

TABLE 1**Description of participating institutions.**

Institution	Enrolled undergraduates	Hispanic Population (%)	6 - year graduation rate (%)	Percentage of degrees awarded to Hispanic students	Accountability group
Medium, public HSI	5,417	70.8	n/a	66.3	Master's
Medium, public HSI	5,798	39.1	81.6	24.7	Master's
Large, public HSI	34,180	37.3	62.8	30.6	Emerging R2
Small, private eHSI	3,666	17.8	61.0	13.4	Doctoral
Medium, public eHSI	8,031	20.8	49.9	14.4	Doctoral PU
Large, public eHSI	31,347	21.8	59.3	20.5	Emerging R1
Comparison-control, public eHSI	51,425	24.1	50.7	23.0	R1

Source. Modification of Table 1 in Mamiya et al. (2022, p. 48). Reprinted with permission of authors and publishers.

Notes. HSI = Hispanic-Serving Institution, eHSI = emerging Hispanic-Serving Institution. Carnegie classifications: R1, R2 = Research university and level, PU = professional university, n/a = not available due to its relatively new standing.

TABLE 2**Comparisons of scores on diagnostic instruments.**

Students by ethnic background and institution	n	MUST		QR	
		M	SD	M	SD
Hispanic students at HSIs	106	4.0	3.6	10.0	3.1
Non-Hispanic students at HSIs	100	6.2	4.1	11.1	3.1
Hispanic students at eHSIs	106	7.3	4.6	12.3	3.2
Non-Hispanic students at eHSIs	252	8.2	4.9	12.9	3.4
Hispanic students (comparison control)	70	10.2	4.0	13.4	2.6
Non-Hispanic students (comparison control)	58	10.9	3.9	13.4	2.7
Total Hispanic students	282 (40.8%)	6.8	4.8	11.7	3.3
Total non-Hispanic students	410 (59.2%)	8.1	4.8	12.6	3.3

Source. Modification of Table 2 in Mamiya et al. (2022, p. 49). Reprinted with permission of authors and publishers.

Notes. HSI = Hispanic-Serving Institution; eHSI = emerging Hispanic-Serving Institution; MUST = Math-Up Skills Test; QR = quantitative reasoning. $n = 564$; MUST max points = 20; QR max points = 20.

TABLE 3**Enrollment by gender and first-generation status.**

Institution type	n	Number of female students in "unsuccessful" population	Number of first-generation students in "unsuccessful" population	Number of first-generation students who are female
eHSI	39	22 (56.4%)	21 (53.8%)	11 (52.4%)
HSI	30	21 (70.0%)	14 (46.7%)	13 (92.9%)
Total	69	43 (62.3%)	35 (50.7%)	24 (68.6%)

Note. HSI = Hispanic-Serving Institution; eHSI = emerging Hispanic-Serving Institution.

TABLE 4**Diagnostic assessment scores and class averages by institution type.**

Institution type	n	MUST		QR		Class average	
		M	SD	M	SD	M	SD
eHSI	39	5.7	3.7	11.7	2.9	58.2	12.3
HSI	30	4.7	3.0	10.4	3.2	60.5	7.3
Totals	69	5.3	3.4	11.2	3.1	59.2	10.4

Note. Maximum score on both the MUST and QR instruments is 20 points. HSI = Hispanic-Serving Institution; eHSI = emerging Hispanic-Serving Institution; MUST = Math-Up Skills Test; QR = quantitative reasoning.

TABLE 5**Comparison of MUST and QR scores and class averages by gender and institution type.**

Gender	Institution type	n	MUST				QR				Class average			
			M	SD	M*	SD	M	SD	M*	SD	M	SD	M	SD
Female	eHSI	32	4.6	3.3	4.4	3.1	10.1	2.3	10.2	2.7	59.7	11.5	59.7	9.4
	HSI	21	4.1	3.0			10.3	3.2			59.8	6.8		
Male	eHSI	7	7.2	3.7	6.7	3.4	13.8	2.3	12.8	3.1	56.4	13.4	58.4	12.1
	HSI	9	5.9	2.5			10.8	3.5			62.2	8.5		
Average	Overall	69			5.3	3.4			11.2	3.1			59.2	10.4

Note. HSI = Hispanic-Serving Institution; eHSI = emerging Hispanic-Serving Institution; MUST = Math-Up Skills Test; QR = quantitative reasoning. * $p < 0.05$. Male Hispanic students entered with higher MUST and QR scores than female Hispanic students. There was no statistical difference between female and male Hispanic students attending the different institution types.

TABLE 6**Comparison of MUST and QR scores and class averages by prior mathematics knowledge and institution type.**

Mathematics background	Institution type	n	MUST score				QR score				Class average			
			M	SD	M*	SD	M	SD	M	SD	M	SD	M	SD
Has taken only algebra or a lower-level course	eHSI	15	4.1	3.2	4.3	3.1	11.1	2.4	10.6	3.0	57.9	13.1	58.5	10.3
	HSI	21	4.4	3.0			10.2	3.3			59.0	8.0		
Has taken precalculus or higher-level course	eHSI	24	6.8	3.6	6.4	3.4	12.1	3.2	11.8	3.2	58.5	12.0	60.0	10.6
	HSI	9	5.3	2.8			11.0	3.1			64.1	3.7		
Average		69			5.3	3.4			11.2	3.1			59.2	10.4

Note. HSI = Hispanic-Serving Institution; eHSI = emerging Hispanic-Serving Institution; MUST = Math-Up Skills Test; QR = quantitative reasoning. * $p < 0.05$. Students who met known mathematics prerequisites entered with higher MUST scores but not QR scores.

TABLE 7**Comparison-control class ($n = 128$) descriptors.****a.**

Ethnicity ($n = 128$)	Non-Hispanic students: 58 (45.3%)	Hispanic students: 70 (54.7%)
First-generation students	Total (n): 63 (49.2%)	Hispanic first-generation students: 40 (57.1%)

b.

Group	MUST		QR		Class average	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Overall class ($n = 128$)	10.5	4.0	13.4	2.7	84.9	11.9
Successful students ($n = 68$)	10.4	3.9	13.4	2.6	86.5	9.0
All Hispanic students ($n = 70$)	10.2	4.0	13.4	2.7	84.8	10.7
Unsuccessful Hispanic students ($n = 2$, both female)	4.0	1.4	6.5	4.9	53.5	2.7

Note. Table 7a shows ethnicity and first-generation status and Table 7b shows diagnostic test scores and class averages by student group.