# De Anza College Office of Institutional Research and Planning

To: AB 705 Committee

From: Mallory Newell, De Anza Researcher

Date: 5/13/2019

**Subject:** Analysis of Success, Withdraw and Drop Rates after AB705 Changes – Winter 2019

This analysis compares success, withdraw and drop rates in EWRT1A, LART250, MATH10 and MATH41 courses over the past 5 winter terms. Rates are disaggregated by modality (face to face, online, hybrid) and Math Performance Success (MPS) sections. Overall rates as well as those disaggregated by ethnicity, EOPS and DSPS status are included as well as distribution by letter grade and success rates by section over the past 5 winter terms.

Success include A, B, C, and P grades. Success rate are the number of A, B, C, P grades divided by total enrolled students in the course. Successful completions or volume of completions are a count of A, B, C, P grades this term compared to the comparison term. Withdraw are students who withdrew from the course after census through week 8 and received a W grade. Drops are students who dropped the course before census, drops are counted even if the student enrolled in a different section of the same course.

# **Summary of Results**

**Table 1. Summary of Access and Successful Completions** 

Access via Enrollment									
Winter 2018 Winter 2019 Difference % Difference									
EWRTIA	1,230	1,520	+290	+24%					
MATH10	955	1,360	+405	+42%					
MATH41	533	491	-42	-8%					
	Succe	essful Complet	ions						
EWRTIA	995	1,170	+175	+18%					
MATH10	683	897	+214	+31%					
MATH41	346	307	-39	-11%					

- EWRT1A resulted in +290 additional students having access to the course and enrolling compared to last winter for a 24% increase.
  - This resulted in +175 additional successful completions from 995 to 1,170 successful completions for an 18% increase in successful completions.
- MATH10 resulted in +405 additional students having access to the course and enrolling compared to last winter for a 42% increase.
  - This resulted in +214 additional successful completions from 683 to 897 successful completions for a 31% increase in successful completions.
- MATH41 resulted in -42 fewer students enrolling in the course compared to last winter for an 8% decrease.
  - This resulted in -39 fewer successful completions from 346 to 307 successful completions for an 11% decrease in successful completions.

Table 2. Summary of Success, Drop and Withdraw Rates

Change from prior year									
	Success	Drop	Withdraw						
	Rate	Rate	Rate						
EWRTIA	-4%	+3%	-2%						
MATHI0	-6%	+4%	+1%						
MATH41	-2%	+4%	+2%						
Cha	inge from	5-year av	verage						
	Success	Drop	Withdraw						
	Rate	Rate	Rate						
EWRTIA	-3%	+2%	0%						
MATH10	-2%	+3%	+1%						

EWRT1A includes students simultaneously enrolled in LART250 sections.

- Overall, success, drop and withdraw rates did not fluctuate drastically, between 0%-6%, when comparing to the prior winter or to the average of the past 5 winter terms.
- Success rates decreased somewhat when comparing winter 2018 to winter 2019, though when comparing to the average of the past 5 winter terms, success rates still decreased, but at a smaller rate.
- Drop rates prior to census increased somewhat for all courses, between 2%-4%.

Table 3. Summary of Enrollment Volume, Success Rate and Success Volume – by Targeted Ethnic Groups

Change from prior year									
		Enrollment	Success	Success					
		Volume	Rate	Volume					
	Af. American	+13	+6%	+11					
EWRT1A	Filipinx	+4	-2%	+2					
	Latinx	+108	-6%	+49					
	Af. American	+20	+5%	+13					
MATH10	Filipinx	+28	0%	+18					
	Latinx	+199	-6%	+96					
	Af. American	+4	-5%	+					
MATH41	Filipinx	-6	-2%	-5					
	Latinx	+2	-3%	-3					

• The overall trend for enrollment in EWRT1A was an increase in access and enrollment for all targeted groups with the largest at +108 additional Latinx students.

- Successful completions by volume was positive for all targeted groups in EWRT1A with +49
  additional Latinx successful completions, though success rates for this groups decreased 6
  percentage points.
- The overall trend for enrollment in MATH10 was an increase in access and enrollment for all targeted groups with the largest at +199 additional Latinx students.
  - Successful completions by volume was positive for all targeted groups with +96 additional Latinx successful completions, though success rates for this groups decreased 6 percentage points.
- The overall trend for enrollment and success was rather unchanged for MATH41 for all targeted groups.

#### **Results**

#### **EWRT1A**

Table 4. EWRT1A – Success, Drop, and Withdraw Rates

	Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
	Count	Count	Rate	Count	Rate	Count	Rate
Winter 2015	1,422	1,292	79%	176	11%	156	11%
Winter 2016	1,381	1,153	83%	100	7%	87	6%
Winter 2017	1,332	1,062	80%	137	9%	127	10%
Winter 2018	1,230	995	81%	103	8%	136	11%
Winter 2019	1,520	1,170	77%	195	11%	140	9%
Average			80%		9%		9%

Includes EWRT1A sections linked to LART250.

- When looking at the past 5 winter terms, there was not much variation in drop or withdraw rates, however, success rates were lower in winter 2019 than the past 5 winters.
  - Enrollment in EWRT1A between winter 2018 and winter 2019 increased 24% from 1,230 to 1,520.
  - Success rates decreased by 4 percentage point from 81% to 77% while the percent of students who dropped the course increased 3 percentage points from 8% to 11% and students who withdrew decreased 2 percentage point from 11% to 9%.
  - Further, an additional +290 students successfully completed EWRT1A in winter 2019 compared to winter 2018 from 995 successful completions to 1,170 successful completions.

Table 5. EWRT1A + LART250 - Success Rates

	Success		Non Success		Withdraw		Total	
Group	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Students in the Coreq	98	79%	15	12%	П	9%	124	100%
Students in EWRTIA	79	64%	34	28%	10	7%	123	100%

Table 5 provides the success rates for students who were in the EWRT1A with the required corequisite course of LART250.

• 79% of students passed the corequisite course while 64% passed the transfer-level course.

Table 6. EWRT1A – Success, Drop and Withdraw Rates by Modality

		Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
Mode	Term	Count	Count	Rate	Count	Rate	Count	Rate
Face to Face	Winter 2015	1,132	898	79%	121	10%	120	11%
	Winter 2016	1,032	854	83%	61	6%	60	6%
	Winter 2017	1,025	841	82%	83	7%	87	8%
	Winter 2018	894	718	80%	59	6%	100	11%
	Winter 2019	1,175	901	77%	136	10%	103	9%
Hybrid	Winter 2015	156	130	83%	10	6%	15	10%
	Winter 2016	211	197	93%	14	6%	4	2%
	Winter 2017	111	75	68%	18	14%	9	8%
	Winter 2018	178	160	90%	19	10%	8	4%
	Winter 2019	126	97	77%	12	9%	П	9%
Online	Winter 2015	134	101	75%	45	25%	21	16%
	Winter 2016	138	102	74%	25	15%	23	17%
	Winter 2017	196	146	74%	36	16%	31	16%
	Winter 2018	158	117	74%	25	14%	28	18%
	Winter 2019	219	172	79%	47	18%	26	12%

Includes students enrolled in EWRT1A + LART250

- Success rates for face to face and hybrid sections decreased from winter 2018 to winter 2019, face to face by 3 percentage points from 80% to 77% and hybrid sections decreased by 13 percentage points from 90% to 77%. Success rates for online sections increased 5 percentage points from 74% to 79%.
- Drops in face to face and online sections increased but decreased for hybrid sections. Between winter 2018 and winter 2019 drops in face to face increased 4 percentage points from 6% to 10% while online increased 4 percentage points from 14% to 18%, while drops in hybrid sections decreased 1%.
- Withdraw rates in face to face and online sections decreased but increased for hybrid sections. Face to face decreased 2 percentage points from 11% to 9% while online decreased 6 percentage points from 18% to 12%, while hybrid sections increased 5 percentage points from 4% to 9%.

Table 7. EWRT1A - Success Rates

	Suc	cess	Non S	Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent	
Winter 2015	1,129	79%	137	10%	156	11%	1,422	100%	
Winter 2016	1,153	83%	141	10%	87	6%	1,381	100%	
Winter 2017	1,062	80%	143	11%	127	10%	1,332	100%	
Winter 2018	995	81%	99	8%	136	11%	1,230	100%	
Winter 2019	1,170	77%	210	14%	140	9%	1,520	100%	
Average		80%		11%		9%		100%	

- Success and non success rates were lower in winter 2019 than the past 5 winter terms while withdraw rates decreased comparatively.
  - Success rates from winter 2018 to winter 2019 decreased 3 percentage point from 81% to 77% though overall successful completions increased from 995 to 1,170. Non success rates increased 6 percentage points and withdrawal rates improved by 2 percentage point from 11% to 9%.

Table 8. EWRT1A - Success and Withdraw Rates by Ethnicity

		Enrollment	Success	Success	Withdraw	Withdraw
	Term	Count	Count	Rate	Count	Rate
African	Winter 2018	43	26	60%	9	21%
American	Winter 2019	56	37	66%	5	9%
Asian	Winter 2018	474	418	88%	34	7%
Asidii	Winter 2019	582	491	84%	35	6%
Eilininy	Winter 2018	103	83	81%	11	11%
Filipinx	Winter 2019	107	85	79%	6	6%
Latinx	Winter 2018	402	303	75%	59	15%
Laumx	Winter 2019	510	352	69%	68	13%
Native	Winter 2018	3	2	67%		
American	Winter 2019	8	4	50%	2	25%
Pacific	Winter 2018	17	9	53%	5	29%
Islander	Winter 2019	14	11	79%		
White	Winter 2018	173	141	82%	17	10%
	Winter 2019	229	178	78%	22	10%
Decline to	Winter 2018	15	13	87%	1	7%
State	Winter 2019	14	12	86%	2	14%

• Success rates within each ethnic group comparing winter 2018 to winter 2019 improved for African American and Pacific Islander students but decreased for all other groups. However, overall successful

- completions increased for African American (+11), Asian (+73), Filipinx (+2), Latinx (+49), Native American (+2), and White (+37).
- Withdraw rates within each group improved for all groups with the exception of Whites students which remained the same.

Table 9. EWRT1A – Success by EOPS Status

		Enrollment	Success	Success
		Count	Count	Rate
Winter	EOPS	53	47	89%
2015	Non EOPS	1,369	1,082	79%
Winter	EOPS	73	66	90%
2016	Non EOPS	1,308	1,087	83%
Winter	EOPS	64	54	84%
2017	Non EOPS	1,268	1,008	79%
Winter	EOPS	74	65	88%
2018	Non EOPS	1,156	930	80%
Winter	EOPS	66	54	82%
2019	Non EOPS	1,454	1,116	77%

• When comparing EOPS students to non EOPS students in EWRT1A courses, EOPS students on average exhibit higher success rates than their counterparts. In winter 2019 this was also the case, 82% compared to 77% respectively.

Table 9. EWRT1A – Success by DSPS Status

			Success	%
		Enrollment	Count	Success
Fall 2014	DSPS	36	31	87%
	Non DSPS	1,386	1,098	81%
Fall 2015	DSPS	28	23	69%
	Non DSPS	1,353	1,130	81%
Fall 2016	DSPS	40	34	83%
Tall 2016	Non DSPS	1,292	1,028	78%
Fall 2017	DSPS	29	24	80%
Tall 2017	Non DSPS	1,201	971	80%
Fall 2018	DSPS	55	41	75%
Fall 2018	Non DSPS	1,465	1,130	77%

• When comparing DSPS students to non DSPS students in EWRT1A courses, DSPS students on average have the same success rates as their counterparts. In winter 2019, DSPS students had a somewhat similar success rate, 75% compared to 77% respectively.

Table 11. EWRT1A - Success by High School GPA - Winter 2019

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
2.6 or Above	292	79%	42	12%	27	9%	361	100%
2.59 - 1.9	170	64%	56	23%	32	13%	258	100%
Less than 1.9	62	60%	27	24%	12	15%	101	100%
No GPA on File	646	81%	85	11%	69	11%	800	100%
Total	1,170	77%	210	14%	140	9%	1,520	100%

Includes only actual HSGPA from CalPass.

Table 10 displays the success rates by GPA band for students enrolled in EWRT1A in winter 2019.

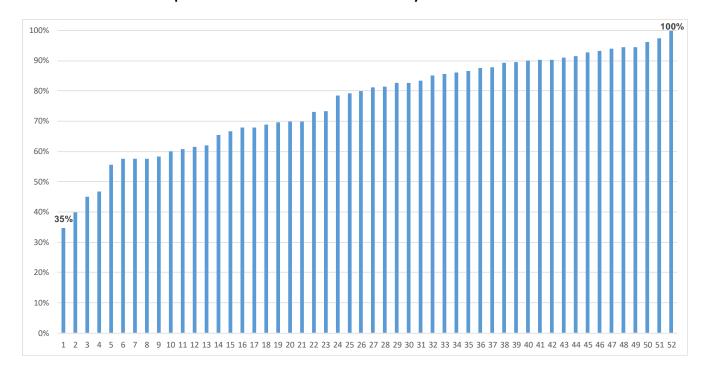
- Students with a HSGPA of 2.6 or above had a success rate of 79%
- Students with a HSGPA of 2.59 1.9 had a success rate of 64%
- o Students with less than a 1.9 HSGPA had a success rate of 60%
- Students who we did not have HSGPA data for had a success rate of 81%

45%
40%
35%
20%
15%
10%
A B C D F W

Winter 2019 Winter 2018 Winter 2017 Winter 2016 Winter 2015

**Graph 1. EWRT1A Grade Distribution by Term** 

Graph 1 shows a distribution of the percent of letter grades by term for all sections over the past 5 winter terms. The highest rate of grades given in EWRT1A are A grades ranging from 35% to 41% of all grades, followed by B grades which range from 26% to 31% of all grades, then C grades ranging from 10%-13%, and W grades ranging from 6% -11%.



Graph 2. EWRT1A Distribution of Success by Section – Winter 2019

Graph 2 shows a distribution of course success by section for EWRT1A sections in winter 2019. Success rates ranged from 35% to 100%. Four sections had a success rate below 50%, six sections between 50%-60%, eleven sections between 61%-70%, five sections between 71%-80%, sixteen sections between 81-90% and eleven sections between 91%-100%.

## MATH10

Table 12. MATH10 - Success, Drop, and Withdraw Rates

	Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
	Count	Count	Rate	Count	Rate	Count	Rate
Winter 2015	1,060	726	68%	148	12%	142	13%
Winter 2016	971	632	65%	174	15%	163	17%
Winter 2017	945	628	66%	175	16%	167	18%
Winter 2018	955	683	72%	150	14%	157	16%
Winter 2019	1,360	897	66%	302	18%	230	17%
Average			68%		15%		16%

- Overall, there was not much variation in success or withdraw rates when comparing fluctuations over the past 5 winter terms, though drops were higher in winter 2019 than prior winter terms.
  - o Enrollment in MATH10 between winter 2018 and winter 2019 increased 42% from 955 to 1,360.
  - Success rates remained rather consistent to prior years, but dropped 6 percentage points from the prior winter term.

 Successful completions of MATH10 increased +405, from 683 successful completions in winter 2018 to 897 successful completions in winter 2019.

Table 13. MATH10 - Drop and Withdraw Rates by Modality

		Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
Mode	Term	Count	Count	Rate	Count	Rate	Count	Rate
Face to Face	Winter 2015	920	619	67%	122	12%	124	13%
	Winter 2016	835	542	65%	144	15%	137	16%
	Winter 2017	734	484	66%	142	16%	139	19%
	Winter 2018	774	558	72%	123	14%	124	16%
	Winter 2019	983	657	67%	232	19%	151	15%
	Average			67%		15%		16%
MPS	Winter 2015	61	58	95%	2	3%	1	2%
	Winter 2016	61	56	92%	I	2%	2	3%
	Winter 2017	96	84	88%	5	5%	5	5%
	Winter 2018	88	79	90%	7	7%	3	3%
	Winter 2019	252	194	77%	37	13%	23	9%
	Average			88%		6%		4%
Online	Winter 2015	79	49	62%	24	23%	17	22%
	Winter 2016	75	34	45%	29	28%	24	32%
	Winter 2017	115	60	52%	28	20%	23	20%
	Winter 2018	93	46	49%	20	18%	30	32%
	Winter 2019	125	46	37%	33	21%	56	45%
	Average			49%		22%		30%

- Success rates for face to face sections decreased five percentage points from winter 2018 to winter 2019 from 72% to 67% while success rates for MPS sections also decreased by 13 percentage points from 90% to 77%.
- Drop rates for MATH10 increased for all modalities as did withdraw rates, with the greatest increase in withdraws for online sections.
- For MPS sections, while success, drop and withdraw rates decreased from the prior winter term, success rates remained 10 percentage points higher than non-MPS face to face sections and 40 percentage points higher than non-MPS online sections, and drop and withdraw rates were much lower comparatively as well. MPS sections increased from 3 in winter 2018 to 8 section in winter 2019.

Table 14. MATH10 - Success Rates

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Winter 2015	726	68%	192	18%	142	13%	1,060	100%
Winter 2016	632	65%	176	18%	163	17%	971	100%
Winter 2017	628	66%	150	16%	167	18%	945	100%
Winter 2018	683	72%	115	12%	157	16%	955	100%
Winter 2019	897	66%	233	17%	230	17%	1,360	100%
Average		67%		16%		16%		100%

- Success, non success and withdraw rates overall were consistent over the past 5 winter terms.
- Successful completions of MATH10 increased +214, from 683 successful completions in winter 2018 to 897 successful completions in winter 2019.

Table 15. MATH10 – Success and Withdraw Rates by Ethnicity

		Enrollment	Success	Success	Withdraw	With draw
	Term	Count	Count	Rate	Count	Rate
African	Winter 2018	29	15	52%	4	14%
American	Winter 2019	49	28	57%	14	29%
Asian	Winter 2018	431	337	78%	48	11%
Asiaii	Winter 2019	514	379	74%	61	12%
Filipinx	Winter 2018	78	49	63%	18	23%
гшршх	Winter 2019	106	67	63%	23	22%
Latinx	Winter 2018	236	145	61%	55	23%
Lauiix	Winter 2019	435	241	55%	98	23%
Native	Winter 2018	3	I	33%	2	67%
American	Winter 2019	11	5	45%	5	45%
Pacific	Winter 2018	2				
Islander	Winter 2019	14	8	57%	I	7%
White	Winter 2018	163	124	76%	30	18%
vville	Winter 2019	216	156	72%	28	13%
Decline	Winter 2018	13	12	92%		
to State	Winter 2019	15	13	87%		

- Success rates within each ethnic group comparing winter 2018 to winter 2019 improved for African American, Native American and Decline to State, remained the same for Filipinx, and decreased for Asian, Latinx and White.
  - However, overall successful completions increased for all groups: African American (+13), Asian (+42), Filipinx (+28), Latinx (+96), Native American (+4), White (+32) and Decline to State (+1).

Table 16. MATH10 – Success by EOPS Status

		Enrollment	Success	Success
		Count	Count	Rate
Winter	EOPS	46	39	85%
2015	Non EOP	1,014	687	68%
Winter	EOPS	38	30	79%
2016	Non EOP	933	602	65%
Winter	EOPS	49	39	80%
2017	Non EOP	896	589	66%
Winter	EOPS	55	42	76%
2018	Non EOP	900	641	71%
Winter	EOPS	60	44	73%
2019	Non EOP	1,300	853	66%

• When comparing EOPS students to non-EOPS students in MATH10 courses, EOPS students overall exhibit higher success rates than their counterparts. In winter 2019, EOPS students had a success rate of 73% compared to their non-EOPS counterparts at 66% success.

Table 17. MATH10 – Success by DSPS Status

			Success	%
		Enrollment	Count	Success
Winter	DSPS	25	14	56%
2015	Non DSPS	1,035	712	69%
Winter	DSPS	23	15	65%
2016	Non DSPS	948	617	65%
Winter	DSPS	30	20	67%
2017	Non DSPS	915	608	66%
Winter	DSPS	22	14	64%
2018	Non DSPS	933	669	72%
Winter	DSPS	43	27	63%
2019	Non DSPS	1,317	870	66%

 When comparing DSPS students to non-DSPS students in MATH10 courses, DSPS students overall exhibit somewhat lower success rates than their counterparts by 5 percentage points. In winter 2019, success rates for DSPS students was 3 percentage points lower at 63% compared to their non-DSPS counterparts at 66% success.

Table 18. MATH10 - Success by High School GPA - Winter 2019

	Success		Non Success		With	draw	Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.0 or higher	166	81%	21	10%	19	9%	206	100%
2.3-2.9	140	57%	58	24%	45	19%	243	100%
Less than 2.3	89	48%	46	24%	53	28%	188	100%
No GPA	502	69%	108	15%	113	16%	723	100%
Total	897	66%	233	17%	230	17%	1,360	100%

Includes only actual HSGPA from CalPass.

Table 16 displays the success rates by GPA band for students enrolled in MATH10 in winter 2019.

- Students with a HSGPA of 3.0 or higher had a success rate of 81%
- Students with a HSGPA of 2.3-2.9 had a success rate of 57%
- Students with less than a 2.3 HSGPA had a success rate of 48%
- Students who we did not have HSGPA data for had a success rate of 69%

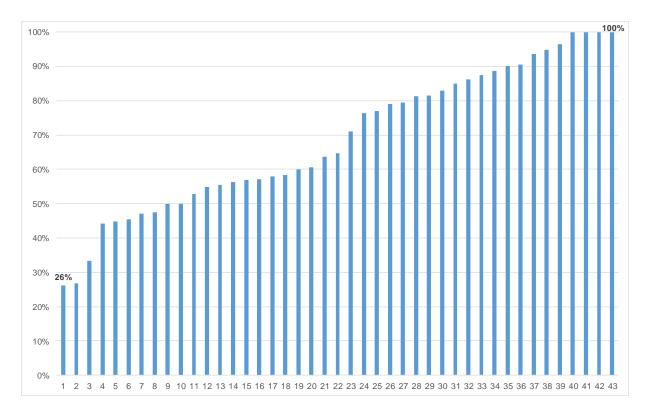
35%
20%
15%
10%
A B C D F W

Winter 2019 Winter 2018 Winter 2017 Winter 2016 Winter 2015

**Graph 3. MATH10 Grade Distribution by Term** 

Graph 3 shows a distribution of percent of letter grades by term for all sections of MATH10 offered over the past 5 winter terms. The highest awarded letter grade are A grades ranging from 23%-30% of all grades, followed by B grades ranging from 22%-25%, then C grades ranging from 18%-22% then W grades ranging from 10%-15%.

Graph 4. MATH10 Distribution of Success by Section - Winter 2019



Graph 4 shows a distribution of course success by section for MATH10 sections in winter 2019. Success rates ranged from 26% to 100%. Eight sections had a success rate below 50%, eleven sections between 50%-60%, three sections between 61%-70%, five sections between 71%-80%, nine sections between 81-90% and seven sections between 91%-100%.

#### MATH41

Table 19. MATH41 - Success, Drop, and Withdraw Rates

		Success	Success	Drop	Drop	Withdraw	Withdraw
	Enrollment	Count	Rate	Count	Rate	Count	Rate
Winter 2015	626	348	56%	66	10%	129	21%
Winter 2016	599	346	58%	82	12%	97	16%
Winter 2017	679	397	58%	98	13%	142	21%
Winter 2018	533	346	65%	78	13%	82	15%
Winter 2019	491	307	63%	102	17%	83	17%
Average			60%		13%		18%

- Overall, there was not much variation in enrollment, success or withdraw rates when comparing fluctuations over the past 5 years, though drop rates increased above past trends in winter 2019.
  - o Enrollment in MATH41 between winter 2018 and winter 2019 decreased 8% from 533 to 491.

 Success rates decreased to 63% from 65% in winter 2019 while the percent of students who dropped the course increased 4 percentage point from 13% to 17% and students who withdrew increased 2 percentage point from 15% to 17%.

Table 20. MATH41 - Success Rates

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Winter 2015	348	56%	149	24%	129	21%	626	100%
Winter 2016	346	58%	156	26%	97	16%	599	100%
Winter 2017	397	58%	140	21%	142	21%	679	100%
Winter 2018	346	65%	105	20%	82	15%	533	100%
Winter 2019	307	63%	101	21%	83	17%	491	100%
Average		60%		22%		18%		100%

• Success, non success and withdraw rates overall were very consistent over the past 5 winter terms as well as non success rates.

Table 21. MATH41 – Success, Drop and Withdraw Rates by Modality

		Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
Mode	Term	Count	Count	Rate	Count	Rate	Count	Rate
Face to Face	Winter 2015	626	348	56%	66	10%	129	21%
	Winter 2016	599	346	58%	82	12%	97	16%
	Winter 2017	679	397	58%	98	13%	142	21%
	Winter 2018	533	346	65%	78	13%	82	15%
	Winter 2019	453	287	63%	101	18%	75	17%
	Average			60%		13%		18%
MPS	Winter 2019	38	20	53%	ı	3%	8	21%

• Success for 1 MPS section in winter fall 2019 was 53% while the non-MPS sections were 63%.

Table 22. MATH41 – Success and Withdraw Rates by Ethnicity

		Enrollment	Success	Success	Withdraw	Withdraw
		Count	Count	Rate	Count	Rate
African	Winter 2018	18	9	50%	5	28%
American	Winter 2019	22	10	45%	5	23%
Asian	Winter 2018	259	195	75%	25	10%
Asian	Winter 2019	237	166	70%	28	12%
Eilininy	Winter 2018	37	27	73%	4	11%
Filipinx	Winter 2019	31	22	71%	6	19%
Latinx	Winter 2018	119	54	45%	29	24%
Launx	Winter 2019	121	51	42%	30	25%
Native	Winter 2018	2	I	50%		
American	Winter 2019	2	I	50%	1	50%
Pacific	Winter 2018	7	3	43%	1	14%
Islander	Winter 2019	3	3	100%		
White	Winter 2018	82	50	61%	17	21%
vviille	Winter 2019	70	52	74%	11	16%
Decline	Winter 2018	9	7	78%	1	11%
to State	Winter 2019	5	2	40%	2	40%

• Success rates within each ethnic group comparing winter 2018 to winter 2019 improved for Pacific Islander and White students, but decreased for all other groups.

Table 23. MATH41 – Success by High School GPA – Winter 2019

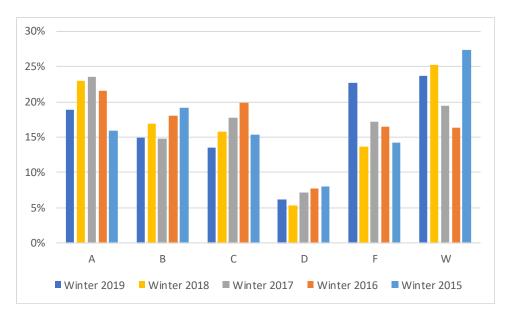
	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.4 or higher	36	88%	3	7%	2	5%	41	100%
3.4-2.6 but no Calculus	63	58%	24	21%	22	21%	109	100%
2.6 or higher and Calculus	12	67%	5	28%	1	6%	18	100%
Less than 2.6	47	53%	22	24%	20	22%	89	100%
No GPA	149	64%	47	20%	38	16%	234	100%
Total	307	63%	102	21%	83	17%	491	100%

Includes only actual HSGPA from CalPass.

Table 21 displays the success rates by GPA band for students enrolled in MATH41 in winter 2019.

- o Students with a HSGPA of 3.4 or higher had a success rate of 88%
- Students with a HSGPA of 3.4-2.6 but no Calculus enrollment in high school had a success rate of 58%

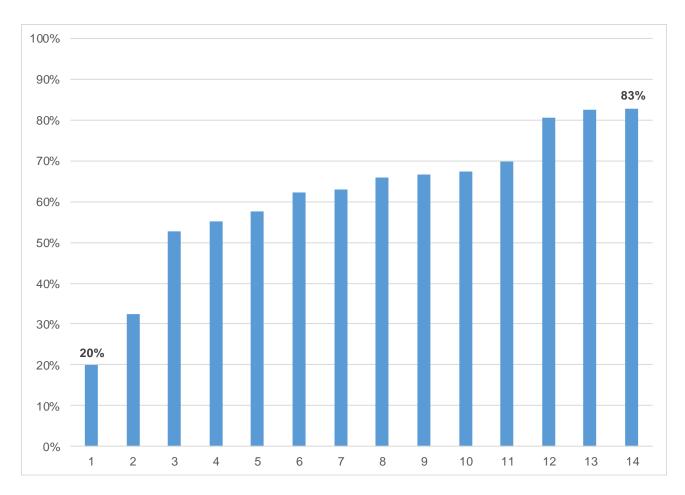
- Students with a 2.6 or higher HSGPA and enrolled in Calculus had a success rate of 67%
- Students with less than a 2.6 HSGPA had a 53% success rate
- Students who we did not have HSGPA data for had a success rate of 64%



**Graph 4. MATH41 Grade Distribution by Term** 

Graph 5 shows a distribution of percent of letter grades by term for all sections of MATH41 offered over the past 5 winter terms. The highest awarded letter grade on average over the past 5 winter terms are W grades ranging from 16% to 27% of all grades, followed by A grades ranging from 16%-24%, then B grades ranging from 15%-18%, then F grades ranging from 14%-23% then C grades ranging from 14%-20%.

**Graph 6. MATH41 Distribution of Success by Section – Winter 2019** 



Graph 6 shows a distribution of course success by section for MATH41 sections in winter 2019. Success rates ranged from 20% to 83%. Two sections had a success rate below 50%, three sections between 50%-60%, six sections between 61%-70%, and three sections between 71%-83%.

# Throughput Rates – as Baseline Comparison Moving Forward

## **EWRT and READ**

Table 24. EWRT, READ, LART – Throughput Rates by Starting Level

	First-time Student		Fall EWRTIA		Winter EWRTIA		Spring EWRTIA	
First Level Enrolled	C	Cohort		Completion		Completion		letion
EWRT, READ, or	Fall 17	248	0	0%	3	1%	59	24%
LART 200	Fall 16	269	0	0%	- 1	0%	68	25%
EWRT, READ, or	Fall 17	828	10	1%	349	42%	448	54%
LART 211	Fall 16	849	0	0%	309	36%	425	50%
EWRT IA	Fall 17	433	379	88%	385	89%	388	90%
EVVNIIA	Fall 16	427	355	83%	364	85%	373	87%

Throughput rates track first time students in each fall term and check to see if they successfully completed any transfer-level EWRT course over 3 quarters based on the level in which they started. The lowest level course in which the student starts is counted as the first course in the sequence. Students who start directly in EWRT1A are tracked for three terms to successful completion of EWRT1A.

- Throughput rates for students who started at the 200 level range from 24%-25%
- Throughput rates for students who started at the 211 level range from 50%-54%
- Throughput rates for EWRT1A range from 87%-90%

#### Math

Table 25. Transfer Level Math Including MATH10- Throughput Rates

Sequence	First-time Student		All Transfer MATH		All Transfer MATH		All Transfer MATH	
Begin Course	Cohort		Completion - Fall		Completion -		Completion - Spring	
MATH 210	Fall 17	315	0	0%	0	0%	0	0%
	Fall 16	299	0	0%	0	0%	0	0%
MATH 212	Fall 17	578	0	0%	2	0%	101	17%
	Fall 16	606	0	0%	2	0%	88	15%
MATH 114	Fall 17	317	1	0%	124	39%	168	53%
	Fall 16	376	- 1	0%	112	30%	148	39%
MATH 10	Fall 17	102	81	79%	85	83%	90	88%
	Fall 16	93	67	72%	71	76%	72	77%

Throughput rates track first time students in each fall term and check to see if they successfully completed any transfer-level math course over 3 quarters. Students who start directly in MATH10 are tracked for three terms to successful completion of MATH10.

- Throughput rates for MATH210 range from 0%-1%
- Throughput rates for MATH212 range from 15%-17%
- Throughput rates for MATH114 range from 39%-53%
- Throughput rates for MATH10 range from 77%-88%

Table 26. Completion of MATH41- Throughput Rates

Sequence	First-time Student		Fall MATH41		Winter MATH41		Spring MATH41	
Begin Course	Cohort		Completion		Completion		Completion	
MATH 210	Fall 17	315	0	0%	0	0%	0	0%
	Fall 16	299	0	0%	0	0%	0	0%
MATH 212	Fall 17	578	0	0%	I	0%	30	5%
	Fall 16	606	0	0%	2	0%	28	5%
MATH 114	Fall 17	317	0	0%	65	21%	86	27%
	Fall 16	376	0	0%	71	19%	94	25%
MATH 41	Fall 17	176	134	76%	140	80%	145	82%
	Fall 16	203	137	67%	154	76%	161	79%

Throughput rates track first time students in each fall term and check to see if they successfully completed MATH41 over 3 quarters. Students who start directly in MATH41 are tracked for three terms to successful completion of MATH41.

- No students who started in MATH210 successfully completed MATH41
- Throughput rates for MATH212 are 5%
- Throughput rates for MATH114 range from 25%-27%
- Throughput rates for MATH41 range from 79%-82%

#### **Background Information**

In fall 2018 the English and Math departments began to change the way they place students into courses in compliance with AB 705. Students were placed via high school transcripts. Students with a 2.6 or higher were placed directly into EWRT1A. All students were eligible to enroll in MATH10 (Statistics), and students with a 3.4 GPA or a 2.6 and had enrolled in Calculus in high school were eligible to enroll in Math41 (Pre-calculus).

Math Performance Success (MPS) is a learning community for students in MATH10 and now MATH41. It requires students to enroll in a 10-unit course opposed to a 5-unit course. Success rates have historically been high for this learning community and the numbers of sections offered continues to expand.

It should be noted that the overall number of placements in fall 2018 is significantly higher, this is due to students being re-assessed based on their high school transcripts going back one full year and that applying to their fall 2018 placement. Further, all students who applied in fall 2018 were automatically given a placement if high school transcript data was available.

In fall 2017 all students were required to take a placement test. In fall 2018, students were placed based on their high school transcript information but could choose to take a placement test. The highest placement is what is used in this analysis. Students without a high school transcript are required to take a placement test.