

# AB705 Update on Math Performance Success



# Math Performance Success (MPS)

- Specialized instruction (including NCBS corequisite)
- Counseling support in the classroom
- Additional tutoring services
- Based on availability, a free rental textbook and calculator for the quarter

Students must apply and be accepted into the MPS program



#### **MPS Sections and Enrollment**

#### Math 10 MPS

- W19 Sp21
- 10 sections
- 291 enrollments

MPS = 5% of Math 10 enrollment

#### Math 48A MPS

- Sp20-Sp21
- 5 sections
- 124 enrollments

MPS = 19% of Math 48A enrollment



# Math 10: Breakdown of Enrollment by High School GPA

HS GPA Band	Math 10 Enrollment		
Statistics	Not MPS	MPS	
3.0 or higher	47%	28%	
2.3 to 2.9	24%	<b>37</b> %	
Less than 2.3	11%	22%	
Unknown GPA	18%	12%	
TOTAL	100%	100%	

MPS sections had a greater percentage of students in the lowest GPA Band than other Math 10 sections.



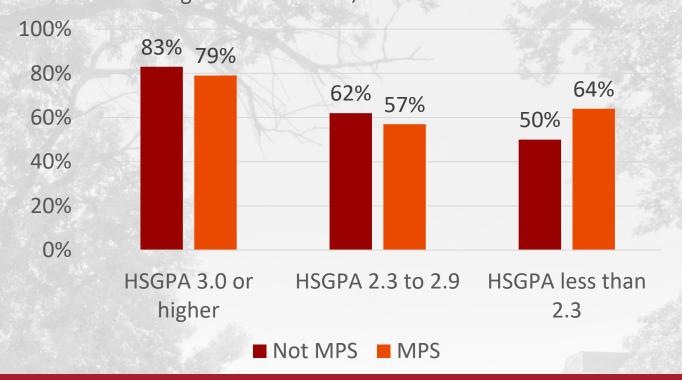
# Math 10: Success Rates by High School GPA

	Math 10		
HS GPA Band	Success Rate		Pct. Point
Statistics	Not MPS	MPS	Diff.
3.0 or higher	78%	85%	+7
2.3 to 2.9	57%	60%	+3
Less than 2.3	47%	63%	+16
Unknown GPA	81%	83%	+2

MPS sections had higher success rates; statistically significant difference in success rate for students in the lowest GPA Band.

#### Math 10: Throughput by HS GPA

Throughput by GPA Band
Began with Math 10, MPS vs. Not MPS



Trend: Lowest GPA Band had higher throughput if began with Math 10 MPS; other GPA Bands had higher throughput if began with regular Math 10. Differences were not statistically significant.

Source: FH IRP. Throughput for students who began the math sequence with Math 10 in Fall, Winter, or Spring from Winter 2019 – Fall 2021 (terms where Math 10 MPS was offered and throughput could be calculated). Throughput = passing a transfer-level math course within three primary terms (Fall, Winter, Spring). MPS HC: HS GPA 3.0 or higher = 34; HS GPA 2.3-2.9 = 44; HS GPA less than 2.3 = 22. Not MPS HC all greater than 250.



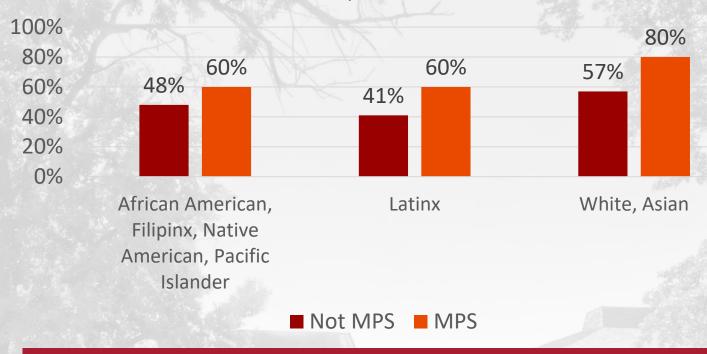
# Math 10: Breakdown of Enrollment by Ethnicity

	Math 10 Enrollment	
Ethnicity	Not MPS	MPS
African American	7%	8%
Asian	25%	5%
Filipinx	6%	3%
Latinx	33%	61%
Native American	0%	1%
Pacific Islander	2%	4%
White	25%	16%

MPS sections had a greater percentage of Latinx students than other Math 10 sections.



Course Success; HS GPA less than 2.3



All ethnicity groups in the lowest GPA Band had higher success rates in MPS sections than in other sections; statistically significant difference for Latinx students.

# Math 48A: Breakdown of Enrollment by High School GPA

HS GPA Band	Math 48A Enrollment		
Precalc	No Coreq	Coreq	MPS
3.4 or higher	27%	12%	19%
2.6 to 3.3	36%	43%	41%
Less than 2.6	27%	32%	27%
Unknown GPA	11%	14%	13%
TOTAL	100%	100%	100%

Coreq sections had a greater percentage of students in the lowest GPA Band than other Math 48A sections.

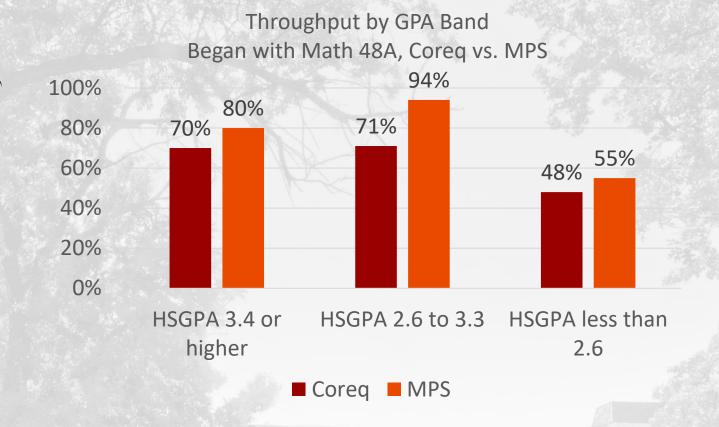


# Math 48A Coreq vs. MPS: Success Rates by High School GPA

HS GPA Band	Math 48A Success Rate		Pct. Point
Precalc	Coreq	MPS	Diff.
3.4 or higher	69%	83%	+14
2.6 to 3.3	53%	76%	+23
Less than 2.6	36%	64%	+28
Unknown GPA	65%	88%	+23

MPS sections had higher success rates; statistically significant difference in success rate for students in the two lowest GPA Bands.

#### Math 48A: Throughput by HS GPA



Trend: Students who began with Math 48A MPS had higher throughput than those who began with Math 48A with coreq.

Differences not statistically significant.

Source: FH IRP. Throughput for students who began the math sequence with Math 48A with coreq or MPS in Spring 2020 or Fall 2020 (terms where Math 48A MPS was offered and throughput could be calculated). Throughput = passing a transfer-level math course within three primary terms (Fall, Winter, Spring). ). Headcounts HS GPA 3.4 or higher: MPS = 10, Coreq = 10; HS GPA 2.6-3.3: MPS = 18, Coreq = 51; HS GPA less than 2.6: MPS = 11, Coreq = 31.

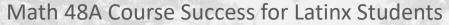


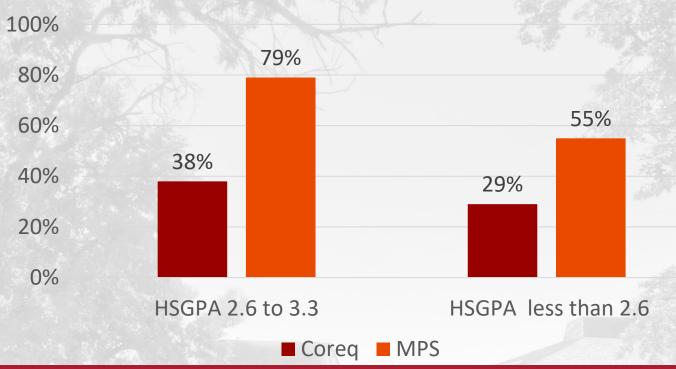
# Math 48A: Breakdown of Enrollment by Ethnicity

	Math 48A Enrollment		
Ethnicity	No Coreq	Coreq	MPS
African American	9%	3%	6%
Asian	16%	20%	12%
Filipinx	3%	4%	5%
Latinx	<b>37</b> %	40%	52%
Native American	0%	1%	2%
Pacific Islander	2%	2%	0%
White	31%	27%	19%

MPS sections had a greater percentage of Latinx students than other Math 48A sections.

# Math 48A: Latinx Success for Two Lowest GPA Bands





Latinx students in the two lowest GPA Bands had higher success rates in Math 48A MPS sections than in Math 48A Coreq sections. Differences statistically significant.