

To: AB 705 Committee

From: Mallory Newell, De Anza Researcher

Date: 12/4/2018

Subject: Analysis of Placement and Enrollment for Fall 2018

---

This analysis compares placements and enrollment into EWRT and Math courses in fall 2017 and fall 2018. Overall rates as well as those disaggregated by ethnicity and gender are included. Disproportionate impacts are also included – a comparison of the proportion of a group of students placed/enrolled compared to their proportion of the total student population.

### Summary of Results

**Table I. Change in Placements and Enrollments**

|        | Fall 2017 to Fall 2018 |            |
|--------|------------------------|------------|
|        | Placement              | Enrollment |
| EWRT1A | +10%                   | +18%       |
| MATH41 |                        | +5%        |
| MATH10 | +30%                   | +25%       |

Math 10 and 41 placements were combined in fall 2017.

EWRT1A enrollment includes LART250 in fall 2018.

- Access via placement into transfer level courses increased from term to term.
  - A 10 percentage point increase for EWRT1A and a 30 percentage point increase for MATH10.
- Enrollment into transfer level courses increased from term to term.
  - An 18 percentage point increase for EWRT1A and a 25 percentage point increase for Math10.

**Table 2. Disproportionate Impacts by Placement and Enrollment**

|        |                  | Placement |           | Enrollment |           |
|--------|------------------|-----------|-----------|------------|-----------|
|        |                  | Fall 2017 | Fall 2018 | Fall 2017  | Fall 2018 |
| EWRT1A | African American | 0%        | 0%        | 0%         | 0%        |
|        | Filipinx         | +2%       | +1%       | +2%        | +2%       |
|        | Latinx           | -7%       | +2%       | -2%        | +3%       |
| MATH41 | African American |           |           | -2%        | -2%       |
|        | Filipinx         |           |           | -6%        | -6%       |
|        | Latinx           |           |           | -21%       | -20%      |
| MATH10 | African American | -1%       | +2%       | 0%         | 0%        |
|        | Filipinx         | -1%       | -1%       | +1%        | +2%       |
|        | Latinx           | -16%      | -1%       | -1%        | +7%       |

Note: Placement into Math10 and Math11 was combined in fall 2017. Refer to table 7 for proportion of ethnic groups.

- Placement into transfer level courses increased for our targeted student groups, increasing their access to these courses and significantly reducing disproportionate impacts for some groups.
  - Disproportionate impacts for Latinx students placing into EWRT1A improved from -7% to +2%.
  - Disproportionate impacts for African American students placing into MATH10 improved from -1% to +2% and for Latinx students from -16% to -1%.
- Enrollment into transfer level courses increased for our targeted populations as well.
  - Disproportionate impacts for Latinx students enrolling in EWRT1A improved from -2% to +3%.
  - Disproportionate impacts for Latinx students enrolling in MATH10 improved from -1% to +7%.
  - Disproportionate impacts for all ethnic groups enrolling in MATH41 did not improve.

## Results

### Placement.

**Table 3. EWRT Placements**

| Placement | Fall 2017 |      | Fall 2018 |      | % -Point Change |     |
|-----------|-----------|------|-----------|------|-----------------|-----|
|           | Count     | %    | Count     | %    | #               | %   |
| EWRT1A    | 1,307     | 61%  | 4,759     | 71%  | 3,452           | 10% |
| EWRT211   | 700       | 33%  | 1,797     | 27%  | 1,097           | -6% |
| EWRT200   | 121       | 6%   | 144       | 2%   | 23              | -4% |
| Total     | 2,128     | 100% | 6,700     | 100% | 4,572           | 0%  |

Placement test taken between 3/1 and 10/9.

- Placement directly into EWRT1A increased from 61% of all placements to 71%, a 10 percentage point increase.
- Placements into EWRT211 decreased from 33% to 27%.
- Placements into EWRT200 decreased from 6% to 2%.

**Table 4. Math Placements**

| Placement | Fall 2017 |      | Fall 2018 |      | % -Point Change |      |
|-----------|-----------|------|-----------|------|-----------------|------|
|           | Count     | %    | Count     | %    | #               | %    |
| MATH41    |           |      | 1,815     | 28%  | 1,815           | 28%  |
| MATH10*   | 466       | 18%  | 3,128     | 48%  | 2,662           | 30%  |
| MATH114   | 632       | 25%  | 425       | 7%   | (207)           | -18% |
| MATH212   | 847       | 33%  | 816       | 13%  | (31)            | -21% |
| MATH210   | 586       | 23%  | 302       | 5%   | (284)           | -18% |
| Total     | 2,531     | 100% | 6,486     | 100% | 3,955           | 0%   |

Note: Placement into Math10 and Math11 was combined in fall 2017. Placement test taken between 3/1 and 10/9.

- Fall 2018 was the first time students were placed directly into MATH41. In this term, 28% of all placements were into MATH41.
- Placement into MATH10 increased 30 percentage points from 18% of all placements to 48%.
- Placement into MATH114 decreased 18 percentage points, MATH212 by 21 percentage points, and MATH210 by 18 percentage points.

**Enrollment.**

**Table 5. EWRT Enrollment**

| Enrollment | Fall 2017 |      | Fall 2018 |      | Change |      |
|------------|-----------|------|-----------|------|--------|------|
|            | Count     | %    | Count     | %    | #      | %    |
| EWRT1A     | 1,514     | 54%  | 1,930     | 72%  | 416    | 18%  |
| EWRT211    | 1,027     | 37%  | 620       | 23%  | (407)  | -14% |
| EWRT200    | 260       | 9%   | 139       | 5%   | (121)  | -4%  |
| Total      | 2,801     | 100% | 2,689     | 100% | (112)  | 0%   |

- The number of students who enrolled into EWRT1A in fall 2018 increased 18 percentage points from 54% of all enrollments to 72% of all enrollments.
  - Overall enrollments in EWRT courses was flat.

**Table 6. Math Enrollment**

| Enrollment | Fall 2017 |      | Fall 2018 |      | Change  |      |
|------------|-----------|------|-----------|------|---------|------|
|            | Count     | %    | Count     | %    | #       | %    |
| MATH41     | 746       | 16%  | 776       | 22%  | 30      | 5%   |
| MATH10     | 1,038     | 22%  | 1,780     | 49%  | 742     | 27%  |
| MATH114    | 1,074     | 23%  | 705       | 20%  | (369)   | -4%  |
| MATH210    | 1,206     | 26%  | 226       | 6%   | (980)   | -20% |
| MATH212    | 555       | 12%  | 115       | 3%   | (440)   | -9%  |
| Total      | 4,619     | 100% | 3,602     | 100% | (1,017) | -22% |

- Enrollment in MATH41(Pre-Calculus) increased 5 percentage points from 16% to 22% based on the courses eligible under AB 705 for fall 2018.
- Enrollment into MATH10 (Statistics) increased 25 percentage points from 22% to 47% of total course enrollment.
  - Overall enrollments in Math courses decreased 20%.

## Disproportionate Impacts

The state Chancellor’s Office has been monitoring through the Equity plan and will continue to monitor via AB 705 and AB 1805 disproportionate rates of students placing and enrolling into transfer-level courses. A disproportionate impact is considered to be present if the percent of students eligible to enroll in the transfer-level course is lower or higher than their proportion of total enrollment at the college. For example, De Anza enrolls on average 27% Latinx students, therefore, in order for there to be no disproportionate impacts around placement, around 27% of Latinx students should be placed into transfer level courses, making them eligible to enroll. If that is not the case, the college is required to investigate their practices and make necessary changes. Disproportionate impacts also apply to throughput rates. Table 7 below displays the proportion of students by ethnic group from term to term.

**Table 7. Ethnic Distribution Across Terms**

|                  | Fall 2017     |             | Fall 2018     |             |
|------------------|---------------|-------------|---------------|-------------|
|                  | Count         | %           | Count         | %           |
| African American | 891           | 4%          | 769           | 4%          |
| Asian            | 8,165         | 39%         | 7,994         | 41%         |
| Filipinx         | 1,469         | 7%          | 1,322         | 7%          |
| Latinx           | 5,746         | 28%         | 5,334         | 27%         |
| Native American  | 111           | 1%          | 84            | 0%          |
| Pacific Islander | 167           | 1%          | 133           | 1%          |
| White            | 3,968         | 19%         | 3,688         | 19%         |
| Decline to State | 277           | 1%          | 282           | 1%          |
| <b>Total</b>     | <b>20,794</b> | <b>100%</b> | <b>19,606</b> | <b>100%</b> |

**Placement by Ethnicity.**

**Table 8. EWRT1A Placement by Ethnicity**

| EWRT1A Placement | Fall 2017    |             | Fall 2018    |             | % -Point Change |           |
|------------------|--------------|-------------|--------------|-------------|-----------------|-----------|
|                  | Count        | %           | Count        | %           | #               | %         |
| African American | 50           | 4%          | 196          | 4%          | 146             | 0%        |
| Asian            | 550          | 42%         | 1,874        | 39%         | 1,324           | -3%       |
| Filipinx         | 119          | 9%          | 359          | 8%          | 240             | -2%       |
| Latinx           | 278          | 21%         | 1,393        | 29%         | 1,115           | 8%        |
| Native American  | 8            | 1%          | 19           | 0%          | 11              | 0%        |
| Pacific Islander | 13           | 1%          | 35           | 1%          | 22              | 0%        |
| White            | 277          | 21%         | 853          | 18%         | 576             | -3%       |
| Decline to State | 12           | 1%          | 30           | 1%          | 18              | 0%        |
| <b>Total</b>     | <b>1,307</b> | <b>100%</b> | <b>4,759</b> | <b>100%</b> | <b>3,452</b>    | <b>0%</b> |

- When looking at access to transfer-level EWRT1A via placement, Latinx students eligible to enroll in EWRT1A increased 8 percentage points from 21% eligible to 29%, removing any disproportionate impacts around placement into EWRT1A.
  - Filipinx enrollment as a percent of total decreased from 9% to 8% though the volume of students increased from 119 to 359.
  - African American student placement increased from 50 to 196, though their percent of the total population remained the same.

**Table 9. MATH10 Placement/Eligibility by Ethnicity**

| MATH10 Placement/Eligible | Fall 2017 |      | Fall 2018 |      | % -Point Change |      |
|---------------------------|-----------|------|-----------|------|-----------------|------|
|                           | Count     | %    | Count     | %    | #               | %    |
| African American          | 13        | 3%   | 173       | 6%   | 160             | 3%   |
| Asian                     | 278       | 60%  | 1154      | 37%  | 876             | -23% |
| Filipinx                  | 27        | 6%   | 191       | 6%   | 164             | 0%   |
| Latinx                    | 56        | 12%  | 844       | 27%  | 788             | 15%  |
| Native American           | -         | 0%   | 15        | 0%   | 15              | 0%   |
| Pacific Islander          | 3         | 1%   | 17        | 1%   | 14              | 0%   |
| White                     | 78        | 17%  | 692       | 22%  | 614             | 5%   |
| Decline to State          | 11        | 2%   | 42        | 1%   | 31              | -1%  |
| Total                     | 466       | 100% | 3,128     | 100% | 2,662           | 0%   |

In fall 2018, MATH 10 become open access, therefore, any student who enrolled in a basic skills math course or placed into basic skills math in the past year was given a MATH10 placement and notified of their eligibility.

- Access to transfer level MATH10 for Latinx students increased 15 percentage points from 12% eligible to 27%, removing any disproportionate impacts for Latinx students. Further, the total volume of Latinx students eligible for MATH10 increased from 56 to 844, an increase of 788 students.
  - African American students eligible for MATH10 increased 3 percentage points from 3% to 6%, again removing any disproportionate impacts for this population.
  - As a percent of total enrollment, Filipinx and Pacific Islander placement into MATH10 remained the same from term to term with no disproportionate impacts present, however, their total placement into MATH10 increased from 13 to 173 for African American students and from 27 to 191 for Filipinx students.

**Enrollment by Ethnicity.**

**Table 10. EWRT1A Enrollment by Ethnicity**

| EWRT1A           | Fall 2017    |             | Fall 2018    |             | % -Point Change |           |
|------------------|--------------|-------------|--------------|-------------|-----------------|-----------|
|                  | Count        | %           | Count        | %           | #               | %         |
| African American | 60           | 4%          | 67           | 3%          | 7               | 0%        |
| Asian            | 604          | 40%         | 816          | 42%         | 212             | 2%        |
| Filipinx         | 129          | 9%          | 177          | 9%          | 48              | 1%        |
| Latinx           | 398          | 26%         | 560          | 29%         | 162             | 3%        |
| Native American  | 6            | 0%          | 6            | 0%          | -               | 0%        |
| Pacific Islander | 16           | 1%          | 12           | 1%          | (4)             | 0%        |
| White            | 283          | 19%         | 276          | 14%         | (7)             | -4%       |
| Decline to State | 18           | 1%          | 16           | 1%          | (2)             | 0%        |
| <b>Total</b>     | <b>1,514</b> | <b>100%</b> | <b>1,930</b> | <b>100%</b> | <b>416</b>      | <b>0%</b> |

- Enrollment into EWRT1A for Latinx students increased 3 percentage points from 26% to 29% with a total increase of 162 additional Latinx students eligible.
- African American and Filipinx enrollment as a percent of total remained the same though the volume of students increased, 7 and 48 students respectively.

**Table 11. MATH41 Enrollment by Ethnicity**

| MATH41           | Fall 2017  |             | Fall 2018  |             | % -Point Change |           |
|------------------|------------|-------------|------------|-------------|-----------------|-----------|
|                  | Count      | %           | Count      | %           | #               | %         |
| African American | 16         | 2%          | 18         | 2%          | 2               | 0%        |
| Asian            | 368        | 49%         | 376        | 48%         | 8               | -1%       |
| Filipinx         | 11         | 1%          | 4          | 1%          | (7)             | -1%       |
| Latinx           | 51         | 7%          | 55         | 7%          | 4               | 0%        |
| Native American  | 174        | 23%         | 181        | 23%         | 7               | 0%        |
| Pacific Islander | 5          | 1%          | 1          | 0%          | (4)             | -1%       |
| White            | 4          | 1%          | 4          | 1%          | -               | 0%        |
| Decline to State | 117        | 16%         | 137        | 18%         | 20              | 2%        |
| <b>Total</b>     | <b>746</b> | <b>100%</b> | <b>776</b> | <b>100%</b> | <b>30</b>       | <b>0%</b> |

- Enrollment into MATH41 remained similar from term to term across all ethnic groups and disproportionate impacts remained.

**Table 12. MATH10 Enrollment by Ethnicity**

| MATH10 Enrollment | Fall 2017    |             | Fall 2018    |             | % -Point Change |           |
|-------------------|--------------|-------------|--------------|-------------|-----------------|-----------|
|                   | Count        | %           | Count        | %           | #               | %         |
| African American  | 39           | 4%          | 77           | 4%          | 38              | 1%        |
| Asian             | 474          | 46%         | 655          | 37%         | 181             | -9%       |
| Filipinx          | 84           | 8%          | 152          | 9%          | 68              | 0%        |
| Latinx            | 279          | 27%         | 613          | 34%         | 334             | 8%        |
| Native American   | 3            | 0%          | 7            | 0%          | 4               | 0%        |
| Pacific Islander  | 7            | 1%          | 12           | 1%          | 5               | 0%        |
| White             | 139          | 13%         | 249          | 14%         | 110             | 1%        |
| Decline to State  | 13           | 1%          | 15           | 1%          | 2               | 0%        |
| <b>Total</b>      | <b>1,038</b> | <b>100%</b> | <b>1,780</b> | <b>100%</b> | <b>742</b>      | <b>0%</b> |

- Enrollment into MATH10 increased substantially for Latinx students from 27% of the total MATH10 population to 34%, an 8 percentage point increase and an increase of 334 total students.

***Placement by Gender.***

Each term, De Anza enrolls around 50% female and 50% male students.

**Table 13. EWRT1A Placement by Gender**

| EWRT1A Placement | Fall 2017    |             | Fall 2018    |             | % -Point Change |     |
|------------------|--------------|-------------|--------------|-------------|-----------------|-----|
|                  | Count        | %           | Count        | %           | #               | %   |
| Female           | 559          | 43%         | 2,297        | 48%         | 1,738           | 5%  |
| Male             | 734          | 56%         | 2,416        | 51%         | 1,682           | -5% |
| Unreported       | 14           | 1%          | 46           | 1%          | 32              | 0%  |
| <b>Total</b>     | <b>1,307</b> | <b>100%</b> | <b>4,759</b> | <b>100%</b> | <b>3,452</b>    |     |

- Enrollment into EWRT1A for female students increased 5 percentage points from 43% to 48%.

**Table 14. MATH10 Placement by Gender**

| MATH10 Placement | Fall 2017 |      | Fall 2018 |      | % -Point Change |     |
|------------------|-----------|------|-----------|------|-----------------|-----|
|                  | Count     | %    | Count     | %    | #               | %   |
| Female           | 200       | 43%  | 1,585     | 51%  | 1,385           | 8%  |
| Male             | 258       | 55%  | 1,505     | 48%  | 1,247           | -7% |
| Unreported       | 8         | 2%   | 38        | 1%   | 30              | -1% |
| Total            | 466       | 100% | 3,128     | 100% | 2,662           | 0%  |

- Placement into MATH10 for female students increased significantly from 43% of the total MATH10 population to 51%, removing any disproportionate impacts. \

**Enrollments by Gender.**

**Table 15. EWRT1A Enrollment by Gender**

| EWRT1A Enrollment | Fall 2017 |      | Fall 2018 |      | % -Point Change |     |
|-------------------|-----------|------|-----------|------|-----------------|-----|
|                   | Count     | %    | Count     | %    | #               | %   |
| Female            | 653       | 43%  | 912       | 47%  | 259             | 4%  |
| Male              | 849       | 56%  | 1,003     | 52%  | 154             | -4% |
| Unreported        | 12        | 1%   | 15        | 1%   | 3               | 0%  |
| Total             | 1,514     | 100% | 1,930     | 100% | 416             | 0%  |

- Enrollment into EWRT1A for female students increased 4 percentage points from 43% to 47%, reducing disproportionate impacts for this group.

**Table 16. MATH41 Enrollment by Gender**

| MATH41 Enrollment | Fall 2017 |      | Fall 2018 |      | % -Point Change |       |
|-------------------|-----------|------|-----------|------|-----------------|-------|
|                   | Count     | %    | Count     | %    | #               | %     |
| Female            | 290       | 39%  | 295       | 38%  | 5               | -0.9% |
| Male              | 448       | 60%  | 477       | 61%  | 29              | 1.4%  |
| Unreported        | 8         | 1%   | 4         | 1%   | (4)             | -0.6% |
| Total             | 746       | 100% | 776       | 100% | 30              | 0%    |

- Disproportionate impacts for female students enrolled in MATH41 remained from term to term.

**Table 17. MATH10 Enrollment by Gender**

| MATH10 Enrollment | Fall 2017    |             | Fall 2018    |             | % -Point Change |             |
|-------------------|--------------|-------------|--------------|-------------|-----------------|-------------|
|                   | Count        | %           | Count        | %           | #               | %           |
| Female            | 530          | 51%         | 918          | 52%         | 388             | 0.5%        |
| Male              | 501          | 48%         | 855          | 48%         | 354             | -0.2%       |
| Unreported        | 7            | 1%          | 7            | 0%          | -               | -0.3%       |
| <b>Total</b>      | <b>1,038</b> | <b>100%</b> | <b>1,780</b> | <b>100%</b> | <b>742</b>      | <b>0.0%</b> |

- MATH10 enrollment remained rather consistent across gender groups and no disproportionate impacts occurred in either term.

### Background Information

In fall 2018 the English and Math departments began to change the way they place students into courses and the courses offered 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 3.5 GPA or a 2.6 and had enrolled in calculus in high school were eligible to enroll in Math41 (Pre-calculus).

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.