

2022-2025 Student Equity Plan:
Evidence of Decreased Disproportionate Impact and Proposed New Benchmarks
Columbia College Research and Planning
Tuesday, June 7, 2022

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2022-2025 COLUMBIA COLLEGE STUDENT EQUITY PLAN EVIDENCE AND BENCHMARKS

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Introduction

This document synthesizes outcomes reported in the California Community College's Student Equity Plan (SEP) baseline data provided to Columbia College in May 2022, and uses it to propose content for two critical areas of the revised SEP goal-setting template.

The first response area was the essay, *Evidence of Decreased Disproportionate Impact*, which considered whether DI was reduced over time. Importantly, however, the goal was to use the data provided to consider the question holistically, rather than to assess specific outcomes established in the previous SEP goal-setting cycle. Many key components of the SEP have changed since the previous cycle, and Columbia College's previously established goals cannot be evaluated using the data provided. The new data provided by the CCC were limited to a first-year cohort, while the data used in the previous cycle retained more students. As well, the target metrics have been revised. For example, the indicator *persisted from first fall to spring* in the 2019-2022 SEP cycle has been expanded to measure persistence from first *primary* term to subsequent primary term, which is more inclusive of spring-starting students. It is also very critical to observe and bear in mind that the baseline years provided by data were not aligned to the starting year of the cycle or to each other. The metric *successful enrollment in the first year*, for example, used recent 2020-2021 cohorts, while measures for *transferred to a four-year institution within three years* lagged substantially with 2016-2017 cohorts which precede even the previous SEP cycle.

The second response area was the benchmarking section, *Student Populations Experiencing Disproportionate Impact*, which used the data provided to establish new targets for the *population experiencing the most significant disproportionate impact*.

Data preparation. The data used for this activity included discrete frequency-based outcomes for equity groups and comparison groups, as well as pre-calculated disparate impact (DI) and achievement gap measures. Columbia College researchers retained the frequency outcomes, but replicated calculations locally using the California Community College's *Percentage Point Gap Minus One* methodology.¹ In doing so, and per best-practice, researchers masked values and calculations when the subgroups fell below a masking threshold of ten students.

¹ California Community Colleges Research and Data Analytics (2022). *Methodology Note 2022 Update: Percentage Point Gap Minus One*. Sacramento, CA: California Community Colleges.

Evidence of Decreased Disproportionate Impact Essay

Columbia College researchers propose the inclusion of the following essay into the appropriate space on the response template. The response is limited to 2,500 characters.

Researchers examined two comparison groups using the SEP datasets provided by the CCC, one that matched the baseline years of the pending 2022 SEP cycle (i.e., *post-cohort*), and another that would reflect the 2019 baseline if the same data had been used at that time (i.e., *pre-cohort*). Researchers used only three of five available metrics because the most recent outcomes for other metrics preceded even the 2019 cycle. They retained operational decisions associated with the PPG-1 methodology, such as to mask small values. It is important to note that the post-cohort outcomes were recorded during the Covid-19 pandemic, which exacerbated existing social inequities even while sensible local policies were implemented to address them.

Successful Enrollment in the First Year. Researchers did not explicitly find DI related to ethnicity in either the pre- or post-cohorts, but noted that the sizes of two ethnicity subgroups, *American Indian/Alaska Native* and *Pacific Islander or Hawaiian Native*, fell below the masking value between cycles, which was interpreted implicitly as emerging DI such that these groups experienced diminished opportunity over time compared to others. Although gender is not considered a primary equity group, researchers observed that the performance gap for *females* narrowed substantially such that DI was present in the pre-cohort had been resolved in the post-cohort.

Persisted First Primary Term to Subsequent Primary Term. Researchers did not observe reduced DI on this item over time. Rather, they noted that DI which existed in the pre-cohort persisted into the post-cohort for *Black or African American, first generation*, and *male* students. As well, they noted that DI emerged over time for *foster youth*, and that the values for *veteran* students declined below the masking threshold over time, suggesting diminished opportunity.

Completed Both Transfer-Level Math and English Within the District in the First Year. Researchers found a clear reduction in DI for *first generation, male*, and *Perkins economically disadvantaged* students. However, they also observed that DI persisted over time for *Black or African American, Hispanic*, and *LGBTQ+* students, while DI emerged (explicitly or implicitly by having samples fall below the masking threshold over time) for *American Indian/Alaska Native, female*, and *veteran* students.

Student Populations Experiencing Disproportionate Impact: Proposed Benchmarks

Columbia College researchers reported and examined outcomes for all equity subgroups where DI was directly observed, or where DI was non-measurable because the subgroup size fell below a masking threshold of 10 students. In proposing primary equity targets, and per the guidelines provided in the SEP template, researchers focused on one primary equity subgroup for each of five critical outcome metrics. In making their determination, researchers balanced both the size of the equity gap observed with the absolute number of students affected.

A summary overview of proposed benchmark targets by primary equity subgroup is presented on the next page, followed by more detailed metric-by-metric outcomes.

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Summary Overview of Proposed Benchmarks

American Indian or Alaska Native Student Equity Subgroups:

- Increase *successful enrollment in the first year* from 1.1% to 2.2% of college enrollment by 2024-2025, and increase the number of first-year students above the masking threshold in all years. ²

Hispanic or Latino Student Equity Subgroups:

- Increase the achievement rate of *completing transfer-level math and English in the first year* 5.2 points from 8.3% to 13.5% by 2024-2025 to match outcomes for all other students. ³
- Increase *attainment of the Vision for Success definition of completion within three-years* 6.0 points from 7.1% to 13.1% by 2024-2025 to match outcomes for all other students. ⁴

First Generation to College Student Equity Subgroups: ⁵

- Increase *persistence from first primary term to second primary term* 8.7 points from 47.2% to 55.9% by 2024-2025 to match outcomes for all other students. ⁶
- Increase *transfers to a four-year college or university within three years* by 14.5 points from 10.3% to 24.8% by 2024-2025. ⁷

² The data for this metric lags one year. It is reported using 2020-2021 outcomes, and will be reported using 2023-2024 outcomes at the next SEP cycle.

³ The data for this metric lags one year. It is reported using 2020-2021 outcomes, and will be reported using 2023-2024 outcomes at the next SEP cycle.

⁴ The data for this metric lags four years. It is reported using 2017-2018 outcomes, and will be reported using 2020-2021 outcomes at the next SEP cycle.

⁵ Determined when neither parent has earned a bachelors degree.

⁶ The data for this metric lags two years. It is reported using 2019-2020 outcomes, and will be reported using 2022-2023 outcomes at the next SEP cycle.

⁷ The data for this metric lags five years. It is reported using 2016-2017 outcomes, and will be reported using 2019-2020 outcomes at the next SEP cycle.

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Metric 300: Successful Enrollment in the First Year (Baseline 2021)

Table 1. Successful Enrollment in the First Year (Metric 300)							
Subgroup	Group Achievement	Group Size	Group Achievement Rate	Comparison Achievement	Comparison Size	Comparison Achievement Rate	Achievement Rate Difference (PPG)
American Indian/Alaska Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Filipino	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pacific Islander or Hawaiian Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Proposed equity group focus: *American Indian/Alaska Native*

Recommendation: Increase Native American student enrollment. First-year enrollment to double from 1.1% to 2.2% by 2024-2025. Group sizes should exceed masking threshold in all years.

Rationale:

- No subgroups were found to have identifiable DI on this metric, but three subgroups emerged as being too small to estimate, including Native American subgroups.
- In 2019, this group was about 1.3% of the overall population in college's extended service area (Amador, Calaveras, Mariposa, and Tuolumne Counties).⁸
- In AY2021-22, this group comprised about 1.3% of college enrollment, and about 1.1% of first-year student enrollment.⁹ Other nonwhite ethnicity subgroups tend to be overrepresented in college enrollment compared to the regional population. Hispanic or Latino students, for example, are estimated at about 12.5% of the population and 22.5% of college enrollment. College enrollment breakdowns tend to more closely reflect the regional workforce demographic than the regional overall population demographic. Hispanic or Latino persons, for example, comprise about 24.9% of the area workforce, which is similar to their college enrollment.¹⁰ By comparison, however, Native American subgroups comprise only about .7% of the area workforce.

⁸ U.S. Census Bureau (2021). *2011-15 to 2015-2019 American Community Survey (5-year estimates)*. Accessed through 'tidycensus' R package on Monday, August 2, 2021.

⁹ Columbia College (2021b). *Student Enrollment Summary by Term* [Dashboard]. Sonora, CA: Columbia College. Accessed Monday, June 6, 2022 from https://www.gocolumbia.edu/institutional_research/institutional_outcomes_and_student_achievement_reporting.php.

¹⁰ Emsi (2022). *Emsi Occupation Overview: All Occupations Overview in the Columbia College Motherlode Area (Amador, Calaveras, Mariposa, and Tuolumne Counties)*. Moscow, ID: Emsi. Downloaded Tuesday, May 24, 2022 from <https://a.economicmodeling.com/login/login.php>.

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Metric 501: Completed Transfer-Level Math and English in the First Year (Baseline 2021)

Table 2. Completed Transfer-Level Math and English in the First Year							
Subgroup	Group Achievement	Group Size	Group Achievement Rate	Comparison Achievement	Comparison Size	Comparison Achievement Rate	Achievement Rate Difference (PPG)
American Indian/Alaska Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Black or African American	1	26	3.8%	93	729	12.8%	-9.0 points
Filipino	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hispanic	13	156	8.3%	81	599	13.5%	-5.2 points
Pacific Islander or Hawaiian Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
LGBTQ+	1	24	4.2%	93	731	12.7%	-8.5 points
Veteran	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Proposed equity group focus: *Hispanic or Latino*

Recommendation: Reduce achievement gap. Gap to be substantially reduced or eliminated by 2024-2025.

Rationale:

- Hispanic or Latino students were a large equity subgroup that comprised about 20.7% of 2021 first-year enrollment using the CCC estimates above.
- This group also experienced a large performance gap of 5.2 points for completing Math and English in the first year compared to other reference groups.
- This was not the largest gap observed (9.0 points for Black or African American students) but affected the greatest number of students.

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Metric 453: Persisted from First Primary Term to Second Primary Term (Baseline 2020)

Table 3. Persisted from Primary Term to Secondary Term							
Subgroup	Group Achievement	Group Size	Group Achievement Rate	Comparison Achievement	Comparison Size	Comparison Achievement Rate	Achievement Rate Difference (PPG)
Asian	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Black or African American	8	25	32.0%	349	642	54.4%	-22.4 points
Filipino	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pacific Islander or Hawaiian Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Two or More Races	< 10	< 10	< 10	< 10	< 10	< 10	< 10
First Generation	85	180	47.2%	272	487	55.9%	-8.7 points
Forster Youth	21	53	39.6%	336	614	54.7%	-15.1 points
Homeless	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Veteran	< 10	< 10	< 10	< 10	< 10	< 10	< 10

Proposed equity group focus: *First Generation*

Recommendation: Reduce achievement gap. Gap to be substantially reduced or eliminated by 2024-2025.

Rationale:

- Using the CCC estimates provided, first-generation students were a large equity group that comprised about 30.0% of 2020 first-year student enrollment, while local reporting estimated them as up to 49.6% of first-year enrollment that year.¹¹
- The subgroup experienced a large 8.7 point achievement gap compared to other groups.
- This was not the largest gap observed (foster youth experienced a 15.1 point gap), but the achievement gap affected a greater number of students.

¹¹ Columbia College (2021). *Student Enrollment Summary by Term* [Dashboard]. Sonora, CA: Columbia College. Accessed Monday, June 6, 2022 from https://www.gocolumbia.edu/institutional_research/institutional_outcomes_and_student_achievement_reporting.php.

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Metric 619: Attained the Vision for Success Definition of Completion Within Three Years (Baseline 2018)

Table 4. Attained the Vision for Success Definition of Completion Within Three Years							
Subgroup	Group Achievement	Group Size	Group Achievement Rate	Comparison Achievement	Comparison Size	Comparison Achievement Rate	Achievement Rate Difference (PPG)
Asian	0	11	0.0%	91	775	11.7%	-11.7 points
Black or African American	1	37	2.7%	90	749	12.0%	-9.3 points
Filipino	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Hispanic	14	197	7.1%	77	589	13.1%	-6.0 points
Pacific Islander or Hawaiian Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Two or More Races	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Forster Youth	0	17	0.0%	91	769	11.8%	-11.8 points
LGBTQ+	1	28	3.6%	90	758	11.9%	-8.3 points

Proposed equity group focus: *Hispanic or Latino*

Recommendation: Reduce achievement gap. Gap to be substantially reduced or eliminated by 2024-2025.

Rationale:

- Hispanic or Latino students were a large equity subgroup that comprised about 25.1% of 2018 first-year enrollment using the CCC estimates above.
- This group experienced a large performance gap of 6.0 points compared to other reference groups.

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Metric 620: Transferred to a Four-Year Institution Within Three Years (Baseline 2017)

Table 5. Transferred to a Four-Year Institution Within Three Years							
Subgroup	Group Achievement	Group Size	Group Achievement Rate	Comparison Achievement	Comparison Size	Comparison Achievement Rate	Achievement Rate Difference (PPG)
American Indian/Alaska Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Asian	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Filipino	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Pacific Islander or Hawaiian Native	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Two or More Races	< 10	< 10	< 10	< 10	< 10	< 10	< 10
First Generation Student	11	107	10.3%	67	270	24.8%	-14.5 points
LGBTQ+	1	17	5.9%	77	360	21.4%	-15.5 points

Proposed equity group focus: *First Generation*

Recommendation: Reduce achievement gap. Gap to be substantially reduced or eliminated by 2024-2025.

Rationale:

- Using the CCC estimates provided, first-generation students were a large equity group that comprised about 28.3% of 2017 enrollment captured, while local reporting estimated them as up to 73.7% of all first-year enrollment that year.¹²
- The subgroup experienced a large 14.5 point achievement gap compared to other groups.
- This was not the largest gap observed (LGBTQ+ experienced a 15.5 point gap), but the achievement gap affected a greater number of students.

¹² Columbia College (2021). *Student Enrollment Summary by Term* [Dashboard]. Sonora, CA: Columbia College. Accessed Monday, June 6, 2022 from https://www.gocolumbia.edu/institutional_research/institutional_outcomes_and_student_achievement_reporting.php.