

De Anza College Office of Institutional Research and Planning

To: Jerry Rosenberg, Dean of Physical Sciences, Math and Engineering

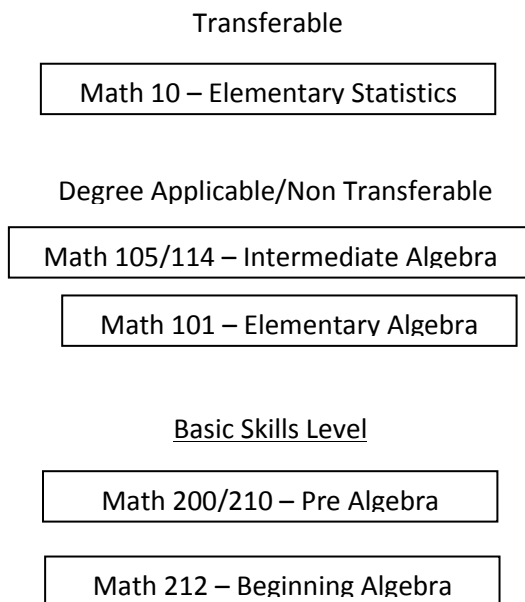
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Subject: Math Performance Success – 11 Year Tracking

Background

The Math Performance Success Program (MPS) is modeled as a supportive learning environment with a team of faculty, counselors, and tutors that work with students to help them succeed in Math 210, 212, 114 and 10. The diagram below shows the course progression from basic skills level to transfer level Math.



Methodology:

MPS sections of 10, 114/105, 101, 200/210, and 212 were compared to the same course in the same year. The instructional method, either face to face or distance was identified for comparison purposes. Only students who received a grade at the end of the term were included. Success is calculated on A, B, C and P grades while non success is D, F, and NP grades and Withdraw is W grades.

Main Findings:

Over 11 years, the course success rates of students in MPS sections of Math 10, 101, 114, 212, and 210 are 10 to 30% higher than the success rates of students in the same course in the traditional format.

Over 11 years, 3,489 students took an MPS math course while 2,805 students (80%) successfully passed their MPS math course.

Over 11 years, 8% of MPS students withdrew from their class compared to 19% of students in a face-to-face and 28% for distance courses.

Over 11 years, 8% of MPS students withdrew from their class compared to 19% of students in a face-to-face and 28% for distance courses.

Eleven Year History by MPS, Face to Face, or Distance Format

2001-02 - 2010-11		Pass		Did Not Pass		Withdrew		Total	
		Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MPS	FACE_TO_FACE	2,805	80%	406	12%	278	8%	3,489	100%
OTHER	FACE_TO_FACE	113,133	63%	32,935	18%	34,189	19%	180,257	100%
OTHER	DISTANCE	2,164	47%	1,163	25%	1,319	28%	4,646	100%

Includes Math 10, 114, 101, 210, and 212 for MPS and Other.

- MPS sections exhibited success rates of 80% compared to 63% of similar courses in the face to face format and 47% for similar courses as a distance section.

Eleven Year History by Course

2001-02 - 2010-11		Pass		Did Not Pass		Withdrew		Total		
		Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	873	89%	62	6%	47	5%	982	100%
	OTHER	FACE_TO_FACE	19,223	65%	4,468	15%	5,926	20%	29,617	100%
	OTHER	DISTANCE	1,759	48%	855	24%	1,020	28%	3,634	100%
MATHD101. Elementary Algebra	MPS	FACE_TO_FACE	175	83%	18	9%	17	8%	210	100%
	OTHER	FACE_TO_FACE	3,312	51%	1,478	23%	1,712	26%	6,502	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	940	80%	146	12%	84	7%	1,170	100%
	OTHER	FACE_TO_FACE	18,269	60%	6,631	22%	5,709	19%	30,609	100%
	OTHER	DISTANCE	405	40%	308	30%	299	30%	1,012	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	641	74%	126	14%	105	12%	872	100%
	OTHER	FACE_TO_FACE	10,362	55%	4,673	25%	3,642	19%	18,677	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	176	69%	54	21%	25	10%	255	100%
	OTHER	FACE_TO_FACE	5,710	56%	2,666	26%	1,873	18%	10,249	100%

- Over 11 years, the course success rates of students in MPS sections of Math 10, 101, 114, 212, and 210 are 10 to 30% higher than the success rates of students in the same course in the traditional format.
- Math 10 exhibited the highest success rate of MPS sections at 89%, followed by Math 101 at 83% and Math 114 at 80%.
- Math 210 exhibited the lowest success rate of MPS sections at 69% success, though still higher than the traditional section at 56% success.

Success Rates by Year and Course – 2011-12 to 2001-02

2011-12			Pass		Did Not Pass		Withdraw		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	100	97%	2	2%	1	1%	103	100%
	OTHER	DISTANCE	208	50%	109	26%	96	23%	413	100%
	OTHER	FACE_TO_FACE	2,255	66%	600	18%	567	17%	3,422	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	163	75%	35	16%	19	9%	217	100%
	OTHER	DISTANCE	64	38%	60	36%	45	27%	169	100%
	OTHER	FACE_TO_FACE	1,930	61%	741	23%	508	16%	3,179	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	139	78%	34	19%	6	3%	179	100%
	OTHER	FACE_TO_FACE	1,581	56%	786	28%	455	16%	2,822	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	43	64%	22	33%	2	3%	67	100%
	OTHER	FACE_TO_FACE	683	50%	453	33%	222	16%	1,358	100%

- In 2011-12, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 97% success.
- Math 210 exhibited the lowest success rate of MPS sections at 64% success, though still higher than the traditional section at 50% success.

2010-11			Pass		Did Not Pass		Withdraw		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	56	78%	10	14%	6	8%	72	100%
	OTHER	FACE_TO_FACE	2,019	61%	614	19%	670	20%	3,303	100%
	OTHER	DISTANCE	251	56%	77	17%	120	27%	448	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	30	88%	4	12%			34	100%
	OTHER	FACE_TO_FACE	1,958	60%	779	24%	517	16%	3,254	100%
	OTHER	DISTANCE	64	39%	56	34%	43	26%	163	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	44	57%	16	21%	17	22%	77	100%
	OTHER	FACE_TO_FACE	1,551	56%	746	27%	468	17%	2,765	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	41	66%	14	23%	7	11%	62	100%
	OTHER	FACE_TO_FACE	850	58%	416	28%	203	14%	1,469	100%

- In 2010-11, all MPS sections had higher success rates than non MPS sections of the same course, though there was only a 1 percentage point difference in the success rates for Math 212.
- Math 114 exhibited the highest success rate of MPS sections at 88% success.
- Math 212 exhibited the lowest success rate of MPS sections at 57%, just above the traditional section at 56% success.

2009-10

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	154	85%	14	8%	13	7%	181	100%
	OTHER	FACE_TO_FACE	1,779	61%	508	18%	611	21%	2,898	100%
	OTHER	DISTANCE	268	46%	165	28%	150	26%	583	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	141	79%	22	12%	15	8%	178	100%
	OTHER	FACE_TO_FACE	1,974	60%	789	24%	509	16%	3,272	100%
	OTHER	DISTANCE	50	31%	61	38%	49	31%	160	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	100	76%	18	14%	14	11%	132	100%
	OTHER	FACE_TO_FACE	1,551	55%	735	26%	538	19%	2,824	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	28	78%	4	11%	4	11%	36	100%
	OTHER	FACE_TO_FACE	760	52%	446	31%	246	17%	1,452	100%

- In 2019-10, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 85% success, all other courses had success rates above 76%.

2008-09

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	111	81%	13	9%	13	9%	137	100%
	OTHER	FACE_TO_FACE	1,886	63%	522	17%	580	19%	2,988	100%
	OTHER	DISTANCE	159	43%	94	26%	113	31%	366	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	110	77%	25	17%	8	6%	143	100%
	OTHER	FACE_TO_FACE	1,816	60%	698	23%	494	16%	3,008	100%
	OTHER	DISTANCE	52	38%	39	29%	45	33%	136	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	66	65%	12	12%	24	24%	102	100%
	OTHER	FACE_TO_FACE	1,543	54%	713	25%	584	21%	2,840	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	20	83%	3	13%	1	4%	24	100%
	OTHER	FACE_TO_FACE	732	56%	348	27%	216	17%	1,296	100%

- In 2008-09, all MPS sections had higher success rates than non MPS sections of the same course.
- This year, Math 210 exhibited the highest success rate of MPS sections at 83% success; Math 210 in other years has one of the lowest success rates of all MPS sections.
- Math 212 exhibited the lowest success rate of MPS sections at 65%, though still above the traditional section at 54%.

2007-08

			Pass		Did Not Pass		Withdraw		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	72	90%	3	4%	5	6%	80	100%
	OTHER	FACE_TO_FACE	1,827	64%	473	17%	540	19%	2,840	100%
	OTHER	DISTANCE	124	48%	86	33%	48	19%	258	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	111	82%	13	10%	12	9%	136	100%
	OTHER	FACE_TO_FACE	1,671	62%	606	22%	433	16%	2,710	100%
	OTHER	DISTANCE	21	33%	24	38%	18	29%	63	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	104	73%	17	12%	22	15%	143	100%
	OTHER	FACE_TO_FACE	1,327	55%	562	23%	504	21%	2,393	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	27	71%	5	13%	6	16%	38	100%
	OTHER	FACE_TO_FACE	645	54%	283	23%	277	23%	1,205	100%

- In 2007-08, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 90% success followed by Math 114 at 82%.
- MPS sections of Math 210 and 212 exhibited success rate above 71%.

2006-07

			Pass		Did Not Pass		Withdraw		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	68	93%	2	3%	3	4%	73	100%
	OTHER	FACE_TO_FACE	1,670	66%	355	14%	495	20%	2,520	100%
	OTHER	DISTANCE	101	38%	64	24%	100	38%	265	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	84	79%	15	14%	8	7%	107	100%
	OTHER	FACE_TO_FACE	1,468	61%	452	19%	484	20%	2,404	100%
	OTHER	DISTANCE	18	44%	10	24%	13	32%	41	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	91	83%	11	10%	7	6%	109	100%
	OTHER	FACE_TO_FACE	1,220	57%	476	22%	462	21%	2,158	100%
MATHD210. Pre-Algebra	MPS	FACE_TO_FACE	17	61%	6	21%	5	18%	28	100%
	OTHER	FACE_TO_FACE	735	60%	247	20%	234	19%	1,216	100%

- In 2006-07, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 93% success.
- Math 210 exhibited the lowest success rate of MPS sections at 61% success, though still higher than the traditional section at 60% success.

2005-06

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	76	95%	4	5%			80	100%
	OTHER	FACE_TO_FACE	1,677	66%	319	13%	534	21%	2,530	100%
	OTHER	DISTANCE	119	38%	115	37%	77	25%	311	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	64	81%	6	8%	9	11%	79	100%
	OTHER	FACE_TO_FACE	1,264	59%	390	18%	484	23%	2,138	100%
	OTHER	DISTANCE	38	52%	3	4%	32	44%	73	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	51	88%	4	7%	3	5%	58	100%
	OTHER	FACE_TO_FACE	984	57%	357	21%	379	22%	1,720	100%

- In 2005-06, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 95% success. Math 114 and 212 had success rates above 80%.

2004-05

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	49	96%	2	4%			51	100%
	OTHER	FACE_TO_FACE	1,562	63%	352	14%	577	23%	2,491	100%
	OTHER	DISTANCE	213	58%	40	11%	116	31%	369	100%
MATHD101. Elementary Algebra	OTHER	FACE_TO_FACE	311	51%	116	19%	177	29%	604	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	31	78%	6	15%	3	8%	40	100%
	OTHER	FACE_TO_FACE	1,429	62%	422	18%	461	20%	2,312	100%
MATHD212. Beginning Algebra	MPS	FACE_TO_FACE	46	64%	14	19%	12	17%	72	100%
	OTHER	FACE_TO_FACE	572	51%	297	27%	249	22%	1,118	100%

- In 2004-05, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 96% success.
- Math 212 exhibited the lowest success rate of MPS sections at 64% success, though still higher than the traditional section at 51% success.

2003-04

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	67	92%	4	5%	2	3%	73	100%
	OTHER	FACE_TO_FACE	1,538	65%	267	11%	579	24%	2,384	100%
	OTHER	DISTANCE	147	49%	39	13%	112	38%	298	100%
MATHD101. Elementary Algebra	MPS	FACE_TO_FACE	62	82%	6	8%	8	11%	76	100%
MATHD101. Elementary Algebra	OTHER	FACE_TO_FACE	986	50%	445	22%	550	28%	1,981	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	68	85%	9	11%	3	4%	80	100%
	OTHER	FACE_TO_FACE	1,687	57%	632	21%	629	21%	2,948	100%
	OTHER	DISTANCE	43	56%	23	30%	11	14%	77	100%

- In 2003-04, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 92% success.
- MPS sections of Math 114 and 212 had success rates above 80%.

2002-03

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	57	89%	4	6%	3	5%	64	100%
		FACE_TO_FACE	1,618	69%	255	11%	473	20%	2,346	100%
		DISTANCE	88	51%	41	24%	42	25%	171	100%
MATHD101. Elementary Algebra	MPS	FACE_TO_FACE	47	90%	3	6%	2	4%	52	100%
		FACE_TO_FACE	1,067	51%	477	23%	530	26%	2,074	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	49	89%	2	4%	4	7%	55	100%
		FACE_TO_FACE	1,717	59%	586	20%	619	21%	2,922	100%
		DISTANCE	28	45%	15	24%	19	31%	62	100%

- In 2002-03, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 101 exhibited the highest success rate of MPS sections at 90% success while Math 10 and 114 had success rates of 89%.

2001-02

			Pass		Did Not Pass		Withdrew		Total	
			Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATHD010. Elementary Statistics	MPS	FACE_TO_FACE	63	93%	4	6%	1	1%	68	100%
		FACE_TO_FACE	1,392	73%	203	11%	300	16%	1,895	100%
		DISTANCE	81	53%	25	16%	46	30%	152	100%
MATHD101. Elementary Algebra	MPS	FACE_TO_FACE	66	80%	9	11%	7	9%	82	100%
		FACE_TO_FACE	948	51%	440	24%	455	25%	1,843	100%
MATHD114. Intermediate Algebra	MPS	FACE_TO_FACE	89	88%	9	9%	3	3%	101	100%
		FACE_TO_FACE	1,355	55%	536	22%	571	23%	2,462	100%
		DISTANCE	27	40%	17	25%	24	35%	68	100%

- In 2001-02, all MPS sections had higher success rates than non MPS sections of the same course.
- Math 10 exhibited the highest success rate of MPS sections at 93% success.
- MPS sections of Math 101 and 114 had success rates above 80%.