



# Impact of AB705 on Math and English

## Fall 2019

### Summary Statements

- Increased access to transfer-level courses along with support components and curriculum changes in light of AB705 had the highest impact on throughput. In fall 2019, transfer level completion increased 2-fold in English and nearly 4-fold in math for newly-assessed students compared to when Accuplacer was used for placement.
- Changes created by AB705 have assisted in closing the equity gap among African American/Black and Latinx students in throughput for English and math, respectively, *eliminating* disproportionate impact for English and *nearly* eliminating it in math.
- Course success rates in transfer-level English and math, respectively, were overall lower and there was minimal to no change in overall course retention rates.
- With regard to throughput of students completing *both* transfer-level English and transfer-level math in the fall term, the rate increased from 25 to 48% among First-time students who were enrolled in both subjects.

Data supporting these findings are provided in the following sections.

Additional Reports will soon be made available on the [College of the Canyons IRPIE Website](#)

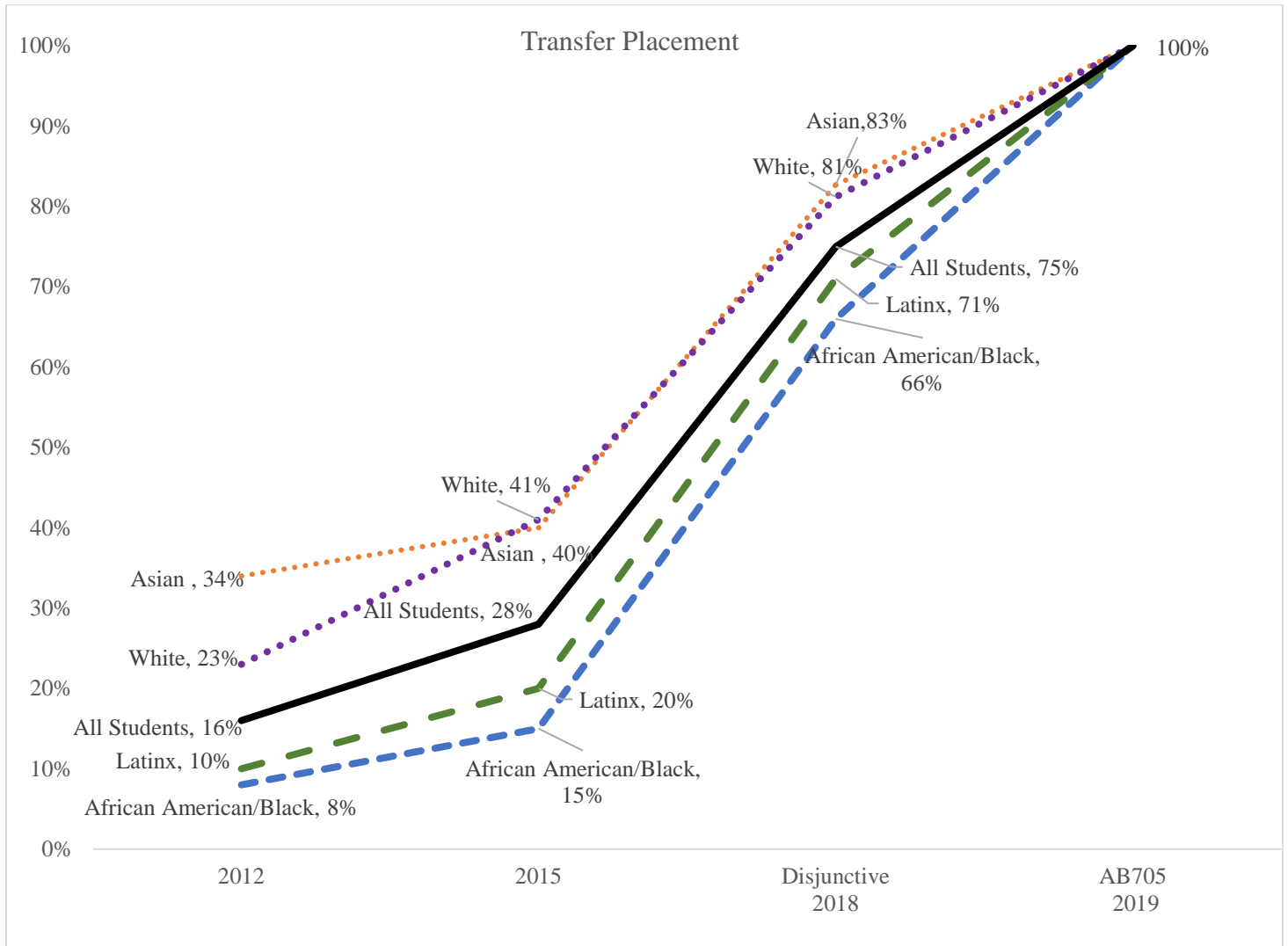
## Table of Contents

AB705 Impact on English.....	3
AB705 Impact on Math.....	7
Impact on Math <i>and</i> English.....	11
Table 1. English Course Summary Data fall 2018 vs. fall 2019.....	4
Table 2. Disproportionate Impact for Throughput in English by Race/Ethnicity.....	6
Table 3. Faculty Ratings of Effectiveness of Curriculum Changes for Student Learning.....	6
Table 4. Math Course Summary Data fall 2018 vs. fall 2019.....	8
Table 5. Disproportionate Impact for Throughput in Math by Race/Ethnicity.....	10
Table 6. Math and English Transfer-level Completion among First-time* Students.....	11
Figure 1. Percent Placing into Transfer-level English by Race/ethnicity.....	3
Figure 2. Success in ENGL-101 (entry-level, transfer) for 3 fall terms.....	4
Figure 3. English Transfer-level completion in the fall term among New students* by year.....	5
Figure 4. Transfer-level English Completion in the Fall Term among New Students by Year and Race/Ethnicity.....	5
Figure 5. Percent Placing into Transfer-level Math by Race/ethnicity.....	7
Figure 6. Success in Transfer-Level Math for 3 fall terms.....	8
Figure 7. Math Transfer-level completion in the fall term among New students* by year.....	9
Figure 8. Transfer-level Math Completion in the Fall Term among New Students by Year and Race/Ethnicity.....	10

## AB705 Impact on English

College of the Canyons efforts of addressing placement gaps preceded the AB705 mandate. Rates of placement into transfer-level English are provided in Figure 1, indicating an elimination of disproportionate impact when it comes to access to transfer-level courses.

Figure 1. Percent Placing into Transfer-level English by Race/ethnicity



In light of AB705, all students were given access to a new 4-unit version of the ENGL-101 course (previously 3 units) and below-transfer courses were not offered in fall 2019. A separate, optional, noncredit support course was also offered. The new ENGL-101 courses, in addition to adding class time included changes to the curriculum (i.e. adding a full-length book, and incorporating metacognition).

The overall success rate for English Composition (ENGL-101, entry-level Transfer) has decreased between 2017-2019. However, the number of students who have enrolled in and then passed a transfer level English course/ENGL-101 (1,786) is slightly higher than the prior term when disjunctive placement was implemented, and 38% higher than when placement was based on Accuplacer (2017) (Figure 2). Retention rates stayed relatively stable from 2017-2019: 87% in fall 2017; 85% in fall 2018 and 85% in fall 2019 with AB 705 implementation.

Figure 2. Success in ENGL-101 (entry-level, transfer) for 3 fall terms

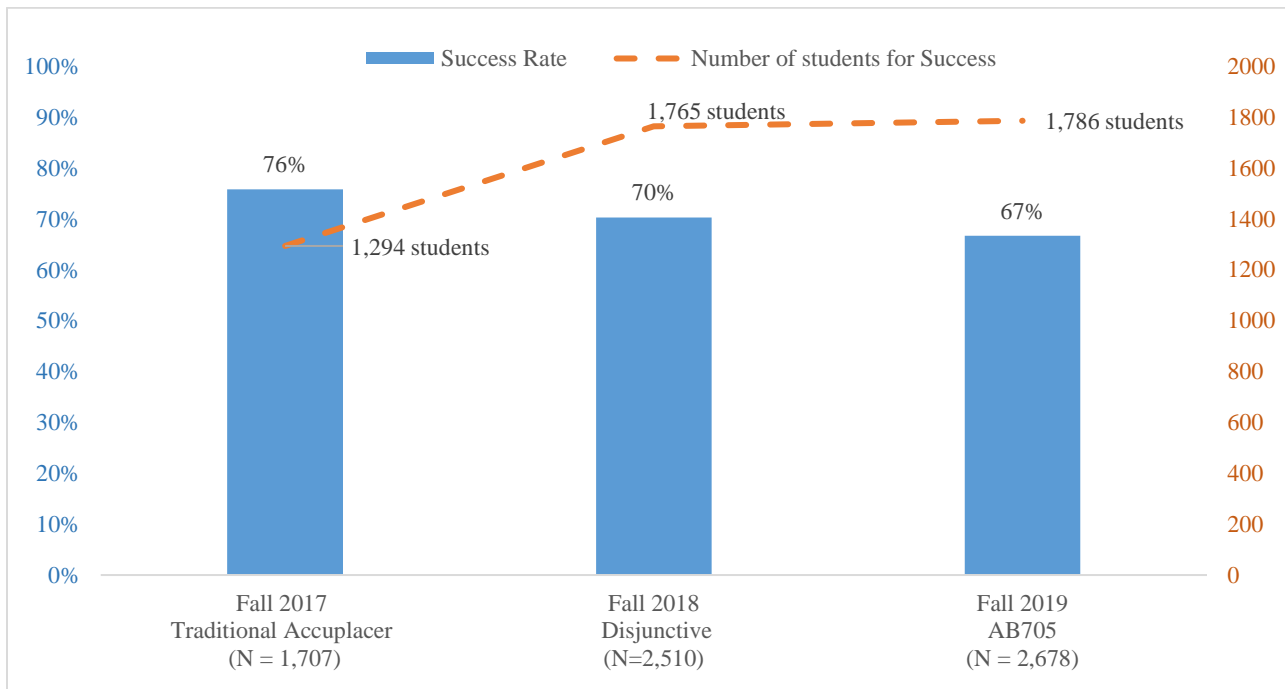


Table 1. English Course Summary Data fall 2018 vs. fall 2019

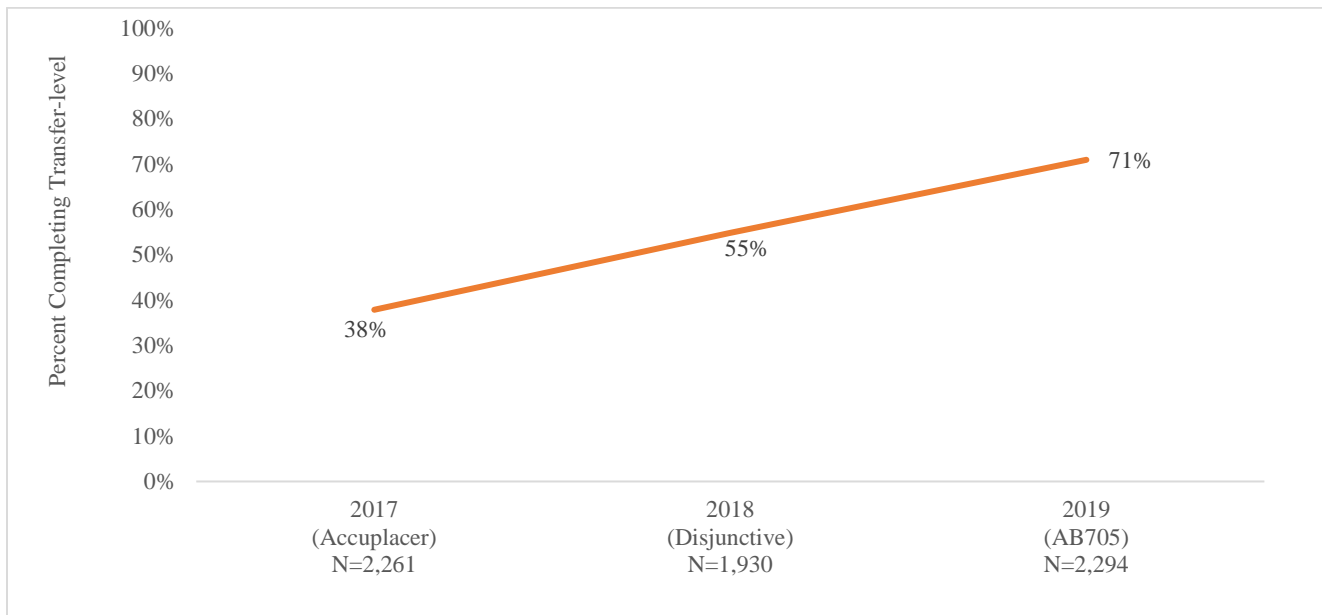
Level	Course Name	# of Sections		Total Enrolled		Success (%)		Retention (%)	
		2018 Fall	2019 Fall	2018 Fall	2019 Fall	2018 Fall	2019 Fall	2018 Fall	2019 Fall
Transfer Level	Composition (ENGL-101*)	78	89	2,510	2,678	70%	67%	85%	85%
	ENGL-103/H & higher	54	56	1,349	1,345	79%	76%	89%	86%
Below Transfer	ENGL- 089/091/094/096	35		769		58%		78%	

### English Throughput

Throughput data was examined for the fall 2019 term in comparison to the previous 3 terms, starting with a baseline of 2017 before disjunctive placement were implemented. Throughput is defined as the percentage of newly-assessed<sup>1</sup> students who completed at least one transfer-level English course in the fall term. The throughput rate was the highest in the 2019 fall term when all students were given access to ENGL-101 yielding an increase of 16 percentage points among newly placed students over the prior fall term (Figure 3).

<sup>1</sup> Newly-assessed students are those who assessed in the given year. Although it includes first-time students entering the college, it is not limited to them, and also includes students who were given the eligibility to re-assess in spite of having enrolled in an English course previously.

Figure 3. English Transfer-level completion in the fall term among Newly-assessed students\* by year



\*Percentage is out of students who assessed and enrolled in an English course in the given term and indicates completion of ENGL-101 or a higher course.

Disaggregating throughput rate by race/ethnicity showed that rates of transfer-level completion in English increased for all groups substantially (Figure 5). Disproportionate impact (D.I.) analyses using the 80% of ‘other’ measure indicated that the gap was significantly reduced for previously identified D.I. groups (i.e. African American/Black students’ rate was further from the 80% benchmark in 2017 and increased to 79% in 2019). Among Latinx students disproportionate impact with regard to throughput in English was eliminated (Table 3).

Figure 4. Transfer-level English Completion in the Fall Term among New Students by Year and Race/Ethnicity

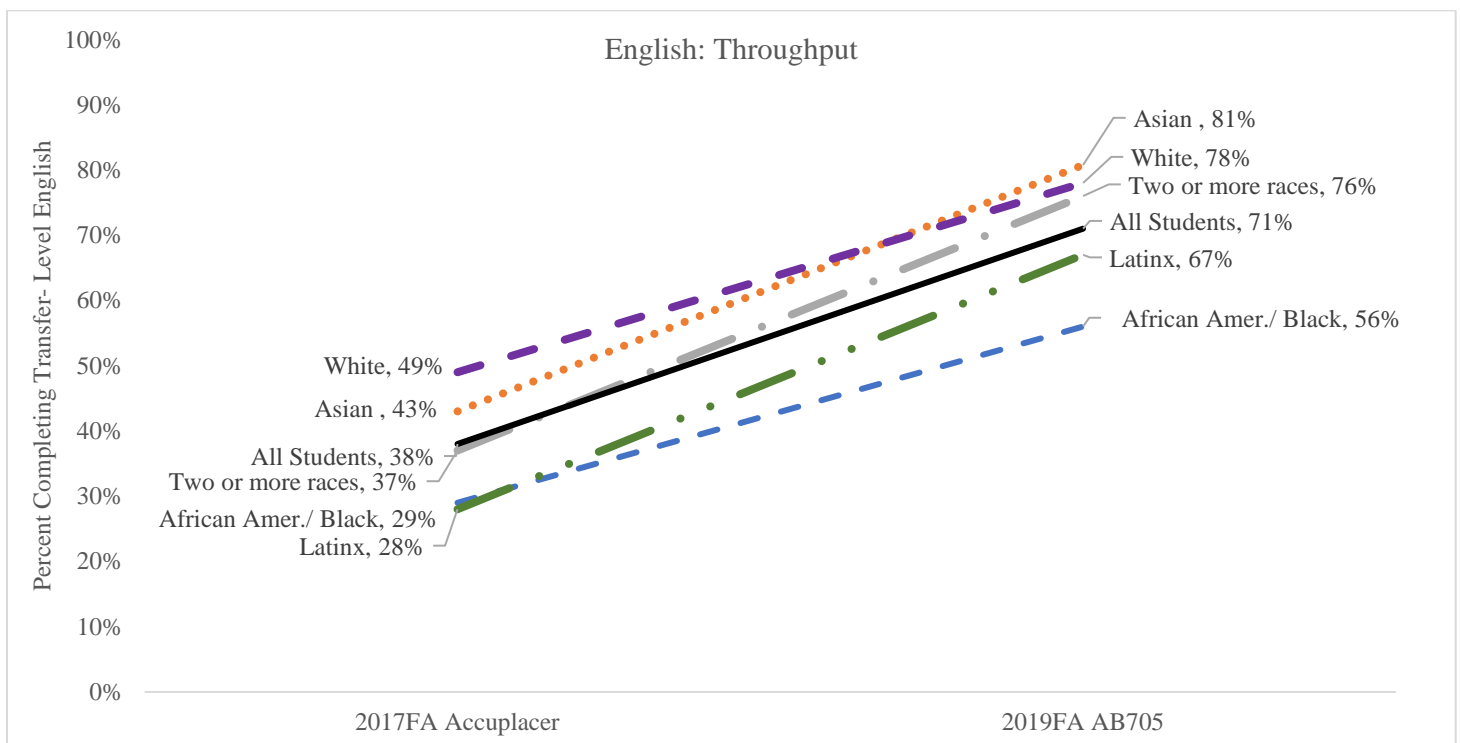


Table 2. Disproportionate Impact for Throughput in English by Race/Ethnicity

	80% of Overall		80% of Other <sup>2</sup>	
	2017FA Accuplacer	2019FA AB705	2017FA Accuplacer	2019FA AB705
Afr. American/Black	<b>76%</b>	<b>79%</b>	<b>75%</b>	<b>79%</b>
Asian	132%	114%	120%	115%
Latinx	<b>78%</b>	94%	<b>63%</b>	88%
White	131%	110%	151%	112%
Two or more races	97%	107%	97%	108%

Red/Orange/Bold indicates disproportionate impact (<80% benchmark)

### English 101 Student and Faculty Survey Data

In reporting how faculty and students have felt in response to the changes resulting from AB 705 we conducted surveys at the end of the Fall 2019 semester.

Student Survey Respondents (N = 862): 72% reported that the rigor level of ENGL-101 (Transfer Level) was “At or around my level,” 21% felt ENGL-101 was “well above my level” and 7% felt it was “below/well below my level”. The data overwhelmingly illustrated that when disaggregating responses by modality (online vs. on-ground) for how prepared a student felt for transfer level English, on-ground students were twice as likely to feel prepared for ENGL-101 as online students were. With regards to the rigor of the course, online students were twice as likely to respond that the rigor level was “well above my level”.

Faculty Survey Respondents (N = 44): 98% reported they were aware of our college’s noncredit support course option. A majority of faculty respondents (86%) also utilized a diagnostic to make referrals to this noncredit support course. In addition, faculty indicated their agreement with questions regarding whether the addition of extra class time, a full-length book, meta-cognition and rhetorical analysis assisted in making the course more effective for student learning. The option with the highest rate of agreement was the addition of the full-length book (68%), followed by metacognition (65%).

Table 3. Faculty Ratings of Effectiveness of Curriculum Changes for Student Learning

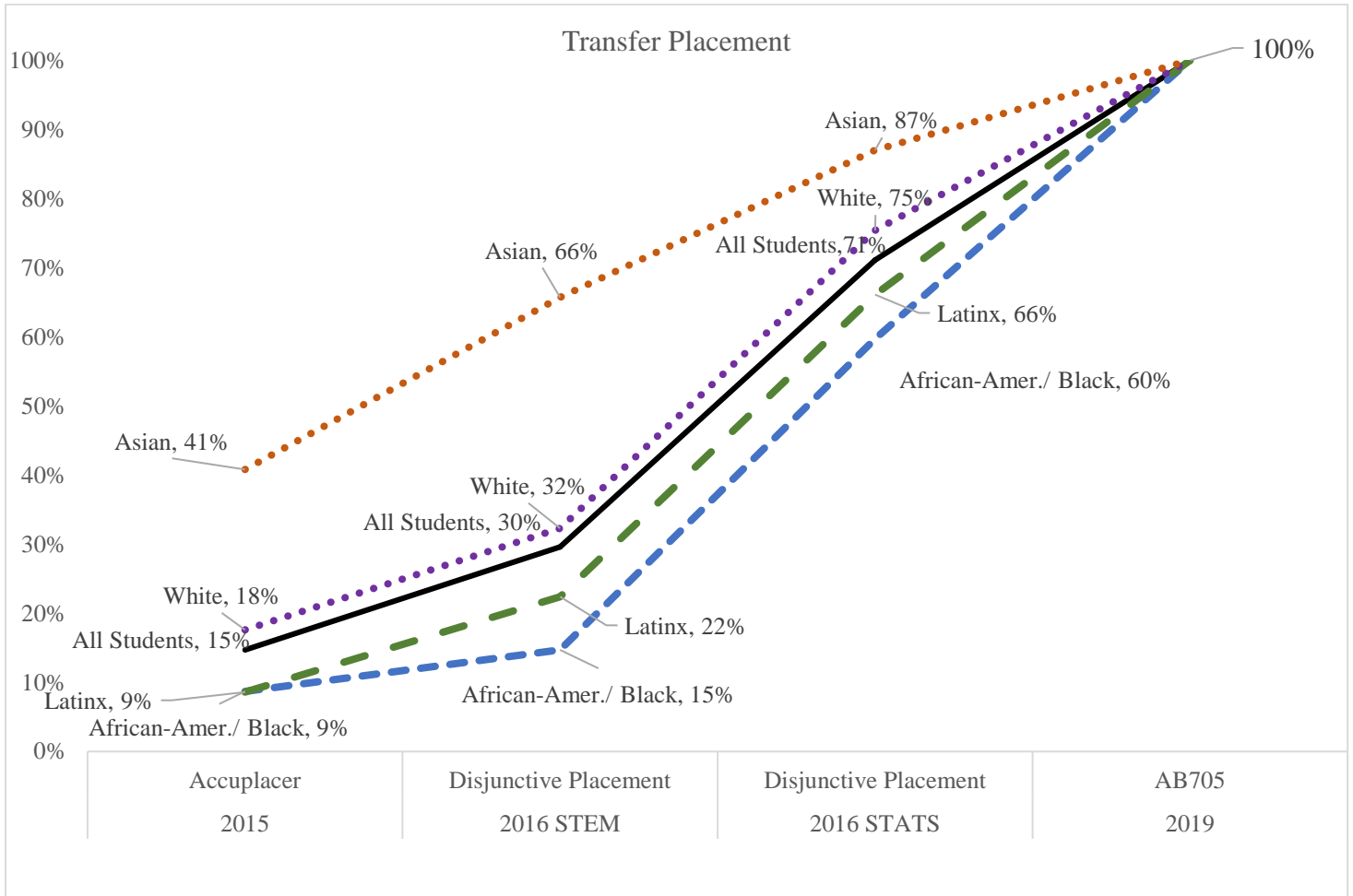
	Strongly/Disagree	Neither	Strongly/Agree
Extra Class Time (n = 44)	23%	34%	43%
Full Length Book (n = 44)	16%	16%	68%
Metacognition (n = 44)	5%	30%	65%
Rhetorical Analysis (n = 44)	16%	23%	61%

<sup>2</sup> Since Latinx- identifying students represent the largest group in the overall student population, the 80% of ‘Other’ measure was used to assess disproportionate impact when the group’s rate is removed and compared to the rate of all other race/ethnicity groups, combined.

## AB705 Impact on Math

The math department at College of the Canyons began implementing disjunctive placement in 2016 where students were given a Statistic placement and a B-STEM placement based on their high school performance measures. This change yielded a significant increase in the number of students placing into transfer-level courses in comparison to 2015 when placement was largely based on Accuplacer. Figure 5 provides the trend data for placement in Transfer-level by Race/ethnicity.

Figure 5. Percent Placing into Transfer-level Math by Race/ethnicity



An aggregated examination of success and retention rates (Table 4) for entry-level transfer courses, and below-transfer level courses was compared between fall 2018 and fall 2019. First, enrollment in below-transfer courses was one-fourth the size of the enrollment in transfer-level courses in the prior fall term. Moreover, success and retention rates in below-transfer level courses were lower in the fall 2019 term (success 39% vs. 53% and retention 68% vs. 79%).

Similarly for transfer-level courses in the B-STEM pathway, success and retention rates were substantially lower in the AB705 term in comparison to the previous term (success 42% vs. 66% and retention 64% vs. 82%) with a 20% increase in enrollment. Transfer-level courses in the Liberal Arts Pathway had a 65% increase in enrollment and the course success rate was slightly lower (72% vs. 77%) and retention remained similar.

Figure 6. Success in Transfer-Level Math for 3 fall terms

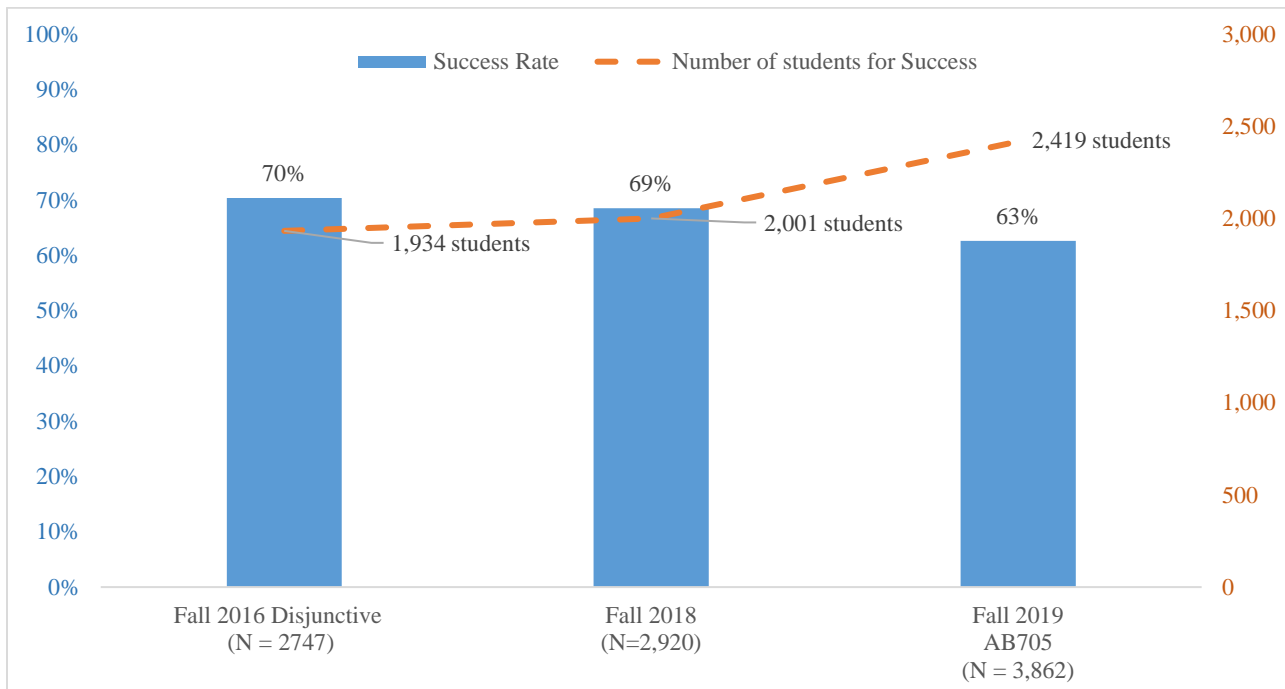


Table 4. Math Course Summary Data fall 2018 vs. fall 2019

	# of Sections		Enrollment (N)		Success (%)		Retention (%)	
	2018 Fall	2019 Fall	2018 Fall	2019 Fall	2018 Fall	2019 Fall	2018 Fall	2019 Fall
Transfer-Level: B-STEM <sup>1</sup>	19	25	573	687	66%	42%	82%	64%
Transfer-Level: Liberal Arts <sup>2</sup>	39	63	1195	1977	77%	72%	88%	87%
Transfer-Level: Other <sup>3</sup>	36	37	1152	1198	61%	59%	78%	72%
Below-Transfer <sup>4</sup>	88	29	2,546	638	53%	39%	79%	68%

\*Excludes courses with fewer than 2 sections offered in the fall term.

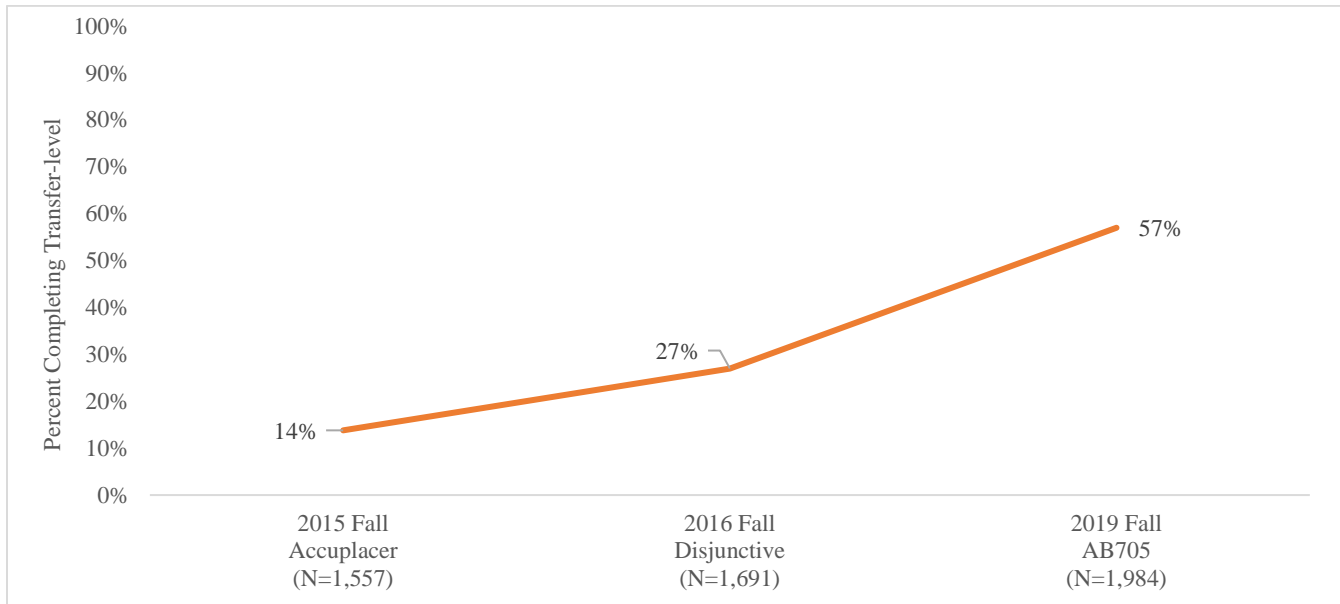
1. B-STEM courses are limited to entry-level, transfer courses (Trigonometry and College Algebra)
2. Liberal Arts Math includes entry-level, transfer courses (Statistics and Liberal Arts Math)
3. Other (PreCalc, Calc I-III, Diff.Eq, Linear Alg., Math Analysis)
4. Below-transfer (Pre-Alg, Elem. Alg., Interm.Alg, Interm.Alg. for Statistics, Geometry)



## Math Throughput

Throughput data was examined for the fall 2019 term in comparison to two prior fall terms, 2015, when Accuplacer was used and 2016 when disjunctive placement was implemented. Throughput is defined as the percentage of newly-assessed<sup>3</sup> students who completed at least one transfer-level math course in the fall term. The throughput rate was the highest in the 2019 fall term when AB705 changes were implemented yielding an increase of 30 percentage points among newly placed students over the prior fall term (Figure 7).

*Figure 7. Math Transfer-level completion in the fall term among Newly-assessed students\* by year*



\*Percentage is out of students who assessed and enrolled in a math course in the given term.

Disaggregating throughput rate by race/ethnicity showed that rates of transfer-level completion in math increased for all groups substantially (Figure 7). Disproportionate impact (D.I.) analyses using the 80% benchmark indicated that the gap was significantly reduced for previously identified D.I. groups (i.e. African American/Black students and Latinx students). In 2016 African American/Black students' rate was at 50% of the 80% benchmark, and increased to 74% of the 80% benchmark in 2019. Among Latinx students, disproportionate impact for throughput in math was also substantially reduced between 2016 and 2019.

<sup>3</sup> Newly-assessed students are those who assessed in the given year. Although it includes first-time students entering the college, it is not limited to them, and also includes students who were given the eligibility to re-assess in spite of having enrolled in a math course previously.

Figure 8. Transfer-level Math Completion in the Fall Term among New Students by Year and Race/Ethnicity

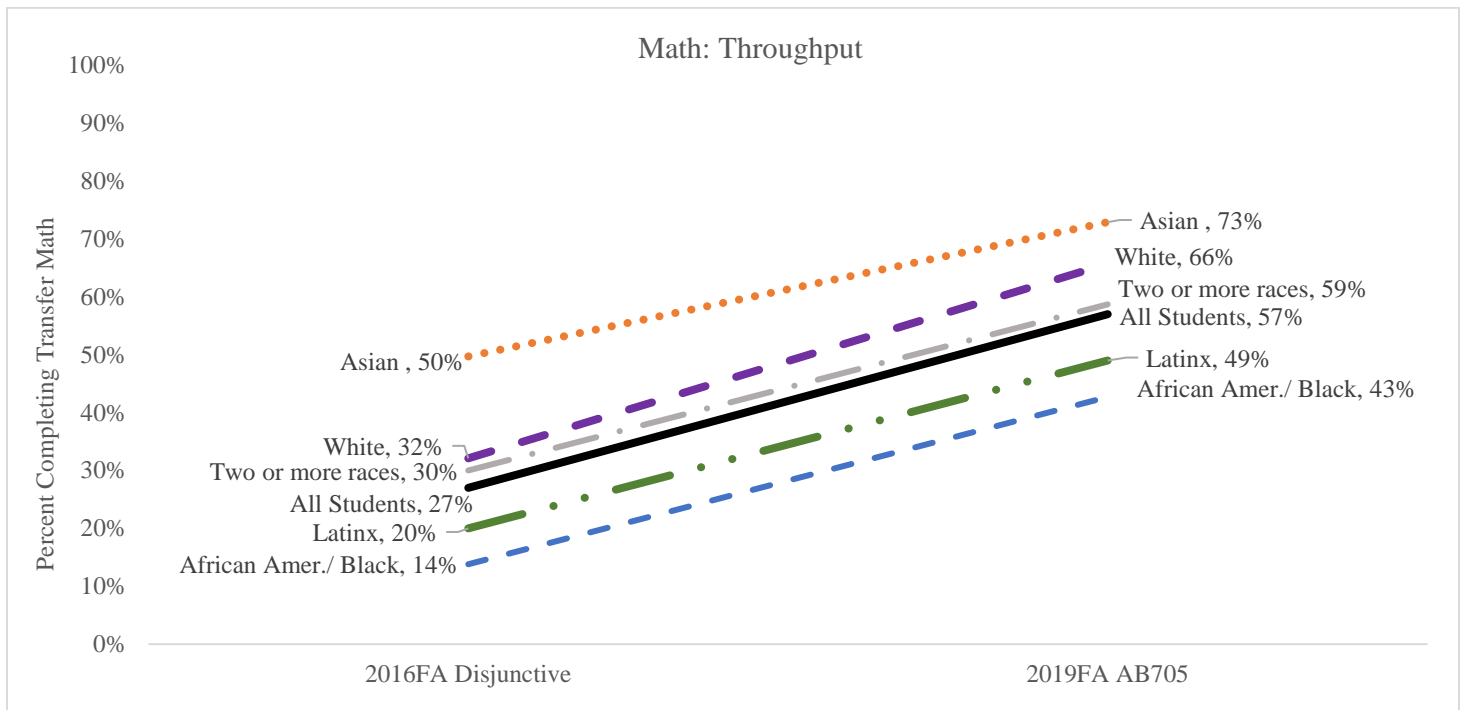


Table 5. Disproportionate Impact for Throughput in Math by Race/Ethnicity

	80% of Overall		80% of Other <sup>4</sup>	
	2016FA Disjunctive	2019FA AB705	2016FA Disjunctive	2019FA AB705
African American/Black	<b>50%</b>	<b>75%</b>	<b>49%</b>	<b>74%</b>
Asian	181%	127%	199%	133%
Latinx	<b>73%</b>	86%	<b>59%</b>	<b>77%</b>
White	117%	115%	125%	119%
Two or more races	111%	102%	112%	103%

Red/Orange/Bold indicates disproportionate impact (<80% benchmark)

<sup>4</sup> Since Latinx- identifying students represent the largest group in the overall student population, the 80% of 'Other' measure was used to assess disproportionate impact when the group's rate is removed and compared to the rate of all other race/ethnicity groups, combined.

## Impact on Math *and* English

Another measure included in the analyses on the impact of AB705 was the number of students who complete both math and English transfer-level in their first fall term after enrolling in both. This throughput rate increased from 25% to 48% over the prior fall term (2018), and the volume increased from 281 to 363 students. Table 6 provides the rates for three terms indicating placement changes that were in effect during that term.

*Table 6. Math and English Transfer-level Completion among First-time\* Students*

	Fall 2017		Fall 2018		Fall 2019	
	Frequency	Math Disjunctive, English Accuplacer Percent	Frequency	English and Math Disjunctive Percent	Frequency	AB705 Percent
Completed both Transfer Math & English	<b>139</b>	<b>14%</b>	<b>281</b>	<b>25%</b>	<b>363</b>	<b>48%</b>
Completed Transfer English only	150	15%	374	34%	162	22%
Completed Transfer Math only	94	9%	30	3%	52	7%
Did not complete either	622	62%	420	38%	175	23%
Total*	1,005		1,105		752	

\*Out of students who were enrolled in both English and math courses, and the fall term was the student's first-term (limited to enrollment in 'credit' courses). This is a conservative parameter than the data with regard to “New” students in prior sections of this report. Excludes students who complete PSYCH-104 and SOCI-137 (Statistics in Social Sciences courses).

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