



Co-req Success Analysis: Evaluating the Success of College Algebra Co-req Labs

Jason Burke & Allison Millmore, CCD



The History

CCD has offered the co-req support lab in different formats:

1. We moved the default progression:
 - Old: 055/0300 into 121/1340
 - New: 1340 plus co-req support lab, with a late-start 0300 for those who need it.
2. We moved the timing of the co-req support lab:
 - Old: Support lab AFTER College Algebra
 - New: Support lab BEFORE College Algebra
3. We added the First Day Assessment (FDA) to help determine appropriate placement.



The Mission

In 2021, we were tasked to answer 3 questions:

1. Does MAT 055/0300 successfully prepare students for MAT 121/1340?
2. Does MAT 093/0341 successfully support students in MAT 121/1340?
3. Does the FDA successfully assess which students should go into the various levels?

Phase 1: Does MAT 055/0300 successfully prepare students for MAT 121/1340?

We requested a report from IR:

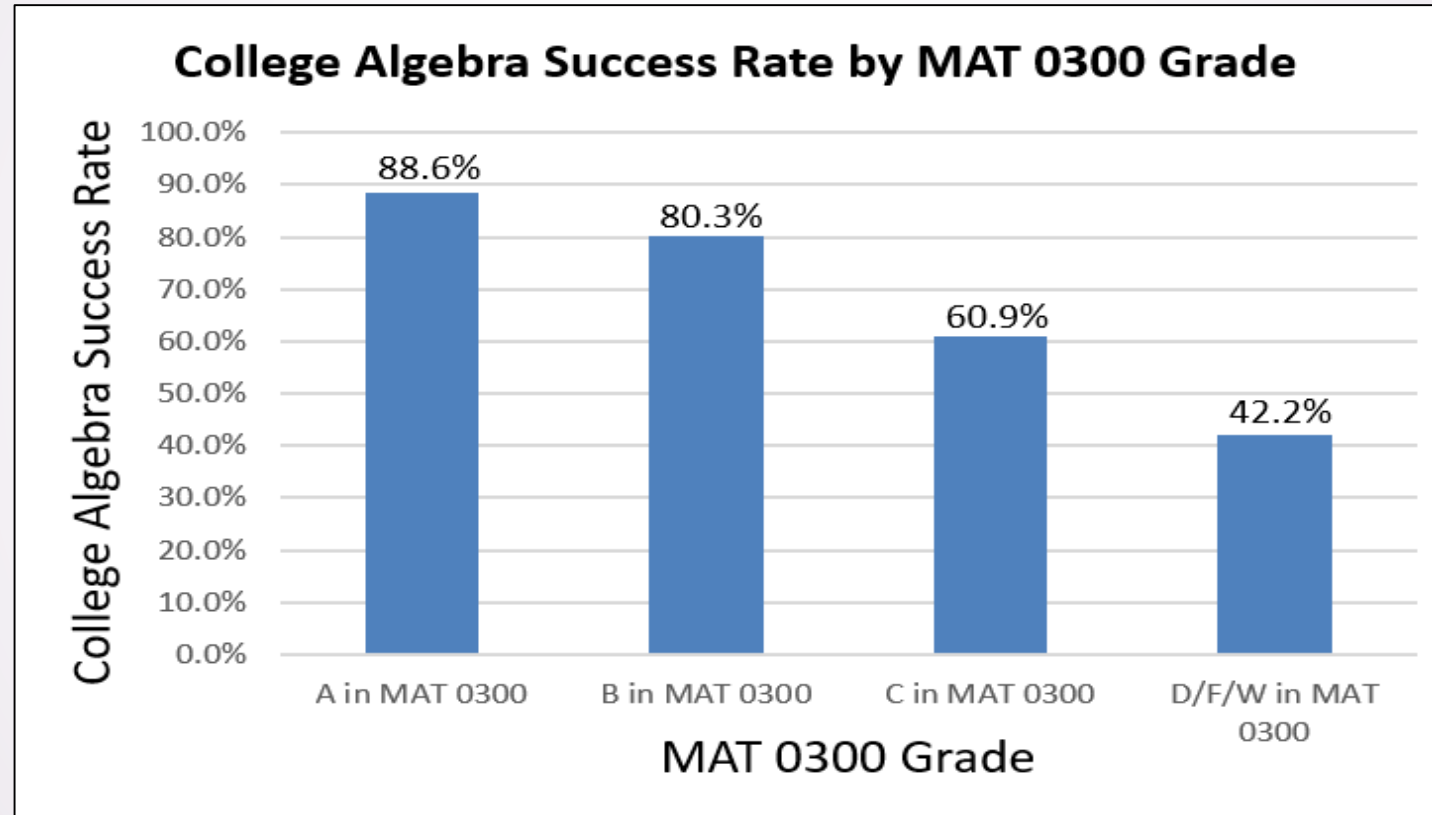
S#	Last Name	First Name	055 Semester	055 Grade	055 Section #	055 Instructor	121 Semester	121 Grade	121 Section #	121 Instructor	122 Semester	122 Grade
S00000001			FA15	P	31C	Watts	SP16	B	20C	Millmore		
S00000002							FA18	A	74R	Burke	SP18	A

We then compared data for grades in MAT 055/0300 to MAT 121/1340.

Phase 1: Does MAT 055/0300 successfully prepare students for MAT 121/1340?

	A in 1340	B in 1340	C in 1340	D F W in 1	Total	Percent Passing
MAT 1340 Grade (no MAT 55 or Coreq)	493	391	334	705	1923	63.3%
MAT 1340 Grade without 0341	556	461	406	755	2178	65.3%
MAT 1340 with 0341	490	523	542	1287	2842	54.7%
A in MAT 0300	53	32	16	13	114	88.6%
B in MAT 0300	20	46	48	28	142	80.3%
C in MAT 0300	9	28	33	45	115	60.9%
D/F/W in MAT 0300	5	11	27	59	102	42.2%

Phase 1: Does MAT 055/0300 successfully prepare students for MAT 121/1340?



Conclusion: MAT 0300 **does** prepare students for success in MAT 1340.

Phase 2: Does MAT 093/0341 successfully support students in MAT 121/1340?

Our first set of data didn't look promising:

	A in 1340	B in 1340	C in 1340	D F W in 1	Total	Percent Passing
MAT 1340 Grade (no MAT 55 or Coreq)	493	391	334	705	1923	63.3%
MAT 1340 Grade without 0341	556	461	406	755	2178	65.3%
MAT 1340 with 0341	490	523	542	1287	2842	54.7%

We realized this wasn't comparing "apples to apples" though.



Phase 2: Does MAT 093/0341 successfully support students in MAT 121/1340?

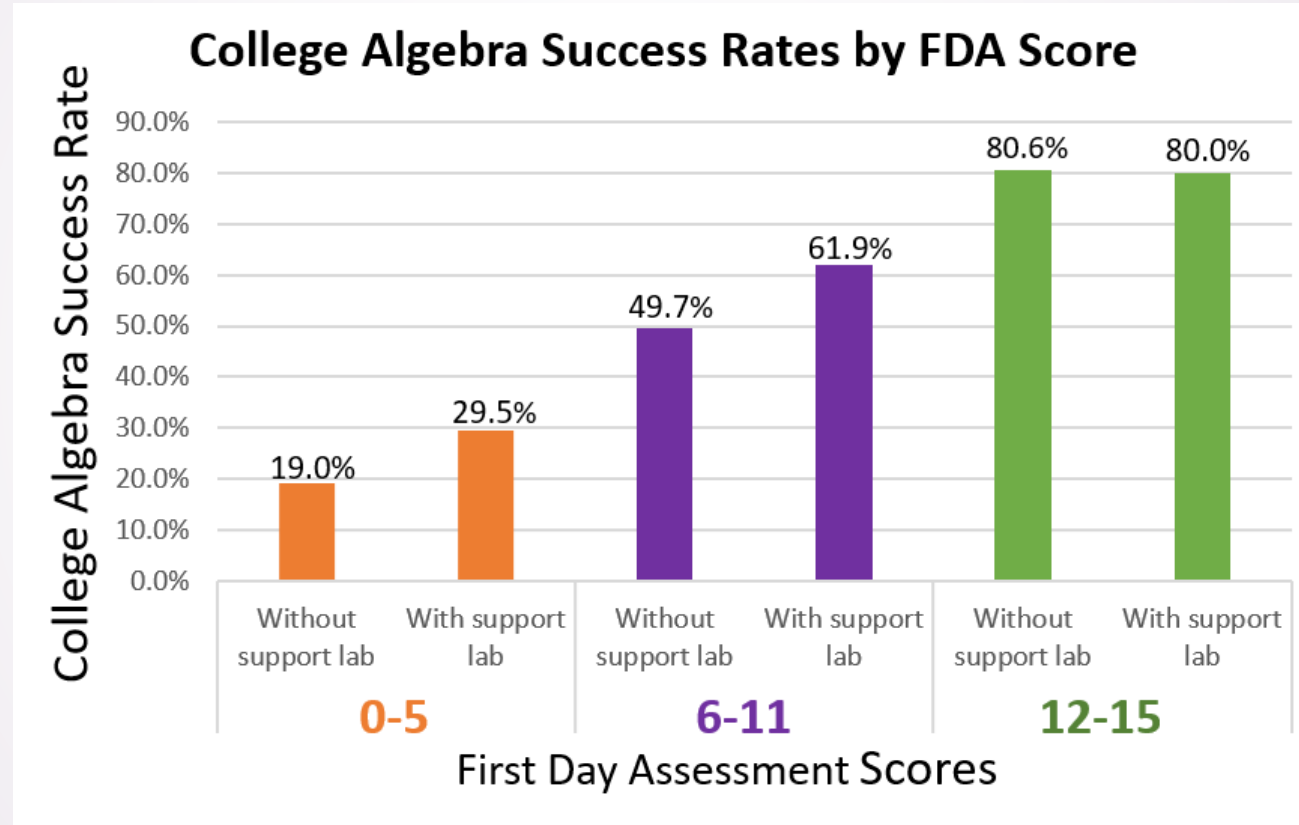
We pulled all post-Covid FDA data:

- Our D2L Admin pulled a report of all D2L grades in all MAT 1340 classes.
- We sorted out all FDA scores and final semester grades.
 - We deleted students without an FDA score.
 - Filled in withdrawn students manually.

Phase 2: Does MAT 093/0341 successfully support students in MAT 121/1340?

Non-Online Students					
FDA Score		Passing Stu	Total Studen	Success Rat	Fail Rate
0-5	C Section:	43	146	29.5%	70.5%
	R Section:	12	63	19.0%	81.0%
	Overall:	55	209	26.3%	73.7%
6-11	C Section:	122	197	61.9%	38.1%
	R Section:	76	153	49.7%	50.3%
	Overall:	198	350	56.6%	43.4%
12-15	C Section:	28	35	80.0%	20.0%
	R Section:	87	108	80.6%	19.4%
	Overall:	115	143	80.4%	19.6%
TOTAL	C Section:	193	378	51.1%	48.9%
	R Section:	175	324	54.0%	46.0%
	Overall:	368	702	52.4%	47.6%

Phase 2: Does MAT 093/0341 successfully support students in MAT 121/1340?



Conclusion: MAT 093/0341 **does** successfully support **some** students in MAT 121/1340.

Phase 2: Does MAT 093/0341 successfully support students in MAT 121/1340?

Based on our data, we were able to send these recommendations to our advisors, faculty, and students.

**15-question
assessment**

**0-5 questions
correct**

These students need to build their foundational algebra skills before taking College Algebra. It is recommended they switch to MAT 0300 and continue into College Algebra the following semester.

**6-11 questions
correct**

These students need some extra support to fill in any gaps in their algebra skills. It is recommended they take the MAT 0341 Support Lab along with College Algebra.

**12-15 questions
correct**

These students have sufficient algebra skills and are prepared take College Algebra as a stand-alone class.



The Mission, Revisited

In 2021, we were tasked to answer 3 questions:

1. Does MAT 055/0300 successfully prepare students for MAT 121/1340? **YES!**
2. Does MAT 093/0341 successfully support students in MAT 121/1340? **YES!**
3. Does the FDA successfully assess which students should go into the various levels? **YES!**



Questions?

Jason.Burke@ccd.edu

Allison.Millmore@ccd.edu

Also contributing towards the data analysis:

Sandy Fink

Jean Hindie

Libby Watts