De Anza College Office of Institutional Research and Planning

To: Math Department

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Date: 5/16/20221

Subject: Enrollment in Other GE Courses after Passing Transfer-Level Math

This analysis looks at students who are passed Math10 (Statistics) or MATH41/31 (Precalculus) in the fall term and the courses in which they were enrolled during the fall, winter and spring quarters of the same academic year. The analysis provides a three-year trend, pre and post implementation of AB 705. The analysis also includes the success rates in the courses in which students enrolled at the same time or after passing the math course, within the same academic year.

Overall Findings for Statistics

- The findings suggest that students are enrolling in a higher number of GE courses after having completing MATH10, when compared to prior terms, even with a continued enrollment decline at the college overall.
- When students complete MATH10, they enroll at a higher rate in subsequent Math courses including MATH1A, 1B and 1C and success rates increased in these courses even with the additional enrollments.
- When students complete MATH10 they also enroll at a higher rate in EWRT courses including EWRT1A and EWRT002.

Of the top 32 courses in which students enrolled, who passed MATH10 or MATH10H, over the past three years:

- Enrollment into MATH1A increased by 92%, while success rates increased by 17% from 76% to 89%.
- Enrollment into MATH001B increased by 41%, while success rates increased 16% from 79% to 92%.
- Enrollment into MATH001C increased by 16%, while success rates increased 15% from 81% to 93%.
- Enrollment into EWRT01A saw an increase of 25%, while success rates decreased 4% from 90% to 86%.
- Enrollment into EWRT002 saw an increase of 13%, while success rates increased 2% from 90% to 92%.
- Enrollment into ANTH002 saw an increase of 96% and success rates increased 1%, from 90% to 91%.
- Enrollment into ARTS1A increased by 62% and success rates remained unchanged at 90%.

Table. I. Students who Passed Statistics

			E	nrollme	nt			Success					
		Fall	Fall	Fall			Fall	Fall	Fall				
		2018 -	2019 -	2020 -			2018 -	2019 -	2020 -				
		Spring	Spring	Spring		%	Spring	Spring	Spring		%		
		2019	2020	202 I	Trend	Change	2019	2020	202 I	Trend	Change		
ACCT	D001A	154	160	161		5%	79%	82%	91%		15%		
ACCT	D001B	133	115	124		-7%	83%	90%	95%		14%		
ACCT	D001C	103	68	93		-10%	89%	96%	94%		6%		
ANTH	D001.	104	121	117		13%	94%	92%	92%		-2%		
ANTH	D002.	49	84	96		96%	90%	92%	91%		1%		
ARTS	D001A	50	70	81		62%	90%	90%	90%		0%		
ASTR	D004.	146	124	117		-20%	88%	84%	82%		-7%		
BIOL	D010.	85	91	127		49%	85%	86%	91%		7%		
BUS	D010.	163	158	163		0%	87%	89%	94%		8%		
BUS	D018.	105	101	100		-5%	90%	90%	94%		4%		
CIS	D003.	49	40	47		-4%	92%	95%	96%		4%		
COMM	D001.	240	291	302		26%	91%	91%	92%		1%		
COMM	D010.	99	113	142		43%	91%	97%	95%		4%		
ECON	D001.	168	190	205		22%	89%	92%	91%		2%		
ECON	D002.	152	162	185		22%	94%	91%	92%		-2%		
ESCI	D001.	91	115	102		12%	95%	94%	96%	\ /	1%		
EWRT	D001A	449	522	560		25%	90%	91%	86%		-4%		
EWRT	D001B	39	32	39		0%	90%	88%	90%		0%		
EWRT	D002.	375	397	425		13%	90%	89%	92%	_/	2%		
HIST	D017B	62	71	61		-2%	97%	93%	93%		-4%		
HIST	D017C	75	84	74		-1%	83%	82%	88%	_/	6%		
HUMI	D001.	260	258	260		0%	90%	92%	90%		0%		
MATH	D031/41.	123	77	86		-30%	69%	78%	73%		6%		
MATH	D032/42.	56	42	45		-20%	73%	90%	82%		12%		
MATH	D001A	51	139	98		92%	76%	81%	89%		17%		
MATH	D001B	56	96	79		41%	79%	86%	92%		16%		
MATH	D001C	37	37	43	_/	16%	81%	84%	93%		15%		
NUTR	D010.	48	72	47		-2%	90%	93%	91%		1%		
PHIL	D001.	64	81	96		50%	91%	84%	84%		-8%		
POLI	D001.	174	167	159		-9%	90%	86%	84%		-7%		
PSYC	D001.	247	278	306		24%	90%	91%	93%		3%		
SOC	D001.	112	132	130		16%	94%	94%	91%		-3%		

Legend:

= Increase or Flat

Overall Findings for Precalculus:

- The findings are more varied for MATH41 than MATH10 students, in that students enrolling in a GE courses after having completing MATH41, is split between increases in some courses and decreases in others.
- However, when students complete MATH41, they enrolled at a higher rate in MATH1A and success rates increased in this course even with the additional enrollments.
- When students complete MATH41 they also enroll at a higher rate in EWRT1A, though success rates decreased for MATH41 students in EWRT1A.

Of the top 28 courses in which students enrolled, who passed MATH41 or MATH31, over the past three years:

- Enrollment into MATH1A increased by 794%, from 17 to 152, while success rates increased by 21% from 71% to 86%.
- Enrollment into MATH32/42 decreased by 30%, though success rates increased 9% from 76% to 83%.
- Enrollment into EWRT01A saw an increase of 5%, while success rates decreased 10% from 92% to 83%.
- Enrollment into EWRT002 saw a decrease of 19%, and success rates decreased 2% from 87% to 85%.
- Enrollment into COMM001 saw an increase of 22%, though success rates decreased 10%, from 97% to 87%.
- Enrollment into CIS22B increased by 20% and success rates increased by 17% from 63% to 74%.

Table. 2. Students who Passed Precalculus

	_	Enrollment						Success					
		Fall	Fall	Fall			Fall	Fall	Fall				
		2018 -	2019 -	2020 -			2018 -	2019 -	2020 -				
		Spring	Spring	Spring		%	Spring	Spring	Spring		%		
		2019	2020	202 I	Trend	Change	2019	2020	202 I	Trend	Change		
ACCT	D001A	61	48	57		-7%	85%	85%	81%		-5%		
ACCT	D001B	37	32	28		-24%	92%	91%	93%	\ /	1%		
ANTH	D001.	39	35	32		-18%	100%	91%	91%		-9%		
ARTS	D001A	24	32	26	/	8%	83%	81%	96%		16%		
ASTR	D004.	56	39	30		-46%	93%	85%	83%		-11%		
BIOL	D010.	35	44	27		-23%	89%	95%	74%		-17%		
BUS	D010.	52	48	52		0%	92%	96%	87%		-5%		
BUS	D018.	33	23	22		-33%	100%	100%	91%		-9%		
CHEM	D001A	76	45	37		-51%	76%	78%	65%		-14%		
CHEM	D025.	84	74	49		-42%	85%	80%	82%		-4%		
CIS	D022A	88	82	88		0%	85%	78%	72%		-15%		
CIS	D022B	35	36	42		20%	63%	58%	74%	_/	17%		
COMM	D001.	73	67	89	_/	22%	97%	96%	87%		-10%		
COMM	D010.	43	29	45	\/	5%	93%	90%	93%		0%		
ECON	D001.	96	69	65		-32%	93%	93%	94%		1%		
ECON	D002.	69	55	47		-32%	91%	95%	94%		3%		
ESCI	D001.	37	36	34		-8%	97%	83%	97%	\/	0%		
EWRT	D001A	238	224	251	\ /	5%	92%	91%	83%		-10%		
EWRT	D002.	201	176	163		-19%	87%	91%	85%		-2%		
HIST	D017C	25	29	26		4%	80%	93%	81%		1%		
HUMI	D001.	110	94	92		-16%	88%	93%	85%		-3%		
MATH	D032/42.	408	297	285		-30%	76%	85%	83%		9%		
MATH	D001A	17	35	152		794%	71%	94%	86%		21%		
NUTR	D010.	20	13	12		-40%	85%	100%	83%		-2%		
PHIL	D001.	27	16	18		-33%	78%	88%	78%		0%		
POLI	D001.	50	58	43		-14%	90%	79%	88%		-2%		
PSYC	D001.	92	78	71		-23%	93%	91%	86%		-8%		
SOC	D001.	31	23	24		-23%	84%	83%	88%		5%		

Legend: = Increase or Flat

Includes students who passed Math41/31 in the fall term and their enrollment and success in all other courses in fall, winter and spring of the same year.