

 CASES FROM THE FIELD

A Case Study of an Institution Continuing to Advance Student Success, the University of South Florida

By Thomas E. Miller

This article describes the strategies employed to make a university-wide commitment to student success, persistence, and graduation rates. The shift in culture has made student success everybody's business, and there has been a high level of buy-in to the enterprise. The predictive tools that have been developed have given focus to serving those students who may need extra support to succeed, allowing the efficient use of human and financial resources.

In 2018, The University of South Florida (USF) Student Success staff generated a manuscript describing the university's progress in undergraduate student success as measured by graduation and persistence rates. That manuscript was published in the spring 2019 edition of *Strategic Enrollment Management Quarterly*. This article describes the continued improvement in student persistence and graduation rates and the strategies and programs that have helped the university accomplish what it has. The first parts of this article describe the steps taken to improve student success, and the last parts are graphic illustrations of the effects of those steps on various aspects of student success.

The Institution

The University of South Florida is a large, public research university with three campuses in Tampa, St. Petersburg, and Sarasota. The campuses, which were

originally three independent, separately accredited institutions, consolidated into one university in the summer of 2020. In the fall of 2021, the university reported an unduplicated headcount of nearly 37,000 undergraduate students, and approximately 40 percent of those students are African American, Hispanic, or Asian.

Performance-Based Funding and Preeminence Metrics

Florida's state universities are governed by the state's board of governors. In 2014, the board implemented a performance-based funding system. The system was comprised of ten metrics against which each university is measured. Eight of the metrics apply to all the state universities, and the other two are chosen by either the board of governors or by the institution's board of trustees. Each institution achieves a ranking score in comparison to the other eleven institutions. The met-

rics associated with student success include the six-year graduation rate and the first-year persistence rate (defined by student persistence from the first summer or fall semester to the end of the second fall). In 2013, the state implemented a preeminence set of measures. In order to be classified as a preeminent institution, the university must meet eleven of the twelve metrics. Two metrics that USF did not meet in that first year were the first-year persistence rate of 90 percent and the six-year graduation rate of 70 percent. Attaining those benchmarks became the focus of the Student Success staff.

Student Success Efforts

Reorganization

In 2016, the university reorganized to provide a focus on student success. The reorganization involved the combination of three distinct, substantial operations—Enrollment Planning and Management, Undergraduate Studies, and Student Affairs—into one unit, referred to as Student Success. The effect of the reorganization was to fully engage a large number of professional staff and the departments they represented in the support of students to enhance their success. Six years later, the organization continues to function as it was first designed.

University-Designed Predictive Analytics

University staff members have developed several predictive tools, based upon the historical experiences of students and their success. Logistic regression is the typical statistical application. Logistic regression is used when multiple variables are employed to predict one dichotomous variable. Machine learning is used to refine the accuracy of the predictor. All those tools identify the students most likely to need support, a “lift,” in order to be successful. Lift is achieved when the predicted rate of student success is exceeded by the actual rate of success. These tools allow the institution to focus its attention on those students who would most benefit, rather than delivering support to all students in a categorical group. The likely reality is that some students do not need extra support, and effort or money is wasted as a result.

For First Time in College Students

■ *First-Year Retention Model:* This model was originally developed in 2006. For the first eight years, the university experimented with various intervention strategies. The university determined in 2014 that a cross-functional team would produce the most effective intervention, and that the model had become a powerful predictor and was anticipating with accuracy which students would need support to persist to the end of the second fall semester. The key data elements that contribute to this model are from admissions data (demographics, academic, and standardized test performance) and the Beginning College Survey of Student Engagement (which will be discussed later in this article). All the data that are used in this predictor are gathered before matriculation at the university.

■ *First-Semester GPA Differential Model:* This model calculates the anticipated first-semester grade point average for first-year students. Several data points were evaluated to develop this predictor, but the one that had the greatest reliability was, simply, high school grade point average. At the beginning of the second semester, after first semester grades are posted, the predicted GPA is compared with the actual student GPA. This model allows the university to identify students whose grades might appear to be satisfactory but represent academic underperformance. It follows that contacting the student and offering support or resources may be helpful.

■ *Finish-in-Four Model:* It is common for personal, financial, or academic challenges to slow down the progress of a student to graduation. Sometimes students experience difficulties that have nothing to do with the university and are not easily moderated. This tool identifies, at the beginning of the second spring semester, the number of remaining semesters after which the student will likely graduate. If the result suggests, irrespective of the cause, that graduation will be more than four years from the semester in which the student started at the university, an advisor can work with the student over the

following semesters to try to moderate the risk of not graduating in four years.

- *Finish-in-Six Model:* This model assesses, in a student's fourth summer, whether the student is likely to graduate within six years from when the student started. To moderate the odds of not graduating within six years, a student will receive support from the advising system.

For Transfer Students

- *Transfer Student First-Year Retention:* This model is like the First-Year Retention Model for first time in college students because it uses data collected before the student enters the institution to anticipate whether the student will need support in order to persist to the end of the second fall semester. The model does not use high school performance data but instead uses academic performance at the previous institution.
- *Transfer Student First-Semester GPA Differential Model:* This tool is the same as the differential predictor for FTIC students as applied to transfer students.

Responders for Students Who May Need Support to Succeed

Predictive analytics and the tools generated by the process are very important to the progress that USF has made in helping students achieve their educational objectives. Identifying which students will need extra support or services is essential. However, the most important contribution to the university's progress is from the people who use those tools to give direct support to the students who most need it. Predictive tools might guide the work of people trying to support student success, but the people themselves are most essential. The following section identifies the departments and people who use the information provided to them to engage the right students in supporting services.

- *Persistence Committee:* This group of 25 persons from cross-functional operations at the university meets on a bi-weekly basis to explore strategies for individual students needing extra support. The group assesses who would be the best support for the stu-

dent based on the premise that students are best served by individuals or departments with which they typically do business or use services. The group also discusses systemic issues, policies, and practices that might create barriers to student success. The committee has stimulated changes in policy and practice on behalf of student success.

- *Care Management Team:* Members of this extended collection of professional staff and student peer leaders are called upon to connect personally with individual students who are predicted to need extra support to be successful. The types of support a student may need could be academic, psycho-social, or financial. Care Team members can find solutions to each of those categories of difficulty. Many times a student is identified by observant staff and faculty as having circumstances that seem to be counter to success. Whether or not the student is associated with a predictor, a Care Team representative initiates a connection to pursue a strategy for support. Following is a set of departments that are represented on the Care Team.
- *The Office of Academic Advocacy:* This office was created in 2013 to give holistic treatment to students needing support for their success. The advocates work with the predictive tools and also receive referrals from faculty and staff regarding students who may need some help. Advocates are assigned to support specific cohorts of entering students and are attuned to services and programs that might be essential to support a student who may need some type of help.
- *Residential Education:* Resident advisors, peer leaders working in the Residential Education Program, are very effective in providing support to students living on campus. In many assessments of the quality of support Care Team members provide, those residential peers provide the greatest lift to students in need. One of the tools that is most enabling of their effectiveness is the residential curriculum, a set of learning outcomes associated with the residential experience. The residential curriculum helps students learn about wellness, interpersonal skills,

academic engagement, and global citizenship. Resident advisors are expected to initiate meaningful, intentional conversations with residential students; and the relationships that are formed as a result ensure that students in difficulty have a knowledgeable resource available to help them.

- *Academic Advisors:* The academic advising system at USF is largely decentralized. Professional advisors are hired and funded by the individual colleges in which they work. For that reason, coordinating the work of advisors relative to student success is not simple. They each have access to the predictive tools that USF uses, and, of course, advisors have key roles in helping students to be successful. When a student needs extra support associated with academic matters or graduation, the advisor is the central player in the task of helping the student. Issues of student persistence and retention might be well-addressed by peers or other Care Team managers, but the supportive role of the advisor is essential in academic matters. The university has undertaken a comprehensive project to inform advisors about the predictive instruments that have been created and to show them how they can be used.
- *Honors College:* The advising team in the Honors College is most interested in the predictive tools related to graduation. They wish to have their students included in the identification, when appropriate, of needing support. Although Honors College students are very capable, some fall behind in the path to graduation because of major life changes, psychological difficulties, or other circumstances that moderate their chances of graduating in a timely fashion.
- *Ombudsman:* The university employs ombuds for responding to student concerns, many of which relate to their success. The ombuds at USF operate under the “Standards of Practice of the International Ombudsman Association.” Those standards include independence, impartiality, confidentiality, and informality. The standards limit the ability to disclose student identities, but the ombuds can request that a student permit the disclosure of the identity of the student in the process of seeking support when that

seems appropriate. The ombuds refer a substantial portion of the students identified in need of support. The ombuds are also able to identify systemic issues that are affecting students and can communicate those concerns to the persistence committee or to university leaders who have authority to address such matters.

- *Financial Education:* This department provides guidance and support to students who would benefit from the development of strategies to manage their financial resources. Students receive coaching about managing debt, and the department offers workshops on related subjects, such as money management, saving money, and general financial literacy. Much of the direct service to students is from student peers who are employed in this department.
- *Academic Success Center:* This department provides a variety of services to students seeking help with their learning strategies. Students can receive tutoring in specific subjects, virtually or in person; support from experts in writing through the Writing Studio; and the Smart Lab can give them support in learning mathematics. The services provided by the center are essential to students developing the skills necessary to be academically successful. Data collected by the center have shown the positive relationship between the frequency with which a student visits the center and the progress made in academic performance.
- *New Student Connections:* This department gives general support to students who are just beginning the university experience by helping them to become acquainted with other students. Its student employees (“PALs”) encourage the students they serve to explore involvement opportunities and navigate key campus resources. The PALs students also employ a phone campaign to engage the students who are identified by the first-year retention predictor.

Other Assets Employed in Student Success

- *Financial Support:* When a Care Team member identifies a student as needing financial support, the Care

Team ally refers the matter to Undergraduate Studies. There the case is considered by a committee, which evaluates the academic performance and the financial circumstances of the student and determines which of several funds, if any, would be used to provide aid and permit the persistence of the student.

- *BCSSE: The Beginning College Survey of Student Engagement* is an important tool in the persistence work of USF. The key part of the survey that informs action by the Care Team and other departments is the section in which a student respondent indicates what is anticipated regarding the college-going experience. The student indicates what is expected regarding academic life and social experience, too. Responses to specific items have predictive merit, and several items or groups of items become part of the predictive measures that the university develops. The survey data supplement the demographic data that feed analytical tools, and the predictive merit becomes powerful. In addition, when a response to a particular item points to a matter that might need attention, individual departments have interest in engaging students in support. For example, a student who expresses on the survey a concern about the affordability of a USF education might be contacted by the Financial Education Office about developing a financial strategy plan.

Challenges for USF

- *COVID:* The pandemic had a serious effect on student success efforts at USF. As was the case for most of higher education, the student experience was not a typical one. In addition to their academic and career focuses, most students enter college to meet people, make friends, and socialize. Much of that was not possible in 2020, because USF classes were delivered remotely, and students were distanced from each other. In the fall 2021 semester, the university welcomed two cohorts who were on campus for the first time: those who started in the fall of 2020 and those who began in the fall of 2021. The predictive tools that USF uses would normally be derived from data of a previously admitted cohort,

but data from the experiences of the 2020 and the 2021 cohorts were reflective of a tremendously different experience and were deemed to be of no value. In the spring of 2022, staff who were working in Student Success experienced what seem to be lasting effects of the pandemic, largely in the form of student indifference to offers of help and support. This does not bode well for the university's efforts to continue to improve in the measures of student success. It may be that other institutions are seeing the same effects, but that will have to be measured in the future.

- *Male Student Initiative:* Data show that male students at USF do not persist at the same rate as female students, and they graduate in four and six years at a substantially lower rate than women. The university has had success eliminating or narrowing performance gaps based upon other characteristics, but the gender gap has not yet been solved. USF officials are considering the employment of different approaches to orienting male students to the institution and focusing on behaviors that enhance learning and advance success. The effect of these approaches will be carefully assessed.
- *Fostered Students:* Students who have been in the Florida foster care system seem to have some special challenges when they enroll at USF. The way the system works in Florida is that a person ages out of foster care and associated services when turning eighteen. Therefore, many of those students who enter the USF campus are left to rely entirely on their own resources. The students are eligible for a tuition waiver, but some students are not aware of that. Those who use the waiver still have remaining substantial costs for room and board and books and, perhaps, transportation. As a result, there is a financial side of this challenge, but in addition to finances, these students face a significant psycho-social set of challenges and, often, an academic readiness issue. The general experience of students who come from the foster care system is problematic, and the university is exploring ways in which it can better serve these students.

📌 **Homeless Students:** Homelessness is an unpleasant reality in the current circumstances, and college students are not immune to it. It does present some uncomfortable conditions for those attempting to study and learn and advance themselves through the student experience. USF employs a group of social workers as case managers in a department called Student Outreach and Support (SOS), and students who have self-identified as homeless are referred to SOS for help in problem solving their homeless condition. SOS also routinely offers support to an-

other student group that benefits from their help: students who are food insecure.

Conclusion

This article describes the breadth of engagement and investment in student success at USF. The activities associated with the success of students are highly regarded and widely applauded, largely because they have produced unparalleled results. Predictive analytics allow those who advise and serve students to give energy and efforts to those who need support.

Appendix: Trends in Retention and Graduation Rates

The following graphs illustrate the effectiveness of the University of South Florida's (USF) efforts to enhance student success described in this article. Note that the

data reported follow IPEDS methodology but are based on internal preliminary data from the USF Office of Decision Support.

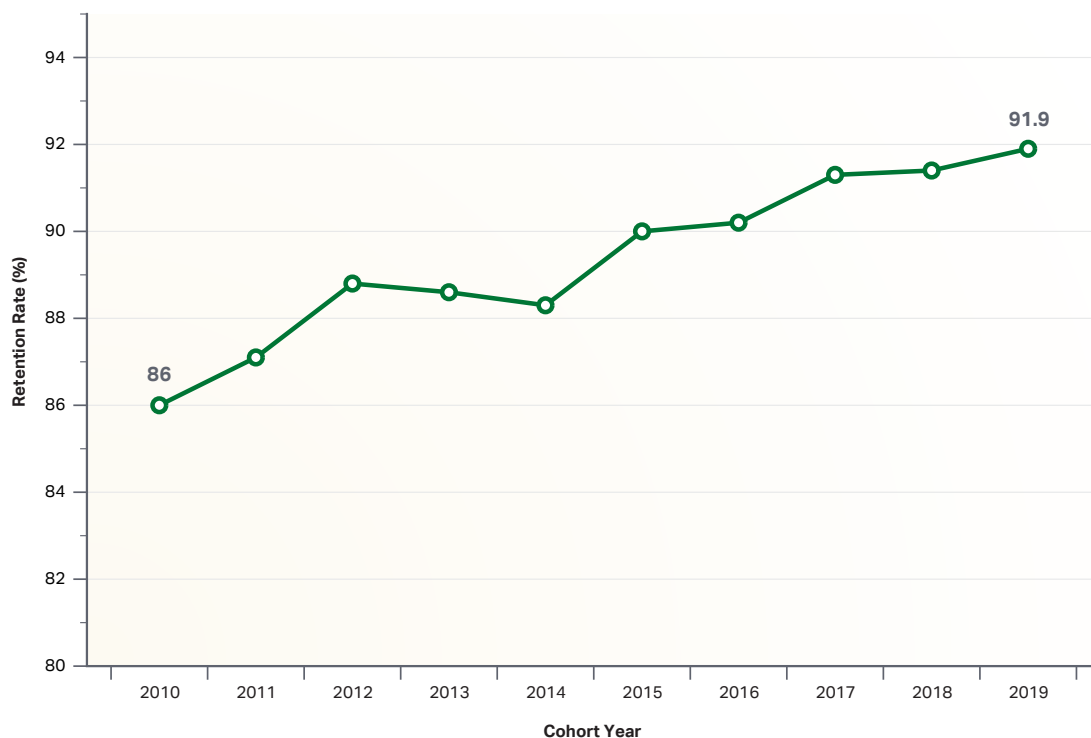


FIGURE 1 ► First-Year Retention Rate, First-Time in College Students

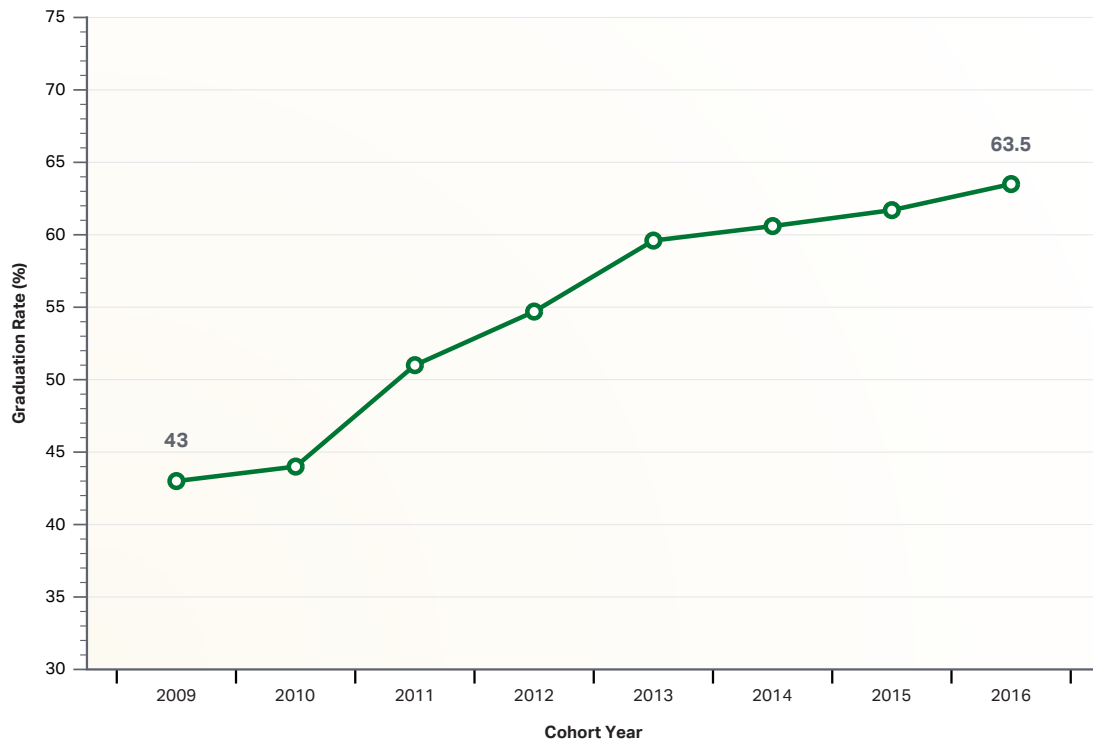


FIGURE 2 ► Four-Year Graduation Rate, First-Time in College Students

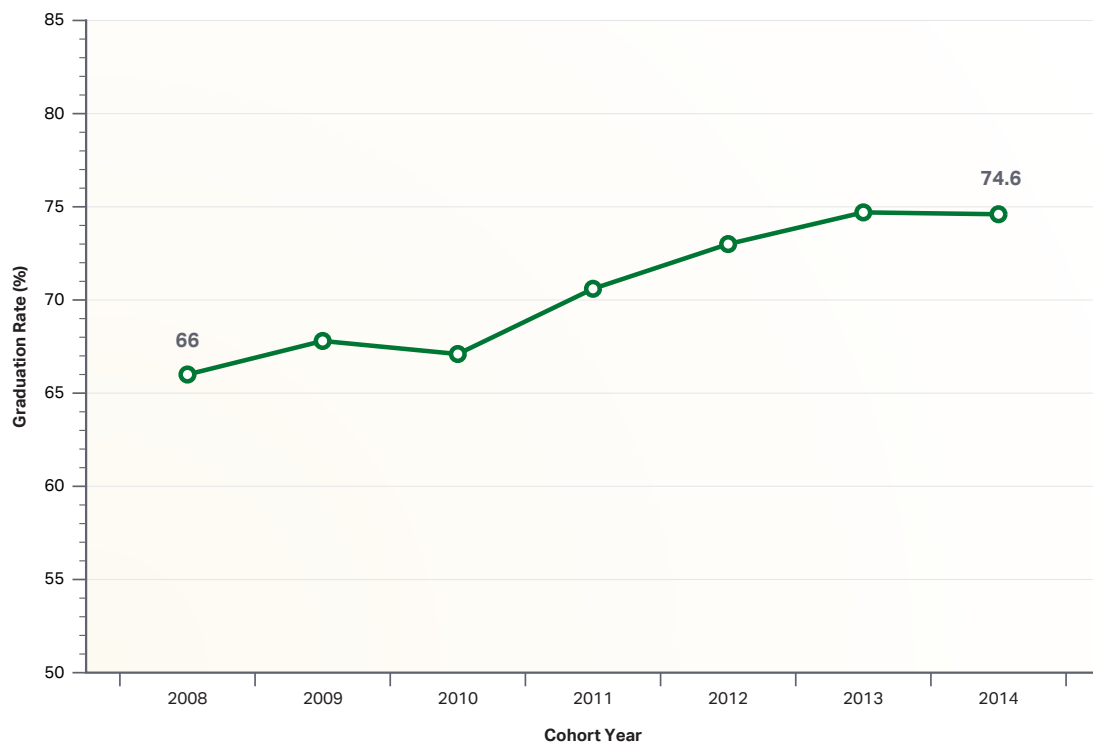


FIGURE 3 ► Six-Year Graduation Rate, First-Time in College Students

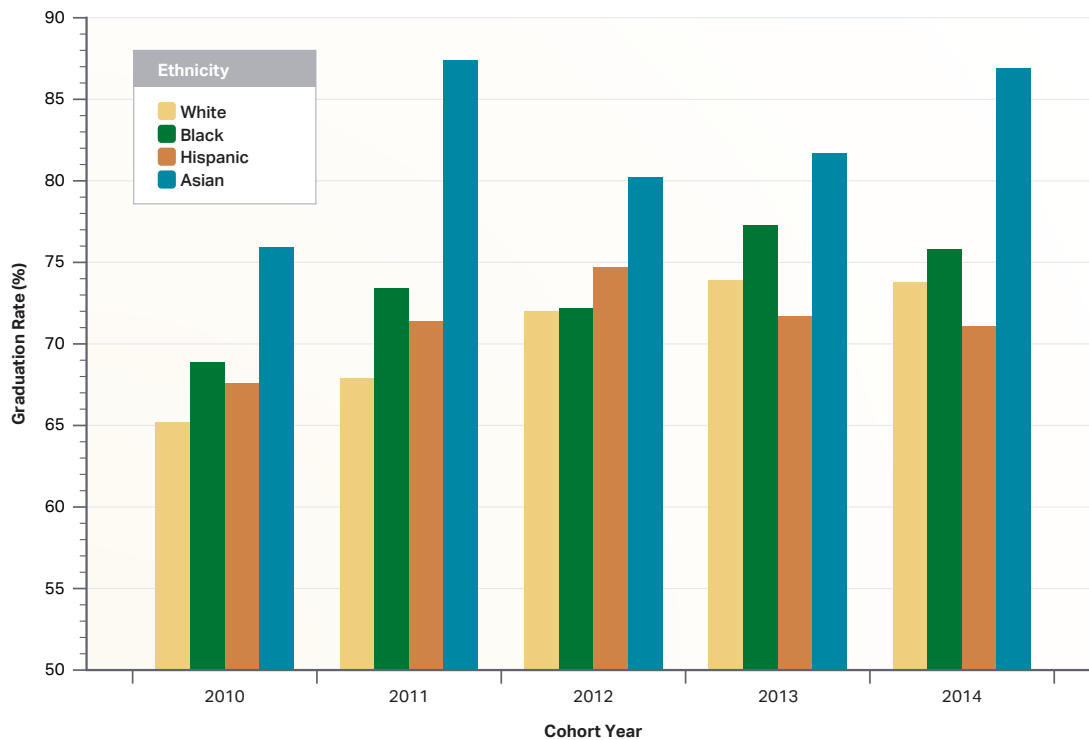


FIGURE 4 ➤ Six-Year Graduation Rate, First-Time in College Students by Ethnicity

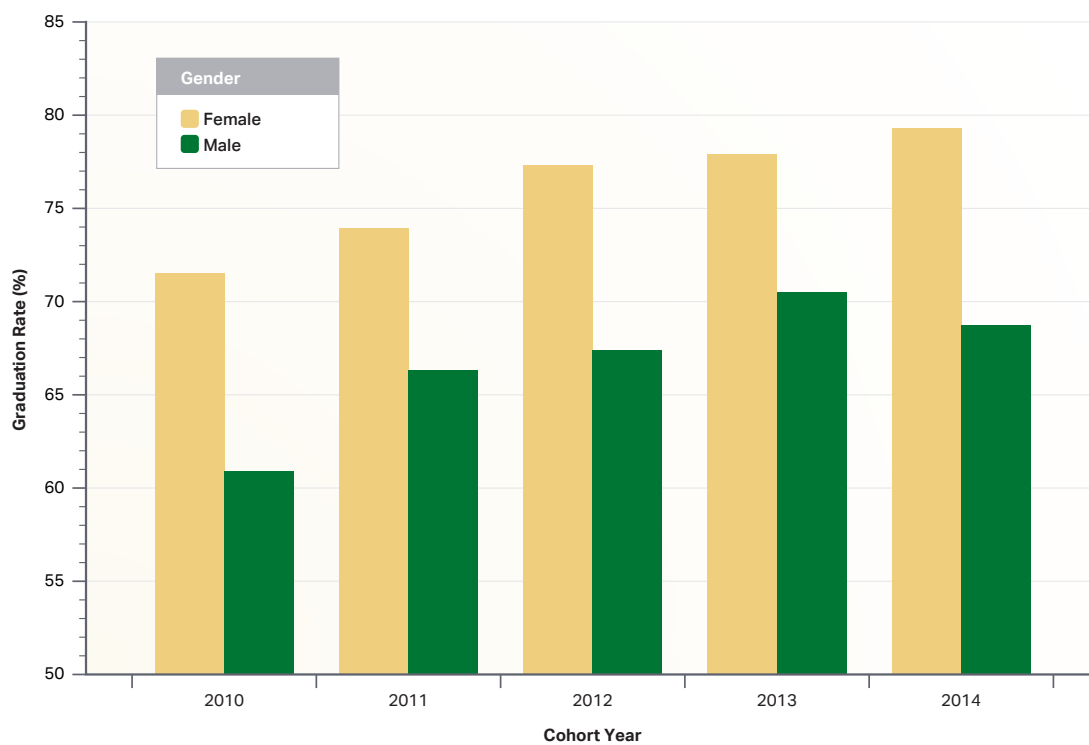


FIGURE 5 ➤ Six-Year Graduation Rate, First-Time in College Students by Gender

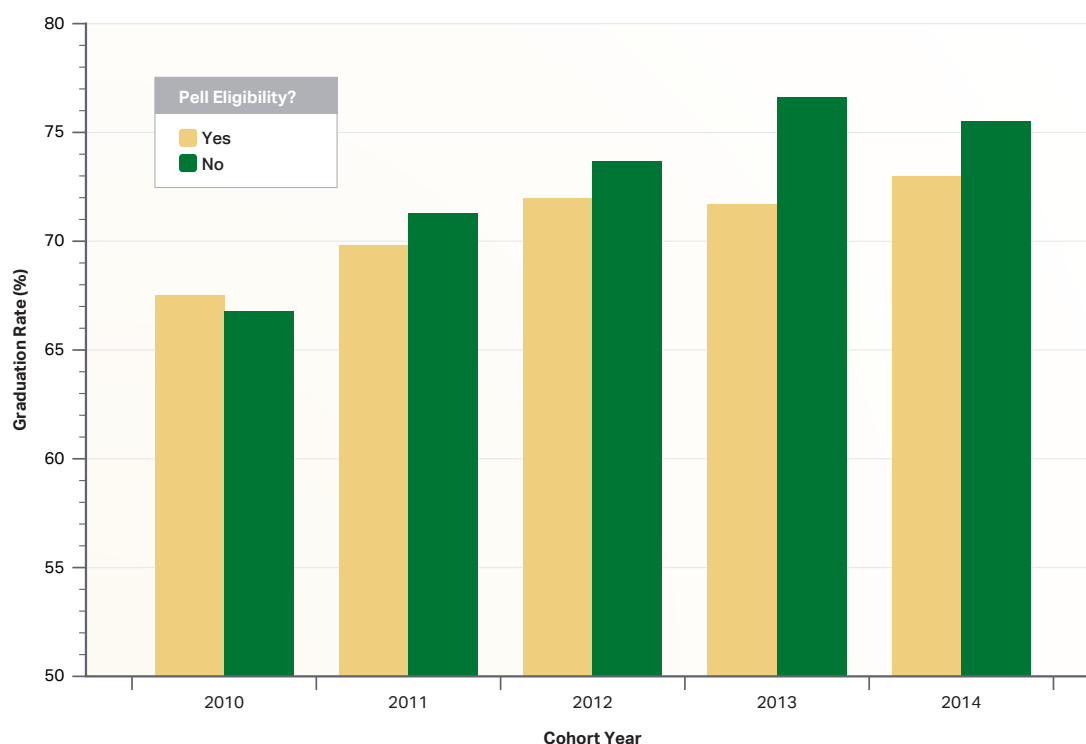


FIGURE 6 ► Six-Year Graduation Rate, First-Time in College Students by Pell Eligibility

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