

PERSISTENCE MATTERS

Examining Relationships Between College Readiness, Ethnicity and Postsecondary Persistence



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ABOUT HELIOS EDUCATION FOUNDATION

Helios Education Foundation is dedicated to creating opportunities for individuals in Arizona and Florida to achieve a postsecondary education. Our work is driven by our four fundamental beliefs in Community, Equity, Investment, and Partnership, and we invest in initiatives across the full education continuum.

Through our Florida Regional Student Success Initiative, Helios is helping underserved, minority, and first-generation students from the state's large population centers in Miami, Orlando, and Tampa achieve a postsecondary education.

In Arizona, where Latino students comprise the largest percentage of the K-12 public school population, the Foundation is implementing its Arizona Latino Student Success initiative focused on preparing all students — especially students in high-poverty, underserved Latino communities — for success.

Dear Colleague:

Over the past several years, there has been significant conversation at both state and national levels about the importance of postsecondary degree attainment to individual quality of life as well as community economic growth and development. Considering the importance of postsecondary degree attainment, we must ask ourselves how can we increase postsecondary access, persistence, and completion among all students as a means of ensuring economic prosperity and future viability?

Helios Education Foundation has prioritized increasing the postsecondary success of students in Arizona and Florida and has invested in programs and initiatives that provide critical information and resources for students in pursuit of that goal. One such initiative is called College Knowing & Going and is working to increase the number of students who are prepared for and who complete postsecondary education in 18 school districts throughout Arizona.


The basis of the following research comes from a cohort of students who participated in College Knowing & Going. The research examines the extent to which these students matriculated to college and whether they persisted after their first year.

We hope that policy makers and educational leaders will use the findings from this research to promote strategies and interventions designed to increase the postsecondary attainment for all Arizonans.

Sincerely,



Vince Roig
Founding Chairman
Helios Education Foundation



Paul J. Luna
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INTRODUCTION

The state of Arizona is at a critical juncture in determining its economic future. Currently, only 38 percent of Arizona’s population holds an associate’s degree or higher. For the Hispanic population, Arizona’s fastest-growing demographic, this number is even lower. Yet, according to the Georgetown Public Policy Institute, more than 68 percent of Arizona jobs will require at least some amount of postsecondary education by the year 2020 (Carnevale, 2015).

Considering the importance of postsecondary education attainment, a critical question must be answered: How can Arizona increase postsecondary access, persistence, and completion among all students as a means of ensuring economic prosperity and future viability?

One of the most obvious answers is to increase state and federal funding in support of education. And while policymakers, researchers, and educational leaders will agree that school finance is a key component to educational success, many would also agree that it is not the only piece to the puzzle. Instead, the focus should be on promoting high-quality educational programs that strive to increase overall access, persistence, and completion. Successful programs must integrate a rigorous pre-K through 12 curriculum with supports that help students navigate financial aid, career planning, and other barriers that may impact a student’s ability to complete a postsecondary education.

Helios Education Foundation (Helios) is dedicated to conducting research that seeks to answer questions like the one above. Helios focuses on investing in initiatives across the education continuum, with the goal of ensuring that all students graduate from high school ready for college and career, eventually going on to complete a high-quality postsecondary degree or certificate.

The basis of the work that informed this policy brief came from a Helios initiative, College Knowing & Going (CKG)¹, which works to increase the number of students who are prepared for and who complete postsecondary education. By examining college access for a cohort of students who participated in CKG, we can better understand the extent to which these students matriculated to college and whether they persisted after their first year. In this context, the term persisted refers to students who returned to college at any institution for their second year. Given the fact that Hispanics and Non-Hispanic Whites comprise a large majority of the state’s population, findings are summarized according to these two groups. We hope that policy leaders and educational experts will use the findings from this brief to promote strategies and interventions designed to increase the postsecondary attainment for all Arizonans.

¹For a more detailed discussion of College Knowing & Going (CKG), see “Examining College Readiness, Aspirations, and Matriculation in 14 Arizona School Districts” available at <http://www.helios.org/news-media/publications>.



THE PROBLEM

In the last decade, a major focus of educational leaders, universities, and philanthropic organizations has been on postsecondary access. Over time the development of coordinated national and state marketing campaigns designed to increase postsecondary access, along with an increase in financial assistance programs, has become more prevalent. This has resulted in an increase in the proportion of female, minority, and first-generation students attending postsecondary institutions.

Unfortunately, increasing access to postsecondary institutions is only part of the battle. Once on campus, students still need adequate academic and life skills to be successful in completing postsecondary requirements. Research has shown that the first year in a postsecondary educational setting is predictive of success. A number of studies have shown that when students persist (meaning they return to college the second year) there is a greater likelihood that they will ultimately complete their program (Fike & Fike, 2008; Tinto, 1996).

Currently, persistence rates across U.S. colleges and universities vary by several factors: whether an institution is public or private, whether it is a two-year or four-year institution (type), and by the race/ethnicity of the student. For example, according to a recent report from the National Student Clearinghouse Research Center (NSCRC), 73.4 percent of students who started college in 2015 persisted into their second year of college. Of those students, those

who attended a four-year public college did the best, persisting at a rate of 81.7 percent. This was 19 percent greater than their counterparts at two-year public colleges who persisted at a rate of 62.7 percent. The NSC report also highlighted clear differences in persistence by race and ethnicity. Among students who entered college in fall 2015, Asian students had the highest persistence rate (84.2 percent), Non-Hispanic Whites persisted at a rate of 79.2 percent, Hispanics at 72.5 percent, and African Americans persisted at a rate of 66.9 percent (see Snapshot Report — First-Year Persistence and Retention, 2017).

This brief builds on work from the National Student Clearinghouse to analyze the extent to which college readiness influences postsecondary persistence. Using one cohort of students from Helios’ College Knowing & Going initiative, we focus our analysis on answering the following three sets of questions.

First, we determine what happened to students after graduating high school – which students went to college? And of those, which ones persisted, enrolled late, graduated with a two-year degree, or dropped out? Second, we examine how college readiness influenced persistence rates and how they played out across race and ethnicity. Third, using statistical modeling, we examine the extent to which race/ethnicity, college readiness, college type, full or half-time enrollment, and time of enrollment relate to college persistence and staying in college.

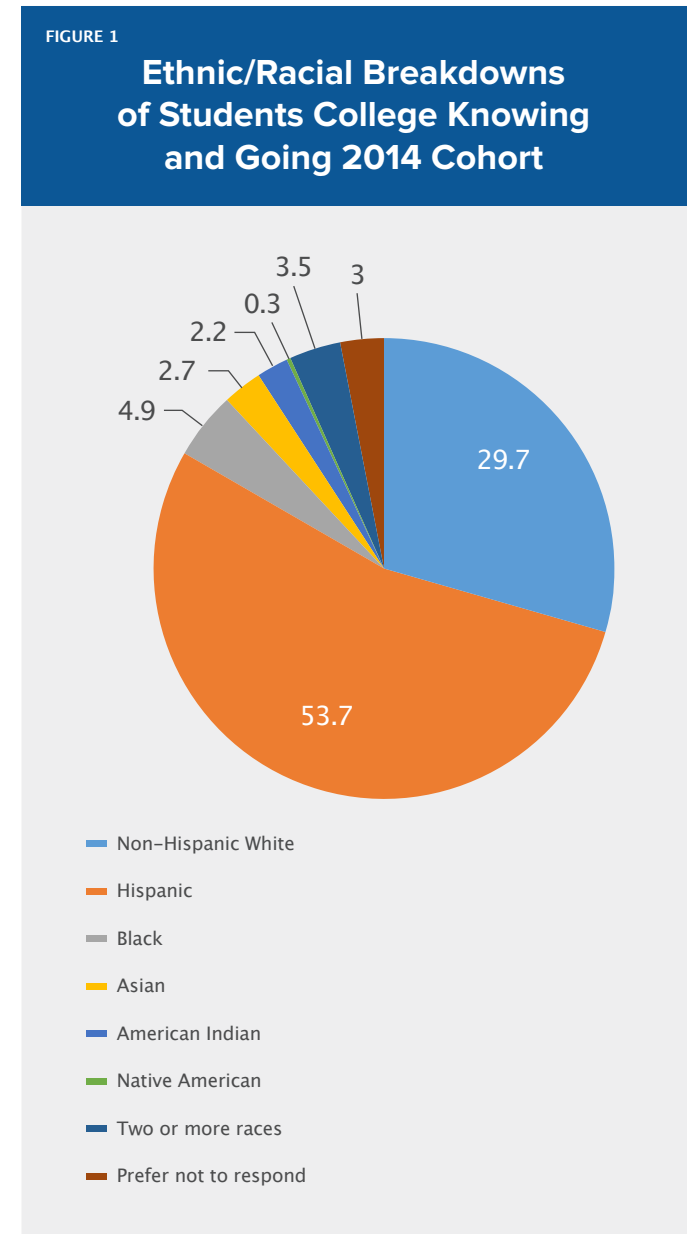
DATA/METHODS

Data from this study were taken from Helios’s College and Knowing and Going (CKG) initiative. Operating in 18 public school districts in Arizona, CKG aims to increase the proportion of students, from the selected districts, who are ready for and who complete postsecondary education. In executing this initiative, Helios and its partners provide participating districts with the following:

- ACT College Entrance Examination testing for ALL juniors in the districts;
- ACT prep support and follow-up;
- Support for completion of the Free Application for Federal Student Aid (FAFSA);
- Support for increasing the percentage of postsecondary applications;
- Support for effectively using Arizona’s Education and Career Action Plan (ECAP); and
- Additional support in training for counselors, connection to community resources and partners, and access to data.

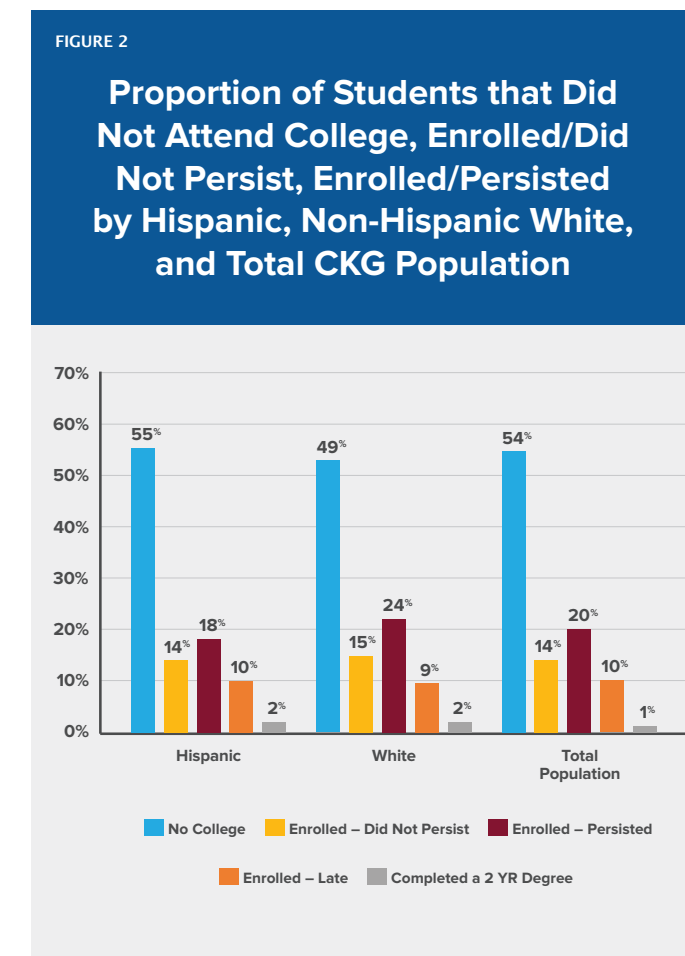
The data for this study were collected from two main sources. First, our student population included every student who graduated in the 2014 cohort of CKG. Under this program all high school juniors were eligible to take the ACT college entrance examination at no cost during the Spring of their junior year. ACT data was utilized to measure college readiness. Second, we matched those students with National Student Clearinghouse data to determine if they went to a postsecondary institution, if so, then where, and finally if they persisted.

Our work yielded 19,409 student records. As Figure 1 shows, Hispanic students make up a majority of the student population at 53.7 percent. This is followed by Non-White Hispanic students at 29.7 percent and Black students at 4.9 percent. Given that more than 83 percent of the student population for this study was either Hispanic or non-Hispanic White, we present comparisons of those two groups with the total population, which is consistent with practices in extant literature reviews.



WHAT HAPPENED TO STUDENTS AFTER HIGH SCHOOL? WHO WENT TO COLLEGE? WHO PERSISTED?

A goal of Helios is to see students enroll at least half time in some type of postsecondary program within the first semester after high school graduation. The thought behind this goal is that, if students enroll in postsecondary education sooner, their chances of persisting and completing their program are greater. Using two years of data from the Clearinghouse we examined how many of the cohort of 2015 graduates went to college and whether they persisted or dropped out. We remind the reader that the persistence rate refers to the percentage of students who return to college at *any* institution for their second year. In contrast, a retention rate measures the percentage of students who return to the same institution for their second year.



Overall, a large proportion of students who took the ACT under CKG did not attend college after graduation or dropped out within the first year of high school graduation. Figure 2 shows the proportion of students that did not attend college, enrolled but did not persist, enrolled and persisted, enrolled late, or completed a two-year degree. The 2015 graduating cohort had 19,409 students from participating districts. Of that total, 10,392 of those students did not enroll (even part time) in a postsecondary institution after high school.

As Figure 2 shows only 45 percent of the Hispanic population made it to college within the first two years of graduating high school, compared with 46 percent of the entire population, and 51 percent of White students. Most troubling from this data is that two years after graduation more than 69 percent of Hispanic students have neither enrolled in college nor persisted in college. Comparatively, 64 percent of White students and 68 percent of the total population have neither enrolled nor persisted in college during the same time period. As can be seen by Figure 2, a small percentage (1–2 percent) of students actually completed a two-year degree within two years after graduating high school. Interestingly, around 10 percent of all college-goers enrolled late, at least one semester after graduation.

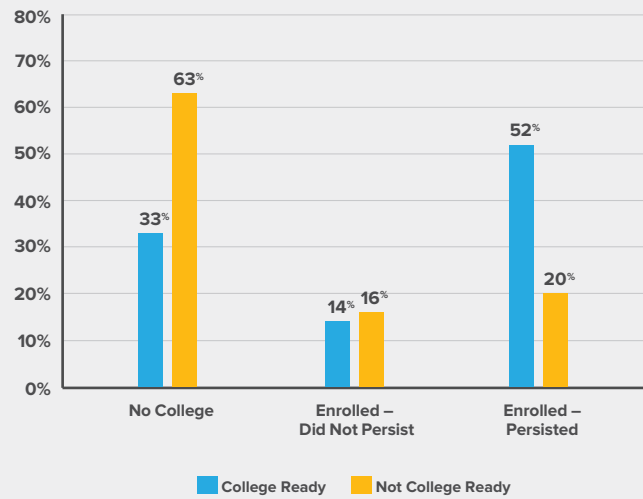
HOW DOES COLLEGE READINESS INFLUENCE PERSISTENCE? DO WE OBSERVE DIFFERENCES BETWEEN WHITES AND HISPANICS?

ACT determines college readiness based on a cutoff core for each of its four core subject areas. The cutoff score for English is at least an 18, for mathematics and reading at least a 22, and for science at least a 23. Based on these four scores, ACT provides each student with a composite score. While it is important to note that the composite score is not the sole indicator of a student’s future potential, a composite score of at least 22 has been found to be a good indicator of college readiness.

Figures 3 through 5 present two categories of students, those that were college-ready and those that were not. Based on these two categories, the figures further elucidate the proportion of students that did not attend college, that enrolled but did not persist, and that enrolled and persisted. Figure 3 presents this information for all students under CKG. Figures 4 and 5 present the same information for Hispanic and Non-Hispanic White students, respectively.

FIGURE 3

Proportion of Students that Did Not Attend College, Enrolled/Did Not Persist, Enrolled/Persisted by Hispanic, Non-Hispanic White, and Total CKG Population



The results of these figures tell us that there is a strong relationship between college readiness and whether a student will attend college. Of those students that were not college-ready, 63 percent did not attend college (see Figure 3). Similarly 63 percent of Hispanic students who were not college-ready did not enroll in college, while 59 percent of White students did not enroll.

At the same time, the figures demonstrate that there is a strong relationship between college readiness and persistence (see Figure 4 and 5). Of those students that were college-ready and enrolled in college, 52 percent persisted. For Hispanic students the relationship was even stronger. Fifty-six percent of Hispanic students who were college-ready and enrolled in college persisted. Unfortunately, a third of college-ready students never enrolled in college.

FIGURE 4

Proportion of Hispanic Students that Did Not Attend College, Enrolled/Did Not Persist, Enrolled and Persisted by ACT College Readiness Standards.

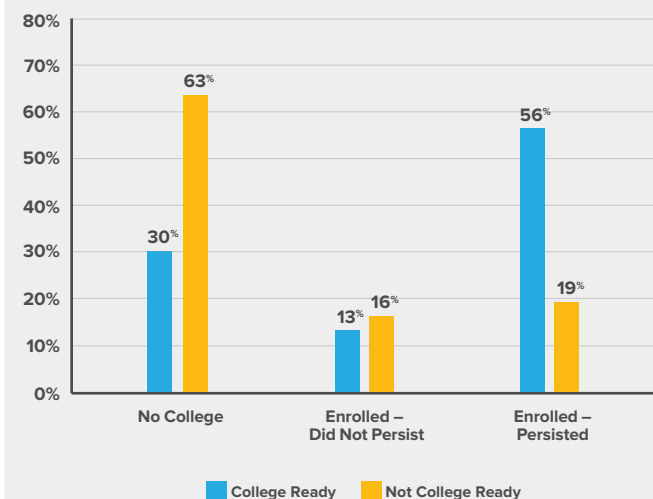
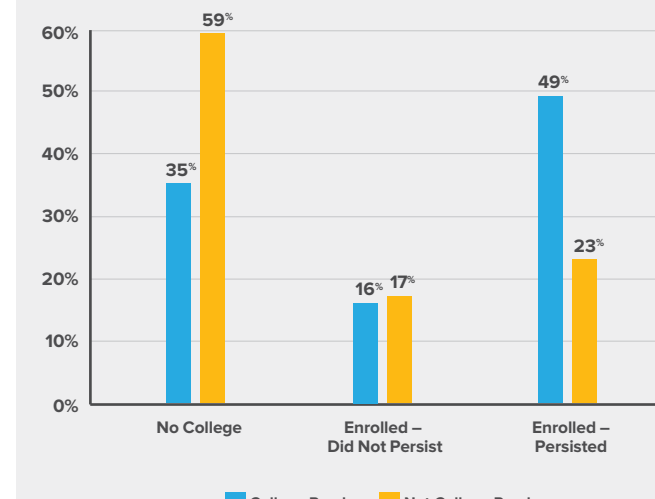


FIGURE 5

Proportion of Non-Hispanic White Students that Did Not Attend College, Enrolled/Did Not Persist, Enrolled and Persisted by ACT College Readiness Standards.



WHAT CAN WE PREDICT ABOUT STUDENT PERSISTENCE AND COLLEGE GOING AFTER HIGH SCHOOL?

In this section our analysis will seek to estimate the effects of several variables on persistence, using a statistical technique to control for the other factors. Our model includes whether students are ready for college (as measured by their ACT scores), the type of schools they attend (two-year or four-year), whether they attend full or half time, race/ethnicity, and time of enrollment. As we saw from our earlier analysis, students can enroll in a postsecondary program at multiple time points. Some students enroll while they are still in high school, some enroll right after graduating, while others take a semester or more off before enrolling. To be more precise in our prediction model we categorized students into one of three categories. (1) Early enrollment was used to define the time frame of 24 months before high school graduation to the time of graduation, (2) On time enrollment described the first fall semester after high school graduation, and (3) Late enrollment was used to define any time after the first fall semester.

Our early analysis of the college going CKG population identified four clear points. First, large proportions of students either did not enroll in college after high school or they dropped out within their first year. Second, a significant amount of students did not enroll in college in the first semester following high school (on-time enrollment). In our sample, 10 percent of all students enrolled at least a semester late (late enrollment). Third, our analysis showed a strong relationship between college readiness and persistence. Finally, our analysis also showed a strong relationship between college readiness and enrollment, with those students who were deemed not college ready being less likely to enroll.

Below we present our key findings through bulleted points and figures.

Key Findings²:

- College-ready students (according to ACT standards) are 43 percent less likely to drop out;
- Students who enter a postsecondary institution right after graduating high school are 63 percent less likely to drop out of college;
- Students who start late are nearly 25 percent more likely to drop out;
- Students attending a four-year college are 43 percent less likely to drop; and
- Of college-ready students, Hispanics are less likely to drop out.

²All findings control for the other variables in the equation.

FIGURE 6

Cumulative Dropout Rates of Hispanics and Whites at Two-Year Colleges by College Readiness

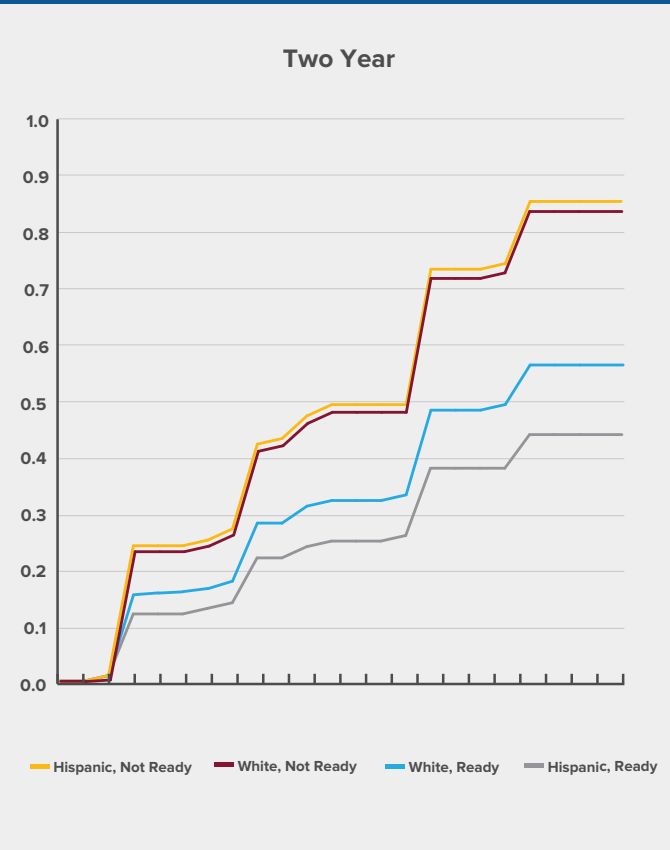


Figure 6 shows the cumulative dropout rates of Hispanic students and Non-Hispanic White students at two-year colleges by their college readiness results. The horizontal x-axis shows increments of time (months after HS graduation) while the y-axis shows the dropout rate. For both Hispanic and Non-Hispanic White students we see that the lines for not being college-ready overlap, meaning that there is no difference between the groups for those students who are not ready. Yet, when comparing Hispanic and White students who are college-ready we see that Hispanic students are more likely to stay in school and persist regardless of when they start college (i.e., college ready Hispanic dropout rates are below the Non-Hispanic White college ready dropout rates).

FIGURE 7

Cumulative Dropout Rates of Hispanic and White Students at Four-Year Colleges by College Readiness

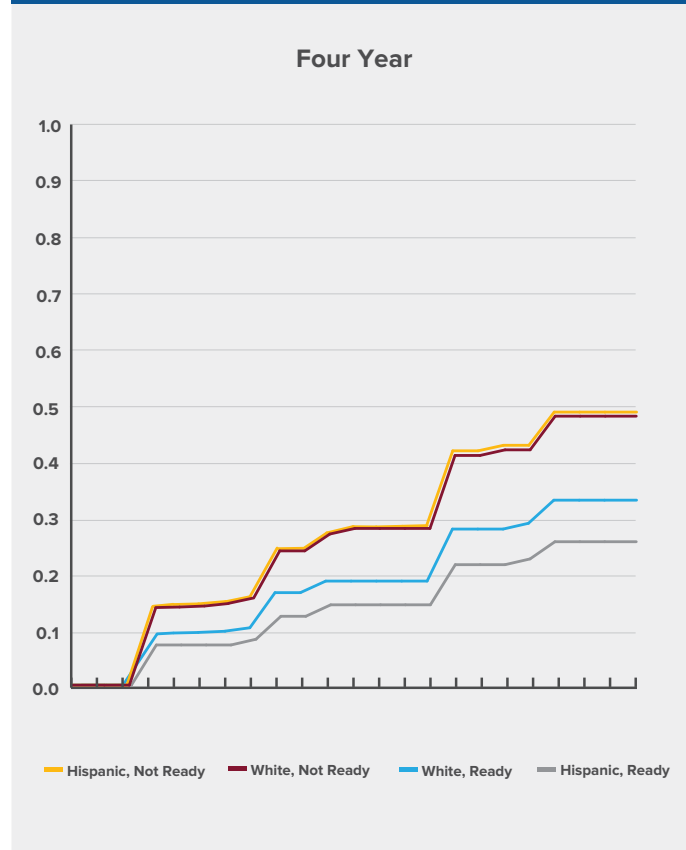


Figure 7 shows the cumulative dropout rates of Hispanic and Non-Hispanic White students at four-year colleges by their college readiness results. The horizontal x-axis shows increments of time while the y-axis shows the dropout rate. Similar to what we saw in the two-year colleges, we see no difference in the dropout rates of Hispanic students and White students who are not college ready. At the same time we also see that Hispanic students are more likely to stay in school and persist regardless of when they start college.

Comparing Figures 6 and 7 we also observe that across two-year and four-year colleges, those students going to four-year colleges are more likely to stay in school and persist.

CONCLUSION

This study sought to examine the extent to which college readiness influences postsecondary persistence. In answering the question, it was important to determine how race and ethnicity, type of school, and time of enrollment related to student persistence.

The findings presented in this policy brief highlight the importance of ensuring college readiness among high school students. Regardless of how we analyzed the data, results showed statistically significant differences between students that were college-ready and those that were not. Students deemed college-ready based on their composite ACT score were 43 percent less likely to drop out of a postsecondary program. Further, our analysis highlighted that Hispanic students considered college-ready were more likely to stay in school than their White counterparts. In terms of the role that type of college plays on persistence, results of our study determined that students attending four-year colleges were less likely to drop out than those attending two-year colleges. Finally, time of enrollment was also shown to effect persistence. Our analysis showed that those students who start late (at least a semester after they graduate) are more than 25 percent more likely to drop out of college. At the same time, those students who start early (before high school graduation) were nearly two-thirds more likely to persist.

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