Hispanic/Latino/a Persistence and Graduation Gaps

The purpose of this report is to explore student success differences between Hispanic/Latino/a first-time, full-time (FTFT) undergraduates and FTFT undergraduates not of color. El Centro requested this report to better serve their population by understanding the timing and majors (by college) where gaps for Hispanic/Latino/a are largest.

Executive Summary

There are significant differences in 2nd and 3rd fall persistence as well as 6 year graduation between Hispanic/Latino/a students and students not of color. These gaps are larger than the gaps for Asian/Pacific Islander as well as Black/African American students but are smaller than the gaps for Native American Students. However, the number of Hispanic/Latino/a students is considerably larger than the other three ethnicity groups. The cohort size is important to consider in regards to the impact closing this gap will have on CSU's overall rates and on the resources that closing the Hispanic/Latino/a gap will require. Highlights of this report's findings are as follows:

- Gaps in persistence and graduation for Hispanic/Latino/a students increase as the students' time at CSU increase. For instance, gaps at second fall are smaller than the gaps at third fall and at graduation. This trend is observed across all ethnicity groups.
- The gaps in persistence and graduation are smaller for more recent cohorts, which indicate that the persistence and graduation of Hispanic/Latino/a students is improving. For instance, the gap in third fall persistence for newer cohorts is smaller than it is for older cohorts. This trend is also observed for Asian/Pacific Islander as well as Black African American students
- About half of all Hispanic/Latino/a student start at CSU with an undeclared major or a major in the College of Natural Sciences (CNS). The gaps are generally large for Hispanic/Latino/a CNS students, which may indicate that this is an efficient group to target.

Population and Student Success Outcomes

Students' ethnicity is identified by their undergraduate application materials. The student counts by ethnicity are considered duplicated because multi-racial students are included in all applicable groups. For example, students that indicate they are Black/African American as well as Hispanic/Latino are included in both groups. The comparison group (students not of color) includes international students, white students and students who did not identify their ethnicity. This comparison group matches the federal and state definition for non-minority students (i.e. students not of color) and is consistently applied in all IRP&E gap analyses.

Persistence gaps are measured at the start of the second and third fall semesters and graduation gaps are measured at the end of six academic years. The most recent five applicable cohorts are used for each of these outcomes. For instance, second fall persistence includes FTFT students from FA10-FA14 cohorts and six year graduation includes FTFT students from FA05-FA09 cohorts. The gaps in persistence and graduation are calculated by subtracting the Hispanic/Latino/a rates from the rate for students not of color. These gaps are discussed in terms of the percentage point (PP) difference. A larger magnitude in the PP difference indicates that the Hispanic/Latino/a rate differs greatly from the comparison group and a small magnitude in the PP difference indicates that the Hispanic/Latino/a rate is very similar to the comparison group. It is an institutional goal for all ethnicity groups to have negligible gaps in their six year graduation rates.

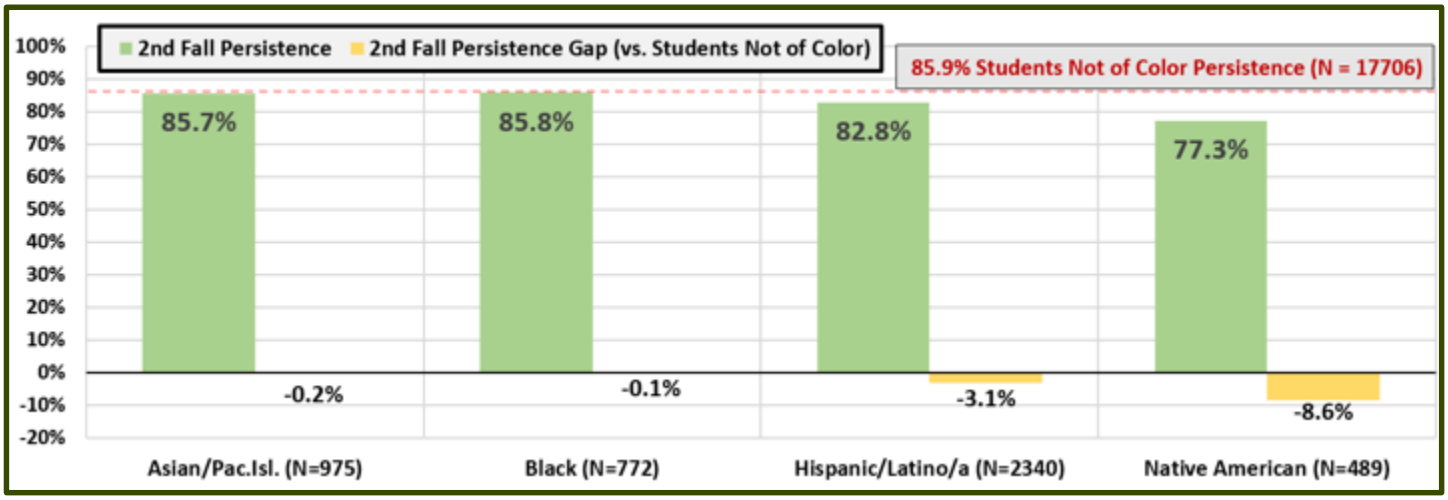
PP Differences in Persistence and Graduation

This section explores PP differences or gaps in student success for students of color compared to students not of color.

Second Fall Persistence

Figure 2 displays persistence rates to the second fall among FTFT students in the FA09-FA13 cohorts, by duplicated ethnicity group. The green bars show the 2nd fall persistence rate by ethnicity group and the red line shows the comparison group's rate. The yellow bars display the gaps between each group's observed second fall persistence and the rate for students not of color.

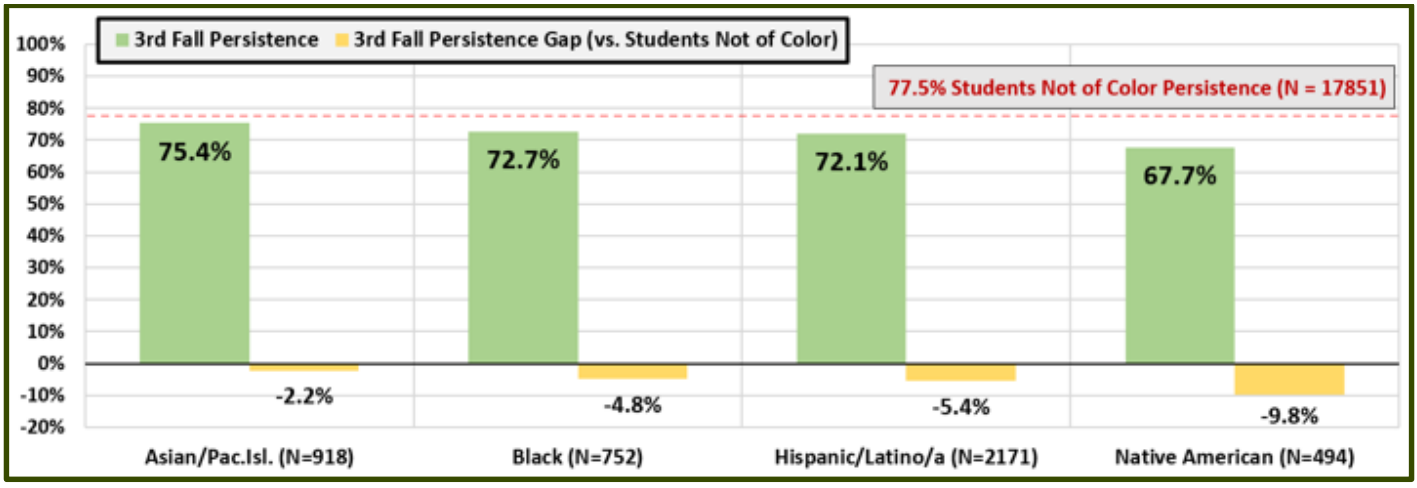
Figure 1. 2nd Fall Persistence by Duplicated Ethnicity, FA10-FA14 Cohorts



When assessing FTFT persistence to second fall, we observe that Hispanic/Latino/a students in recent FA10-FA14 cohorts persist to the second fall at an overall rate that is 3.1 PP's lower than students not of color, 82.8% to 85.9%. This gap is larger than the second fall persistence gaps observed for Asian and Black students, though substantial smaller than the 8.6 PP gap observed for Native American students.

Figure 2 shows a similar chart displaying FTFT persistence to the third fall.

Figure 2. 3rd Fall Persistence by Duplicated Ethnicity, FA09-FA13 Freshman Cohorts

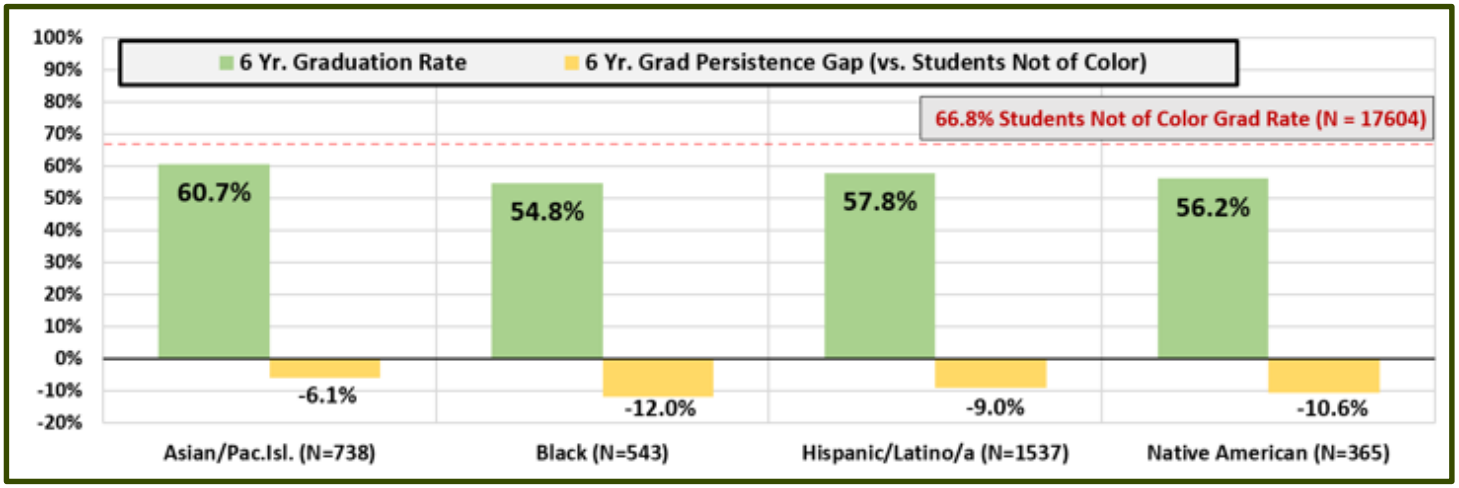


Overall, Hispanic/Latino/a students in the studied cohorts persist to the third fall at a rate of 72.1%, which is 5.4 PP's lower than the student not of color rate of 77.5%. Comparing third fall persistence gaps to the second fall gaps shown in Figure 1, we observe increases in gap size for each ethnicity group compared with students not of color. At third fall, Hispanic/Latino/a student persistence rates are now very similar to Black/African American rates, though still lower than Asian/Pacific Islander and higher than Native American rates.

6 Year Graduation Rates

Figure 4 mirrors Figures 2 and 3, but displays the six year graduation outcome.

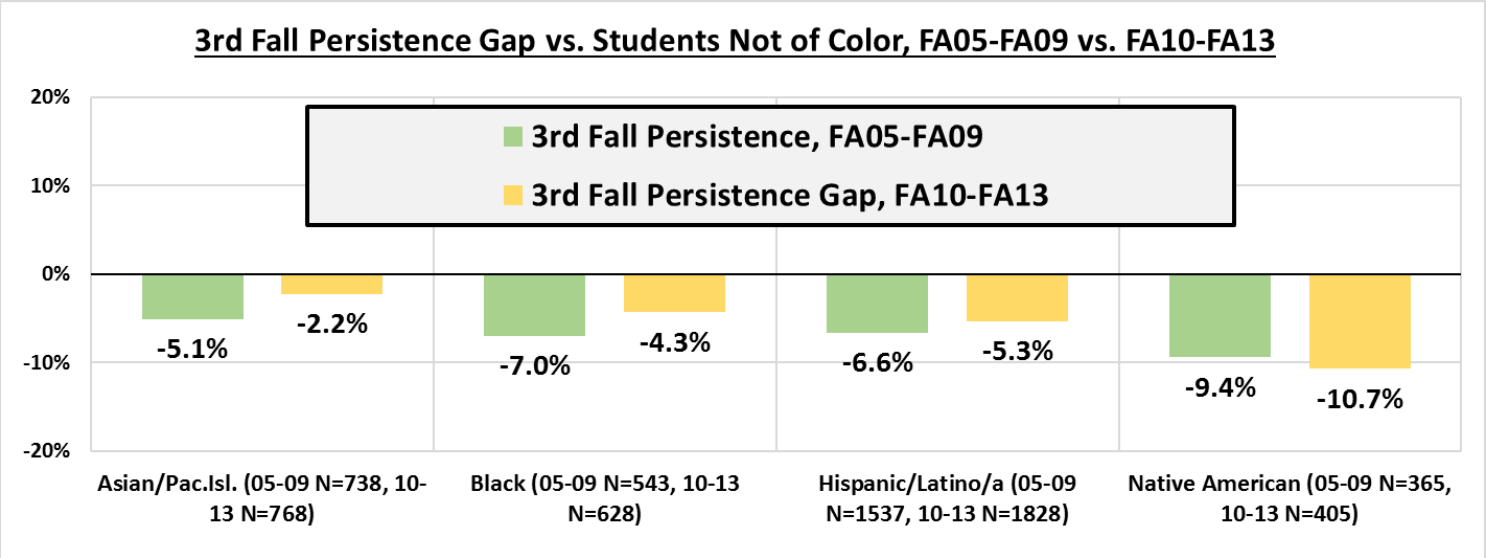
Figure 3. 6 Year Graduation Rate by Duplicated Ethnicity, FA05-FA09 Freshman Cohorts



We observe that FA05-FA09 Hispanic/Latino/a students graduate within six years at a rate of 57.8%, which is 9.0 PP's lower than the student not of color graduation rate of 66.8%. Across all studied ethnicity groups, we observe that achievement gaps increase substantially compared to the third fall persistence gaps shown in Figure 3. For Hispanic/Latino/a students, the six year graduation gap of 9.0 PP is 3.6 PP greater than the third fall gap of 5.4 PP.

It is possible that the graduation gaps are larger than the persistence gaps because more recent cohorts are more likely to persist compared to prior cohorts. To assess this hypothesis, Figure 4 shows third fall persistence gaps for older cohorts (FA05-FA09) versus newer (FA10-FA13) cohorts. The difference in third fall persistence between Hispanic/Latino/a students and students not of color for older cohorts (FA05-FA09) is displayed by the green bars and the difference for newer cohorts (FA10-FA13) is displayed by the yellow bars.

Figure 4. 3rd Fall Persistence Gap vs Students Not of Color, FA05-FA09 vs. FA10-FA13



We observe that third fall persistence gaps have closed slightly for Hispanic/Latino/a, at 5.3 PP in the recent cohorts versus 6.6 PP for the FA05-FA09 graduation study cohorts. This trend is also observed for Asian/Pacific Islander and Black/African American students. However, given that the third fall persistence gap is relatively similar (within 1.3 PP) between newer and older cohorts it is likely that the gaps observed for FA05-FA09 will only be slightly larger than the gaps that will eventually be observed for the FA10-FA13 cohorts. These results suggest that newer cohorts of Hispanic/Latino/a students are performing better than prior cohorts but that the risk of attrition for Hispanic/Latino/a students doesn't decrease after the second fall semester like it does for students not of color.

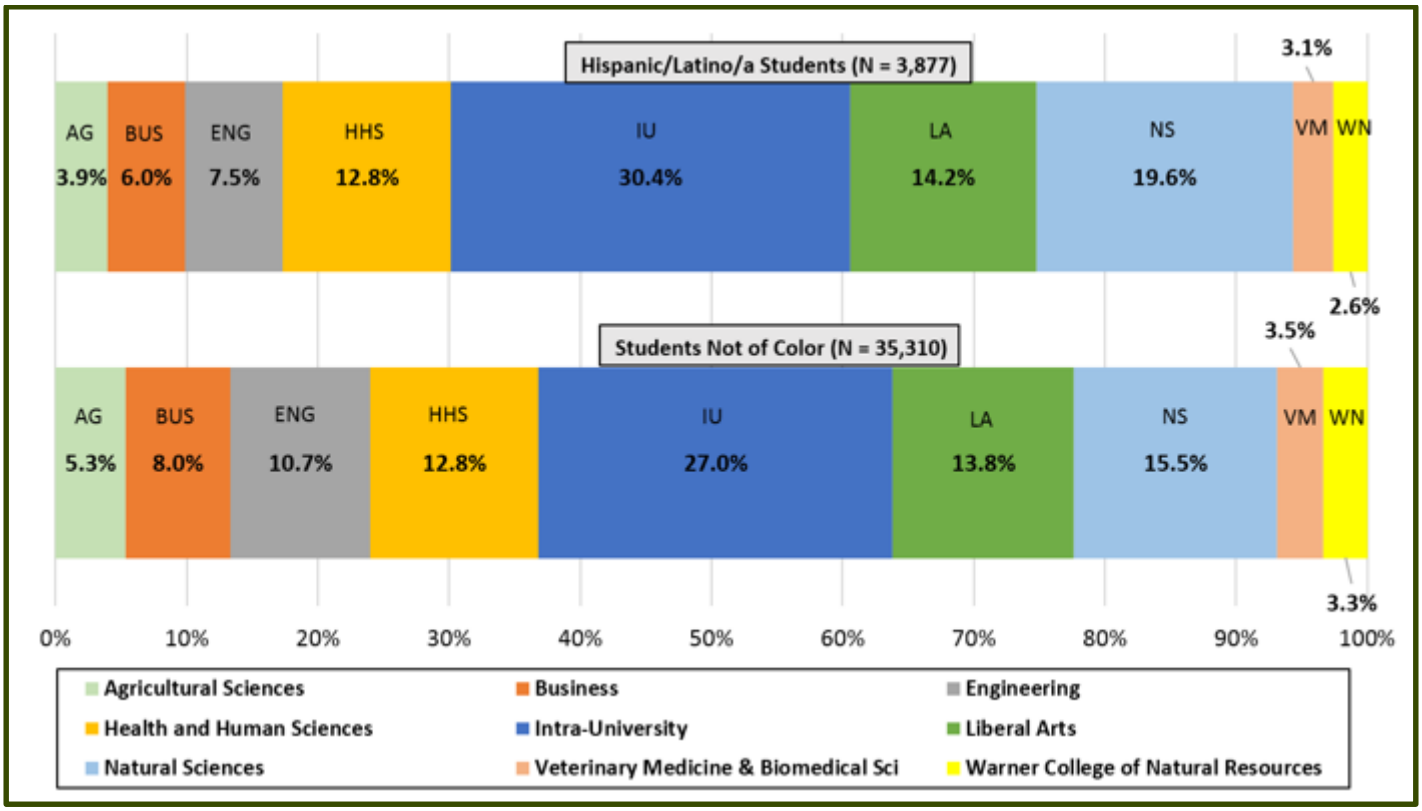
Hispanic/Latino/a Enrollment and Success by College

This section focuses on the enrollment and success of Hispanic/Latino/a by college.

Distribution of First Fall Majors, by College

Figure 5 displays the distribution of FTFT Hispanic/Latino/a students across all studied cohorts FA05-FA14. The distribution of majors among students not of color is included for comparison.

Figure 5. % Cohort Major College, Hispanic/Latino/a & Students Not of Color FA05-FA14

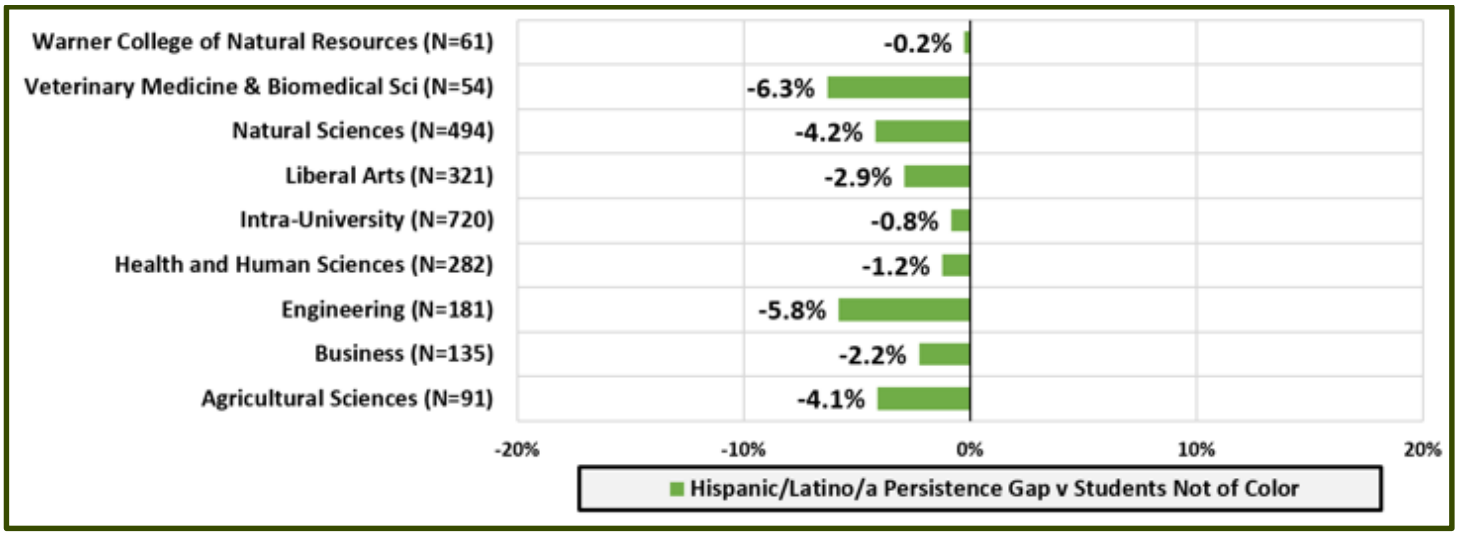


Across the FA05 through FA14 FTFT cohorts there are a total of 3,877 freshmen who self-classify as Hispanic/Latino/a, compared to 35,310 freshmen students not of color. The distribution of first fall major college are generally similar for Hispanic/Latino/a students and students not of color. However, a few noticeable differences do exist. Only 6.0% of Hispanic/Latino/a undergraduates choose an initial College of Business major, versus 8.0% of students not of color. Hispanic/Latino/a freshmen are also less likely to choose an Engineering major (7.5%) than students not of color (10.7%). Conversely, Hispanic/Latino/a freshmen are more likely to choose a Natural Sciences major (19.6%) than students not of color (15.5%), and Hispanic/Latino/a students are also more likely to be Intra-University undeclared in their first semester (30.4%) than students not of color (27.0%).

Percentage Point Differences in Hispanic/Latino/a Student Success, by College

Figure 6 displays the PP gaps in second fall persistence for FA10-FA14 Hispanic/Latino/a students by cohort major college.

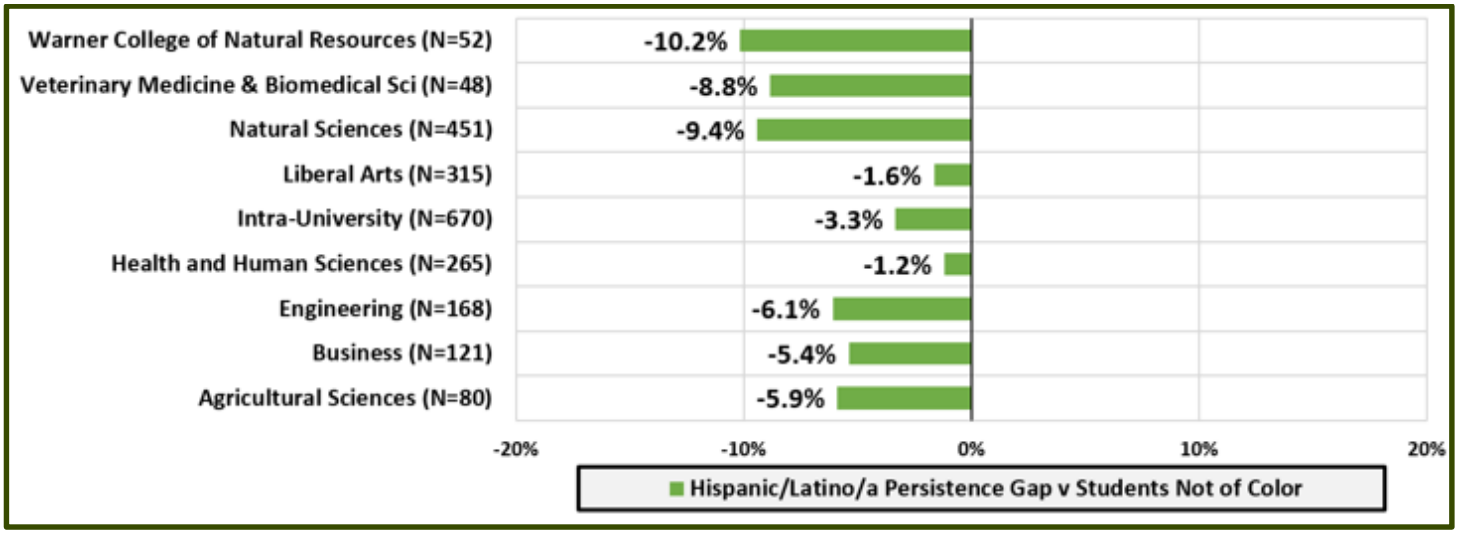
Figure 6. Hispanic/Latino/a 2nd Fall Persistence Gap, FA10-FA14 Cohorts



While second fall persistence gaps exist across all colleges, the gaps for Warner College of Natural Resources (-0.2 PP), Intra-University (-0.8 PP), and Health & Human Sciences (-1.2 PP) are particularly small. Hispanic/Latino/a students with a cohort major in VMBS (-6.3 PP), Engineering (-5.8 PP), Natural Sciences (-4.2 PP), and Agricultural Sciences (-4.1 PP) experience the largest second fall persistence gaps compared to students not of color. The gaps among Natural Sciences and Engineering majors may be of particular concern, given the relative high rates of Hispanic/Latino/a first term enrollment in those colleges (494 and 181 students, respectively).

Figure 7 shows a similar display, studying third fall persistence among the FA09-FA13 cohorts.

Figure 7. Hispanic/Latino/a 3rd Fall Persistence Gap, FA09-FA13 Cohorts



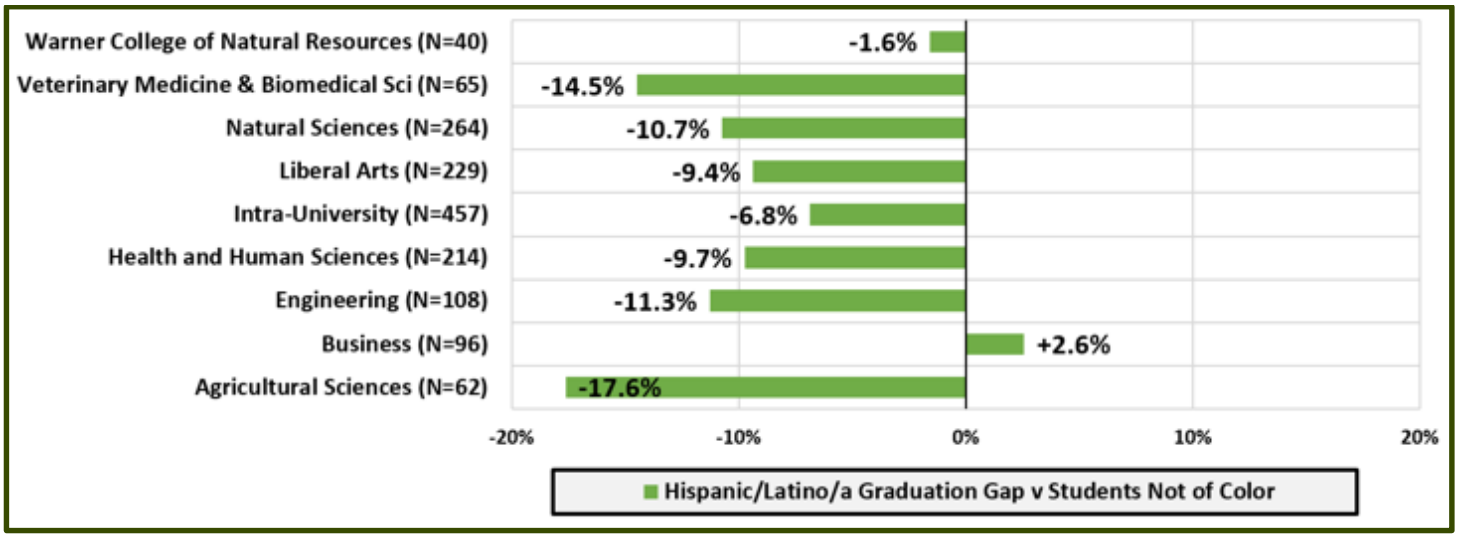
For Hispanic/Latino/a students, third fall persistence gaps exist across all eight colleges and among Intra-University (undeclared) students. Persistence gaps are particularly small for Intra-University Hispanic/Latino/a students and students with a major declared in Liberal Arts and Health and Human Sciences. It is notable that these three lower-gap colleges represent the 1st, 3rd, and 4th most popular cohort major colleges for Hispanic/Latino/a students.

On the contrary, the 2nd most popular cohort major college for Hispanic/Latino/a students, Natural Sciences, is among the colleges in which Hispanic/Latino/a students show the largest third fall persistence gap of 9.4 PP. Persistence gaps are also large for Hispanic/Latino/a students enrolling in Warner College of Natural Resources and Veterinary Medicine & Biomedical Sciences, both of which experience relatively little Hispanic/Latino/a student enrollment overall (about 10 students each per FTFT cohort). Given the large quantity of Hispanic/Latino/a students matriculating with a Natural Sciences' major, that college seems to be most ripe for potential interventions aimed at improving Hispanic/Latino/a student success.

Contrasting Hispanic/Latino/a gaps in the College of Engineering in Figures 6 and 7, we observe that the third fall persistence gap is only slightly larger than the second fall persistence gap, -6.1 PP vs. -5.8 PP. This finding tentatively suggests that Hispanic/Latino/a cohort Engineering students may be particularly sensitive to adverse factors affecting achievement during the first year of enrollment.

Figure 8 shows Hispanic/Latino/a student six year graduation gaps compared to students not of color, by college.

Figure 8. Hispanic/Latino/a Six Year Graduation Gap, FA05-FA09 Cohorts



For the FA05-FA09 cohorts, Hispanic/Latino/a graduation rate in the College of Business is 2.6 PP greater than the rate for students not of color. Gaps are present for all other cohort colleges, with Warner College of Natural Resources (-1.6 PP) and Intra-University (-6.8 PP) displaying the smallest gaps. The large FA05-FA09 cohort graduation gaps observed for Health and Human Sciences (-9.7 PP) and Liberal Arts (-9.4 PP) stand in contrast to the small persistence gaps observed for those colleges in Figure 7 (-1.2 PP and -1.6 PP, respectively). Given the strong relationship between third fall persistence and eventual degree attainment at CSU, it is likely that Hispanic/Latino/a HHS and Liberal Arts majors in the more recent cohorts depicted in Figure 6 will eventually graduate with a smaller graduation gap than the FA05-FA09 cohorts shown in Figure 8.

Conclusions

We observe significant achievement gaps for Hispanic/Latino/a students across all three student success outcomes (second fall persistence, third fall persistence, six year graduation) measured in this report. For all ethnicity groups the gaps in achievement increase as the students' time at CSU increases, which indicates that the risk of attrition for students of color does not decrease after the second fall semester at the same rate that it does for students not of color. This suggests that engagement and support activities during and after the sophomore year will particularly benefit these groups of students.

It should also be noted that more recent students of color cohorts are persisting at a higher rate than older cohorts. This is a positive result for our efforts to increase the success of diverse students at CSU.

Across all three outcomes the gaps are larger for Hispanic/Latino/a students compared to Asian/Pacific Islander and Black/African American students but are smaller than the Native American gaps. Additionally, the cohort size of Hispanic/Latino/a students is considerably larger than the other ethnicity groups. The larger gaps and cohort sizes for Hispanic/Latino/a student's indicate that closing this group's gap will have the largest impact on CSU's overall persistence and graduation rates but also that closing the gap for this group will most likely require the largest amount of resources.

Students' cohort college may be one strategic way to target interventions for Hispanic/Latino/a undergraduates. For instance, third fall persistence gaps for the college of Natural Science are large (-9.4 PP) and this college has large Hispanic/Latino/a enrollment. This combination suggests that it may be efficient to specifically target efforts towards improving Hispanic/Latino/a student achievement in the College of Natural Sciences. Additionally about 30% of Hispanic/Latino/a undergraduates have an undeclared major their first fall semester. The gaps for this group are not particularly large most likely because undeclared students not of color also persist and graduate at lower rates. Hispanic/Latino/a undeclared students may also be an effective group to target for interventions.