

## Institutional Effectiveness, Success, & Equity

## Math Success Rates and Throughput Study (July 2024)

## **Research Questions**

1) Starting with all students who enrolled in Math 176 in fall 2023 as a first-math class, what percentage of them completed Math 180 by the end of spring 2024? Starting with all students who enrolled in Math 176+076 in fall 2023 as a first-math class, what percentage of them completed Math 180 by the end of spring 2024?

		Math 180 Enrollment	and Success by Initial	Math 176 Class				
	N	MATH176+076 Cohort		MATH 176 Cohort				
	Enrolled in Math 180	Succes	sful	Enrolled in Math 180	Succe	ssful		
Race/Ethnicity	#	#	%	#	#	%		
Asian	4	1	25%	7	1	14%		
African American/Black				5	2	40%		
Hispanic/Latinx	34	6	18%	36	7	19%		
Middle Eastern	16	4	25%	32	9	28%		
Native American								
Pacific Islander								
Two or more	1	0	0%	2	0	0%		
White	12	5	42%	30	9	30%		
Other/Unknown				2	0	0%		
Total	67	16	24%	114	28	25%		
Gender	#	#	%	#	#	%		
Female	20	5	25%	47	9	19%		
Male	47	11	23%	64	19	30%		
Unknown				3	0	0%		
Total	67	16	24%	114	28	25%		

2) Starting with all students who enrolled in Math 180 with Math 080 in fall 2023 or spring 2024 as a first-math class and a placement score of 15X or below, what percentage of them completed Math 180 in that first semester?

Math 180 Enrollment a	Math 180 Enrollment and Success by Term Among Students with a Placement of 15x or Below									
		Fall 2023		Spring 2024						
	Cohort	Success	ful	Cohort	Succe	ssful				
Race/Ethnicity	#	#	%	#	#	%				
Asian	6	4	67%	1	1	100%				
African American/Black	4	2	50%							
Hispanic/Latinx	13	9	69%	7	5	71%				
Middle Eastern	18	13	72%	7	6	86%				
Native American										
Pacific Islander										
Two or more	5	3	60%	1	1	100%				
White	9	8	89%	2	1	50%				
Other/Unknown										
Total	55	39	71%	18	14	<i>78</i> %				
Gender	#	#	%	#	#	%				
Female	15	10	67%	5	4	80%				
Male	38	28	74%	12	10	83%				
Unknown	2	1	50%	1	0	0%				
Total	55	39	71%	18	14	78%				

3) Starting with all students who enrolled in Math 180 with Math 080 in fall 2023 or spring 2024 as a first-math class and a placement score of 17X, what percentage of them completed Math 180 in that first semester?

Math 180 Enrollment and Success in First Semester Among Students with a Placement of 17x								
	Fa	all 2023		Spring 2024				
	Cohort	Successful		Cohort	Successfu	ıl		
Race/Ethnicity	#	#	%	#	#	%		
Asian				1	0	0%		
African American/Black				1	0	0%		
Hispanic/Latinx	8	4	50%	4	2	50%		
Middle Eastern	2	0	0%	4	3	<b>7</b> 5%		
Native American								
Pacific Islander								
Two or more	1	0	0%	2	1	50%		
White	5	4	80%	1	0	0%		
Other/Unknown								
Total	16	8	50%	13	6	46%		
Gender	#	#	%	#	#	%		
Female	4	1	25%	4	2	50%		
Male	12	7	58%	9	4	44%		
Unknown								
Total	16	8	50%	13	6	46%		

4) Starting with all students who enrolled in Math 180 with Math 080 in fall 2023 or spring 2024 as a first-math class and with a placement score of 15X or below, what percentage of them completed Math 180 by the end of spring 2024 (this can include multiple attempts for students who first enrolled in fall 2023)?

Fall 2023 and Spring 2024 Math 180+080 Success Rates Among Students with a Placement of 15x or Below								
	Cohort	Successful by Spring 2024						
Race/Ethnicity	#	#	%					
Asian	7	5	71%					
African American/Black	4	2	50%					
Hispanic/Latinx	20	14	70%					
Middle Eastern	25	21	84%					
Native American								
Pacific Islander								
Two or more	6	4	67%					
White	11	9	82%					
Other/Unknown								
Total	73	55	75%					
Gender	#	#	%					
Female	20	14	70%					
Male	50	40	80%					
Unknown	3	1	33%					
Total	73	55	75%					

5) Starting with all students who enrolled in Math 180 with Math 080 in fall 2023 or spring 2024 as a first-math class and with a placement score of 17X, what percentage of them completed Math 180 by the end of spring 2024 (this can include multiple attempts for students who first enrolled in fall 2023)?

Fall 2023 and Spring 2024 Ma	Fall 2023 and Spring 2024 Math 180+080 Success Rates Among Students with of Placement 17x									
	Cohort	Successful by	Spring 2024							
Race/Ethnicity	#	#	%							
Asian	1	0	0%							
African American/Black	1	0	0%							
Hispanic/Latinx	12	6	50%							
Middle Eastern	6	3	50%							
Native American										
Pacific Islander										
Two or more	3	1	33%							
White	6	4	67%							
Other/Unknown										
Total	29	14	48%							
Gender	#	#	%							
Female	8	3	38%							
Male	21	11	52%							
Unknown										
Total	29	14	48%							

6)	Starting with all students who enrolled in Math 180 (without Math 080) in fall 2023 or spring 2024 as a first-math class, what is the success rate on their first attempt based on the student's GPA used for their placement?

Fall 2023 and Spring 2024 First-Math 180 Without 080 Success Rates by GPA								
	F	all 2023	Spring 2024					
	Cohort	Successful		Cohort	Succe	ssful		
Under 2.6	#	#	%	#	#	%		
Asian				1	1	100%		
African American/Black								
Hispanic/Latinx	4	1	25%	4	0	0%		
Middle Eastern	1	0	0%	9	4	44%		
Native American								
Pacific Islander								
Two or more				1	1	100%		
White	1	1	100%	2	1	50%		
Other/Unknown								
Total	6	2	33%	17	7	41%		
Female				6	2	33%		
Male	6	2	33%	11	5	45%		
Unknown Gender								
Total	6	2	33%	17	7	41%		
2.6-2.79	#	#	%	#	#	%		
Asian								
African American/Black	1	0	0%					
Hispanic/Latinx	3	2	67%	3	2	67%		
Middle Eastern				1	0	0%		
Native American								
Pacific Islander								
Two or more								
White				3	1	33%		
Other/Unknown								
Total	4	2	50%	7	3	43%		
Female	2	1	50%	3	2	67%		
Male	2	1	50%	4	1	25%		
Unknown Gender								
Total	4	2	50%	7	3	43%		

Fall 2023 and Spring 2024 First-Math 180 Without 080 Success Rates by GPA									
	Fa	all 2023		Spring 2024					
	Cohort	Successful		Cohort	Succe	ssful			
2.8-2.99	#	#	%	#	#	%			
Asian	1	1	100%	1	0	0%			
African American/Black									
Hispanic/Latinx	4	1	25%	5	1	20%			
Middle Eastern	1	1	100%	2	1	50%			
Native American									
Pacific Islander									
Two or more	1	0	0%	2	1	50%			
White	1	1	100%	2	2	100%			
Other/Unknown				1	1	100%			
Total	8	4	50%	13	6	46%			
Female	4	2	50%	6	3	50%			
Male	4	2	50%	7	3	43%			
Unknown Gender									
Total	8	4	50%	13	6	46%			
3.0-3.29	#	#	%	#	#	%			
Asian	3	0	0%	1	1	100%			
African American/Black	1	0	0%						
Hispanic/Latinx	4	2	50%	10	7	70%			
Middle Eastern	6	3	50%	2	2	100%			
Native American									
Pacific Islander									
Two or more	1	0	0%						
White	3	2	67%	8	3	38%			
Other/Unknown				1	1	100%			
Total	18	7	39%	22	14	64%			
Female	5	2	40%	9	4	44%			
Male	12	5	42%	11	10	91%			
Unknown Gender	1	0	0%	2	0	0%			
Total	18	7	39%	22	14	64%			

Fall 2023 and Spring 2024 First-Math 180 Without 080 Success Rates by GPA									
		Fall 2023			Spring 2024				
	Cohort	Succe	ssful	Cohort	Succe	ssful			
3.3 or higher	#	#	%	#	#	%			
Asian	3	2	67%	3	2	67%			
African American/Black	1	0	0%	6	5	83%			
Hispanic/Latinx	14	7	50%	18	9	50%			
Middle Eastern	7	5	71%	12	9	<b>7</b> 5%			
Native American									
Pacific Islander									
Two or more	4	2	50%	4	2	50%			
White	17	11	65%	13	11	85%			
Other/Unknown	3	1	33%	1	0	0%			
Total	49	28	57%	57	38	67%			
Female	23	12	52%	24	15	63%			
Male	26	16	62%	32	23	72%			
Unknown Gender				1	0	0%			
Total	49	28	57%	<i>57</i>	38	67%			
No high school GPA	#	#	%	#	#	%			
Asian				1	1	100%			
African American/Black									
Hispanic/Latinx				3	2	67%			
Middle Eastern	1	0	0%	2	2	100%			
Native American									
Pacific Islander									
Two or more									
White	1	1	100%	2	2	100%			
Other/Unknown									
Total	2	1	50%	8	7	88%			
Female	1	0	0%	5	4	80%			
Male	1	1	100%	2	2	100%			
Unknown Gender				1	1	100%			
Total	2	1	50%	8	7	88%			

Fall 2023 and Spring 2024 First-Math 180 Without 080 Success Rates by GPA								
	Fall 2023							
	Cohort	Successful	(	Cohort	Succes	sful		
All GPAs	#	#	%	#	#	%		
Asian	7	3	43%	7	5	71%		
African American/Black	3	0	0%	6	5	83%		
Hispanic/Latinx	29	13	45%	43	21	49%		
Middle Eastern	16	9	56%	28	18	64%		
Native American								
Pacific Islander								
Two or more	6	2	33%	7	4	57%		
White	23	16	70%	30	20	67%		
Other/Unknown	3	1	33%	3	2	67%		
Total	87	44	51%	124	<i>7</i> 5	60%		
Female	35	17	49%	53	30	57%		
Male	51	27	53%	67	44	66%		
Unknown Gender	1	0	0%	4	1	25%		
Total	87	44	51%	124	<i>7</i> 5	60%		

7) What is the gender breakdown for all students enrolled in Math 180 versus math 280 in fall 2023 and spring 2024? Do as individual semesters and combined.

	Math 180 and Math 280 Enrollment by Gender													
	MATH-180								MATH-280				Both Co	urses
	Fall 20	)23	Spring 2	2024	Tota	ıl	Fall 20	)23	Spring	2024	Tota	ıl	Tota	ıl
Gender	#	%	#	%	#	%	#	%	#	%	#	%_	#	%
Female	96	36%	106	40%	202	38%	32	27%	51	32%	83	30%	285	35%
Male	164	62%	151	57%	315	60%	85	71%	107	67%	192	69%	507	63%
Unknown	4	2%	7	3%	11	2%	2	2%	1	1%	3	1%	14	2%
Total	264	100%	264	100%	528	100%	119	100%	159	100%	278	100%	806	100%

8) Starting with all students who enrolled in Math 180 with Math 080 in fall 2023 as a first-math class and with a placement score of 15X or below (see the list of students sent separately), what percentage succeeded in Math 280 in spring 2024?

	Math 280 Enrollment and S	uccess by Initial Math 180+08	O Class Among Students with	a Placement of 15x or Below	
	Math 180+080 Cohort	Cohort Success in Math 180	Enrolled Math 280	1-Year Cohort Suc	cess in Math 280
Ethnicity	#	#	#	#	%
Asian	6	4	4	4	67%
African American/Black	4	2	0	0	0%
Hispanic/Latinx	13	9	7	4	31%
Middle Eastern	18	13	10	8	44%
Native American					
Pacific Islander					
Two or more	5	3	2	1	20%
White	9	8	7	5	56%
Other/Unknown					<u></u>
Total	55	39	30	22	40%
Gender	#	#	#	#	%
Female	15	10	7	6	40%
Male	38	28	23	16	42%
Unknown	2	1	0	0	0%
Total	55	39	30	22	40%

9) Starting with all students who enrolled in Math 180 with Math 080 in fall 2023 as a first-math class and had a placement score of 17X (see the list of students sent separately), what percentage succeeded in Math 280 in spring 2024?

Math 280 Enrollment and Success by Initial Math 180+080 Class Among Students with a Placement of 17x								
	Math 180+080 Cohort	Cohort Success in Math 180 Enrolled Math 280		1-Year Cohort Success in Math 280				
Ethnicity	#	#	#	#	%			
Asian								
African American/Black								
Hispanic/Latinx	8	4	3	2	25%			
Middle Eastern	2	0	0	0	0%			
Native American								
Pacific Islander								
Two or more	1	0	0	0	0%			
White	5	4	4	4	80%			
Other/Unknown								
Total	16	8	7	6	38%			
Gender	#	#	#	#	%			
Female	4	1	1	1	25%			
Male	12	7	6	5	42%			
Unknown								
Total	16	8	7	6	38%			

10) Starting with all students who enrolled in Math 180 without Math 080 in fall 2023 as a first-math class, what percentage succeeded in math 280 in spring 2024?

Math 280 Enrollment and Success by Initial Math 180 Class Without 080									
	Math 180 Cohort	Cohort Success in Math 180	Enrolled Math 280	1-Year Cohort Success in Math 280					
Ethnicity	#	#	#	#	%				
Asian	7	3	2	2	29%				
African American/Black	3	0	0	0	0%				
Hispanic/Latinx	29	13	9	9	31%				
Middle Eastern	16	9	1	1	6%				
Native American									
Pacific Islander									
Two or more	6	2	0	0	0%				
White	23	16	7	7	30%				
Other/Unknown	3	1	0	0	0%				
Total	87	44	19	19	22%				
Gender	#	#	#	#	%				
Female	35	17	5	5	14%				
Male	51	27	14	14	27%				
Unknown	1	0	0	0	0%				
Total	87	44	19	19	22%				