

# De Anza College Office of Institutional Research and Planning

**To:** AB 705 Committee

**From:** Mallory Newell, De Anza Researcher

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

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This analysis compares success, withdraw and drop rates in EWRT1A, EWRT1A + LART250 and EWRT1AS as well as MATH10, MATH10 + MATH210X, MATH10.MPS and MATH41, MATH41 + MATH231, and MATH41.MPS as well as MATH1A courses over the past five fall terms. Rates are disaggregated by modality (face to face, online, hybrid) and Math Performance Success (MPS) sections when appropriate. Overall rates as well as those disaggregated by ethnicity and DSPS status are included as well as distribution by high school GPA, letter grade and success rates by section.

Success include A, B, C, and P grades, Non Success include D, F, NP, FW and I grades, while Withdraw includes W, MW and EW grades. The success rate is 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.

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## Summary of Results

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

Access via Enrollment				
	Fall 2018	Fall 2019	Difference	% Difference
EWRT1A	1,929	2,667	+738	+38%
MATH10	1,780	1,749	-31	-2%
MATH41	776	730	-46	-6%
MATH1A	559	758	+199	+36%
Successful Completions				
EWRT1A	1,537	2,061	+524	+34%
MATH10	1,096	1,181	+13	+8%
MATH41	517	429	-88	-17%
MATH1A	374	528	+154	+41%

Includes standalone courses and those connected to a corequisite course.

- **EWRT1A resulted in +738 additional students having access to the course and enrolling** compared to last fall for a 38% increase.
  - **This resulted in +524 additional successful completions of EWRT1A** – from 1,537 to 2,061 successful completions for a 34% increase in successful completions.
- MATH10 flattened out after a large increase in enrollment in fall 2018. While **MATH10 enrollments decreased by 2%, successful completions increased by 8%**, suggesting MATH10 has stabilized in enrollment but success continues to improve.
- **MATH41 saw a decrease in enrollment of 6% and successful completions also decreased by 17%.**

- **MATH1A resulted in +199 additional students having access to Calculus and enrolling** compared to last fall for a 36% increase.
  - **This resulted in +154 additional successful completions of MATH1A** – a 41% increase.

**Table 2. Summary of Success, Drop and Withdraw Rates**

Change from prior year			
	Success Rate	Drop Rate	Withdraw Rate
EWRT1A	-3%	0%	-1%
MATH10	+6%	-2%	-6%
MATH41	-8%	+2%	+1%
MATH1A	+3%	+4%	-4%
Change from 5-term average			
	Success Rate	Drop Rate	Withdraw Rate
EWRT1A	-2%	-1%	-1%
MATH10	+4%	0%	-5%
MATH41	-3%	+1%	-1%
MATH1A	0	+3%	-2%

Includes standalone courses and those connected to a corequisite or stretch course.

- Success rates decreased 3 percentage points for EWRT1A compared to the prior year, increased 6 percentage points for MATH10, decreased 8 percentage points for MATH41 and increased 3 percentage points for MATH1A.
  - When comparing to the average of the past five fall terms, success rates for EWRT1A decreased 2 percentage points, MATH10 increased 4 percentage points, MATH41 decreased 3 percentage points and MATH1A remained flat.
- Drop rates prior to census remained flat for EWRT1A when comparing to the prior fall, decreased by 2 percentage points for MATH10, increased by 2 percentage points for MATH41 and increased 4 percentage points for MATH1A.
- Withdraw rates between census and week 8 decreased 1 percentage point for EWRT1A compared to the prior fall, decreased 6 percentage points for MATH10, increased 1 percentage point for MATH41 and decreased 4 percentage points for MATH1A.

**Table 3. Summary of Enrollment Volume, Success Rate and Success Volume – for African American, Filipinx, and Latinx Students**

		Change from prior year		
		Enrollment	Success	Success
		Volume	Rate	Volume
EWRT1A	Af. American	+47	-2%	+33
	Filipinx	+27	-1%	-20
	Latinx	+285	0%	+191
MATH10	Af. American	-4	-4%	+5
	Filipinx	-13	+17%	+17
	Latinx	-62	4%	-5
MATH41	Af. American	+8	-11%	+2
	Filipinx	-3	-13%	-9
	Latinx	+9	-8%	-2

Includes standalone courses and those connected to a corequisite or stretch course.

- **EWRT1A saw the greatest gains in access and enrollment with 285 additional Latinx students enrolling in EWRT1A in fall 2019 over fall 2018. Successful completions for Latinx students also increased by 191 additional successful completions of EWRT1A.**

## EWRT1A Results

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

	Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
	Count	Count	Rate	Count	Rate	Count	Rate
Fall 2015	1,554	1,259	81%	159	9%	134	9%
Fall 2016	1,567	1,221	78%	145	8%	147	9%
Fall 2017	1,519	1,223	81%	180	11%	146	10%
Fall 2018	1,929	1,537	80%	172	8%	167	9%
Fall 2019	2,667	2,061	77%	226	8%	210	8%
Average			79%		9%		9%

Includes all EWRT1A courses - standalone courses and those connected to a corequisite or stretch course.

- When looking at the past five fall terms, success rates dropped a bit while there was not much variation in drop or withdraw rates in fall 2019 than the past five fall terms.
  - Enrollment in EWRT1A between fall 2018 and fall 2019 increased 38% from 1,929 to 2,667, including the Stretch and Bundled sections.
  - Success rates for all EWRT1A sections, including the Stretch and Bundled sections decreased 3 percentage points while drop rates remained unchanged at 8% and withdraw rates decreased 1% at 8%.
  - An additional +524 students successfully completed EWRT1A in fall 2019 compared to fall 2018 from 1,537 successful completions to 2,061 successful completions.

**Table 5. EWRT1A Success Rates by Course Type**

Group	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
EWRT1A Stretch	126	72%	30	17%	20	11%	176	100%
EWRT1A Bundle	484	71%	157	23%	43	6%	684	100%
EWRT1A Standalone	1,451	80%	209	12%	147	8%	1,807	100%
<b>Total</b>	<b>2,061</b>	<b>77%</b>	<b>396</b>	<b>15%</b>	<b>210</b>	<b>8%</b>	<b>2,667</b>	<b>100%</b>

Table 5 provides the success rates for students in EWRT1A with varying levels of support.

- Success rates in EWRT1AS (Stretch) were 72% with 176 total enrollments or 7% of all EWRT1A enrollments.
- Success rates in EWRT1A +LART 250 (Bundle) were 71% with 684 total enrollments or 26% of all EWRT1A enrollments.
- Success rates in standalone EWRT1A sections had the highest success rates at 80% with the greatest enrollment at 1,807 total students or 68% of EWRT1A enrollment.
- It should be noted for context that even though the success rates for EWRT1A Bundle or Stretch are lower than the standalone course, one-year throughput rates for EWRT1A for students who started in EWRT, READ or LART2111 averaged 49%. Thus, throughput in one term at 71% or 72% in just one-term is significantly higher than 49% in one year. See Table 16 for details on throughput rates.

**Table 6. EWRT1AS: Stretch - Success Rates by Support Level and High School GPA**

Stretch	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
2.6 or above	17	89%	1	5%	1	5%	19	100%
2.59 - 1.9	22	73%	3	10%	5	17%	30	100%
Less than 1.9	19	53%	12	33%	5	14%	36	100%
No GPA on File	68	75%	14	15%	9	10%	91	100%
<b>Total</b>	<b>126</b>	<b>72%</b>	<b>30</b>	<b>17%</b>	<b>20</b>	<b>11%</b>	<b>176</b>	<b>100%</b>

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in EWRT1AS were highest for students with a 2.6 GPA or higher who had an 89% success rate followed by students with no GPA on file (this was the largest group) with a success rate of 75%, then students with a 2.59-1.9 GPA in high school at 73%, and students with less than a 1.9 GPA with a success rate of 53%.

**Table 7. EWRT1A: Bundle - Success Rates by Support Level and High School GPA**

Bundle	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
2.6 or above	163	82%	27	14%	10	5%	200	100%
2.59 - 1.9	80	66%	30	25%	12	10%	122	100%
Less than 1.9	38	57%	27	39%	3	4%	68	100%
No GPA on File	203	69%	73	25%	18	6%	294	100%
<b>Total</b>	<b>484</b>	<b>71%</b>	<b>157</b>	<b>23%</b>	<b>43</b>	<b>6%</b>	<b>684</b>	<b>100%</b>

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in EWRT1A.Q were highest for students with a 2.6 GPA or higher who had an 82% success rate followed by students with no GPA on file (this was the largest group) with a success rate of 69%, then students with a 2.59-1.9 GPA in high school at 66%, and students with less than a 1.9 GPA with a success rate of 57%.

**Table 8. EWRT1A: Standalone - Success Rates by Support Level and High School GPA**

Standalone	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
2.6 or above	668	87%	67	9%	29	4%	764	100%
2.59 - 1.9	86	59%	35	24%	25	17%	146	100%
Less than 1.9	45	53%	23	26%	18	20%	86	100%
No GPA on File	652	80%	84	10%	75	9%	811	100%
<b>Total</b>	<b>1,451</b>	<b>80%</b>	<b>209</b>	<b>12%</b>	<b>147</b>	<b>8%</b>	<b>1,807</b>	<b>100%</b>

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in EWRT1A standalone were highest for students with a 2.6 GPA or higher who had an 87% success rate followed by students with no GPA on file (this was the largest group) with a success rate of 80%, then students with a 2.59-1.9 GPA in high school at 59%, and students with less than a 1.9 GPA with a success rate of 53%.

**Table 9. Distribution of Ethnic Groups by EWRT1A and EWRT1A + LART250**

Fall 2019	EWRT1A Standalone		EWRT1A + LART250		EWRT1AS	
	N	%	N	%	N	%
African American	63	3%	33	5%	16	9%
Asian	839	46%	197	29%	56	32%
Filipinx	141	8%	54	8%	8	5%
Latinx	473	26%	295	43%	74	42%
Native American	5	0%	2	0%	1	1%
Pacific Islander	15	1%	10	1%	2	1%
White	233	13%	79	12%	16	9%
Decline to State	38	2%	14	2%	3	2%
Total	1,807	100%	684	100%	176	100%

Table 9 provides the distribution of enrollment by ethnicity in each type of EWRT1A course for fall 2019.

- There is a higher percentage of African American and Latinx students enrolled in EWRT1A with additional support than in the standalone course.

**Table 10. EWRT1A – Success, Drop and Withdraw Rates by Modality**

Mode	Term	Enrollment Count	Success Count	Success Rate	Drop Count	Drop Rate	Withdraw Count	Withdraw Rate
Face to Face	Fall 2015	1,253	1,028	82%	108	8%	92	7%
	Fall 2016	1,119	906	81%	89	7%	87	8%
	Fall 2017	1,093	896	82%	112	9%	87	8%
	Fall 2018	1,374	1,113	81%	104	7%	98	7%
	Fall 2019	1,394	1,152	83%	102	7%	94	7%
Hybrid	Fall 2015	136	113	83%	6	3%	15	11%
	Fall 2016	212	152	72%	20	7%	21	10%
	Fall 2017	217	181	83%	25	10%	21	10%
	Fall 2018	279	220	79%	25	8%	33	12%
	Fall 2019	23	21	91%	4	1%	1	4%
Online	Fall 2015	165	118	72%	45	21%	27	16%
	Fall 2016	236	163	69%	36	13%	39	17%
	Fall 2017	209	146	70%	43	17%	38	18%
	Fall 2018	277	204	74%	43	13%	36	13%
	Fall 2019	390	278	71%	46	11%	52	13%

Includes standalone EWRT1A sections only.



- Success rates for online EWRT1A standalone were the lowest out of the three modalities at 71% in fall 2019, down 3 percentage points from the prior fall. Face to face sections were at 83%, down 2 percentage points from the prior fall. There appears to be only one hybrid section offered in fall 2019.

**Table 11. EWRT1A – Success and Withdraw Rates by Ethnicity**

	Term	Enrollment Count	Success Count	Success Rate	Withdraw Count	Withdraw Rate
African	Fall 2018	65	49	75%	5	8%
American	Fall 2019	112	82	73%	7	6%
Asian	Fall 2018	812	712	88%	40	5%
	Fall 2019	1,092	924	85%	60	5%
Filipinx	Fall 2018	176	142	81%	11	6%
	Fall 2019	203	162	80%	11	5%
Latinx	Fall 2018	557	380	68%	79	14%
	Fall 2019	842	571	68%	95	11%
Native American	Fall 2018	7	4	57%		0%
	Fall 2019	8	7	88%		0%
Pacific Islander	Fall 2018	16	10	63%	3	19%
	Fall 2019	27	19	70%	4	15%
White	Fall 2018	279	226	81%	29	10%
	Fall 2019	328	253	77%	31	9%
Decline to State	Fall 2018	17	14	82%		0%
	Fall 2019	55	43	78%	2	4%

Includes all EWRT1A courses - standalone courses and those connected to a corequisite or stretch course.

- Success rates within each ethnic group comparing fall 2018 to fall 2019 improved for Pacific Islander students, remained relatively stable for Filipinx and Latinx students, and declined for all other groups.
- However, **the number of overall successful completions of EWRT1A increased for all ethnic groups: African American (+33), Asian (+212), Filipinx (+20), Latinx (+191), Pacific Islander (+9), White (+27) and Decline to State (+29).**

**Table 12. EWRT1A – Success by DSPS Status**

		Enrollment	Success	%
			Count	Success
Fall 2015	DSPS	33	22	67%
	Non DSPS	1,521	1,237	81%
Fall 2016	DSPS	36	30	83%
	Non DSPS	1,531	1,191	78%
Fall 2017	DSPS	46	37	80%
	Non DSPS	1,473	1,186	81%
Fall 2018	DSPS	54	40	74%
	Non DSPS	1,875	1,497	80%
Fall 2019	DSPS	85	51	60%
	Non DSPS	2,582	2,010	78%

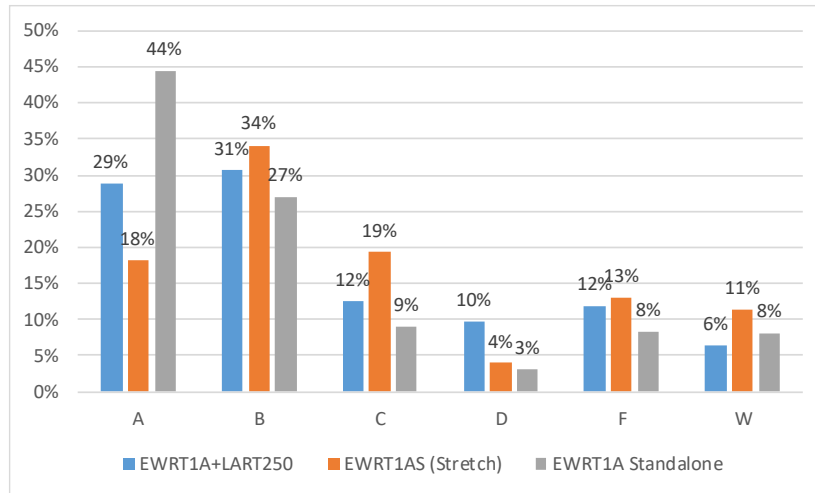
- When comparing DSPS students to non-DSPS students in EWRT1A courses, DSPS students on average exhibited somewhat lower success rates than their counterparts historically. However, **in fall 2019, success rates for DSPS students was 18 percentage points lower, suggesting that DSPS students could benefit from additional supports in transfer-level EWRT courses.**

**Table 13. EWRT1A by Course Type and Success by DSPS Status**

DSPS Students	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
EWRT1A Stretch	8	73%	3	27%	0	0%	11	100%
EWRT1A Bundle	16	44%	16	44%	4	11%	36	100%
EWRT1A Standalone	27	71%	5	13%	6	16%	38	100%
<b>Total</b>	<b>51</b>	<b>60%</b>	<b>24</b>	<b>28%</b>	<b>10</b>	<b>12%</b>	<b>85</b>	<b>100%</b>

- Success rates for DSPS in fall 2019 in the Stretch and Standalone courses were relatively high and consistent with prior fall terms (see Table 13 above), the low success rate of 44% in the Bundle brought down the overall success rate in fall 2019.
- Over 40% of DSPS students are enrolled in the Bundle course in fall 2019, which has the lowest success rate of all modalities.
- It should also be noted that the Stretch course had the highest success rate, but these students will also need to pass EWRT1T in a subsequent term in order to get transferable credit for EWRT1A, thus the overall success rate may be lower after the second term.

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

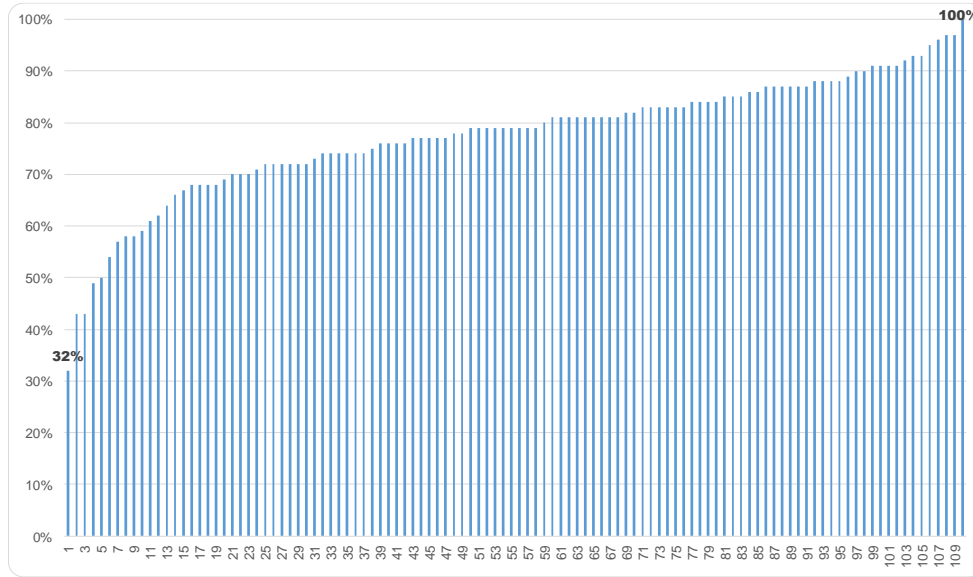


Fall 2019	A	B	C	D	F	W
EWRT1A+LART250	29%	31%	12%	10%	12%	6%
EWRT1AS (Stretch)	18%	34%	19%	4%	13%	11%
EWRT1A Standalone	44%	27%	9%	3%	8%	8%

Graph 1 above shows a distribution of the percent of letter grades by the varying types of EWRT1A course sections in fall 2019. Overall, **students in the Standalone and Bundle courses received A and B grades at the highest rate while students in the Stretch course received B and C grades at the highest rate and the highest rate of F and W grades.**

- For A grades, students in Standalone EWRT1A received the highest rate of A grades at 44% of students receiving such grade, followed by the Bundle course at 29% and the Stretch class at 18%.
- For B grades the distribution was closer by course type with students in the Stretch course receiving the highest rate of B grades at 34%, followed by the Bundle at 31% and the Standalone course at 27%.
- For C grades, students in the Stretch course received the highest rate of C grades at 19% followed by the Bundle at 12% and the lowest rate of C grades were in the Standalone course at 9%.
- For D grades, 10% of students in the Stretch course received this grade while only 3% in the Standalone and 4% in the Bundle course received a D grade.
- For F grades, the distribution was rather similar with 13% of Bundle and 12% of Stretch students receiving an F and 8% in the Standalone course.
- In regards to W grades, the lowest rate was in the Bundle course at 6% followed by the Standalone at 8% and the highest was 11% in the Stretch course.

**Graph 2. EWRT1A Distribution of Success by Section – Fall 2019**



Graph 2 above shows a distribution of course success by section for all EWRT1A sections in fall 2019. **Success rates ranged from 32% to 100%.**

**Table 14. EWRT1A Students Who Did Not Pass in Fall 2019**

Group	Enrolled	Did not	% Did not pass	Number	% Enrolled	Number	% Enrolled
	in fall 2019	pass in fall 2019		enrolled in winter 2020	in winter 2020	enrolled in EWRT1A in winter 2020	in EWRT1A in winter 2020
	#	#	%	#	%	#	%
EWRT1A Stretch	176	50	28%	33	66%	10	8%
EWRT1A Bundle	684	200	29%	171	86%	21	16%
EWRT1A Standalone	1,807	356	20%	278	78%	98	76%
Total	2,667	606	23%	482	80%	129	100%

Note: As of first week of the winter quarter, not at census.

Table 14 above looks at the students who did not pass EWRT1A in fall 2019 and their enrollment in the following term.

- 28% of students did not pass the Stretch course in fall 2019, of these students, 66% enrolled in the following term.
- 29% of students did not pass the Bundle in fall 2019, of these students, 86% were enrolled in the following term.
- 20% of students did not pass EWRT1A standalone, 78% of these students were enrolled in the following term.
- Of all students who did not pass EWRT1A in fall 2019 but enrolled in an EWRT1A section in winter 2020, 8% enrolled in a Stretch section, 16% in a Bundle and 76% in EWRT1A standalone.

## EWRT and READ – Throughput Rates

**Table 15. EWRT, READ and LART – Throughput Rates – All Starting Levels to Transfer-Level EWRT**

Sequence Begin Course - EWRT, READ, or LART	First-time Students	All Transfer EWRT Completion - Fall		All Transfer EWRT Completion -		All Transfer EWRT Completion - Spring	
Fall 2018 - All Starting Levels	<b>1,457</b>	741	<b>51%</b>	943	<b>65%</b>	1,018	<b>70%</b>
Fall 2017 - All Starting Levels	<b>1,481</b>	372	<b>25%</b>	717	<b>48%</b>	874	<b>59%</b>
Fall 2016 - All Starting Levels	<b>1,598</b>	400	<b>25%</b>	721	<b>45%</b>	913	<b>57%</b>
Fall 2015 - All Starting Levels	<b>1,619</b>	374	<b>23%</b>	720	<b>44%</b>	907	<b>56%</b>

Sequence begin course is the first course in which a student enrolled at any level in the fall term.

As displayed in Table 26 above, throughput rates for all first time students enrolled in an EWRT, READ and LART course as their first course of enrollment have increased each year with the greatest increase between fall 2017 and fall 2008 from 59% to 70%.

**Table 16. EWRT, READ and LART – Throughput Rates by Starting Level to Transfer-Level EWRT**

First Level Enrolled	First-time Student Cohort	Fall EWRT1A Completion		Winter EWRT1A Completion		Spring EWRT1A Completion		
EWRT, READ, or LART 200	Fall 18	<b>122</b>	0	<b>0%</b>	27	22%	42	34%
	Fall 17	<b>248</b>	0	<b>0%</b>	3	<b>1%</b>	59	<b>24%</b>
	Fall 16	<b>269</b>	0	<b>0%</b>	1	<b>0%</b>	68	<b>25%</b>
EWRT, READ, or LART 211	Fall 18	<b>446</b>	2	<b>0%</b>	151	<b>34%</b>	197	<b>44%</b>
	Fall 17	<b>828</b>	10	<b>1%</b>	349	<b>42%</b>	448	<b>54%</b>
	Fall 16	<b>849</b>	0	<b>0%</b>	309	<b>36%</b>	425	<b>50%</b>
EWRT 1A	Fall 18	<b>862</b>	716	<b>83%</b>	729	<b>85%</b>	744	<b>86%</b>
	Fall 17	<b>433</b>	379	<b>88%</b>	385	<b>89%</b>	388	<b>90%</b>
	Fall 16	<b>427</b>	355	<b>83%</b>	364	<b>85%</b>	373	<b>87%</b>

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 in any 200 level course or combination of courses range from 24%-34%
- Throughput rates for students who started in any 211 level course or combination of courses range from 44%-54%
- Throughput rates for EWRT1A range from 87%-90%

**Table 17. EWRT & READ– Throughput Rates by Starting Level to EWRT2**

First Level Enrolled	First-time Student		Fall EWRT2		Winter EWRT2		Spring EWRT2	
	Cohort	Completion	Completion	Completion	Completion	Completion		
EWRT, READ, or LART 200	Fall 18	122	0	0%	0	0%	15	12%
	Fall 17	248	0	0%	0	0%	2	1%
	Fall 16	269	0	0%	0	0%	0	0%
EWRT, READ, or LART 211	Fall 18	446	0	0%	0	0%	82	18%
	Fall 17	828	0	0%	1	0%	184	22%
	Fall 16	849	0	0%	0	0%	165	19%
EWRT 1A	Fall 18	862	0	0%	357	43%	460	53%
	Fall 17	433	0	0%	169	39%	224	52%
	Fall 16	427	0	0%	130	30%	167	39%
EWRT 2	Fall 18	14	12	86%	12	86%	12	86%
	Fall 17	13	11	85%	12	92%	12	92%
	Fall 16	8	8	100%	8	100%	8	100%

Throughput rates through EWRT2 track first time students in each fall term and check to see if they successfully completed EWRT2 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 EWRT2 are tracked for three terms to successful completion of EWRT2.

- Throughput rates for students who started in any 200 level course or combination of courses range from 0%-12%
- Throughput rates for students who started in any 211 level course or combination of courses range from 18%-22%
- Throughput rates for students who start in EWRT1A range from 39%-53%
- Throughput rates for students who start directly in EWRT2 range from 86%-100%

## MATH10 Results

**Table 18. MATH10 - Success, Drop, and Withdraw Rates**

	Enrollment Count	Success Count	Success Rate	Drop Count	Drop Rate	Withdraw Count	Withdraw Rate
Fall 2015	1,075	710	66%	159	13%	151	14%
Fall 2016	1,045	648	62%	165	14%	201	19%
Fall 2017	1,038	658	63%	167	14%	203	20%
Fall 2018	1,780	1,096	62%	327	16%	323	18%
Fall 2019	1,749	1,181	68%	284	14%	214	12%
Average			64%		14%		17%

Note: Includes MATH10 standalone and MATH10 + MATH210x

- **Success rates in fall 2019 were higher than success rates over the past 5 fall terms and drop and withdraw rates were lower in fall 2019 than prior terms.**
  - Enrollment in MATH10 between fall 2018 and fall 2019 remained rather stable at -2% from 1,780 to 1,749, as the largest changes for MATH10 took place in fall 2018 which saw a 61% increase in enrollment from fall 2017.

- Successful completions of MATH10 increased by +85 students, from 1,096 successful completions in fall 2018 to 1,181 successful completions in fall 2019, though success rates increased by 6 percentage points from 62% to 68%.

**Table 19. MATH10 – Success Rates by Course Type**

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATH10 + MATH210X	78	63%	31	25%	14	11%	123	100%
MATH10 MPS	131	74%	28	16%	19	11%	178	100%
MATH10 Standalone	972	67%	295	20%	181	13%	1,448	100%
Total	1,181	68%	354	20%	214	12%	1,749	100%

- While overall success rates for MATH10 were 68% in fall 2019, they varied by type of course with success rates for the standalone MATH10 course at 67%, at 63% for MATH10 with corequisite support, and at 74% for the MPS sections.
- It should be noted for context that even though the success rates for MATH10 with corequisite support is lower than the standalone course, the one-year throughput rates for MATH10 for students who started in MATH114 averaged 44%. Thus, **a one-term throughput rate of 63% is higher than 44% in one year for students starting one-level below.** See Table 38 for details on throughput rates.

**Table 20. MATH10.Q - Success Rates by Support Level and High School GPA**

Corequisite	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.0 or higher	26	90%	2	7%	1	3%	29	100%
2.9 or below	23	49%	17	35%	8	16%	48	100%
No GPA	29	63%	12	26%	5	11%	46	100%
Total	78	63%	31	25%	14	11%	123	100%

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in MATH10 with corequisite support were highest for students with a 3.0 GPA or higher who had a 90% success rate followed by students with no GPA on file with a success rate of 63%, then students with a 2.9 or lower GPA in high school at 49% (this was the largest group of students).

**Table 21. MATH10.MPS - Success Rates by Support Level and High School GPA**

MPS	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.0 or higher	27	100%					27	100%
2.9 or below	38	59%	14	21%	14	21%	66	100%
No GPA	66	78%	14	16%	5	6%	85	100%
Total	131	74%	28	16%	19	11%	178	100%

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in MATH10 MPS were highest for students with a 3.0 GPA or higher who had a 100% success rate followed by students with no GPA on file with a success rate of 78% (this was the largest group of students), then students with a 2.9 or lower GPA in high school at 59%.

**Table 22. MATH10.Standalone - Success Rates by Support Level and High School GPA**

Standalone	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.0 or higher	269	86%	31	10%	12	4%	312	100%
2.9 or below	201	49%	129	31%	85	21%	415	100%
No GPA	502	70%	135	19%	84	12%	721	100%
Total	972	67%	295	20%	181	13%	1,448	100%

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in MATH10 Standalone were highest for students with a 3.0 GPA or higher who had an 86% success rate followed by students with no GPA on file with a success rate of 70% (this was the largest group of students), then students with a 2.9 or lower GPA in high school at 49%.

**Table 23. MATH10 - Drop and Withdraw Rates by Modality**

Mode	Term	Enrollment Count	Success Count	Success Rate	Drop Count	Drop Rate	Withdraw Count	Withdraw Rate
Face to Face	Fall 2015	947	637	67%	128	12%	133	14%
	Fall 2016	769	494	64%	109	12%	147	19%
	Fall 2017	858	566	66%	129	13%	152	18%
	Fall 2018	1,436	868	60%	257	15%	268	19%
	Fall 2019	1,360	927	68%	227	14%	156	11%
	Average				65%		13%	16%
MPS	Fall 2015	50	36	72%	6	8%	5	10%
	Fall 2016	68	48	71%	4	7%	9	13%
	Fall 2017	64	48	75%	4	6%	6	9%
	Fall 2018	245	189	77%	25	37%	20	8%
	Fall 2019	178	131	74%	21	11%	19	11%
	Average			74%		14%		10%
Online	Fall 2015	78	37	47%	25	13%	13	17%
	Fall 2016	208	106	51%	52	34%	45	22%
	Fall 2017	116	44	38%	34	33%	45	39%
	Fall 2018	99	39	39%	45	31%	35	35%
	Fall 2019	88	45	51%	36	29%	25	28%
	Average			45%		28%		28%

Note: Excludes MATH10Q sections.

- Success rates for face to face sections increased 8 percentage points from fall 2018 to fall 2019 from 60% to 68% while success rates for MPS sections decreased by 3 percentage points from 77% to 74% and online success rates increased 12 percentage points from 39% to 51%.



- **Drop rates for MATH10 decreased for all modalities.** Withdraw rates decreased for face to face and online but increased for MPS.
- MPS success rates continued to remain higher than face to face sections by 6 percentage points.

**Table 24. MATH10 – Success and Withdraw Rates by Ethnicity**

	Term	Enrollment Count	Success Count	Success Rate	Withdraw Count	Withdraw Rate
African American	Fall 2018	77	40	52%	15	19%
American	Fall 2019	73	35	48%	14	19%
Asian	Fall 2018	653	509	78%	72	11%
	Fall 2019	699	589	84%	49	7%
Filipinx	Fall 2018	149	76	51%	39	26%
	Fall 2019	136	93	68%	16	12%
Latinx	Fall 2018	614	277	45%	157	26%
	Fall 2019	552	272	49%	100	18%
Native American	Fall 2018	7	4	57%	1	14%
American	Fall 2019	4	4	100%	0	0%
Pacific Islander	Fall 2018	14	6	43%	3	21%
	Fall 2019	21	12	57%	3	14%
White	Fall 2018	252	172	68%	35	14%
	Fall 2019	223	149	67%	28	13%
Decline to State	Fall 2018	14	12	86%	1	7%
	Fall 2019	41	27	66%	4	10%

Note: Includes all sections of MATH10 standalone and with support.

- Success rates within each ethnic group comparing fall 2018 to fall 2019 improved for Asian, Filipinx, Latinx, and Pacific Islander students, and decreased for African American and Decline to State and remained somewhat unchanged for White students.
- However, the number of overall successful completions increased for: Asian (+80), Filipinx (+17), Pacific Islander (+6), and Decline to State (+15).

**Table 25. MATH10 – Success by DSPS Status**

		Enrollment	Success Count	% Success
Fall 2015	DSPS	25	15	60%
	Non-DSPS	1,050	695	66%
Fall 2016	DSPS	28	15	54%
	Non-DSPS	1,017	633	62%
Fall 2017	DSPS	28	16	57%
	Non-DSPS	1,010	642	64%
Fall 2018	DSPS	55	32	58%
	Non-DSPS	1,725	1,064	62%
Fall 2019	DSPS	64	43	67%
	Non-DSPS	1,685	1,138	68%

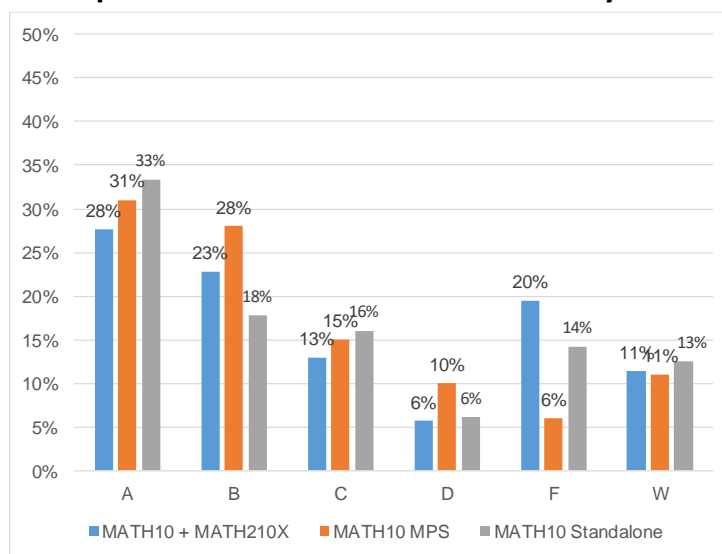
- When comparing DSPS students to non-DSPS students in MATH10 courses, **DSPS students overall exhibited a lower success rate than their counterparts historically, but this fall, success rates were very similar between the two groups.**

**Table 26. MATH10 by Course Type and Success by DSPS Status**

DSPS	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATH10 + MATH210X	4	44%	4	44%	1	11%	9	100%
MATH10 MPS	11	73%	4	27%	0	0%	15	100%
MATH10 Standalone	28	70%	8	20%	4	10%	40	100%
Total	43	67%	16	25%	5	8%	64	100%

- Similar to EWRT1A, success rates for DSPS were relatively high and consistent with prior fall terms as displayed above in Table 3 in the MPS and Standalone courses, the low success rate of 44% in the corequisite brought down the overall success rate in fall 2019.
- The smallest population of DSPS students were in the corequisite course in fall 2019 with the majority in the standalone course, who had a 70% success rate, above the 68% success rate of non-DSPS students.

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

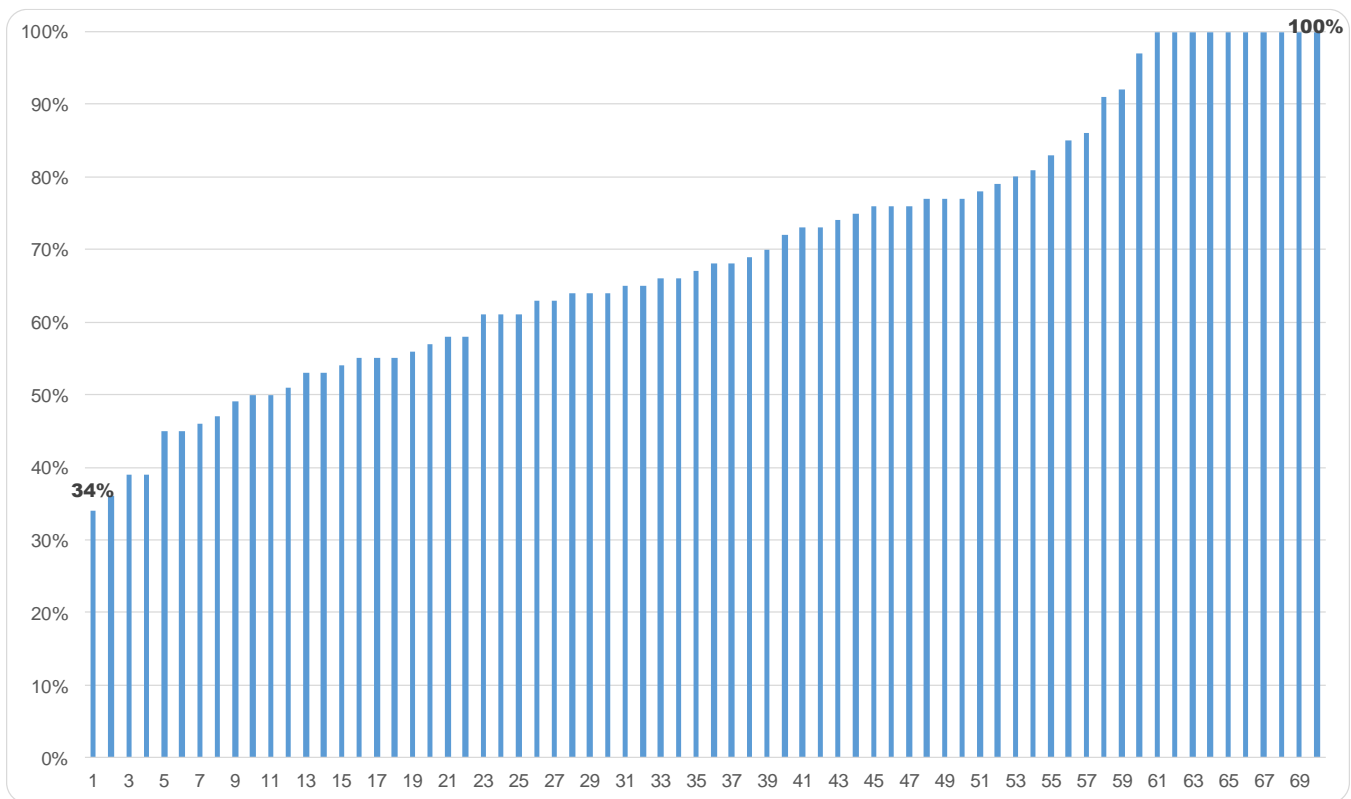


Fall 2019	A	B	C	D	F	W
MATH10 + MATH210X	28%	23%	13%	6%	20%	11%
MATH10 MPS	31%	28%	15%	10%	6%	11%
MATH10 Standalone	33%	18%	16%	6%	14%	13%

Graph 2 above shows a distribution of the percent of letter grades by the three types of MATH10 course sections in fall 2019.

- **Students in the Standalone course had a higher rate of A, C and W grades while students in the MPS course had the highest rates of B and D grades while the Corequisite courses had the highest rates of F grades.**
- For A grades, students in Standalone MATH10 received the highest rate of A grades at 33% of students receiving such grade, followed by 31% for MPS and 28% in the Corequisite course.
- For B grades, students in the MPS course received the highest rate of B grades at 28% followed by the Corequisite course at 23% then the Standalone course at 19%.
- For C grades, students in the Standalone and MPS courses had similar rate at 15-16% followed by the Corequisite course at 13%.
- For D grades, there was a similar distribution for Standalone and Corequisite at 6% while MPS was at 10%.
- For W grades, MPS and Corequisite were both at 11% and the Standalone was a bit higher at 13%.
- For F grades, the distribution was highest for the Corequisite course at 20% compared to 14% for the Standalone and 6% for MPS.

**Graph 4. MATH10 Distribution of Success by Section – Fall 2019**



Note: Includes all MATH10 sections.

Graph 4 above shows a distribution of course success by section for all MATH10 sections. **Success rates ranged from 34% to 100%.**

**Table 27. MATH10 Students Who Did Not Pass in Fall 2019**

Group	Enrolled in	Did not	% Did not pass	Enrolled in	% Enrolled	Enrolled in	% Enrolled
	fall 2019	pass in fall 2019		winter 2020	in winter 2020	MATH in winter 2020	in MATH in winter 2020
	#	#	%	#	%	#	%
MATH10 + MATH210X	123	45	37%	32	71%	11	10%
MATH10 MPS	178	47	26%	41	87%	8	7%
MATH10 Standalone	1,448	476	33%	378	79%	96	83%
Total	1,749	568	32%	451	79%	115	100%

Note: As of first week of the quarter, not at census.

Table 27 above looks at the students who did not pass MATH10 in fall 2019 and their enrollment in the following term.

- 37% of students did not pass the MATH10 with a corequisite course in fall 2019, of these students, 71% enrolled in the following term.
- 26% of students did not pass MATH10 MPS in fall 2019, of these students, 87% were enrolled in the following term.
- 33% of students did not pass MATH10 standalone, 79% of these students were enrolled in the following term.
- Of all students who did not pass MATH10 in fall 2019 but enrolled in a MATH course in winter 2020, 10% of corequisite students took another MATH course, 7% of MPS students took another MATH course and 83% of MATH10 standalone students took another MATH course.

## MATH41 Results

**Table 28. MATH41 - Success, Drop, and Withdraw Rates**

	Enrollment	Success	Success	Drop	Drop	Withdraw	Withdraw
		Count	Rate				
Fall 2015	698	462	66%	91	12%	99	14%
Fall 2016	704	392	56%	101	13%	137	19%
Fall 2017	746	462	62%	84	10%	143	19%
Fall 2018	776	517	67%	100	11%	114	15%
Fall 2019	730	429	59%	108	13%	117	16%
Average			62%		12%		17%

- Overall, there was no shift in access to MATH41, either in fall 2018 or fall 2019, enrollment decreased in fall 2019 by -46 students and success rates decreased 8 percentage points.
  - Success rates decreased to 59% from 67% in fall 2019 while the percent of students who dropped the course increased by 2 percentage point from 11% to 13% and students who withdrew increased 1 percentage point from 15% to 16% between fall 2019 and fall 2019.

**Table 29. MATH41 - Success Rates by Support Level**

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATH41 + MATH210X	81	55%	41	28%	25	17%	147	100%
MATH41 MPS	65	67%	26	27%	6	6%	97	100%
MATH41 Standalone	283	58%	117	24%	86	18%	486	100%
Average	429	59%	184	25%	117	16%	730	100%

- Success rates for MATH41 Standalone were higher than MATH41 with a corequisite, 60% compared to 55%, though lower than the MPS sections of MATH41 which were at 67%.
- It should be noted for context that while a success rate of 55% or even 58% may seem low, it is a one-term throughput rate that is higher than students who started in MATH114. **The one-year throughput rate for students starting in MATH114 who completed MATH41 was 27% over the past three years, thus, the 55% or 58% for one-term is a higher throughput rate when students start directly in MATH41 than if they started in MATH114.** See Table 39 for detailed throughput rates.

**Table 30. MATH41.Q - Success Rates by Support Level and High School GPA**

Corequisite	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.4 or higher	11	92%	1	8%			12	100%
3.4-2.6 but no Calculus	27	63%	11	26%	5	12%	43	100%
2.6 or higher and Calculus	2	100%					2	100%
Less than 2.6	11	35%	11	35%	9	29%	31	100%
No GPA	30	51%	18	31%	11	19%	59	100%
Total	81	55%	41	28%	25	17%	147	100%

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in MATH41 with corequisite support decreased as students' high school GPA decreased. Success rates for students with a 3.4 GPA or higher had a 92% success rate followed by students with a 3.4-2.6 GPA and had not enrolled in Calculus in high school at 63%.

**Table 31. MATH41.MPS - Success Rates by Support Level and High School GPA**

MPS	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.4 or higher	4	67%	1	17%	1	17%	6	100%
3.4-2.6 but no Calculus	21	78%	4	15%	2	7%	27	100%
2.6 or higher and Calculus	1	100%					1	100%
Less than 2.6	8	40%	11	55%	1	5%	20	100%
No GPA	31	72%	10	24%	2	4%	43	100%
Total	65	67%	26	27%	6	6%	97	100%

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in MATH41 MPS was largely comprised of students without a GPA in file, these students had a success rate of 72%. The next largest group were students with a 3.4-2.6 GPA without Calculus, their success rate was 78%. The 20 students with less than a 2.6 GPA had the lowest success rate at 40%.

**Table 32. MATH41.Standalone - Success Rates by Support Level and High School GPA**

Standalone	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
3.4 or higher	79	86%	11	12%	2	2%	92	100%
3.4-2.6 but no Calculus	51	58%	23	26%	14	16%	88	100%
2.6 or higher and Calculus	4	44%	4	44%	1	11%	9	100%
Less than 2.6	26	30%	27	33%	32	37%	85	100%
No GPA	123	58%	52	25%	37	17%	212	100%
<b>Total</b>	<b>283</b>	<b>58%</b>	<b>117</b>	<b>24%</b>	<b>86</b>	<b>18%</b>	<b>486</b>	<b>100%</b>

Note: Includes only actual high school GPAs from CalPass Plus.

- Success rates in MATH41 Standalone also decreased as high school GPA decreased. Success rates for students with a 3.4 GPA or higher had an 86% success rate followed by students with a 3.4-2.6 GPA and had not enrolled in Calculus in high school at 58%. Students with less than a 2.6 GPA had a success rate of 30%, and this was 85 total students.

**Table 33. MATH41 – Success and Withdraw Rates by Ethnicity**

		Enrollment	Success	Success	Withdraw	Withdraw
		Count	Count	Rate	Count	Rate
African	Fall 2018	18	11	61%	6	33%
American	Fall 2019	26	13	50%	7	27%
Asian	Fall 2018	375	275	73%	46	12%
	Fall 2019	306	214	70%	31	10%
Filipinx	Fall 2018	55	39	71%	5	9%
	Fall 2019	52	30	58%	7	13%
Latinx	Fall 2018	179	90	50%	29	16%
	Fall 2019	208	87	42%	51	25%
Native	Fall 2018	1	1	100%	0	0%
American	Fall 2019	1	1	100%	0	0%
Pacific	Fall 2018	4	1	25%	0	0%
Islander	Fall 2019	3	1	33%	2	67%
White	Fall 2018	139	97	70%	28	20%
	Fall 2019	123	75	61%	19	15%
Decline to State	Fall 2018	4	3	75%	0	0%
	Fall 2019	11	8	73%	0	0%

- Success rates within each ethnic group comparing fall 2018 to fall 2019 decreased for all racial/ethnic groups except Pacific Islander students.

**Table 34. MATH41 – Success by DSPS Status**

		Enrollment	Success	
			Count	% Success
Fall 2015	DSPS	9	3	33%
	Non-DSPS	689	459	67%
Fall 2016	DSPS	18	11	61%
	Non-DSPS	686	381	56%
Fall 2017	DSPS	21	10	48%
	Non-DSPS	725	452	62%
Fall 2018	DSPS	19	12	63%
	Non-DSPS	756	505	67%
Fall 2019	DSPS	22	15	68%
	Non-DSPS	708	414	58%

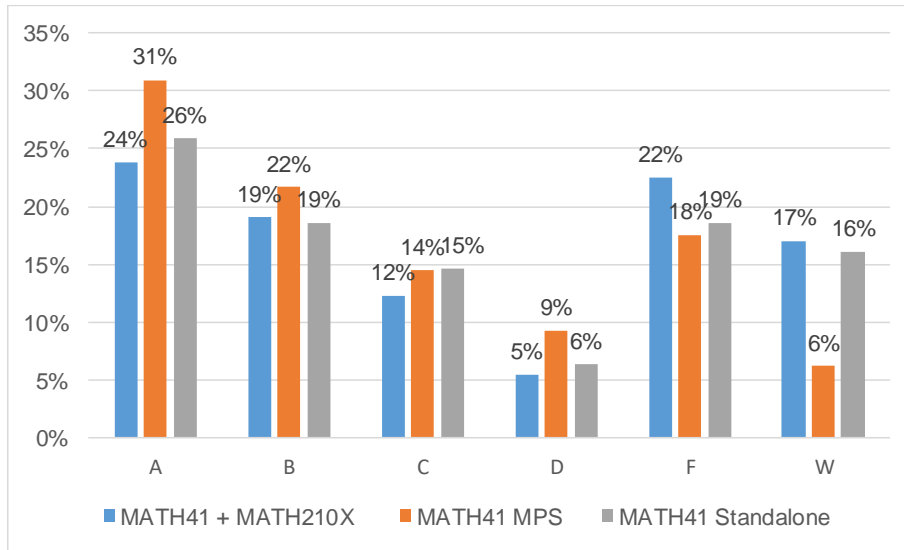
- When comparing DSPS students to non-DSPS students in MATH41 courses, **DSPS students on average exhibit lower success rates than their counterparts. Though this was not the case in fall 2019, where DSPS students exhibited a success rate 10 percentage points higher than their non-DSPS counterparts.**

**Table 35. MATH41 – Success by DSPS Status and Course Type**

DSPS	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
MATH41 + MATH210X	0	0%	0	0%	1	100%	1	100%
MATH41 MPS	3	50%	2	33%	1	17%	6	100%
MATH41 Standalone	12	80%	1	7%	2	13%	15	100%
Average	15	68%	3	14%	4	18%	22	100%

- DSPS students in the standalone MATH41 section did very well with a success rate of 80%. The MPS sections had a success rate of 50% while there was only 1 student in the corequisite who withdrew.

**Graph 6. MATH41 Grade Distribution by Term**



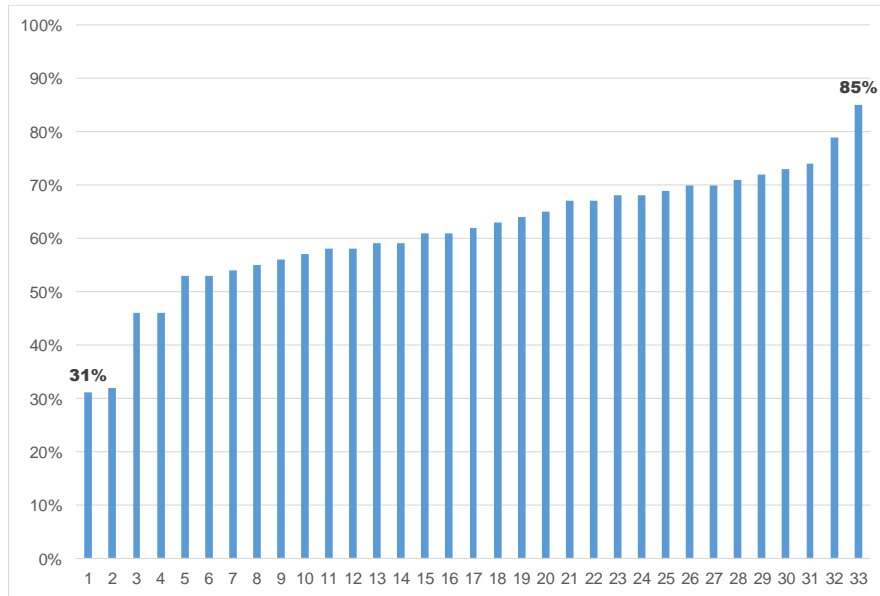
Fall 2019	A	B	C	D	F	W
MATH41 + MATH210X	24%	19%	12%	5%	22%	17%
MATH41 MPS	31%	22%	14%	9%	18%	6%
MATH41 Standalone	26%	19%	15%	6%	19%	16%

Graph 2 above shows a distribution of the percent of letter grades by MATH10 course sections in fall 2019 with different types of support.

- **Students in the MPS sections of MATH41 had the highest rate of A and B grades, as well as D grades while students in the Corequisite course had the lowest rates of A, C and D grades and the highest rate of F grades. Students in the Standalone section had the highest rates of A then B and F grades.**
- For A grades, students in MPS MATH41 received the highest rate of A grades at 31% of students receiving such grade, followed by 26% in the Standalone course and 24% in the Corequisite course.
- For B grades, students in the MPS section had the highest rate at of B grades at 22% followed by the standalone course and Corequisite course, both at 19%.
- For C grades, students in the MPS sections had similar rates as the Standalone course at 14-15% and the Corequisite course at 12%.
- For D grades, there was a similar distribution for Standalone and Corequisite at 5-6% though MPS was the highest at 9%.
- For F grades, the distribution was similar for the Standalone and Corequisite course at 16-17% compared to just 6% for MPS.



**Graph 7. MATH41 Distribution of Success by Section – Fall 2019**



Note: Includes all MATH41 sections.

Graph 7 above shows a distribution of course success by section for MATH41 sections in fall 2019. **Success rates ranged from 31% to 85%.**

**Table 36. MATH41 Students Who Did Not Pass in Fall 2019**

Group	Enrolled in	Did not	% Did not pass	Enrolled	% Enrolled	Enrolled	% Enrolled
	fall 2019	pass in fall 2019		in winter 2020	in winter 2020	in MATH in winter 2020	in MATH in winter 2020
	#	#	%	#	%	#	%
MATH41 + MATH210X	147	66	45%	57	86%	25	23%
MATH41 MPS	97	32	33%	28	88%	12	11%
MATH41 Standalone	486	203	42%	160	79%	74	67%
Total	730	301	41%	245	81%	111	100%

Table 36 above looks at students who did not pass MATH41 in fall 2019 and their enrollment in the following term.

- 45% of students did not pass the MATH41 with a corequisite course in fall 2019, of these students, 86% enrolled in the following term.
- 33% of students did not pass MATH41 MPS in fall 2019, of these students, 88% were enrolled in the following term.

- 42% of students did not pass MATH41 standalone, 79% of these students were enrolled in the following term.
- Of all students who did not pass MATH41 in fall 2019 but enrolled in a MATH course in winter 2020, 23% of Corequisite students took another MATH course, 11% of MPS students took another MATH course and 67% of MATH41 Standalone students took another MATH course.

## Math1A Results

**Table 37. MATH1A Enrollment, Success, Drops and Withdraws**

	Enrollment Count	Success Count	Success Rate	Drop Count	Drop Rate	Withdraw Count	Withdraw Rate
Fall 2015	536	374	70%	47	8%	67	13%
Fall 2016	527	366	69%	33	6%	85	16%
Fall 2017	502	367	73%	67	12%	64	13%
Fall 2018	559	374	67%	57	9%	91	16%
Fall 2019	758	528	70%	116	13%	90	12%
Average			70%		10%		14%

- Enrollment in MATH1A in fall 2019 increased by +199 students, a 36% increase.
- At the same time, success rates overall went up 2 percentage points from 67% to 70% while the number of overall successful completions increased by +154 successful completions or by 41%.
- Drops in MATH1A did increase 4 percentage points though withdraws decreased 4 percentage points from the prior fall.

**Table 38. MATH1A Success Rates**

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Fall 2015	374	70%	95	18%	67	13%	536	100%
Fall 2016	366	69%	76	14%	85	16%	527	100%
Fall 2017	367	73%	71	14%	64	13%	502	100%
Fall 2018	374	67%	94	17%	91	16%	559	100%
Fall 2019	528	70%	140	18%	90	12%	758	100%
Average		70%		16%		14%		

- Success rates increased from 67% in fall 2018 to 70% in fall 2019 while non success rates increased 1 percentage point from 17% to 18% and withdraw rates decreased from 16% to 12%.

**Table 39. MATH1A Success Rates**

	Term	Enrollment Count	Success Count	Success Rate	Withdraw Count	Withdraw Rate
African American	Fall 2018	14	5	36%	4	29%
American	Fall 2019	19	13	68%	2	11%
Asian	Fall 2018	375	261	70%	56	15%
	Fall 2019	499	371	74%	82	16%
Filipinx	Fall 2018	25	15	60%	7	28%
	Fall 2019	33	22	67%	6	18%
Latinx	Fall 2018	42	26	62%	10	24%
	Fall 2019	78	33	42%	22	28%
Native American	Fall 2018	1	0	0%		0%
	Fall 2019	1	1	100%		0%
Pacific Islander	Fall 2018	1	1	100%		0%
	Fall 2019	1	1	100%		0%
White	Fall 2018	89	58	65%	14	16%
	Fall 2019	109	76	70%	21	19%
Decline to State	Fall 2018	12	8	67%	2	17%
	Fall 2019	18	11	61%	5	28%

- Enrollment in MATH1A increased for all ethnic groups. Enrollment increased by +5 African American students, +124 Asian students, +8 Filipinx students, +36 Latinx students, +18 White students, and +6 Decline to State students.
- The number of successful completions also increased for all ethnic groups though success rates decreased for Latinx and Decline Students.

**Table 40. MATH1A Success Rates by GPA**

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
Above 3.4	104	74%	25	18%	12	9%	141	100%
3.4 to 2.6 and Calculus	46	69%	12	18%	9	13%	67	100%
3.4 to 2.6 and no Calculus	46	64%	16	22%	10	14%	72	100%
Less than 2.6	23	52%	12	27%	9	20%	44	100%
No GPA	309	71%	75	17%	50	12%	434	100%
Total	528	70%	140	18%	90	12%	758	100%

- Using CalPASS Plus high school transcript data, which are actual transcripts rather than self-reported high school information, the largest group of students do not have a GPA on file at CalPass Plus, their success rate was 71%.
- The next largest group were students above a 3.4 GPA with the highest success rates at 74%.
- Students with a 3.4 to 2.6 and no Calculus were the next largest group with a 64% success rate.
- Students with a 3.4 to 2.6 and Calculus were the next largest with a 69% success rate.

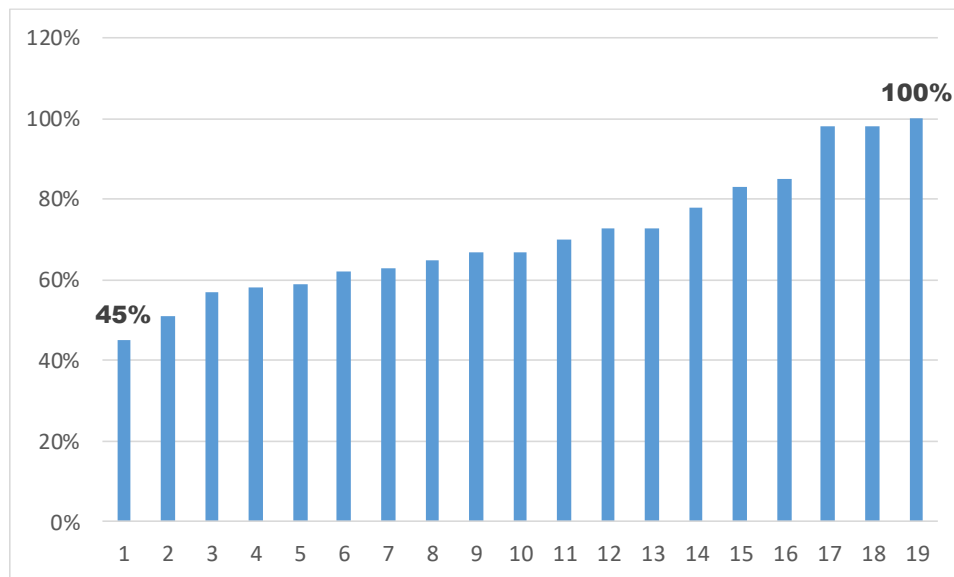
- The smallest group, students with less than a 2.6 GPA had the lowest success rate at 52%.

**Table 41. MATH1A Success Rates by Placement Type**

	Success		Non Success		Withdraw		Total	
	Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
All Other Placements	251	71%	56	16%	46	13%	353	100%
MATH1A - Guided Self-Placement	87	71%	22	18%	14	11%	123	100%
MATH1A - High School GPA	190	67%	62	22%	30	11%	282	100%
Total	528	70%	140	18%	90	12%	758	100%

- Success rates are very similar across the various ways students were placed.
- Students who had a placement that was older than two years old which placed them into a course other than MATH1A had a success rate of 71%, similar to students who were placed via guided self-placement with a success rate of 71% as well. Students who were placed with high school data had a slightly lower success rate at 67%.

**Table 42. MATH1A Success Rates by Section**



- Success rates in MATH1A ranges from 45% to 100%

## Math Throughput Rates

**Table 43. Transfer Level Math – Starting at All Levels – Throughput Rates**

Sequence Begin Course - Any MATH Course	First-time Students	All Transfer MATH Completion - Fall		All Transfer MATH Completion - Winter		All Transfer MATH Completion - Spring	
Fall 2018 - All Starting Levels	<b>1,384</b>	642	<b>46%</b>	770	<b>56%</b>	857	<b>62%</b>
Fall 2017 - All Starting Levels	<b>1,624</b>	362	<b>22%</b>	502	<b>31%</b>	654	<b>40%</b>
Fall 2016 - All Starting Levels	<b>1,815</b>	374	<b>21%</b>	523	<b>29%</b>	667	<b>37%</b>
Fall 2015 - All Starting Levels	<b>1,770</b>	400	<b>23%</b>	534	<b>30%</b>	660	<b>37%</b>

As displayed in Table 29 above, throughput rates for all first time students enrolled in a Math course as their first course of enrollment increased between fall 2016 and fall 2017 from 37% to 40% and the greatest increase was between fall 2017 and fall 2008 from 40% to 62%.

**Table 44. Transfer Level Math Including MATH10– Throughput Rates**

First Level Enrolled	First-time Student Cohort	Fall Transfer-Level MATH Completion		Winter Transfer- Level MATH Completion		Spring Transfer- Level MATH Completion		
MATH 210	Fall 18	<b>39</b>	0	<b>0%</b>	1	<b>3%</b>	1	<b>3%</b>
	Fall 17	<b>315</b>	0	<b>0%</b>	0	<b>0%</b>	0	<b>0%</b>
	Fall 16	<b>299</b>	0	<b>0%</b>	0	<b>0%</b>	0	<b>0%</b>
MATH 212	Fall 18	<b>102</b>	0	<b>0%</b>	4	<b>4%</b>	25	<b>25%</b>
	Fall 17	<b>578</b>	0	<b>0%</b>	2	<b>0%</b>	101	<b>17%</b>
	Fall 16	<b>606</b>	0	<b>0%</b>	2	<b>0%</b>	88	<b>15%</b>
MATH 114	Fall 18	<b>244</b>	1	<b>0%</b>	75	<b>31%</b>	101	<b>41%</b>
	Fall 17	<b>317</b>	1	<b>0%</b>	124	<b>39%</b>	168	<b>53%</b>
	Fall 16	<b>376</b>	1	<b>0%</b>	112	<b>30%</b>	148	<b>39%</b>
MATH 10	Fall 18	<b>498</b>	275	<b>55%</b>	294	<b>59%</b>	311	<b>62%</b>
	Fall 17	<b>102</b>	81	<b>79%</b>	85	<b>83%</b>	90	<b>88%</b>
	Fall 16	<b>93</b>	67	<b>72%</b>	71	<b>76%</b>	72	<b>77%</b>

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%-3%
- Throughput rates for MATH212 range from 15%-25%
- Throughput rates for MATH114 range from 39%-53%
- Throughput rates for MATH10 range from 62%-88%

**Table 45. Completion of MATH41– Throughput Rates**

First Level Enrolled	First-time Student Cohort	Fall MATH41 Completion	Winter MATH41 Completion	Spring MATH41 Completion
MATH 210	Fall 18 <b>39</b>	0 <b>0%</b>	0 <b>0%</b>	0 <b>0%</b>
	Fall 17 <b>315</b>	0 <b>0%</b>	0 <b>0%</b>	0 <b>0%</b>
	Fall 16 <b>299</b>	0 <b>0%</b>	0 <b>0%</b>	0 <b>0%</b>
MATH 212	Fall 18 <b>102</b>	0 <b>0%</b>	0 <b>0%</b>	8 <b>8%</b>
	Fall 17 <b>578</b>	0 <b>0%</b>	1 <b>0%</b>	30 <b>5%</b>
	Fall 16 <b>606</b>	0 <b>0%</b>	2 <b>0%</b>	28 <b>5%</b>
MATH 114	Fall 18 <b>244</b>	0 <b>0%</b>	55 <b>23%</b>	69 <b>28%</b>
	Fall 17 <b>317</b>	0 <b>0%</b>	65 <b>21%</b>	86 <b>27%</b>
	Fall 16 <b>376</b>	0 <b>0%</b>	71 <b>19%</b>	94 <b>25%</b>
MATH 41	Fall 18 <b>258</b>	208 <b>81%</b>	219 <b>85%</b>	230 <b>89%</b>
	Fall 17 <b>176</b>	134 <b>76%</b>	140 <b>80%</b>	145 <b>82%</b>
	Fall 16 <b>203</b>	137 <b>67%</b>	154 <b>76%</b>	161 <b>79%</b>

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 range between 5%-8%
- Throughput rates for MATH114 range from 25%-28%
- Throughput rates for MATH41 range from 79%-89%

### 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 starting 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.