety of resources to turn to, in addition to a direct e-mail link to the instructor.

- Central Texas College uses MyMathLabPlus in all developmental math courses and uses MyMathLab in college-level courses through calculus. The programs' intuitive interfaces and easy-to-learn features mean that students have a consistent learning experience each semester, and that at each new level, they need concentrate solely on learning new course content—not new software.

Conclusions

MyMathLabPlus's benefit to developmental-level students prompted Central Texas College to pilot two new ways to deter these higher-risk students from dropping out, including eight-week courses and concurrent enrollment courses.

Central Texas College is also exploring how to help students remediate via the use of MyMathTest prior to taking placement exams, and in spring 2011 the college will transition the entire developmental sequence to a mastery quiz format.

In addition, the college moved all three developmental mathematics courses into a new MyMathLabPlus portal that enables

a two-week grace period for access codes—a significant benefit for students who are on financial aid and may not have funds available at the start of the course.

Submitted by Jenny Shotwell, Professor, Developmental Studies
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