theRPgroup

Research • Planning • Professional Development
for California Community Colleges

# Compton College

# AB 705 Assessment

## Analysis of English and Math Student Outcomes

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# Introduction

The Research and Planning Group for California Community Colleges (RP Group) partnered with Compton College (Compton) to assess the processes and activities developed to support their implementation of AB 705 which included changes to placement processes, course sequences and offerings, academic support, and faculty professional development. The purpose of this assessment is to analyze the impact AB 705 implementation has had on student success. Findings from the analysis will help inform the college's English and math redesign efforts and identify opportunities for improvement to support students' successful throughput in transfer-level courses.

In addition to interviews, focus groups, and survey feedback received from students, instructional faculty, supplemental learning associates, and embedded coaches, the RP Group conducted a comparative outcomes and descriptive analysis of math and English course success and throughput pre- and post-multiple measures implementation. This assessment analyzes the impact the college's AB 705 implementation has had on academic outcomes to determine what additional support and resources are needed to ensure student success, increase throughput, and close achievement gaps.

Data for the comparative student outcomes analysis contained in this report were disaggregated by gender and ethnicity to help identify student achievement gaps and uncover subpopulations who might be experiencing disproportionate impact. Findings from the analysis, combined with the results from other activities completed under the scope of this research, will help inform the college's English and math redesign efforts and identify opportunities for improvement to support students' successful throughput in transfer-level courses.

## Project Overview

In an effort to understand the impact and outcomes of implementing AB 705, Compton College partnered with the RP Group to conduct a research study that examined both summative and formative data to help identify what is working well and where improvements may be needed.

Student outcomes in transfer-level English and math were analyzed to assess the impact of AB 705 on student success. The information in this report is intended to provide Compton College with a summary of the quantitative findings and data considerations that resulted from AB 705 implementation.

The findings from this analysis will help support data-informed decision-making around equity, student support, and resource prioritization.

# Background

Beginning in fall 2019, California community colleges (CCC) were required to be in compliance with Assembly Bill 705 (AB 705) by implementing multiple measures placement policies for English and math that would maximize the likelihood students with an educational goal of degree or transfer would complete English and math requirements appropriate to their goal within a one-year timeframe.

In an effort to understand the impact and outcomes of implementing AB 705, the RP Group conducted a research study that examined both summative and formative data to help identify what is working well and where improvements may be needed.

Student outcomes in transfer-level English and math were analyzed to assess the impact of AB 705 on student success. The information in this report is intended to provide Compton with a summary of the quantitative findings and data considerations that resulted from AB 705 implementation. The findings from this analysis will help support data-informed decision-making around equity, student support, and resource prioritization.

# Methodology

This report examines English and math student outcomes over a six-year period, with a comparative analysis of successful course completions and throughput for the 2019-2020 academic year relative to the previous five years. Examining the data from a longitudinal perspective provides a comprehensive overview of historical student completion patterns at Compton to better understand how academic outcomes were affected by AB 705 implementation.

The analysis was structured around key research questions pertaining to successful completion of transfer-level English and math to explore the relationships between AB 705 reform and student outcomes, including an examination into the specific outcomes of first-time and dual-enrolled students (see *Research Questions* sidebar). It is important note that this analysis includes primary terms (i.e., fall and spring), therefore any metrics reported on an annual basis exclude summer terms. Data were disaggregated by ethnicity and gender to examine differences across student groups and assess how outcomes have changed over time for specific populations.

The COVID-19 pandemic and transition to remote instruction in spring 2020 resulted in an increased number of students receiving excused withdrawal (EW) grades. Prior to the COVID-19 pandemic, EWs were approved on an infrequent basis for students who experienced extenuating circumstances making course completion impracticable. EW grades act as if a student was never enrolled, therefore, they were excluded from the denominator in the student outcome calculations contained in this report.

## Research Questions

- How does the number and percentage of first-time students successfully completing transfer-level English and math within their first year compare to those in prior terms?
- How does the number of students successfully completing transfer-level English and math compare to that in prior terms?
- How do success rates in transfer-level English and math compare to those of prior terms?
- How many dual enrollment students are enrolling in English and math courses and what are their success rates?

## Data Definitions

**Enrollment**: A student is considered to have been enrolled in a course if the student received a valid end-of-term grade notation. Student enrollment is a duplicated count of students. Students may be enrolled in more than one course and would be counted once in each course for the term. Excludes EW, RD, UD, and UG.

**Success Count:** The number of students who receive a passing grade of A, B, C, CR, IA, IB, IC, IPP, or P at the end of the term.

**Success Rate:** The percentage of students who receive a passing grade of A, B, C, CR, IA, IB, IC, IPP, or P at the end of the term divided by the total number of students enrolled in the course.

**Throughput Count:** The number of first-time students who complete a target gateway course (e.g., transfer-level English or math) within one year.

**Throughput Rate:** The percentage of first-time students who receive a passing grade of A, B, C, CR, IA, IB, IC, IPP, or P in a target gateway course (e.g., transfer-level English or math) within one year divided by the total number of students enrolled in the cohort.

**English 101:** Includes English 101, 101H, and 1A.[1]

**Transfer-Level Math:** Includes Math 110 and above.

**First-Time Student:** A student who enrolls in college for the first time after high school. First-time status is based on enrollment as of the fall term.

**Dual-Enrolled Student:** A high school student who is concurrently enrolled in college.

## In This Report

This report examines Compton students who successfully completed transfer-level English and math courses from fall 2014 to spring 2020. The first two sections include a discussion of the key English and math quantitative findings organized by the following metrics: 1) enrollments, 2) successful completions, and 3) throughput. Charts and tables are provided to illustrate relevant patterns that emerged from the analysis. Data are disaggregated by ethnicity and gender to examine differences across student groups. The final section contains concluding remarks on how the information from this analysis can be used by college leadership, while taking into account several factors believed to impact student outcomes including the COVID-19 pandemic and the transition to remote instruction.

[1] In fall 2019, English 1A was renamed English 101. Figures and tables titled English 101 also include English 1A from previous terms.

# English Findings

This section highlights the key results drawn from the comparative analysis of student outcomes for transfer-level English. Data are organized according to the research questions developed for that subject. It is important to note, disaggregated data in this section and subsequent sections are only reported for groups containing at least 10 students. For a complete listing of English data tables, including those examined by ethnicity and gender, see Appendix A.

## Enrollments and Successful Completions

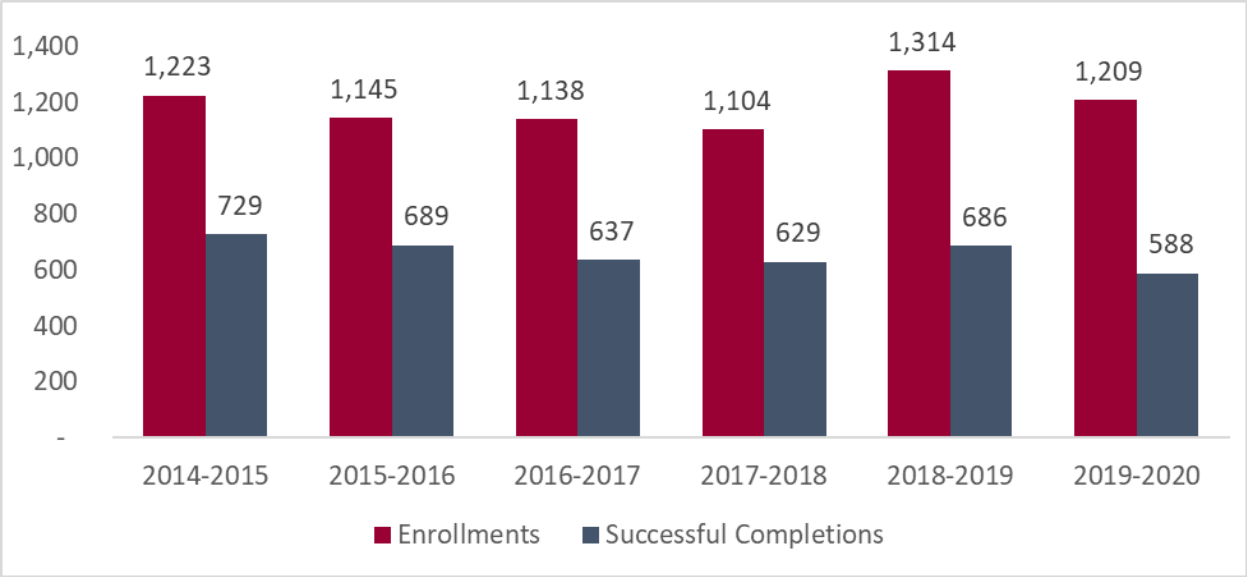
### How does the number of students enrolling in and successfully completing English 101 compare to prior years?

Enrollments in English 101 trended downward from 2014-2015 to 2017-2018 decreasing from 1,223 to 1,104; however, the trajectory changed the following year (Figure 1). In 2018-2019, enrollments increased by nearly 20%, reaching a six-year high of 1,314. This rise in enrollments may be the result of students having greater access to transfer-level English courses due to changes in placement policies leading up to the implementation of AB 705. In 2019-2020, enrollments dropped slightly to 1,209, but this decline took place entirely in spring 2020. There was a 60% decrease in English 101 enrollments in spring 2020 compared to spring 2019 (317 and 796, respectively), likely resulting from the impact of the COVID-19 pandemic and the increase in excused withdrawals[2] (EWs). Unlike regular withdrawals, EWs do not count as an enrollment attempt, therefore, they are generally excluded in student outcome calculations. Comparatively, English 101 enrollments in fall 2019 displayed a significant increase from fall 2018 (892 and 518, respectively).

The number of students successfully completing English 101 declined from 2014-2015 to 2017-2018 decreasing from 729 to 629 (Figure 1). Success counts increased to 686 in 2018-2019 following the same pattern as enrollments. This uptick in success counts from 2017-18 to 2018-19 may reflect changes that took place at the college in preparation for AB 705 implementation. In 2019-2020, success counts dropped to 588 hitting a six-year low. Similar to enrollments, this decrease took place entirely in spring 2020 likely due to factors related to the COVID-19 pandemic including the use of EW grades.

[2]Prior to the pandemic, excused withdrawals (EWs) were approved on an infrequent basis for students who experienced extenuating circumstances. In spring 2020, there were 308 EWs in English 101 compared to zero in spring 2019.

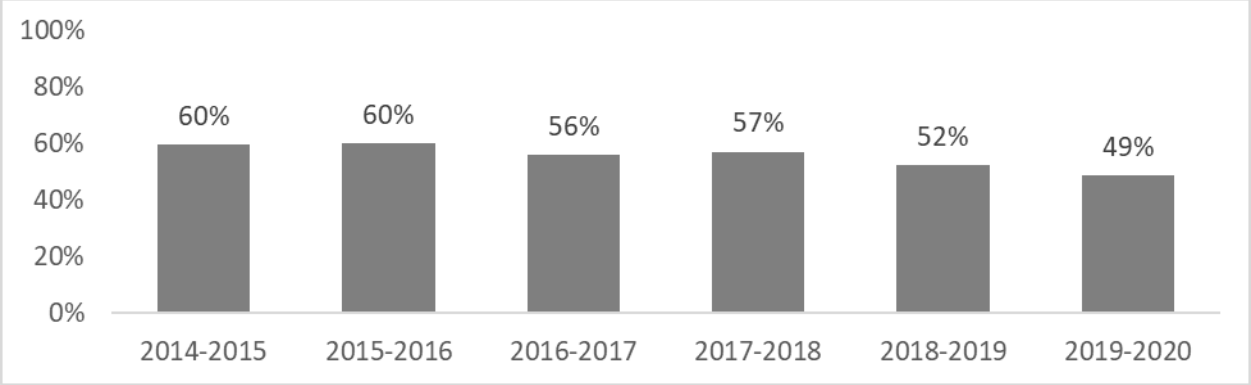
*Figure 1*. English 101 Enrollments and Successful Completions




## How do success rates in English 101 compare to those of prior years?

The percentage of students successfully completing English 101 declined over the last six years from 60% in 2014-2015 to 49% in 2019-2020 (Figure 2). Approximately every two years, success rates dropped by three to five percentage points, reaching a six-year low in 2019-2020. The initial decline reflects the drop in enrollments and success counts that took place from 2014-2015 to 2017-2018; however, English 101 success rates in the last two years were influenced by a rapid increase in enrollments that was not matched by a proportional increase in success counts.

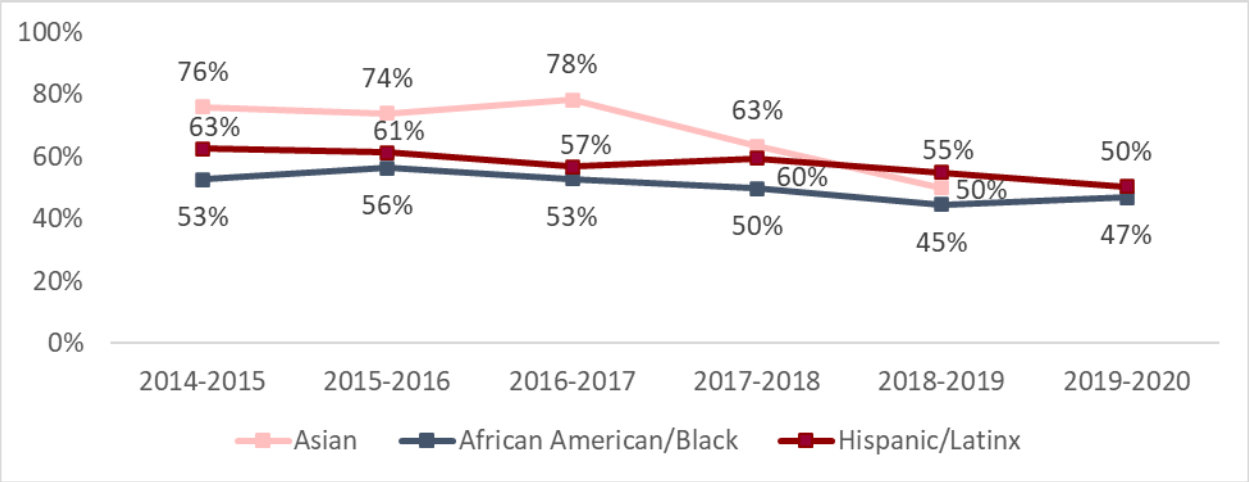
*Figure 2*. English 101 Success Rates




When examined by ethnicity, success rates across reported student groups show a similar trend to the overall success rate, displaying a net decrease over the last six years (Figure 3). The largest percentage decrease between 2014-2015 and 2019-2020 was among Asian students

(-26%[3]), followed by Hispanic/Latinx students (-13%), and African American/Black students (-6%).

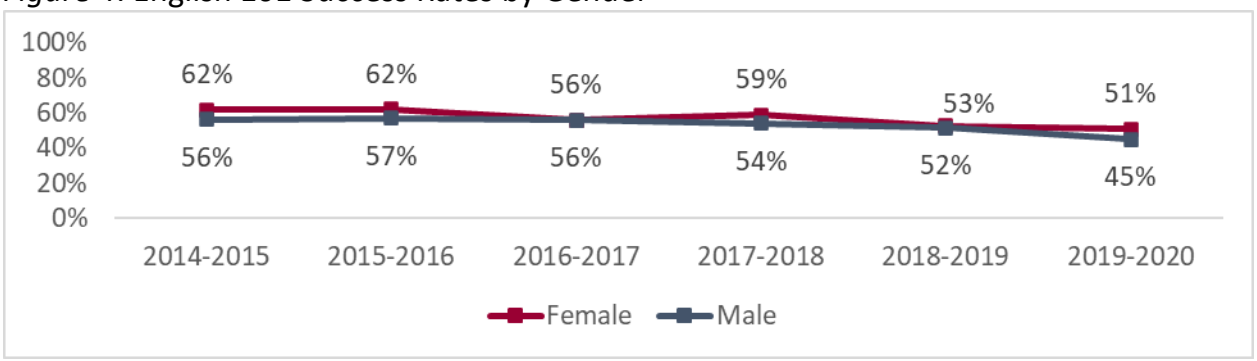
*Figure 3*. English 101 Success Rates by Ethnicity




Note: The chart reflects success rates for groups containing at least 10 students in each year. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

When examined by gender, success rates across student groups show a similar trend to the overall success rate, displaying a net decrease over the last six years (Figure 4). Success rates among female students were stable from 2014-2015 to 2015-2016 at 62%, and then decreased in 2016-2017 to 56%. The following year, success rates rebounded to 59%, but have declined again in the last two years, reaching a six-year low in 2019-2020 at 51%. Success rates among male students were steady between 2014-2015 and 2016-2017, but have gradually decreased in more recent years, also hitting a six-year low in 2019-2020 at 45%.

*Figure 4*. English 101 Success Rates by Gender




Note: The chart reflects success rates for groups containing at least 10 students. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

[3] The success rate among Asian students in 2019-2020 was suppressed due to low count, therefore, this calculation was based on data from 2014-2015 to 2018-2019.

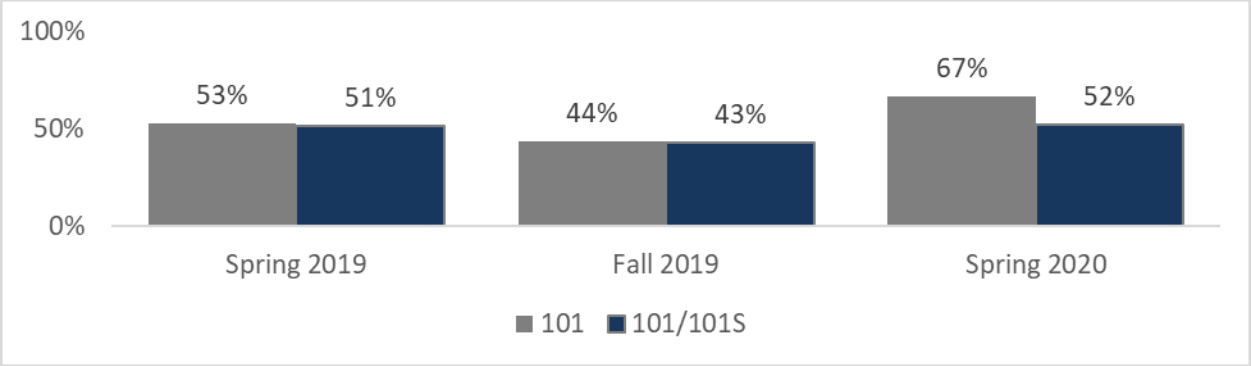
## How do success rates among students who take English 101S compare to students in English 101 who do not take English 101S?[4]

For the first two semesters when support courses were offered,[5] success rates among students enrolled in English 101S were comparable to students who did not take 101S with a one to two percentage point differential (Figure 5). However, in spring 2020, success rates were significantly higher among students who were not enrolled in the support course (67%) relative to those who were enrolled in the support course (52%).

It is worth noting, out of the 626 enrollments in English 101 that term, 309 (50%) resulted in EW grades. Of those EW grades, 223 (72%) stemmed from students who were not enrolled in the support course, while 86 (28%) stemmed from students who were enrolled in the support course. EW grades act as if a student was never enrolled, therefore, they are typically excluded from the denominator in student outcome calculations. The unique circumstances surrounding spring 2020 and the increased number of EW grades may have resulted in inflated success rates due to this exclusion. Since the percentage of EW grades is larger among students who did not take the support course, this may partially explain the higher success rate observed in spring 2020 for this student group.

Additionally, the disparity in success rates observed in spring 2020 could be driven by the lower number of enrollments reported in this term relative to the previous two terms. In total, 317 students were enrolled in English 101 in spring 2020, down from 892 in fall 2020 and 796 in spring 2019.

*Figure 5*. Comparison of Success Rates for English 101 and English 101/101S

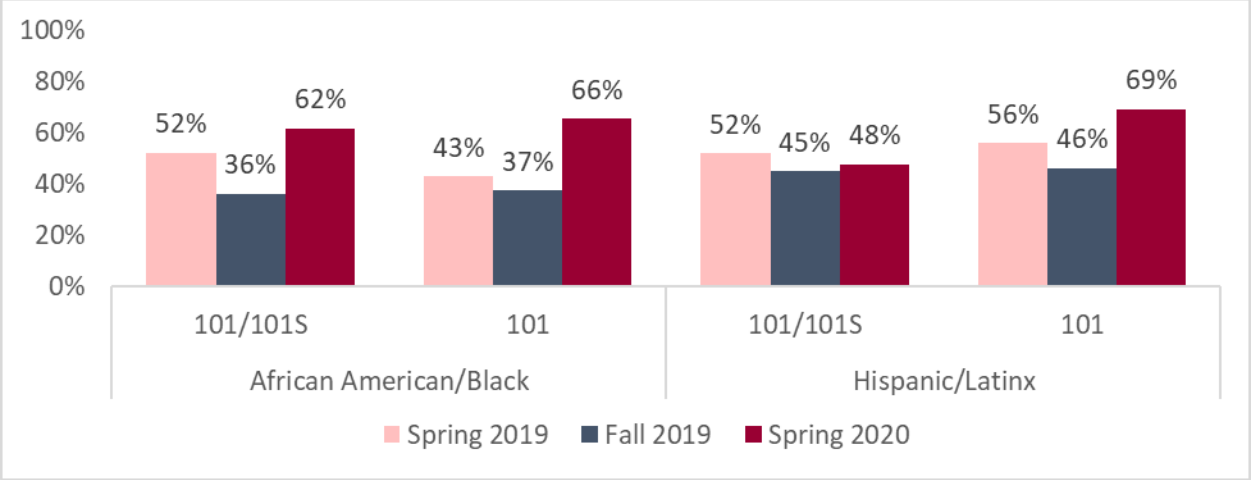



When examined by ethnicity, success rates among African American/Black students enrolled in English 101S were higher or comparable to African American/Black students not enrolled in the support course for the first two semesters it was offered (Figure 6). In spring 2020, this pattern shifted and success rates were lower (-4%) among African American/Black students enrolled in English 101S compared to African American/Black students who were not enrolled in the support course. Success rates among Hispanic/Latinx students enrolled in English 101S were lower or comparable the first two semesters it was offered compared to Hispanic/Latinx

[4] The original research question asked "Do students who take 101S have higher success rates in 101 than students in the same HSGPA band who do not take 101S?" This question was revised based on the available data.
[5] English support courses (i.e., English 1A-S, English 101S) were offered beginning in spring 2019.

students who were not taking the support course. In spring 2020, Hispanic/Latinx students enrolled in English 101S had substantially lower success rates (-21%) than their counterparts not taking the support course, possibly driven by the impact of EW grades noted earlier.

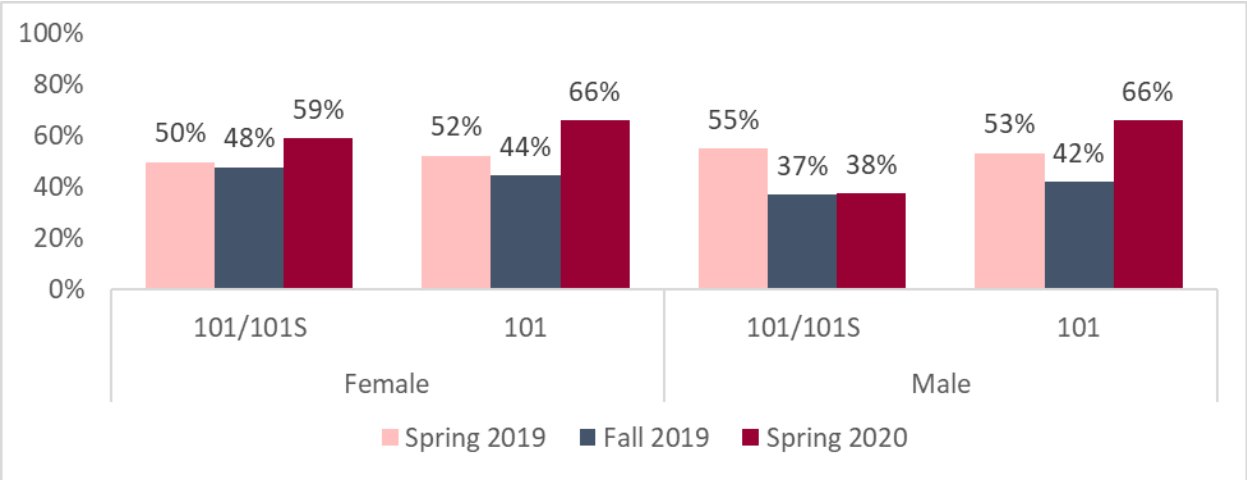
*Figure 6*. Comparison of Success Rates for English 101 and English 101/101S by Ethnicity




Note: The chart reflects success rates for groups containing at least 10 students. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

When examined by gender, success rates among female students enrolled in English 101S displayed alternating patterns term-over-term when compared to their female counterparts who were not enrolled in the support course (Figure 7). Success rates for female students enrolled in English 101S were lower in spring 2019 (-2%), higher in fall 2019 (+4%), and lower in spring 2020 (-7%) relative to female students not enrolled in the support course. Success rates for male students enrolled in English 101S were higher in spring 2019 (+2%) compared to their male counterparts not enrolled in the support course, but lower in the following two terms (-5%, -38%, respectively).

*Figure 7*. Comparison of Success Rates for English 101 and English 101/101S by Gender




Note: The chart reflects success rates for groups containing at least 10 students. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

## How many dual-enrolled students are taking English 101 and English RWA and what are their success rates?

Dual-enrolled students only began enrolling in English courses in 2019-2020. There were 35 dual-enrolled students in English 101 and no students enrolled in English RWA. The success rate for dual-enrolled students in English 101 was 57%, compared to 48% for non-dual-enrolled students.

## What is the breakdown of transfer-level English success rates by faculty and student ethnicity?

Success rates for 2019-2020 transfer-level English were examined by faculty and student ethnicity (Table 1). It is important to consider the number of faculty within each ethnic group when interpretating the success rates to help gauge their relative weight or significance. For instance, the number of White faculty teaching English 101 (n = 11) is higher than any other ethnic group, so the success rates in this category represent a larger proportion of faculty. This context is also important when analyzing ethnic groups with fewer faculty, as they are vulnerable to the effect of outliers that can skew data and lead to large fluctuations year-over-year.

It is not usual to see small n-counts when data are disaggregated across one or more factors as was the case in this analysis. Success rates for ethnic groups containing fewer than 10 students were suppressed to protect confidentiality. These groups can be explored further using various approaches, including aggregating data over multiple years to increase n-counts, combining similar groups where appropriate, and conducting qualitative research, such as focus groups and interviews to dig deeper into the findings. Alternatively, Compton can choose to examine groups containing fewer than 10 students with the understanding that the results may not meet criteria for disproportionate impact, but still provide useful information to support local equity initiatives. The cross-tabulation below is provided for information purposes only. It serves as a place for Compton to start its discussions of how to incorporate instructor-level data disaggregation in the college's equity-related discussions.

*Table 1.* Comparison of 2019-2020 English 101 Success Rates by Faculty and Student Ethnicity

| Student Ethnicity | Faculty Ethnicity | | | | |
|---|---|---|---|---|---|
| | African American/ Black | Asian | Hispanic/ Latinx | Two or more | White |
| | n = 3 | n = 3 | n = 3 | n = 2 | n = 11 |
| African American/Black | 54% | 60% | 64% | * | 43% |
| Asian | * | * | * | * | * |
| Hispanic/Latinx | 60% | 46% | 52% | 42% | 50% |
| Native American | * | * | * | * | * |
| Pacific Islander | * | * | * | * | * |
| Two or More | * | * | * | * | * |
| White | * | * | * | * | * |
| Unknown | * | * | * | * | 39% |

Note: There was a small number of faculty with unknown ethnicity who are not included in the table.

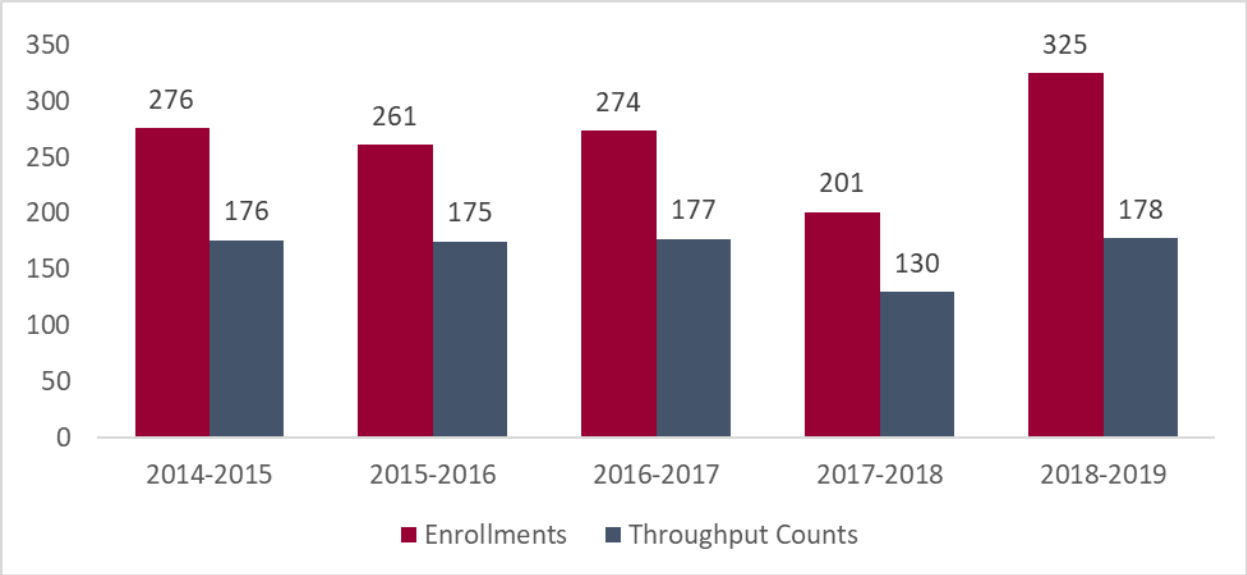
# Throughput

## How does the number and percentage of first-time students enrolling in and successfully completing English 101 within their first year compare to those in prior years?

The number of first-time students enrolling in English 101 was stable between 2014-2015 and 2016-2017 ranging from 261 to 276. In 2017-2018, the number of enrollments dropped to 201 but then jumped to 325 the subsequent year, where it reached a five-year high. As mentioned earlier, this rapid increase in enrollments may be the result of increased access to transfer-level English due to changes made to placement policies leading up to AB 705 implementation.

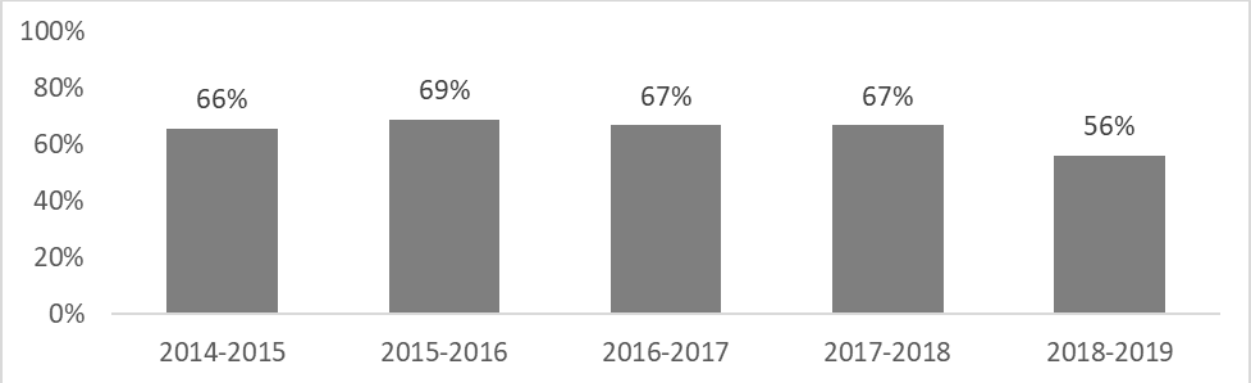
The number of first-time students successfully completing English 101 within one year was stable from 2014-2015 to 2018-2019 ranging from 175 to 178, with the exception of 2017-2018 in which the throughput count dropped to 130 (Figure 8). It is important to note that there were zero first-time students successfully completing English 101 in 2019-2020. The number of first-time students enrolled in any English course in 2019-2020 was unusually low (n = 17) and all students received Ws or EWs. This pattern is consistent with the data Compton reported to the Chancellor's Office in 2019-2020. According to the CCCCO MIS Datamart, a total of 91 first-time students were enrolled at the college during 2019-2020, down from 1,165 first-time students the previous year. This result seems unusual; therefore, the college may want to investigate further.

*Figure 8*. English 101 Enrollments and Throughput Counts for First-Time Students



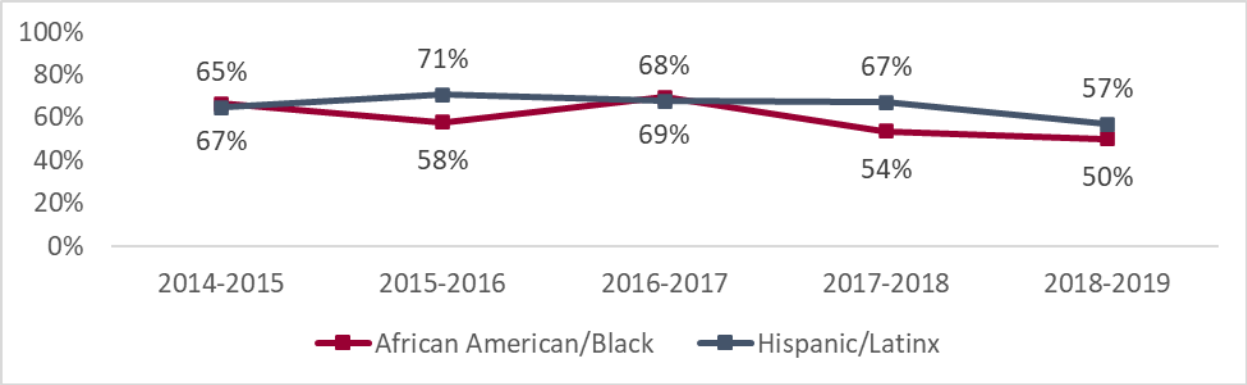

The throughput rates of first-time students successfully completing English 101 between 2014-2015 and 2017-2018 ranged from 66% to 69% (Figure 9). In 2018-2019, the throughput rate dropped to 56% despite the throughput count having regained stability that same academic year. This incongruity is likely due to the higher volume of enrollments in 2018-2019 relative to prior years, which reduced the throughput rate proportionally. The throughput rate for 2019-2020 could not be determined due to the data anomaly noted above, and therefore is not included in the presentation of rates in Figures 9, 10, and 11. The abnormally low number of first-time student enrollments should be inspected further to identify the underlying cause.

*Figure 9*. English 101 Throughput Rates for First-Time Students




When examined by ethnicity, throughput rates across reported student groups show a similar trend to the overall throughput rate, displaying a net decrease over the last five years (Figure 10). Throughput rates among Hispanic/Latinx students were relatively steady from 2014-2015 to 2017-2018 ranging from 67% to 71%, but decreased (-10%) in 2018-2019. Throughput rates among African American/Black students displayed alternating patterns of growth and decline from 2014-2015 to 2016-2017, but have decreased consistently from 2016-2017 to 2018-2019 (-18%).

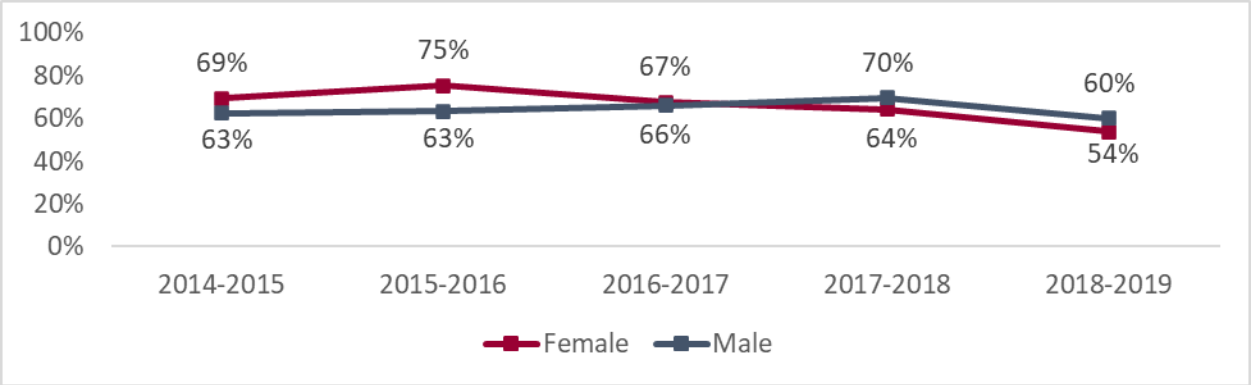
*Figure 10*. English 101 Throughput Rates for First-Time Students by Ethnicity




Note: The chart reflects throughput rates for groups containing at least 10 students. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

When examined by gender, throughput rates across reported student groups show a similar trend to the overall throughput rate, displaying a net decrease over the last five years (Figure 11). Throughput rates among female students increased the most between 2014-2015 and 2015-2016 (+6%), but have continued to decrease over the last four years (-21%), reaching a five-year low in 2018-2019. Throughput rates among male students were on the rise from 2014-2015 to 2017-2018 increasing from 63% to 70%, but decreased (-10%) in 2018-2019, reaching a five-year low similar to the female student population.

*Figure 11*. English 101 Throughput Rates for First-Time Students by Gender



# Math Findings

This section highlights the key results drawn from the comparative analysis of student outcomes for transfer-level math. Data are organized according to the respective research question. As previously noted, disaggregated data are only reported for groups containing at least 10 students. For a complete listing of math data tables including those examined by ethnicity and gender, see Appendix B.

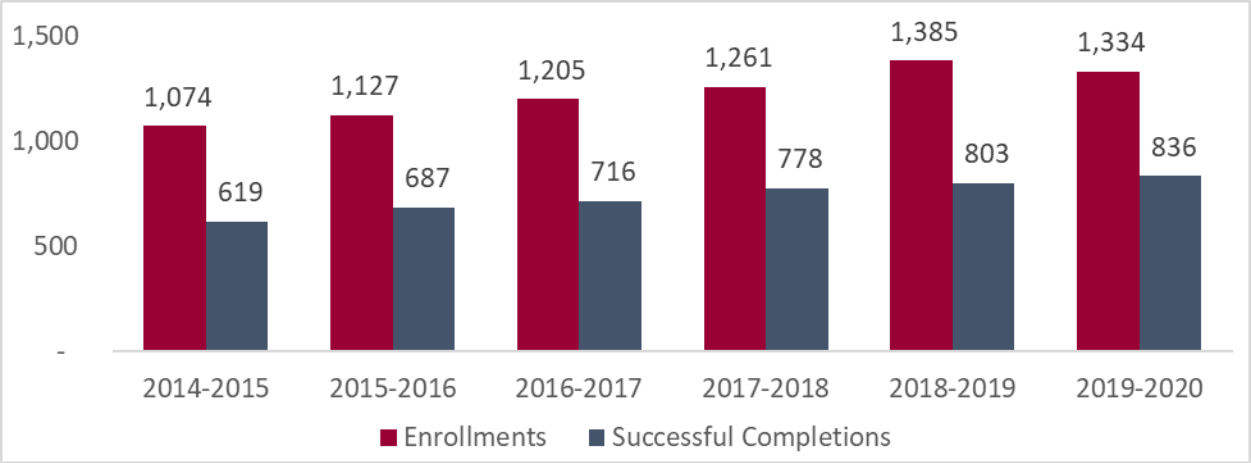
## Enrollments and Successful Completions

### How does the number of students enrolling in and successfully completing transfer-level math compare to that in prior years?

Enrollments in transfer-level math trended upward from 1,074 in 2014-2015 to 1,261 in 2017-2018. In 2018-2019, enrollments increased even more significantly reaching a six-year high at 1,385, amounting to 10% growth from the previous year. Enrollments dropped slightly the following year to 1,334; however, this decline took place entirely in spring 2020, which is consistent with the pattern observed in English 101 enrollments and points to factors related to the COVID-19 pandemic and the increase in EWs.[6] As mentioned previously, EWs differ from regular withdrawals in that they do not count as an enrollment attempt, therefore, they are generally excluded in student outcome calculations. Transfer-level math enrollments decreased by 24% in spring 2020 compared to the previous like term (610 and 801, respectively), while enrollments in fall 2019 displayed a significant increase (724 and 584, respectively), helping to stabilize the overall enrollment count in 2019-2020.

The number of students successfully completing transfer-level math steadily increased from 619 in 2014-2015 to 836 in 2019-2020 when it reached a six-year high (Figure 12). This pattern is consistent with the increase in enrollments observed over the same time period, which indicates improvement in both access and academic outcomes for transfer-level math.

*Figure 12*. Transfer-Level Math Enrollments and Successful Completions




[6] In spring 2020, there were 226 EWs in transfer-level math compared to zero in spring 2019.

To gain a more complete picture of the aforementioned growth in transfer-level math, the data were disaggregated by academic pathway to determine if student outcomes in courses categorized as Business, Science, Technology, and Math (BSTEM) or Social Science and Liberal Arts Math (SLAM) display similar patterns. Which type of math course students take is based on a student's major, career interest, and transfer intent. Counselors work with students to help determine which math pathway is best suited for their educational goals.

*Figure 13*. Math Courses Grouped by Academic Pathway[7]

**BSTEM**

- Math 140 Finite Math for Business and Social Science*
- Math 165 Calculus for Business and Social Science
- Math 170 Trigonometry
- Math 180 Pre-Calculus
- Math 190 Single Variable Calculus and Analytic Geometry I
- Math 191 Single Variable Calculus and Analytic Geometry II
- Math 210 Introduction to Discrete Structures
- Math 220 Multi-Variable Calculus
- Math 270 Differential Equations with Linear Algebra

**SLAM**

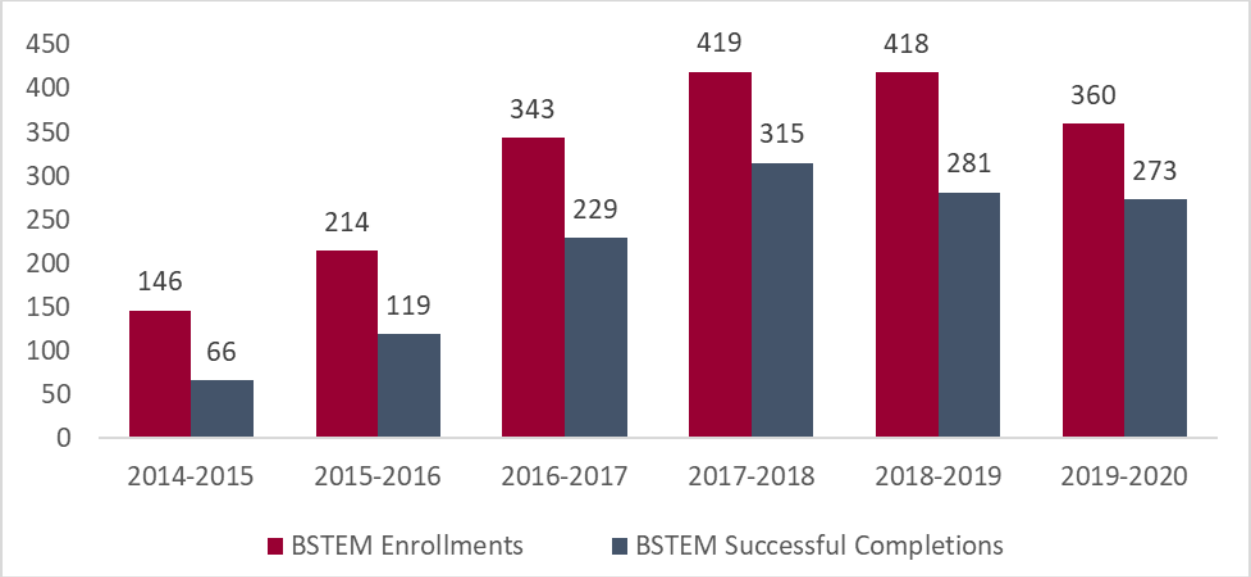
- Math 110 Structures and Concepts in Math
- Math 111 Math for Elementary School Teachers-Geometry, Probability, and Statistics
- Math 115 Probability and Statistics for Prospective Elementary School Teachers*
- Math 116 Geometry and Measurement for Prospective Elementary School Teachers*
- Math 120 Nature of Mathematics
- Math 130 College Algebra
- Math 150 Elementary Statistics with Probability

When examined by academic pathway, enrollments in BSTEM math courses showed significant growth from 2014-2015 to 2018-2019, increasing almost threefold from 146 to 418 (Figure 14). Enrollments decreased to 360 in 2019-2020 likely due to the impact of the COVID-19 pandemic in spring 2020.

The number of students successfully completing BSTEM math courses displayed a similar pattern of growth from 2014-2015 to 2017-2018 increasing almost fivefold from 66 to 315, which was a six-year high (Figure 14). Successful completions decreased in 2018-2019 to 281, and remained relatively stable at 273 in 2019-2020 despite the impact of the COVID-19 pandemic.

[7] Courses are listed in ascending, numeric order and do not reflect the actual sequencing students follow through math pathways. Courses with an asterisk (*) were not offered during the reporting period and are provided for informational purposes only.

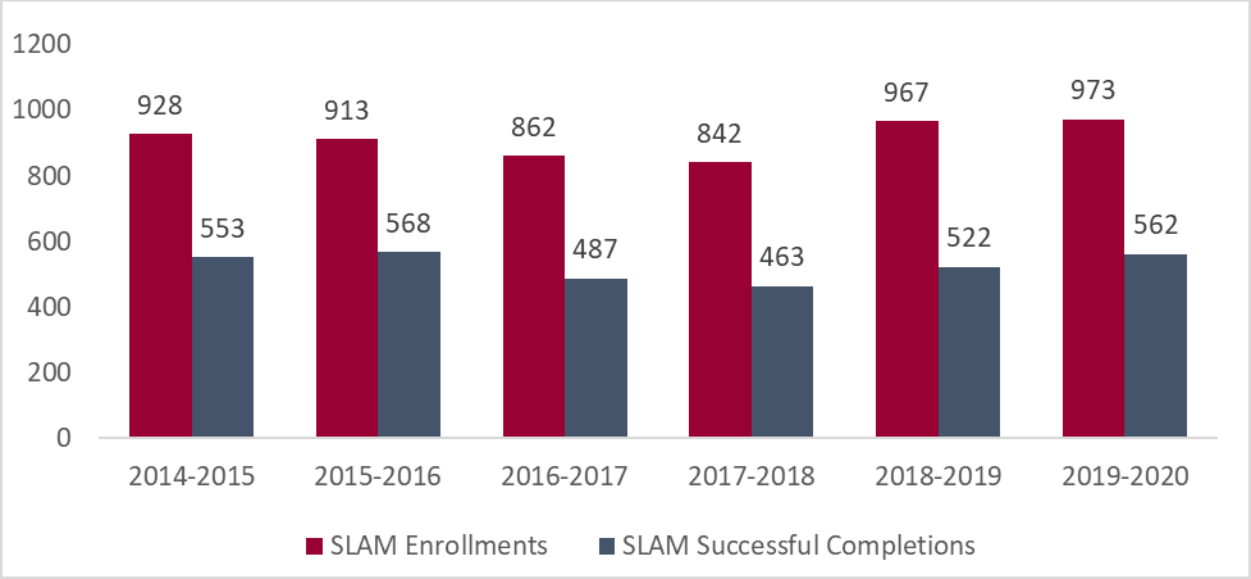
*Figure 14*. Transfer-Level Math Enrollments and Successful Completions in BSTEM




From 2014-2015 to 2017-2018, enrollments in SLAM math courses trended downward from 928 to 842 (Figure 15). In the following two years, enrollments increased considerably, reaching a six-year high of 973 in 2019-2020. This rapid growth beginning in 2018-2019 may point to changes made to placement policies to increase access to transfer-level math in anticipation of AB 705 implementation.

The number of students successfully completing SLAM math courses paralleled the pattern observed in enrollments (Figure 15). Successful completions declined from 553 in 2014-2015 to 463 in 2017-2018, but in the next two years, successful completions trended upward, reaching 562 in 2019-2020.

*Figure 15*. Transfer-Level Math Enrollments and Successful Completions in SLAM

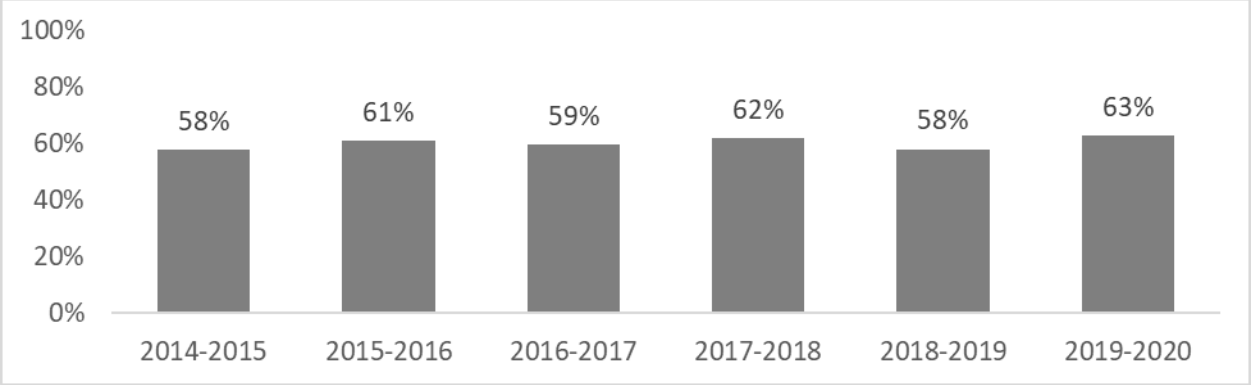


## How do success rates in transfer-level math compare to those of prior years?

The percentage of students successfully completing transfer-level math has been relatively stable from 2014-2015 to 2018-2019 ranging from 58% to 62% (Figure 16). The success rate increased slightly in 2019-2020, reaching a six-year high at 63%.

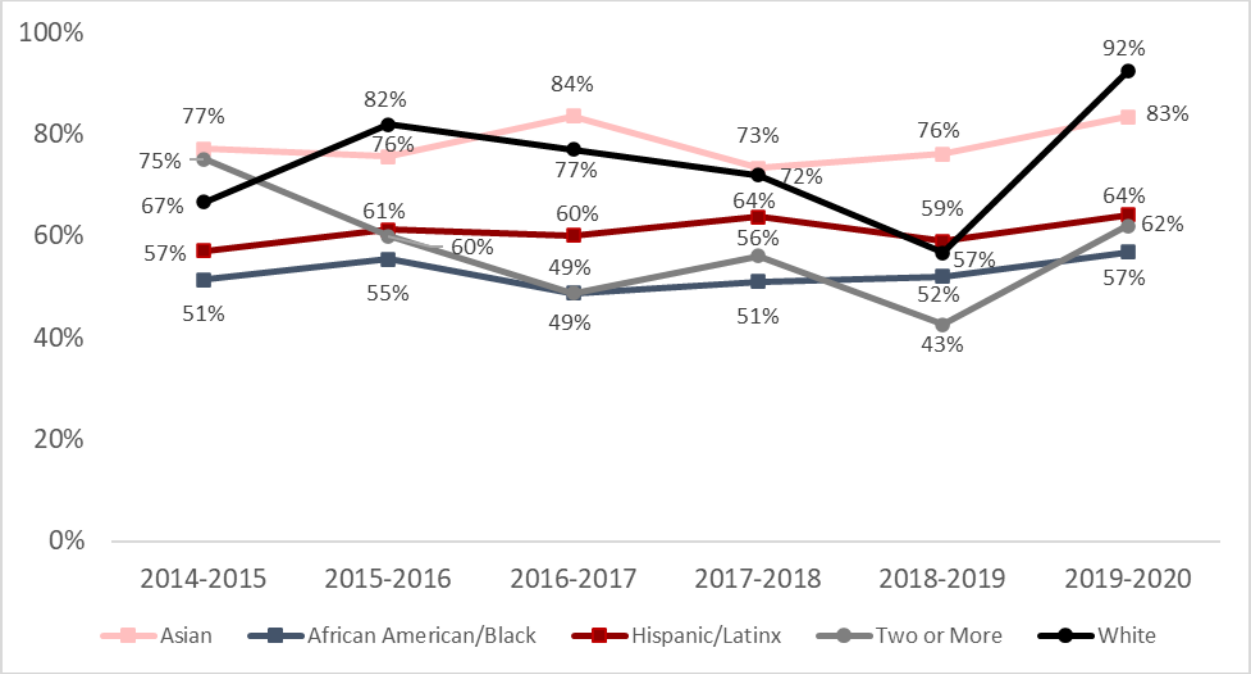
Historically, SLAM courses have accounted for the vast majority of transfer-level math enrollments. In 2014-2015, SLAM math courses made-up 86% of the total enrollments in transfer-level math. While enrollments in BSTEM courses have increased over the last six years, so have enrollments in SLAM courses. In 2019-2020, SLAM courses still made-up almost three-quarters of the total enrollments in transfer-level math. For this reason, SLAM courses are influencing math success rates to a higher degree than BSTEM courses, which is why the pattern displayed in Figure 16 more closely resembles the pattern observed in SLAM courses (Figure 15) than that of BSTEM courses (Figure 14).

*Figure 16*. Transfer-Level Math Success Rates




When examined by ethnicity, success rates across reported student groups show a similar trend to the overall success rate, displaying a net increase over the last six years (Figure 17). From 2014-2015 to 2019-2020, percentage increases were observed among Asian students (+6%), African American/Black students (+6%), Hispanic/Latinx students (+7%), and White students (+25%). The only group to show a decreased success rate over that same time period was students who identify as two or more ethnicities (-13%). It is important to note, student groups with small counts (e.g., White, Two or More) were prone to greater fluctuation.

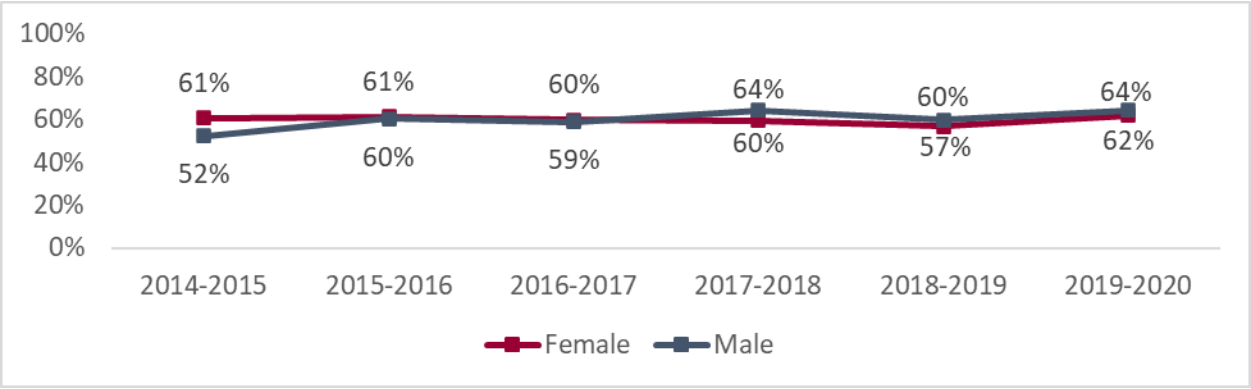
*Figure 17*. Transfer-Level Math Success Rates by Ethnicity




Note: The chart reflects success rates for groups containing at least 10 students. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

When examined by gender, success rates among female students were relatively stable from 2014-2015 to 2018-2019 with an overall net gain (+1%) in that six-year period (Figure 18). Success rates did somewhat decrease among female students in 2018-2019 to 57%, but rebounded the following year to 62%. Success rates among male students increased the most between 2014-2015 and 2015-2016 (+8%), and have remained at or above that level in the last four years.

*Figure 18*. Transfer-Level Math Success Rates by Gender




Note: The chart reflects success rates for groups containing at least 10 students. Groups containing fewer than 10 have been suppressed to protect student confidentiality.

## How many dual enrollment students are enrolling in 47A, intermediate algebra, and transfer-level math and what are their success rates?

Dual-enrolled students only appeared in 2019-2020 and zero were enrolled in Math 47A or Math 80 (Intermediate Algebra for Science, Technology, and Engineering). There were 75 dual-enrolled students in total, two who took Math 73 (Intermediate Algebra for General Education) with a 100% success rate, and 73 who took transfer-level math with a 68% success rate.

## What is the breakdown of transfer-level math success rates by faculty and student ethnicity?

Success rates for transfer-level math in 2019-2020 were examined by faculty and student ethnicity (Table 2). Similar to what was mentioned earlier regarding the breakdown of English success rates by faculty and student ethnicity, the magnitude of the success rates can be better assessed by taking the number of faculty within each ethnic group into consideration. For example, the number of White faculty teaching transfer-level math (n = 7) is greater than any other ethnic group, so the success rates in this category represent outcomes for a larger proportion of instructors. Additionally, the success rates in this ethnic group will be less prone to the effect of outliers, which may skew data and create large fluctuations year-over-year when n-counts are small. It is important to note that this cross-tabulation is intended for informational purposes only, and to serve as a way to begin equity-related conversations. Further analysis is needed to address small n-counts so all ethnic groups can be examined. Recommendations on how to maintain student confidentiality while working with small populations can be found in the English section of this report (page 9).

*Table 2.* Comparison of 2019-2020 Transfer-Level Math Success Rates by Faculty and Student Ethnicity

| | | Faculty Ethnicity | | | | |
|---|---|---|---|---|---|---|
| | | African American/ Black | Asian | Hispanic/ Latinx | Native American | White |
| | | n = 3 | n = 2 | n = 6 | n = 1 | n = 7 |
| Student Ethnicity | African American/Black | * | 53% | 58% | * | 58% |
| | Asian | * | * | 81% | * | * |
| | Hispanic/Latinx | 51% | 42% | 71% | * | 61% |
| | Native American | * | * | * | * | * |
| | Pacific Islander | * | * | * | * | * |
| | Two or More | * | * | * | * | * |
| | White | * | * | * | * | * |
| | Unknown | * | * | 59% | * | 48% |

Note: There was a small number of faculty with unknown ethnicity who are not included in the table.

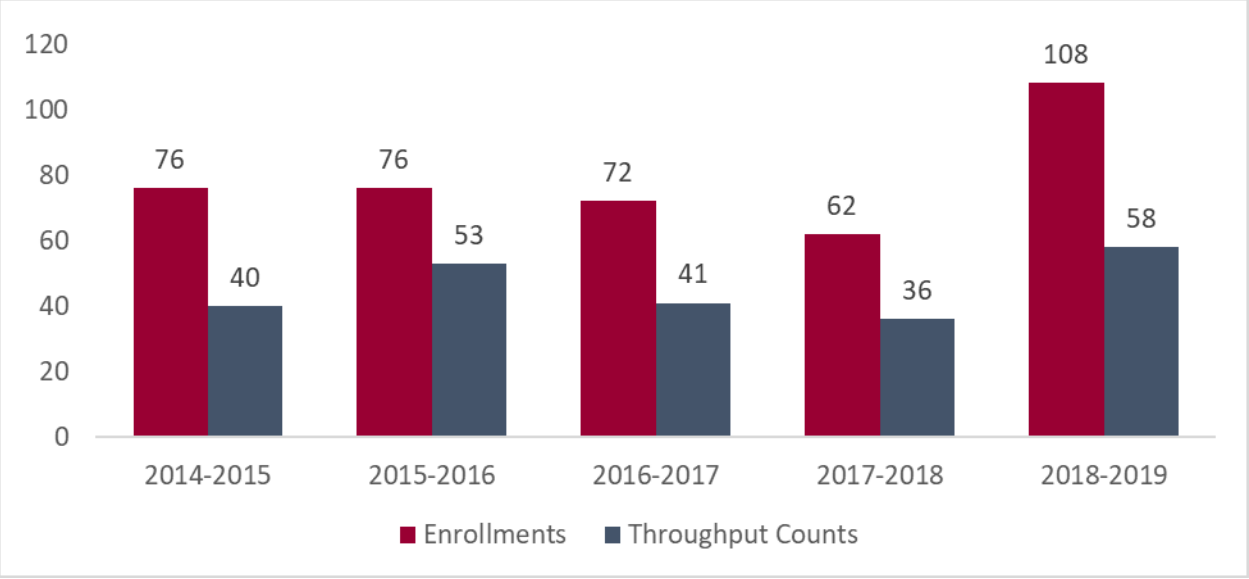
# Throughput

## How does the number and percentage of first-time students enrolling in and successfully completing transfer-level math within their first year compare to those in prior years?

The number of first-time students enrolling in transfer-level math was stable between 2014-2015 and 2016-2017 ranging from 72 to 76. In 2017-2018, the number of enrollments dropped to 62 but then jumped to 108 in 2018-2019, where it reached a five-year high. This pattern mirrors the enrollment trend observed in English 101. The sudden uptick in 2018-2019 enrollments may be the result of increased access to transfer-level math due to changes made to placement policies leading up to AB 705 implementation.

The number of first-time students successfully completing transfer-level math within one year was relatively stable from 2014-2015 to 2018-2019, reaching a six-year high of 58 in 2018-2019 (Figure 19). Similar to the data anomaly observed in English 101, there were zero first-time students successfully completing transfer-level math in 2019-2020 (see pages 10-11). The number of first-time students enrolled in any math course in 2019-2020 was surprisingly low (n = 9) and all students received Ws or EWs. This unusual result merits closer inspection.

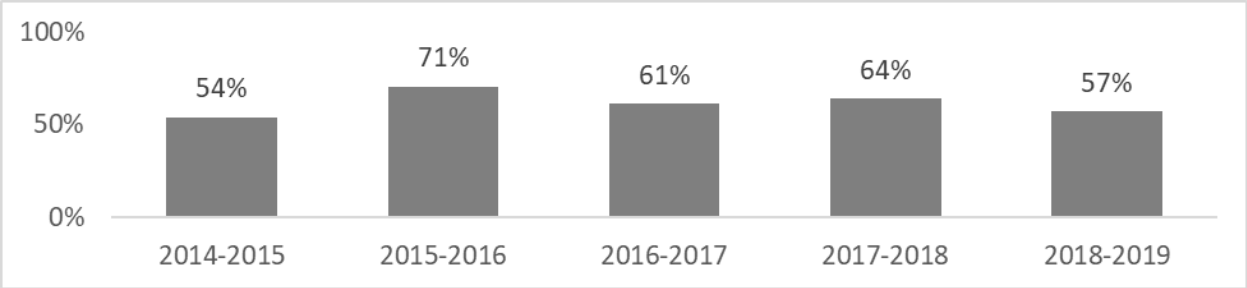
*Figure 19*. Transfer-Level Math Enrollments and Throughput Counts for First-Time Students




The throughput rates of first-time students successfully completing transfer-level math increased from 54% in 2014-2015 to 71% in 2015-2016 (Figure 20). The throughput rate decreased to 61% the following year, increased to 64%, but fell again 2018-2019 to 57%. This sudden drop is due to the higher volume of enrollments in 2018-2019 relative to prior years, which reduced the throughput rate proportionally. The throughput rate for 2019-2020 could not be determined due to the data anomaly noted earlier, and therefore is not included in the

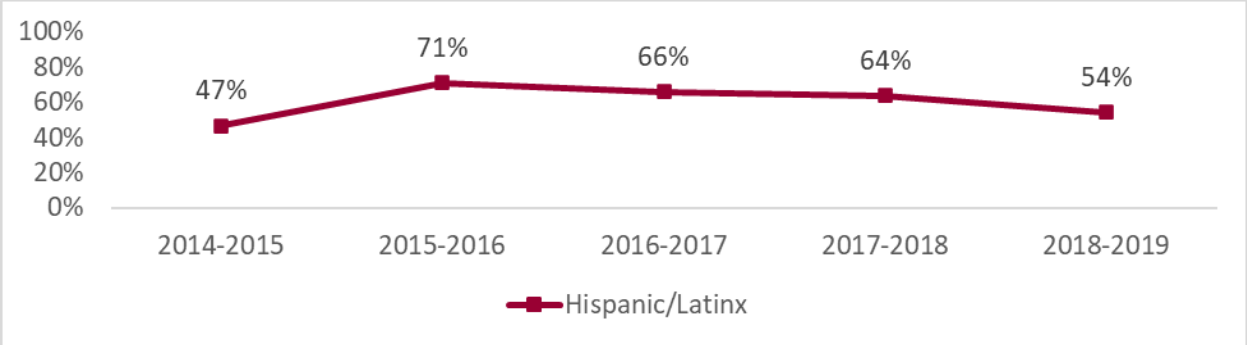
presentation of rates in Figures 20, 21, and 22. The unusually low number of first-time student enrollments should be examined further to identify the underlying cause.

*Figure 20*. Transfer-Level Math Throughput Rates for First-Time Students




Due to low counts, throughput rates desegregated by ethnicity could only be reported for Hispanic/Latinx students (Figure 21). Among this group, throughput rates increased the most between 2014-2015 and 2015-2016 (+24%), and remained relatively steady the following two years. Throughput rates decreased from 2017-2018 to 2018-2019 (-10%), displaying a similar pattern to what was observed in the overall throughput rate.

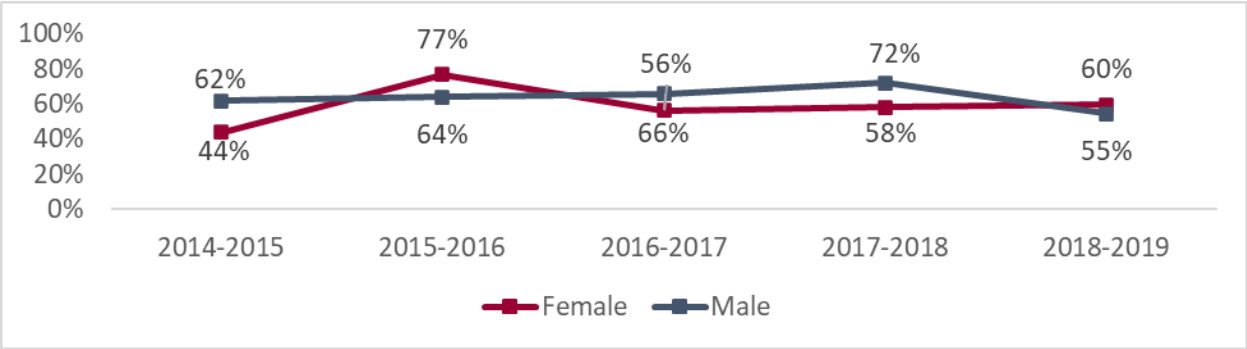
*Figure 21*. Transfer-Level Math Throughput Rates for First-Time Students by Ethnicity




Note: The chart reflects success rates for groups containing at least 10 students. Groups containing fewer than 10 students have been suppressed to protect confidentiality.

When examined by gender, throughput rates among female students increased 33% between 2014-2015 and 2015-2016 (Figure 22). Throughput rates decreased the following year among female students (-21%), but remained steady through 2018-2019. Throughput rates among male students were on the rise from 2014-2015 to 2017-2018, increasing from 62% to 72%, but decreased (-17%) in 2018-2019 to 55%.

*Figure 22*. Transfer-Level Math Throughput Rates for First-Time Students by Gender



# Conclusion

Enrollments in English 101 were on a downward trajectory from 2014-2015 to 2017-2018; however, in 2018-2019 there was a marked increase which continued through the fall 2019. If not for the impact of the COVID-19 pandemic in spring 2020, Compton would likely have seen a net increase in enrollments from 2018-2019 to 2019-2020.

Enrollments in transfer-level math were on an upward trajectory from the start of 2014-2015, hitting a six-year high in 2018-2019. Similar to English 101, enrollments in transfer-level math continued to climb through fall 2019, suggesting the college would likely have reported a net increase from the previous year had it not been for the impact of the COVID-19 pandemic on spring outcomes. This rise in enrollments indicates increased access to transfer-level courses in English and math that may be driven by placement policy changes in support of AB 705 and the Vision for Success goals.

Success rates in English 101 trended downward from 2014-2015 to 2019-2020. When disaggregated by ethnicity and gender, all reported student groups showed a similar trend to the overall college success rate, reflecting a net ***decrease*** in the last six years. These results indicate that students enrolled in English may need additional support in order to successfully complete transfer-level coursework.

Success rates in transfer-level math displayed an opposite pattern to English, reflecting an overall increase from 2014-2015 to 2019-2020. When disaggregated by ethnicity and gender, all reported student groups displayed a net ***increase*** in success rates over the last six years.

While it is important to disaggregate data by student demographics to identify disproportionately impacted groups, meaningful equity-related discussions also need to take place at the instructor level. Colleges are beginning to make this type of data available in dashboards that include student outcomes disaggregated by instructor and/or course section. The cross-tabulations included in this report (Table 1 and Table 2) serve as a starting point for Compton to engage in instructor level data disaggregation; however, it important to first take the time to assess the institutional culture as to whether it is in a place to supports this type of reporting and likely challenging conversations. To expand on the current analysis, Compton could provide individual instructors with their own data, to give them an idea of how their student outcomes compare to course averages. Furthermore, a correlation analysis could be conducted to determine if instructors who implement culturally relevant pedagogies and strategies report higher success rates.

There was one other factor impacting the data in 2019-2020 beyond AB 705, the COVID-19 pandemic, and the abrupt conversion to remote instruction; namely, the transition of the college's data from El Camino's system to Compton's. These considerations should be discussed when interpreting the results of this comparative analysis to help identify potential data integrity issues that need to be addressed: in particular, the significant drop in first-time students enrolled in English and math in 2019-2020. The findings and recommendations in this report, coupled with the results from the previously administered surveys, provide information that Compton can use to enhance AB 705 implementation efforts to support student success and address equity gaps in students' completion of transfer-level English and math courses.

# Appendix A: English Tables

The following tables provide success and throughput counts for English 101, disaggregated by ethnicity and gender. Groups containing fewer than 10 students have been suppressed to protect confidentiality and are denoted with an asterisk (*).[8]

*Table A1.* English 101 Success Counts by Ethnicity

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 |
|---|---|---|---|---|---|---|
| African American/Black | 186 | 167 | 126 | 122 | 139 | 129 |
| Asian | 19 | 20 | 18 | 26 | 11 | * |
| Hispanic/Latinx | 492 | 475 | 459 | 459 | 502 | 407 |
| Native American | * | * | * | * | * | * |
| Pacific Islander | * | * | * | * | * | * |
| Two or More Races | 15 | 14 | 19 | * | 19 | 10 |
| White | 16 | * | * | 10 | * | * |
| Unknown | * | * | * | * | * | * |

*Table A2.* English 101 Success Counts by Gender

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 |
|---|---|---|---|---|---|---|
| Female | 470 | 433 | 371 | 407 | 435 | 378 |
| Male | 259 | 256 | 265 | 222 | 251 | 201 |
| Unknown | * | * | * | * | * | * |

*Table A3.* English 101 Throughput Counts for First-Time Students by Ethnicity

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |
|---|---|---|---|---|---|
| African American/Black | 24 | 22 | 25 | 15 | 23 |
| Asian | * | * | * | * | * |
| Hispanic/Latinx | 144 | 145 | 140 | 102 | 144 |
| Pacific Islander | * | * | * | * | * |
| Two or More | * | * | * | * | * |
| White | * | * | * | * | * |
| Unknown | * | * | * | * | * |

Note: Throughput counts for 2019-2020 are not reflected in the table as there were no first-time students who successfully completed English 101 in the data.

*Table A4.* English 101 Throughput Counts for First-Time Students by Gender

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |
|---|---|---|---|---|---|
| Female | 86 | 89 | 87 | 63 | 103 |
| Male | 90 | 86 | 90 | 67 | 75 |

Note: Throughput counts for 2019-2020 are not reflected in the table as there were no first-time students who successfully completed English 101 in the data.

[8] Additional suppression of non-sensitive data took place to ensure adequate protection of personally identifiable information (e.g., complementary suppression of table totals so the values of the suppressed cells could not be calculated by subtracting the reported values from the column totals).

# Appendix B: Math Tables

The following tables provide success and throughput counts for transfer-level math, disaggregated by ethnicity and gender. Groups containing fewer than 10 have been suppressed to protect student confidentiality and are denoted with an asterisk (*).[9]

*Table B1.* Transfer-Level Math Success Counts by Ethnicity

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 |
|---|---|---|---|---|---|---|
| African American/Black | 133 | 142 | 117 | 130 | 126 | 141 |
| Asian | 47 | 31 | 61 | 55 | 54 | 25 |
| Hispanic/Latinx | 388 | 474 | 482 | 553 | 587 | 606 |
| Native American | * | * | * | * | * | * |
| Pacific Islander | * | * | * | * | * | * |
| Two or More | 21 | 15 | 20 | 14 | 17 | 13 |
| White | 22 | 18 | 30 | 23 | 17 | 12 |
| Unknown | * | * | * | * | * | 35 |

*Table B2.* Transfer-Level Math Success Counts by Gender

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 |
|---|---|---|---|---|---|---|
| Female | 410 | 421 | 430 | 428 | 457 | 489 |
| Male | 209 | 266 | 286 | 350 | 346 | 337 |
| Unknown | * | * | * | * | * | 10 |

Note: Throughput counts for 2019-2020 are not reflected in the table as there were no first-time students who successfully completed transfer-level math in the data.

*Table B3.* Transfer-Level Math Throughput Counts for First-Time Students by Ethnicity

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |
|---|---|---|---|---|---|
| African American/Black | * | * | * | * | * |
| Asian | * | * | * | * | 10 |
| Hispanic/Latinx | 28 | 44 | 33 | 28 | 38 |
| Pacific Islander | * | * | * | * | * |
| Two or More | * | * | * | * | * |
| White | * | * | * | * | * |
| Unknown | * | * | * | * | * |

Note: Throughput counts for 2019-2020 are not reflected in the table as there were no first-time students who successfully completed transfer-level math in the data.

*Table B4.* Transfer-Level Math Throughput Counts for First-Time Students by Gender

| | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |
|---|---|---|---|---|---|
| Female | 14 | 30 | 18 | 18 | 34 |
| Male | 26 | 23 | 23 | 18 | 24 |

[9] Additional suppression of non-sensitive data took place to ensure adequate protection of personally identifiable information (e.g., complementary suppression of table totals so the values of the suppressed cells could not be calculated by subtracting the reported values from the column totals).

# Research and Planning Group for California Community Colleges

As the representative organization for Institutional Research, Planning, and Effectiveness (IRPE) professionals in the California Community Colleges (CCC) system, the RP Group strengthens the ability of CCC to discover and undertake high-quality research, planning, and assessments that improve evidence-based decision-making, institutional effectiveness, and success for all students.

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