# 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 20I8 |  |  |  |  |
| Winter 20I9 | Difference | \% Difference |  |  |
| EWRTIA | 1,230 | 1,520 | +290 | $+24 \%$ |
| MATHIO | 955 | 1,360 | +405 | $+42 \%$ |
| MATH4I | 533 | 491 | -42 | $-8 \%$ |
| Successful Completions |  |  |  |  |
| EWRTIA | 995 | 1,170 | +175 | $+18 \%$ |
| MATHIO | 683 | 897 | +214 | $+31 \%$ |
| MATH4I | 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\% |
| MATHIO | -6\% | +4\% | +1\% |
| MATH4I | -2\% | +4\% | +2\% |
| Change from 5-year average |  |  |  |
| Success |  | Drop | Withdraw |
| Rate |  | Rate | Rate |
| EWRTIA | -3\% | +2\% | 0\% |
| MATHIO | -2\% | +3\% | +1\% |
| MATH4I | +3\% | +4\% | -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 |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{c}\text { Enrollment } \\ \text { Volume }\end{array}$ | $\begin{array}{c}\text { Success } \\ \text { Rate }\end{array}$ | \(\left.\begin{array}{c}Success <br>

Volume\end{array}\right]\)

- 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 Count | Success <br> Count | Success <br> Rate | Drop <br> Count | Drop <br> Rate | Withdraw Count | Withdraw 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 | I, I70 | 77\% | 195 | 11\% | 140 | 9\% |
| Average |  |  | 80\% |  | 9\% |  | 9\% |

- 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 |  | 98 |
| ---: | :--- |
| Students in the Coreq | $99 \%$ |
| 15 | $12 \%$ |
| 11 | $9 \%$ |
| 124 | $100 \%$ |
| Students in EWRTIA | 79 |
| $94 \%$ | 34 |

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

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

|  | Success |  | 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 |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | Cerm | Success | Success | Withdraw | Withdraw |  |
| 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 | $7 \%$ |
|  | Winter 2019 | 582 | 491 | $84 \%$ | 35 | $6 \%$ |
| Filipinx | Winter 2018 | 103 | 83 | $81 \%$ | 11 | $11 \%$ |
|  | Winter 2019 | 107 | 85 | $79 \%$ | 6 | $6 \%$ |
| Latinx | Winter 2018 | 402 | 303 | $75 \%$ | 59 | $15 \%$ |
|  | 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 <br> Count | Success <br> Count | Success <br> 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

|  |  | Enrollment | Success | \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  | 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 | I, 130 | 81\% |
| Fall 2016 | DSPS | 40 | 34 | 83\% |
|  | Non DSPS | 1,292 | 1,028 | 78\% |
| Fall 2017 | DSPS | 29 | 24 | 80\% |
|  | Non DSPS | 1,201 | 971 | 80\% |
| Fall 2018 | DSPS | 55 | 41 | 75\% |
|  | Non DSPS | 1,465 | I, 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 Flle | 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 $64 \%$
- 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 $81 \%$

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\%.

## MATH1O

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

|  | Enrollment |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Count | Count | Raccess | Drop | Drop |  | Withdraw Withdraw |
|  | 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.
- 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

| Mode | Term | Enrollment Count | Success <br> Count | Success <br> Rate | Drop <br> Count | Drop <br> Rate | Withdraw Count | Withdraw 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\% | 15 \| | 15\% |
|  | Average |  |  | 67\% |  | 15\% |  | 16\% |
| MPS | Winter 2015 | 61 | 58 | 95\% | 2 | 3\% | 1 | 2\% |
|  | Winter 2016 | 61 | 56 | 92\% | 1 | 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 |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Count | Success | Success | Withdraw | Withdraw |  |
|  | 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 | $11 \%$ |
|  | Winter 2019 | 514 | 379 | $74 \%$ | 61 | $12 \%$ |
| Filipinx | Winter 2018 | 78 | 49 | $63 \%$ | 18 | $23 \%$ |
|  | Winter 2019 | 106 | 67 | $63 \%$ | 23 | $22 \%$ |
| Latinx | Winter 2018 | 236 | 145 | $61 \%$ | 55 | $23 \%$ |
|  | Winter 2019 | 435 | 241 | $55 \%$ | 98 | $23 \%$ |
|  | Winter 2018 | 3 | 1 | $33 \%$ | 2 | $67 \%$ |
| American | Winter 2019 | 11 | 5 | $45 \%$ | 5 | $45 \%$ |
| Pacific | Winter 2018 | 2 |  |  |  |  |
| Islander | Winter 2019 | 14 | 8 | $57 \%$ | 1 | $7 \%$ |
| White | Winter 2018 | 163 | 124 | $76 \%$ | 30 | $18 \%$ |
|  | 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 <br> Count | Success <br> Count | Success <br> 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 <br> Count | $\%$ <br> 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 |  | Withdraw |  | 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 $69 \%$

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 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 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.
- 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

| Mode | Term | Enrollment Count | Success <br> Count | Success <br> Rate | Drop <br> Count | Drop <br> Rate | Withdraw Count | Withdraw <br> Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Face to Face | Winter 2015 | 626 | 348 | 56\% | 66 | 10\% | 129 | 21\% |
|  | Winter 2016 | 599 | 346 | 58\% | 82 | 1 $2 \%$ | 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\% | I | 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 <br> Count | Success <br> Count | Success <br> Rate | Withdraw | Count |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | Rathdraw

- 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 | $100 \%$ |

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

- 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\%.

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

|  | First-time Student <br> First Level Enrolled |  | Fall EWRTIA <br> Completion |  | Winter EWRTIA |  | Completion |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | | Compring EWRTIA |
| :--- |
| Completion |

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 $87 \%-90 \%$

Table 25. Transfer Level Math Including MATH10- Throughput Rates

| Sequence <br> Begin Course | First-time Student Cohort |  | All Transfer MATH <br> Completion - Fall |  | All Transfer MATH Completion - |  | All Transfer MATH 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 II4 | Fall 17 | 317 | I | 0\% | 124 | 39\% | 168 | 53\% |
|  | Fall 16 | 376 | 1 | 0\% | 112 | 30\% | 148 | 39\% |
| MATH IO | 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 <br> Begin Course | First-time Student Cohort |  | Fall MATH4I <br> Completion |  | Winter MATH4I Completion |  | Spring MATH4 I <br> 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\% | 1 | 0\% | 30 | 5\% |
|  | Fall 16 | 606 | 0 | 0\% | 2 | 0\% | 28 | 5\% |
| MATH II4 | 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.

