PERCENTAGE POINT GAP METHODOLOGY

The percentage point gap methodology **compares the percent of students in a disaggregated subgroup who succeed in an outcome with the percent of *all* students who succeed in the same outcome.** Percentage point gap measurements are calculated by subtracting the all student average success rate (%) from the success rate (%) of a disaggregated subgroup in the same outcome. The resulting 'percentage point gap' will have a - / + designation that signals whether or not the disaggregated subgroup is experiencing a rate that is lower (-) or higher (+) than the all student average (*Quick note: The all student group rate is subtracted from the disaggregated subgroup to avoid outcomes in which positive values represent a gap and negative values represent equal or higher success*).

According to this methodology, a '-3 percentage point gap or less' is evidence of a disproportionate impact. Though this, much like the 80% rule, is an arbitrary designation, it serves as a reasonable strategy for identifying unequal outcomes that would benefit from further discussion, which should include the following considerations. First, *the number of students impacted*: a campus may prioritize a smaller percentage point gap that is calculated for a student group with more than 100 students over a larger percentage point equity gap calculated for a student group with fewer than 10 students. This is because rates calculated using smaller numbers will be subject to greater variability and it may make sense to prioritize a gap that impacts a greater number of students. Second, *the disaggregated subgroup's proportion of the total population*: The larger the proportion a subgroup represents of the total population, the more similar their success rate will be to the all student average. In this instance, campuses should consider comparing the all student success rate (as well as the subgroup's) with the success rates at comparable institutions or systems.

The percentage point gap methodology is demonstrated below using transfer rate data disaggregated by ethnicity. Other percentage point gap calculations are performed similarly with the counts of subgroups in the cohort and outcome groups.

Transfer rates were obtained from the CCCCO Data Mart Transfer Velocity metric. Table One presents the counts and transfer percentages of the student cohorts beginning in Academic Year 2008-09 who were then tracked for six years.

Table One presents the results of a percentage point gap analysis. In the table, the counts in the column "Transfer Count" are the numbers of students who transferred to a four-year institution anytime within those six years. Filipino counts are counted within the "Asian" ethnicity category.

Table 1. Transfer Rate Disaggregated by Ethnic Subgroup

Ethnicity	Cohort Count	Transfer Count	Transfer Percentage
African-American	7,490	2,566	34%
American Indian/Alaskan Native	1,079	314	29%
Asian	21,674	10,765	50%
Hispanic	43,329	12,662	29%
Multi-Ethnicity	29	12	41%
Pacific Islander	1,303	452	35%
Unknown	15,185	6,034	40%
White	48,671	19,828	41%
Total	138,760	52,633	38%

Using this methodology, the percentage of each disaggregated subgroup attaining the desired outcome (i.e., transfer percentage) is calculated by dividing the transfer frequency into the cohort frequency (Table One). The second step of the methodology compares the transfer percentage of each non-reference disaggregated subgroup to the transfer percentage of all students.

The 'Percentage Point Gap' column is calculated by subtracting the transfer rate for all students (38%) from the transfer rate of each disaggregated subgroup. For example, the percentage point gap for Asians is calculated by subtracting 38 from 50, which equals +12. This indicates that Asians experience transfer rates that are 12 percentage points above the overall transfer rate for all students. In this example, African-Americans, American Indians/Alaskan Natives, Hispanics, and Pacific Islanders experience gaps that are -3 percentage points or less than the overall transfer rate for all students, indicating that there are disparities in this area.

Table 2. Transfer Rate Disaggregated by Ethnic Subgroup

Ethnicity	Cohort Count	Transfer Count	Transfer Percentage	Percentage Point Gap
African-American	7,490	2,566	34%	-4
American Indian/Alaskan Native	1,079	314	29%	-9
Asian	21,674	10,765	50%	+12
Hispanic	43,329	12,662	29%	-9
Multi-Ethnicity	29	12	41%	+3
Pacific Islander	1,303	452	35%	-3
Unknown	15,185	6,034	40%	+2
White	48,671	19,828	41%	+3
Total	138,760	52,633	38%	

A strength of the percentage point gap measurement is that it allows users to calculate and communicate the number of students 'lost' relative to the all student (or another group's) average. For example, percentage point gap measurements can be translated to, "this gap would not have existed if 8 additional African American students had persisted to basic skills MAT 55." This statement makes it easier for the average person to immediately comprehend the magnitude of the gap, which is in contrast to proportional index measurements that are communicated as "African American students have a proportionality index gap of 0.89 in MAT 55."* It is important to note that the former language should not be misunderstood as a quota or goal, as it is neither. Instead, this language is a description of past data ("If 5 additional African American students *had succeeded, we would have experienced* equity") that measures the size of the gap in terms of number of students rather than rates. Another way to think of it is that it's the use of a different *measure* to describe the same gap, like describing an amount of liquid using liters instead of ounces.

* As highlighted here, the Proportionality Index (and other proportionality or share based measurements) does not easily allow the translation to numbers as the math starts to get complicated and would require unrealistic assumptions (e.g., only one target group can see an increase in the outcome measure, so that the total number of students achieving the outcome only increases by the number of additional students in the one target population. Problems then emerge if following the same process with a different subgroup.)