

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



KEY TAKE-AWAY

By using MyMathLab to track data as per the college's Quality Enhancement Plan mandate, FDTC statistically proves that the program positively impacts students in the areas of exam scores, retention, and subsequent success.

Textbooks in Use

Developmental Mathematics, 7e, 2008, Bittinger, Beecher; Intermediate Algebra: Graphs and Models, 3e, 2008, Bittinger, Ellenbogen, Johnson

Course Implementation

Course Design

Students attend three hours per week in the Hub (math lab), attend two hours of lecture per week, and use MyMathLab to watch videos, work problems, and take tests.

who do not pass must complete exercises selected by the MyMathLab Study Plan before they are allowed to retake the test.

20 percent

MyMathLab final exam (cumulative)

Assessments

20 percent MyMathLab homework
100 percent mastery required to advance.

60 percent MyMathLab unit tests (proctored)
A score of at least 80 percent is required to progress to the next chapter. Students

Use of MyMathLab

MyMathLab is used for all assessments: homework, quizzes, tests, and the final exam. In addition, the program is used for Study Plans, prerequisites, and announcements.

Use of MyMathLab contributes 100 percent to a student's final course grade.

Results and Data

MyMathLab is a required component in every Hub math course. Courses defined as Traditional in the tables that follow are courses in which use of MyMathLab is optional. The college has established the following four goals against which all progress is measured.

Primary Goal: Increase students' course competencies by at least 5 percent in remedial/prerequisite courses.

Secondary Goal 1: Increase course completion rates in remedial/prerequisite math courses by at least 5 percent.

Secondary Goal 2: Increase course completion rates of students in curriculum math courses, who took prerequisite math course, by at least 5 percent.

Secondary Goal 3: Increase final exam average in each remedial/prerequisite math course by at least 5 percent.

Course	Environment	Number of Students	Pretest Mean	Posttest Mean	Mean Increase	Percent Difference (Hub over Traditional)	Has Goal Been Met?
Arithmetic	Hub	867	38.8	81.1	42.3	8.7%	Yes
	Traditional	279	38.4	77.3	38.9		
Prealgebra	Hub	909	40.9	63.5	22.6	43.9%	Yes
	Traditional	584	40.0	55.7	15.7		
Beg Algebra	Hub	479	35.5	79.4	43.9	33.8%	Yes
	Traditional	1,070	37.0	69.7	32.8		
Inter Algebra	Hub	395	36.0	70.8	34.8	14.1%	Yes
	Traditional	795	35.2	65.7	30.5		

Table 1. Primary Goal: Combined Test Score Data, Fall 2006–Fall 2010 (n=5,378)

Course	Environment	Number of Students Who Completed	Number of Students Who Attempted	Completion Rate	Percent Difference (Hub over Traditional)	Has Goal Been Met?
Arithmetic	Hub	984	1,703	57.8%	24.2%	Yes
	Traditional	848	1,819	46.6%		
Prealgebra	Hub	1,142	1,567	72.9%	56.8%	Yes
	Traditional	1,223	2,631	46.5%		
Beg Algebra	Hub	598	1,413	42.3%	15.9%	Yes
	Traditional	1,305	3,580	36.5%		
Inter Algebra	Hub	436	891	48.9%	18.1%	Yes
	Traditional	814	1,966	41.4%		

Table 2. Secondary Goal 1: Combined Retention Data, Summer 2005–Fall 2010 (n=15,570)

Course Sequence	Environment	Number of Students Who Completed	Number of Students Who Attempted	Completion Rate	Percent Difference (Hub over Traditional)	Has Goal Been Met?
Inter Algebra from Beg Algebra	Hub	236	426	56.7%	20.9%	Yes
	Traditional	690	1,470	46.9%		
College Algebra from Inter Algebra	Hub	175	279	62.7%	-3.4%	No
	Traditional	624	961	64.9%		
Contemp Math from Beg Algebra	Hub	101	121	83.5%	2.5%	No
	Traditional	480	589	81.5%		
Alg. Geom, Trig I from Prealgebra	Hub	35	51	68.3%	-9.4%	No
	Traditional	43	57	75.4%		

Table 3. Secondary Goal 2: Combined Completion Rates in Subsequent Course Data, Summer 2005–Fall 2010 (n=3,954)

Course	Environment	Number of Students Taking Exam	Mean Exam Score	Standard Deviation	Percent Difference (Hub over Traditional)	Has Goal Been Met?
Arithmetic	Hub	1,080	83.9	9.6	10.4%	Yes
	Traditional	1,412	76.0	13.2		
Prealgebra	Hub	1,212	74.6	11.3	6.6%	Yes
	Traditional	2,204	70.4	13.3		
Beg Algebra	Hub	521	76.6	11.4	13.8%	Yes
	Traditional	2,752	67.3	15.0		
Inter Algebra	Hub	390	66.9	12.1	3.9%	No
	Traditional	1,432	64.4	13.4		

Table 4. Secondary Goal 3: Combined Final Exam Data, Summer 2005–Fall 2010 (n=11,003)

The Student Experience

The school’s students appreciate MyMathLab and recognize its contribution to their overall learning. In a recent survey, 82 percent of students ranked the value of the help they received from MyMathLab as high or very high. Additional survey comments included the following:

- “I’ve been out of school for more than 20 years. MyMathLab helped me to recover most of the knowledge I had lost.”
- “When I caught on more quickly than others, I didn’t have to wait to advance in the course.”

Conclusions

Data from primary goal competency studies and secondary goal 1 completion studies indicate that students both learn more and persevere longer when MyMathLab is required than when it is optional. What’s more, data from secondary goal 3 show that the final exam scores in Arithmetic,

Prealgebra, and Beginning Algebra are higher for those students whose courses required the use of MyMathLab.

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