Keep Me in, Coach: Can Coaching Improve Marginal College Students' Outcomes?

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Preliminary, please do not circulate

Abstract

In an effort to boost college graduation rates, policymakers often advocate for the use of academic support services such as coaching or advising. Previous studies show that proactive and intensive coaching promotes students' academic success. In this paper, we evaluate a lighter-touch coaching program intended to enhance academic outcomes of freshman students placed on academic probation. The coaching program was implemented at a U.S. 4-year college and requires participants to attend a workshop designed to improve goal-setting and time management skills. During the workshop, participants are divided into small groups led by trained coaches and are provided with personalized feedback. Participants also have to hold a one-on-one follow-up meeting with their coach. Using a difference-in-discontinuity design, we show that the program raises participants' freshman-year GPA by 10.7 percent of a standard deviation, and decreases their first-year dropout rate by 8.7 percentage points. Effects are concentrated among low-income students who also experience a significant increase in their six-year graduation rate. Our findings indicate that non-intrusive but targeted coaching can be an effective way to increase marginal students' college retention. We are currently in the process of collecting Unemployment Insurance (UI) data to examine whether this program impacts participants' labor market outcomes.

JEL Classification: I23, I24, J16

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1 Introduction

Despite small improvements over the past few years, U.S. college completion rates remain low. At four-year public postsecondary institutions, the share of students who obtain a bachelor's degree within six years from initial enrollment is 60% (College Board, 2019). Furthermore, socioeconomic gaps in postsecondary attainment are substantial and have been growing over time (Bailey and Dynarski, 2011). Among low-ability students enrolled at four-year public institutions, the six-year BA completion rate is 55% for students from high-income families versus 33% for their low-income counterparts (College Board, 2019). Academic support services such as coaching or advising are often touted as effective tools to increase graduation rates, but evidence on their success is mixed.

In this paper, we evaluate a mandatory academic coaching program implemented at a U.S. four-year college and targeted at freshman students who are on academic probation. The program begins with a two-hour workshop. During the first 30 minutes, all students attend a group presentation which covers topics such as time management, work-life balance and campus resources. They are then divided into smaller groups of 6 to 8 students and are assigned to coaches who lead a one hour and a half session. During this session, students focus on goal-setting, planning and time management, and receive personalized feedback from their coaches. Students also commit to having a 15 to 30 minute follow-up one-on-one meeting with their coach or to using another campus resource during the fifth week of the quarter. Coaches act as a support contact throughout the quarter and send a personalized email to their students in week 5 to remind them of their goals.

To identify causal effects, we leverage the fact that freshman students are assigned to the program if their GPA is lower than 2.0 during their first quarter. Students who score below that cutoff are also placed on academic probation, precluding us from using a standard regression discontinuity design. However, the program was introduced in 2009 implying that students enrolled as freshmen after that date were exposed to both academic probation and the coaching program, while those enrolled before that date were only exposed to academic probation. We thus use a difference-in-discontinuity (DiRD) design which compares freshman students enrolled at the college in the years 2009 or later with a first-quarter GPA on either side of the 2.0 cutoff (treatment group), to students on either side of this threshold but who were freshmen in years before 2009 (control group). The DiRD essentially estimates the discontinuity in treated cohorts' outcomes and differences out any potential discontinuities in control cohorts' outcomes, thereby isolating the impacts of the coaching program from academic probation.

We find that students incur large gains from participating in the coaching program.

Overall, the program increases students' freshman-year GPA by 10.7 percent of a standard deviation, and decreases their likelihood of dropping out after the first year by 8.7 percentage points (pp). Our results suggest that these effects persist in the long run as the program raises 6-year graduation rates—albeit corresponding estimates are not statistically significant across all specifications. Heterogeneity analyses further reveal that our main effects are concentrated among students who ex-ante, are expected to benefit the most from this program. Specifically, we show that as a result of the coaching program, low-income students experience a 14.5 percent of a standard deviation increase in their freshman-year GPA, a 12.8 pp decrease in their first-year dropout rate and a 14.1 pp improvement in their 6-year graduation rate—which is statistically significant at conventional levels. In contrast, we find that the program has no statistically significant impact on high-income students' outcomes.

We further examine whether our effects differ by students' gender and major. First, we show that the program's benefits are concentrated among men. Indeed, our results indicate that the coaching program raises men's first-year GPA by 21.5 percent of a standard deviation and decreases their likelihood of dropping out after first year by 8.7 pp. We detect no statistically significant effect on their 6-year graduation rate but reduced precision prevents from drawing definitive conclusions for this outcome. On the other hand, we find no statistically significant impacts on women's various academic outcomes. These findings are unsurprising given that men persist in and complete college at much lower rates than women (Bound, Lovenheim and Turner, 2010; Bailey and Dynarski, 2011).

Second, students in our setting enroll as freshmen with a declared major. This allows us to examine heterogeneous effects based on students' declared major at the beginning of their freshman year. Students enrolled in STEM majors may benefit more from the program than their non-STEM peers, as STEM majors are more difficult and competitive. Indeed, our findings indicate that the program's effects are driven by students enrolled in STEM majors. These students see a 16.7 percent of standard deviation improvement in their first-year GPA and a 12.3 pp decline in first-year dropout rate, while no significant effects are found for non-STEM majors.

Finally, to examine the mechanisms behind our effects, we utilize data taken from preand post-program surveys administered to all students who participated in the coaching program. Using an individual fixed-effects model, we find that by the end of the program, students (i) feel significantly more supported by a faculty or staff member, (ii) are less likely to feel that they are the only ones struggling, (ii) are more familiar with the university's student services and, (ii) are better at managing their time. We further detect no significant changes in their motivation, likelihood of attending classes or feeling that they are connected to a community at the university. Our paper is related to an emerging literature which examines whether access to academic support services improves college students' success. Several programs offering one-on-one, personalized and continuous advising have been recently implemented to help students navigate the complexities of college, but evidence on their effectiveness is mixed.¹ Some of these interventions resulted in limited improvements in students' academic performance, with effects dissipating once advising ends (Angrist, Lang and Oreopoulos, 2009; Scrivener and Weiss, 2009; Angrist, Oreopoulos and Williams, 2014; Bird et al., 2019). On the other hand, recent studies find that proactive coaching or advising have large and persistent positive effects on academic performance and raise college persistence (Bettinger and Baker, 2014; Oreopoulos and Petronivejic, 2018; Barr and Castleman, 2018).

Our paper differs from these studies in several ways. First, the program we focus on is lower-touch, less intrusive and has a shorter time span (one quarter) than previous interventions. Students in our setting are required to attend only one group coaching workshop and hold one individualized meeting with their coach. In contrast, a common feature of all other effective programs is that coaches or advisors are very proactive, as they regularly initiate contact and schedule one-on-one meetings with their students. Furthermore, coaches typically follow students for at least one academic year—with some programs even lasting multiple years.²

Second, unlike previous studies, coaching in our context is conducted in a group setting and not just one-on-one. This is important since exposure to peers with similar academic difficulties may allow students to feel supported and part of a community which could increase their level of commitment to their studies. Indeed, the positive effects we document are consonant with recent studies showing that programs in which group activities are a key component, largely improve students' academic outcomes. For example, Weiss et al. (2015) find that learning communities, which mainly co-enroll students into two or more courses, have persistent positive effects on community college students' credit accumulation. In another study, Weiss et al. (2019) show that ASAP—a comprehensive 3-year program in which

¹A variety of advising and counseling programs have also been put in place to raise high school students' college enrollment and access to financial aid (Bettinger et al., 2012; Avery, Howell and Page, 2014; Castleman, Page and Schooley, 2014; Carrell and Sacerdote, 2017; Castleman and Goodman, 2018).

²Specifically, Barr and Castleman (2018) report increases in college enrollment and persistence due to Bottom Line (BL), a program which offers intensive counseling to students starting their senior year in high school and up to 6 years after high school. BL counselors meet one-on-one with first-year college students around 3 to 4 times per semester. Bettinger and Baker (2014) document a rise in persistence from InsideTrack, a for-profit coaching service offered to non-traditional college students where coaches regularly initiate contact via phone and keep in touch with students. Oreopoulos and Petronijevic (2018) implement a one-year coaching intervention at a Canadian University in which they instruct coaches to be proactive and offer personalized regular support. Their coaching intervention substantially increased academic performance.

participants are offered a variety of academic supports including proactive one-on-one advising and incentives to enroll in the same classes—substantially increases community college graduation rates.³

Third, a unique feature of our program is that it targets college students placed on academic probation. Targeted interventions implemented at the right time are highly effective at improving student outcomes in other settings. Carrell and Sacerdote (2017) show that an intensive coaching program targeting high school seniors who are at risk of not applying to college, substantially increases college enrollment and persistence. The ASAP program studied by Weiss et al. (2019) is aimed at low-income college students who had to take one or two remedial courses. In a similar vein, Bettinger et al. (2012) find that offering low-income individuals personal assistance with completing the FAFSA application largely raises their children's college attendance. However, no previously studied coaching or advising program targets students on academic probation. This is despite the facts that academic probation is universal and puts students at risk of dropping out of college (Lindo, Sanders and Oreopoulos, 2010), which in turn leads to substantial losses in future earnings (Ost, Pan and Webber, 2018).

Our findings indicate that providing targeted coaching can be an effective way to overturn the negative effects of academic probation. Furthermore, the program we focus on is lower-touch and less intensive than previously studied coaching or advising interventions. Yet, the positive effects we document are on par with the academic benefits of more proactive programs. We are hoping to gain access to Unemployment Insurance (UI) data to examine whether this program also benefits students in the labor market.

The rest of this paper is organized as follows. Section 2 details the institutional background. Section 3 describes the data that we use. Section 4 outlines the identification strategy. Sections 5 and 6 respectively present the main results and discuss the mechanisms behind our effects. We conclude in section 7.

2 Background

The setting for this study is a large selective, public 4-year college located on the Central Coast of California. The university serves approximately 21,000 students with a focus on undergraduate education, particularly in engineering and agriculture fields. To provide context, for the 2019-20 academic year, the acceptance rate was 28% and tuition and fees

³ASAP is more comprehensive than the program we focus on as it also offers financial support, weekly tutoring and seminars. Several other multifaceted programs combining financial aid with academic supports have also been shown to substantially increase college completion rates (Page et al., 2019; Angrist, Autor and Pallais, 2020).

(excluding books, supplies, room/board etc.) were nearly \$10,000/year for California residents and \$25,000 for out-of-state and international students. The 2019 entering cohort of first-time freshmen had an average high school GPA of 4.1 (on a 5.0 scale), an average SAT score of 1,375 and an average ACT score of 29. Admitted students at this institution score among the top 20% nationally on the SAT exam.

2.1 First Year Success Program

Like many institutions, this university is concerned with retention and completion rates. Not only are these metrics important inputs into university rankings, but administrators are also aware that it is costly to students—both directly and indirectly—to begin and not complete a degree, as they are unable to realize the associated wage premium. In an attempt to improve these outcomes, in 2009 the university introduced the First Year Success Program (FYSP)—a mandatory academic coaching program for first-time freshmen who qualify for academic probation during the fall quarter of their first year. It has always been the case that students are placed on academic probation if their term GPA or cumulative GPA falls below 2.0.4 While the intent of academic probation is to serve as a warning or motivate students to improve their performance, there is a concern that it is ineffective or may even discourage some students. In light of this concern, FYSP was intentionally designed to take a different approach from the standard academic probation corrective measure. FYSP curriculum is designed based on Psychologist Dr. Albert Bandura's Theory of Self-Efficacy. The theory posits that individuals with sufficient levels of self-efficacy have confidence in their ability to exert control over their motivation and behavior and, consequently, are able to achieve specific performance benchmarks. As such, FYSP aims to improve self-efficacy. The program was first implemented as a pilot in the fall of 2009 for a subset of majors, and was extended to the entire university the following year.

The program consists of two parts: (1) a two-hour workshop led by trained faculty coaches that takes place the first week of the following quarter (winter quarter) and, (2) a follow-on assignment to be completed by week 5 of the quarter. For the assignment, students choose between either visiting a campus resource and completing a reflection assignment, or attending a one-on-one follow-up meeting with their workshop coach and completing a reflection assignment. The university typically offers two workshop dates to accommodate student and faculty schedules. There are about 300 students who qualify for the program each fall quarter and almost all of them participate in one of the two workshop sessions. A small share of students are unable to attend the session due to a scheduling conflict

⁴Students on probation are subject to dismissal if their cumulative GPA does not exceed the 2.0 threshold by the end of their first year.

and complete the requirement one-on-one with a trained coach. To enforce participation, students are unable to enroll in spring quarter courses until they have completed all parts of the program.

The two-hour workshop is broken into two parts: thirty minutes with all session participants (typically about 150 students) followed by a one and half hour breakout session with a smaller group of 5-7 students led by a trained faculty or staff coach. The goal of the large group portion of the workshop is to normalize failure and to show students that they are not the only ones at the university who experienced academic challenges in their first quarter. During this part of the workshop, students watch a video on various high profile people who have overcome challenges and failure. The FYSP leadership team presents students with information on campus resources including tutoring services, health and wellbeing services, counseling services and cross cultural services including the Gender Equity Center, Pride Center and Multicultural Center. They also outline the rules of Academic Probation and Academic Disqualification in an attempt to remove some of the anxiety surrounding these titles.

The second part of the workshop is meant to be more interactive and discussion-based. It involves a breakout session with a smaller group, typically 6-8 students, led by a trained coach. Coaches are faculty and staff from across the university who have undergone a two-hour training led by the FYSP leadership team. The emphasis of this portion is on identifying weaknesses and goal setting. Students are allotted time to reflect on factors that may have contributed to their academic struggles in the fall quarter; i.e., academic challenges (time management, study skills, class attendance and school/life balance), college adjustment difficulties (roommate issues, homesickness, difficulty finding resources and difficulty fitting in) and personal hardships (mental or physical health issues, personal or family crises and identity based isolation). To guide this process, participants work through a worksheet pausing to discuss their responses with the group. The worksheet is set up in three steps: identifying weaknesses, identifying solutions or resources that can aid in overcoming these weaknesses, and goal setting for the current quarter. The intent of this exercise is for students to leave the workshop with a tangible plan to change their academic trajectory going forward.

3 Data

All data in the analysis are student-level and come from four sources: (1) administrative records from the university office of Institutional Research, (2) FYSP participation files, (3) pre- and post-FYSP survey responses from the First Year Success Program Office which are discussed in detail in Section 6, and (4) survey responses on post-graduate labor market

outcomes from the Graduate Status Report provided by the university's Career Services office.⁵ The full sample includes 11 entering cohorts of first-time freshmen who enrolled at the university in a fall quarter between 2007 and 2017 (44,556 students) and tracks them by quarter through graduation or until they separate from the university.

The administrative transcript files provide a detailed view of students' academic progress. We observe by student-quarter: enrolled courses, course grades, cumulative GPA, academic major, academic standing, probation status and the timing of separation from the university either as a dropout or graduate. These files also contain a rich set of background characteristics including a students' gender, race/ethnicity, high school GPA, parental education, whether they are required to enroll in remedial math and English courses, their expected family contribution (EFC) as determined by the Free Application for Federal Student Aid (FAFSA) and eligibility for the Federal Pell Grant program. The administrative files are then augmented with FYSP participation records to identify which students complete the program.

Summary statistics are presented in Table 1. While column 1 presents means for the full sample to provide context, column 2 reports summary statistics for the 21,433 students who are part of the analysis sample; i.e., the marginal students scoring between 1 and 3 GPA points in their first quarter at the university. Relative to the full sample, the analysis sample has more men (56% vs. 52%), more non-white students (42% vs. 38%) and is lower-income. The share of Pell Grant-eligible students is 19% compared to 16% in the full sample. Moreover, this group experiences relatively worse academic outcomes. More than half of the students in the analysis sample are placed on academic probation at some point during their college career and 8% dropout after first year. Consequently, the 4- and 6-year graduation rates for the students around the 2.0 GPA cutoff is 30% and 76%, respectively; much lower than the full sample.

Columns 3 and 4 report summary statistics for the group of students in the pre-program years; i.e, the years prior to the introduction of FYSP. This constitutes a sample of 4,138 students enrolled in all faculties in 2007 and 2008, and select faculties in 2009.⁶ Column 3 includes the students who are placed on probation (GPA \in [1,2)) and column 4 is students scoring just above the 2.0 GPA cutoff (GPA \in [2,3)) and, thus, are not on probation. Strikingly, the group of students who barley qualify for probation after their first quarter (column 3) have a mean first-year dropout rate of 27% compared to 5% for those who just

 $^{^5}$ We are currently in the process of obtaining California UI records so that we can observe more complete and longer-term labor market outcomes.

⁶The following colleges participated in the 2009 pilot: College of Agriculture, Food, and Environmental Sciences; College of Business; College of Engineering; and College of Architecture and Environmental Design. The College of Science and Mathematics and College of Liberal Arts did not participate.

miss the probation cutoff (column 4). As such, this group is much less likely to graduate in four (9% versus 28%) or six years (46% versus 80%). These large differences suggest that first quarter probation may have a profound and negative impact on students' academic outcomes.

In columns 5 and 6 we present summary statistics for the 15,630 students exposed to both the probation policy and FYSP. We split this sample into those eligible for both programs, $GPA \in [1,2)$, as presented in column 5 and those who are barley ineligible, $GPA \in [2,3)$, as presented in column 6. Notably, we find that students scoring below the cutoff have, on average, a 22% year-one dropout rate compared to 5% for those scoring above the 2.0 GPA cutoff. This difference, albeit large, is smaller than the one found in columns 3 and 4; the comparison across students who are placed on probation with those who are not. Finally, we find that students scoring just above the cutoff have higher 4- and 6-year graduation rates compared to those just below. These raw differences are again smaller than those found when comparing probation-eligible versus ineligible students. In summary, mean comparisons from columns 3 through 6 suggest that probation likely has a negative impact on student academic outcomes and academic coaching may partially moderate this effect. In the following section, we turn to a causal framework to more rigorously probe this possibility.

4 Empirical Strategy

4.1 Visual Motivation

Our research design leverages the discontinuous nature of academic coaching program assignment attributed to first quarter GPA at the university. In particular, our analysis is in the spirit of a regression discontinuity (RD) design framework that compares across student outcomes for those scoring just below a 2.0 GPA during their first quarter (eligible for FYSP) and those scoring above this cutoff (ineligible for FYSP). One issue in this setting is that the GPA cutoff for FYSP also coincides with that of probation. This complicates the interpretation of the standard RD estimate by confounding the impact of coaching with that of probation. For example, if FYSP has a positive treatment effect and probation has an equally negative one, then using a standard RD design will lead one to find a null result, despite FYSP having a significant positive impact on students. To isolate the effect of coaching, we further leverage the fact that all cohorts were affected by the probation rule, but not all were exposed to FYSP. The pilot FYSP was introduced in the 2009 academic year (for select faculties) such that the cohorts of 2007, 2008 and some students in the 2009 cohort were never eligible for the program. We refer to cohorts that were not exposed to FYSP

as pre-program cohorts (control cohorts) and those eligible for FYSP as program cohorts (treatment cohorts).

To estimate the causal effects of FYSP, we thus use a difference-in-discontinuity design. This design first estimates the effect of scoring just below the cutoff for treatment cohorts (those exposed to FYSP + probation) and then removes any effect of probation by differencing out any discontinuity found around the cutoff for control cohorts (those exposed to probation only). As long as the effects of probation are constant across these two time periods, then this design will produce an unbiased estimate of the effect of FYSP, an issue we return to in Section 5.5.1. Figure 1 provides graphical motivation for our DiRD design using first quarter GPA as the running variable. All figures take similar forms in that circles represent local averages over a 0.1 GPA score range. Further, all figures are drawn over a bandwidth of 1 GPA point on either side of the cutoff using a linear fit. Figures in the left panel summarize effects at the 2.0 GPA cutoff for students in control cohorts (exposed to probation policy only), while those on the right present effects for those in treatment cohorts (exposed to FYSP + probation).

The RD graphs plotted in Figure 1 provide visual evidence of meaningful differences between students exposed exclusively to the probation policy (control cohorts) and those exposed to probation and FYSP (treatment cohorts). Figure 1a and Figure 1b highlight significant first year dropout differences between control and treatment cohorts at the cutoff. Specifically, students on the margin of probation were 10.6 pp more likely to drop out after first year compared to those not at risk of probation. This large and meaningful gap at the cutoff is heavily reduced to a statistically insignificant 2 pp for cohorts exposed to probation and FYSP. Under the assumption that the negative effects of probation were similar for all cohorts, this suggests that students barely exposed to the coaching program experienced significantly lower dropout rates compared to those not exposed.

Figure 1c shows an insignificant 1.5 pp reduction in 4-year graduation rates at the cutoff for control cohorts. This compares to an insignificant, but positive 0.6 pp increase in 4-year graduation rates for students exposed to both policies, as shown in Figure 1d. As such, there is not strong visual evidence that FYSP changes students probability of graduating on time. On the other hand, 6-year graduation rates seem to be more affected by the program as we find an 8.4 pp reduction for control cohorts, compared to a 4.5 pp reduction for treatment cohorts, as shown in panels e and f of Figure 1. Finally, Figure 1g and Figure 1h show that while students exposed to probation were not significantly affected in terms of first year GPA, those exposed to both programs experienced a large and significant 17 percent of a standard deviation increase in performance at the cutoff. That is, FYSP seems to have positive grade impacts on marginal student. Next, we introduce our econometric framework

more formally using a difference-in-discontinuity design.

4.2 Formal Design: Difference-in-Discontinuity Design

To formally evaluate the causal effects of academic coaching for marginal students, we use a difference-in-discontinuity design. Intuitively, this design first estimates the discontinuity in outcomes across the 2.0 GPA cutoff for cohorts exposed to both FYSP and probation and then purges the effects of probation by differencing out any discontinuity in outcomes for cohorts exposed to the probation policy solely. Under the assumption that probation effects are constant over time, estimates from the DiRD design can be interpreted as the causal effects of the coaching program. We check whether this assumption reasonably holds in Section 5.5.1. Formally, we estimate the following equation:

$$Y_{i} = \beta_{1} + \beta_{2}GPA_{i} + \beta_{3}Treatgroup_{i} + \beta_{4}ScoreBelow_{i} + \beta_{5}(ScoreBelow_{i} * Treatgroup_{i}) + \beta_{6}(ScoreBelow_{i} * GPA_{i}) + \beta_{7}(ScoreBelow_{i} * Treatgroup_{i}) + \beta_{8}(ScoreBelow_{i} * Treatgroup_{i} * GPA_{i}) + \gamma X_{i} + \epsilon_{i}$$

$$(1)$$

 Y_i is the outcome of interest for student i. GPA_i is the running variable and represents student i's normalized first quarter GPA relative to the cutoff of 2.0.7 $Treatgroup_i$ is a binary variable that takes the value of 1 for treated cohorts, corresponding to all students exposed to both the probation policy and FYSP and 0 for control cohorts exposed only to the probation policy. ScoreBelow is a binary variable that takes the value of 1 for students scoring below the GPA cutoff of 2.0 and 0 otherwise. The interactions with GPA_i allow slopes to vary on either side of the GPA cutoff as well as across treated and control cohorts.

The parameter of interest in this regression is β_7 , which represents the difference in the discontinuous jump in all outcomes for students scoring just below the 2.0 GPA cutoff to those scoring just above between the treated and the control cohorts.⁸ Additionally, X_i is a vector of controls composed of students' predetermined characteristics—high school GPA, gender, race, required enrollment in remedial math and English courses, Pell Grant eligibility, EFC and parental education—which should improve precision by reducing residual variation in the outcome variable, but should not significantly alter the treatment estimates. Finally, ϵ_i represents the error term. We use robust standard errors for inference because clustering with a discrete running variable leads to confidence intervals with worse coverage properties

⁷In our main analysis, we rely on three different bandwidths for this running variable: 0.5, 0.75 and 1 GPA points on either side of the cutoff.

⁸The parameter β_3 summarizes the average difference in outcomes for students scoring above the 2.0 cutoff in the treated versus control cohorts. The parameter β_4 represents the average difference in outcomes for students scoring below to those scoring above the cutoff in the control cohorts.

without resolving specification bias issues (Kolsar & Rothe, 2018).

5 Results

5.1 Program Participation

We begin by accessing whether participation in FYSP is based on first quarter GPA as the policy states. That is, we plot the first stage. Figure 2 shows the likelihood of program participation for all entering cohorts from fall 2010 to fall 2018, i.e. since the inception of the coaching program.⁹ Importantly, no student with a first quarter GPA above the threshold of 2.0 participated in FYSP while virtually all students scoring below the 2.0 cutoff participated.¹⁰ This "first stage" affirms that the FYSP was indeed binding in practice and was based solely on student GPA.

As previously mentioned, a complication of the analysis is that FYSP and probation policy eligibility are determined by the same GPA threshold of 2.0. Our main analysis leverages the fact that the probation policy existed before and after the introduction of FYSP and no changes were made to the way probation is administered. To confirm this, we next show that probation is indeed binding for both treatment and control cohorts. Figures A1a and A1b show that the likelihood of students being on probation is solely dependent on quarter GPA as we find a sharp discontinuity at the 2.0 grade threshold for control cohorts exposed only to probation as well as for treatment cohorts exposed to both the probation policy and FYSP.¹¹ We conclude that both treatments, FYSP and probation, exhibit a large and roughly equally sharp discontinuity at the grade cutoff of 2.0. This is important as it is essential that the discontinuity in the probability of selection into each treatment is equal in order to point identify local average treatment effects using a difference-in-discontinuity design (Galindo-Silva, Some and Tchuente, 2020).

5.2 Validity of the Research Design

The main identifying assumption with any regression discontinuity based design is that individuals do not have the ability to precisely control the running variable. If individuals

⁹We exclude students from the few faculties who where selected for the pilot program in 2009 from this analysis as we do not have program participation data for these students.

¹⁰Each fall quarter there are a few students (less than 10) who qualify for the program but who are granted a wavier by the Dean of their college and are thus excused from participating in FYSP. These waivers are typically reserved for extenuating circumstances such as health shocks or family emergencies.

¹¹Unfortunately, the probation variable indicator is missing for the 2010-2016 entering fall cohorts. As such, our first stage is based on the freshmen in the fall cohorts 2007, 2008, 2009 and 2017.

can influence which side of the cutoff they are on, it will call into question the causal interpretation of the point estimates as it will be difficult to distinguish between student sorting and the true effect of the intervention. In our setting, this could occur if instructors or students strategically manipulate grades in such a manner that the distribution of observable and/or unobservable characteristics of students are discontinuous at the 2.0 GPA cutoff. Although this is a fundamentally untestable assumption, we provide several indirect tests that support its plausibility.

First, it is unlikely that instructors are able to strategically manipulate a student's full quarter GPA, since they are generally responsible for only one of three or four course grades. Second, we check for manipulation around the 2.0 threshold by plotting the distribution of student GPAs for all cohorts (see Figure 3a). While we do find two large density spikes at the GPA cutoffs of 2.0 and 3.0, we also show that these heaping patterns are similar across treatment (FYSP-eligible cohorts) and control cohorts (pre-FYSP cohorts), as shown in Figure 3b and Figure 3c. Importantly, this indicates that the documented overall GPA pattern did not change with the implementation of FYSP. In fact, heaping at round GPA points is not necessarily indicative of manipulation. It is possible that discontinuities in the GPA distribution are linked to other exogenous factors such as grade rounding. Natural, non-strategic, institutional grade bumps are common in many U.S. institutions and have been documented in GPA based RD settings such as Zimmerman (2014) and Ost et. al (2018). In order to alleviate concerns over grade heaping, in Section 5.5.2 we re-estimate our main analysis using a Donut DiRD design that involves dropping the heaping points at the 2.0 and 3.0 GPA cutoff (Barreca, Lindo and Waddell, 2016). Our main findings are robust to this alternative approach.

Finally, we examine whether observable student characteristics evolve similarly around the 2.0 GPA threshold. If individuals are unable to manipulate the side of the threshold they fall on, we should observe no differences in predetermined characterizes across the cutoff. To implement this, we estimate a series of balance tests using Equation (1). Indeed, for the three different bandwidth windows of 0.5, 0.75 and 1 GPA points on either side of the cutoff, we find no evidence of differences in discontinuities for any of the nine observable predetermined student characteristics. Results are reported in Table 2. To summarize these effects, we construct predicted dropout and predicted first-year GPA outcomes for each student based on these nine baseline covariate and estimate our main specification. If no GPA manipulation is present, the estimates should not be statistically different from zero. The DiRD treatment estimates for these predicted outcomes are presented in Table A1 and, in fact, are statistically insignificant at the cutoff. In summary, the fact that observable student characteristics appear to be smooth across the threshold, further alleviates concerns

over GPA manipulation. Altogether, the findings from these empirical tests indicate that the DiRD design should purge our estimates of any such unobservable bias—assuming the unobservable differences are also constant across cohorts.

5.3 Main Results

Next, we estimate the main findings using the DiRD design presented in Equation (1). Table 3 reports the point estimates using three different bandwidths ranging from 0.5 to 1 GPA points. We report all estimates with and without controls to ensure results are robust to the inclusion of predetermined student characteristics. Columns 1 through 3 present DiRD estimates for various college dropout outcomes. We find no significant treatment effects on dropout after first or second quarter indicating that FYSP had no effect on dropout during the first year. This is consistent with the timing of the program (winter quarter) and the university policy that no student is subject to dismissal for poor academic performance until the end of the first year, though they could opt to leave before then. Moreover, we find large and statistically significant treatment estimates on dropout directly following first year. FYSP decreases marginal students' first year dropout rates by 7.3 to 8.7 pp, an approximate 30% decrease from the baseline dropout rate of 27% for students placed on probation in pre-program years. All estimates reported in column 3 are robust to bandwidth choice as well as the inclusion of predetermined student characteristics

In columns 4 and 4 of Table 3, we check for reduced form impacts on graduation rates. We find no statistically significant impact on 4-year graduation rates but some suggestive evidence that 6-year graduation are affected. Indeed, some estimates found in column 5 are statistically significant, while those that are insignificant are relatively large in magnitude. Additionally, findings on 6-year graduation rates are consistent with estimates presented in column 3 and indicate that most students who remained at the university due to FYSP most likely eventually graduated.

Finally, we present DiRD estimates on standardized GPA outcomes in columns 6 and 7. We find that marginally being eligible for FYSP increases students' first-year GPA by a large and significant 10.9 to 14.4 percent of a standard deviation, depending on bandwidth choice. Interestingly, we find that these first-year GPA effects seem to persist into the long run as we find similar treatment effects on GPA at graduation—though not all estimates in column 7 are statistically significant at conventional levels.

5.4 Heterogeneity Analysis

Next, we examine the impact of FYSP for various groups who, ex ante, may have been more likely to be affected by a coaching intervention. We begin by separately estimating effects by gender and field of study. Results are presented in Table 4 using a bandwidth of 0.75 and 1 GPA points. 12 Columns 1-3 reveal no differences between men and women in terms of dropout rates. Similar to the main findings, for both groups there is no detectible impact on dropout after the first two quarters and both groups are equally affected in terms of having lower dropout rates at the end of spring quarter. Although the point estimates on first-year dropout (column 3) do not all attain conventional levels of significance, most likely due to reduced precision, the magnitudes for both women and men are similar to our overall results. We also find no striking differences between men and women in terms of 4- and 6year graduation rates, though again most estimates are quite imprecise precluding one from drawing strong conclusions. On the other hand, the documented grade effects in Table 3 are largely driven by men. Columns 4-7 report point estimates for the grade outcomes by subgroup. FYSP increases first-year GPA for men by 21% of a standard deviation and increases GPA at graduation by 0.13-0.16 of a standard deviation. We find little evidence that FYSP impacts women's grades.

Because different fields of study tend to have different dropout rates, it is possible FYSP is particularly beneficial to students in certain majors. As such, we separately estimate effects of FYSP for STEM and non-STEM majors At this university and most, STEM degrees tend to have relatively higher dropout rates. Often interventions such as mentoring, advising and coaching are proposed as ways to combat STEM attrition. Our analysis, indeed, supports this hypothesis as we find large effects of the program for STEM majors. We find FYSP decreases first-year dropout for STEM majors by 12 pp (column 3) and increases the likelihood of graduating within 6 years by 10.8 pp (column 5). ¹³ We also find FYSP increases marginal STEM students' first year GPA by 17.0 to 20.4\% of a standard deviation while also increasing GPA at graduation by 17.5 to 24.2 percent of a standard deviation. Typically, heterogeneity analyses by major suffer from student sorting that is related to the treatment, but that is not the case in this setting. A feature of this university is that students apply and are admitted to a specific college and major-e.g., an Electrical Engineering major in the College of Engineering-and switching colleges and majors is quite difficult, particularly in the fist year. As such, in this setting college major can be viewed as a predetermined characteristic much like race.

 $^{^{12}}$ We exclude smaller bandwidths from this analysis since our sample size is significantly reduced with this analysis.

¹³Note, however, that the estimates for 6-year graduation are not robust to larger bandwidths.

In Table 5 we explore effects based on students' socioeconomic background. We do so using two separate proxies for socioeconomic status (SES). The first definition divides the sample into lower versus higher SES students based on their EFC. In particular, all students eligible for financial aid have a defined EFC number while those with a missing EFC score in the database are generally ineligible for financial aid. As a result, we define lower income students as those with a defined EFC score and higher income students as those with a missing score. Using this definition, we find that our documented effects are primarily driven by students from lower income backgrounds—i.e. those who are ex-ante more likely to benefit from close advising or coaching. Lower SES students marginally exposed to coaching are 9.9 to 12.4 pp less likely to dropout after first year and are 13.6 to 16.6 pp more likely to graduate within six years. We also find that lower income students experience large and significant improvements in their first year and overall GPAs. Additionally, we use a second and more stringent definition for students' socioeconomic status, Pell Grant-eligibility. 14 Results from this exercise are less robust and less precise, but they do seem to suggest that effects on dropout and graduation are mainly driven by low-income students while GPA effects are less conclusive.

5.5 Robustness Checks

5.5.1 Testing an additional DiRD assumption

As formalized in Galindo-Silva, Some and Tchuente (2020), a difference-in-discontinuity design requires an additional assumption beyond what is required for a traditional RD design; that is, that the confounding policy (the probation policy in our case) must have the same effect before and after the introduction of the policy of interest (FYSP). One way to probe the plausibility of this assumption is to analyze how the effect of probation on students evolves over time. If, for example, the effect of probation is similar across the different pre-FYSP cohorts, then it suggests that the effect of probation is likely constant over time. Formally, we test for this by running separate RD analyses for each cohort for two main outcomes: the likelihood of dropout after 1st year and first-year standardized GPA. We focus on these outcomes as this is where we document significant FYSP impacts. All estimates relay on a bandwidth of 1 GPA point, with the treatment defined as scoring below a 2.0 GPA.

Figure 4 plots the RD estimates, in the spirit of an event study design, to assess the dynamics of the effect of probation. Robust standard errors reported in bars. The first three estimates, those displayed before the dashed vertical line, are probation effects for students enrolled in our two pre-FYSP years (2007, 2008) and the two faculties that were not exposed

¹⁴One downside of using such a stringent definition is the lower sample size for analysis.

to the pilot program in 2009. All estimates after the dashed line represent probation effects for the cohorts of students exposed to both policies, i.e. the four pilot faculties in 2009 and the 2010 to 2017 cohorts.

For both outcomes, the effect of probation is quite similar over time as evident among the pre-FYSP cohorts. In Figure 4a, the first three estimates show positive and mostly significant effects on dropout rates for students just eligible for probation, and these probation effects are similar across the three pre-FYSP cohorts. Then once FYSP is introduced, the positive dropout effects dissipate suggesting that FYSP likely has a moderating effect on probation. Figure 4b displays a similar pattern. First-year standardized GPA is unaffected for the three control cohorts while the cohorts that are exposed to probation and FYSP are positively affected. Importantly, the "pre-trend" patterns in both figures seem to indicate that probation had a similar effect on outcomes regardless of year. Perhaps most compelling, is comparing the two different RD estimates from 2009 (2009-1 and 2009-2). Here the year is held constant, but two faculties were exposed only to probation while the other four were exposed to both probation and FYSP. It is unlikely that the probation policy would differ within the same year. As such, it is reasonable to interpret the difference in the two 2009 estimates as the impact of FYSP. Overall, the weight of the evidence suggests that the confounding probation policy had the same effects before and after the introduction of FYSP.

5.5.2 Donut DiRD estimates

As shown in Section 5.2, we observe grade bunching at the 2.0 GPA cutoff. This bunching or heaping pattern is similar and observable for both the control (Figure 3b) and treatment cohorts (Figure 3c) suggesting that this was the result of natural institutional student GPA rounding as observed in Zimmerman (2014) and Ost et al. (2018). However, to alleviate concerns around grade bunching, we implement our main DiRD analysis dropping the heaping point at the 2.0 cutoff. Table A2 summarizes findings from this exercise. We find similar and robust results to those reported in Table 3 for all outcomes of interest. As such, the heaping observed in our data is most likely non-strategic and due to natural grade rounding.

6 Mechanisms

Many students face academic difficulties during their first year of college. Indeed, they may struggle with more demanding course work, more autonomy, often less-than-ideal living situations while simultaneously trying to find a supportive community in a new environment. FYSP includes a bundle of treatments targeted to an at-risk group at a critical time

and that could remedy some of these issues. Our results indicate that FYSP improves students' academic performance, retention and graduation rates. The program combines several elements—goal-setting, time management, coaching and a nudge—which all have the potential to individually boost students' academic success. Though it is difficult to conclusively identify which of the program's components are driving the documented improvements in student outcomes, in this section we explore ways in which the program may have changed students' behavior.

We utilize data from surveys conducted by the university's First Year Success Program Office. The surveys were administered to all FYSP participants pre- and post-program completion for eight cohorts of students: those qualifying in the Fall quarters 2013 and 2015-2018 and those qualifying in the Winter quarters 2017-2019. All surveys were administered through the online platform SurveyMonkey and are included in Appendix E. Given the structure of the data, this exercise is more descriptive in nature as the analysis relies on within student comparisons of outcomes before and after FYSP participation. As such, we estimate the following model:

$$Y_{it} = \beta_1 + \beta_2 Post_t + \delta_i + \epsilon_{it} \tag{2}$$

where Y_{it} is the outcome for individual i in period t, $Post_t$ takes the value 1 to indicate the post-program period and zero otherwise, and δ_i is an individual fixed effect. All standard errors are clustered at the individual level.

Results from this analysis are reported in Table 7. In columns 1 to 5, we focus on outcomes addressing students' knowledge of academic resources, time management, class attendance, feelings of connectedness and academic motivation. Specifically, using the pre- and post-program surveys for students who qualified for FYSP in Fall 2013 (434 observations), we construct five binary outcomes: (i) Resources is a dummy variable that is equal to one if a student reports that he/she is familiar with the university's student services and how to use them, and 0 otherwise, (ii) Time Management is equal 1 if a student indicates that he/she manages their time well and 0 otherwise, (iii) Attend Class is equal to one if a student reports regularly attending classes and 0 otherwise, (iv) Connected is equal to 1 if a students reports feeling connected to a community at the university and 0 otherwise and (v) Motivated is equal to 1 if a student is motivated to focus on school and 0 otherwise.

Results in Table 7 reveal that FYSP changes students' behavior in meaningful ways. We

¹⁵FYSP was first implemented university-wide in Fall 2010 (though, there was a pilot in Fall 2009 for a subset of faculties) and has been in operation each fall since. For a subset of years, the university also operated a second program in the year for students qualifying in the winter quarter (Winter quarters 2014, 2015 and 2017-2019). While we do not use Winter quarter participation in our main analysis, we do use survey responses from these cohorts of students in the mechanism analysis.

find that it significantly increases their awareness and possibly take-up of various student resources offered by the university (column 1).¹⁶ Column 2 further indicates that the program improves students' time management skills, but we detect no significant changes in their self-reported level of connectedness to the university (column 4) or their self-reported level of motivation (column 5).

We further use pre- and post-survey responses for students qualifying for FYSP in the Fall 2015-2018 and Winter 2017-2019 quarters (1,882 observations) to explore whether program participation affects students' feelings of isolation and faculty support. Using these data, we construct two additional binary outcomes defined as follows: (i) Others is a dummy variable equal to 1 if a student reports feeling that he/she is not the only one on academic probation at the university, and 0 if the student feels he/she is the only one on probation, (ii) Cares takes the value of 1 if the student can identify a staff or faculty member at the university who cares about his/her success and equals 0 if the student is still looking for such support. Columns 6 and 7 of Table 7 show that FYSP reduces participants' feeling that they are the only ones at the university who experienced academic difficulties in the previous quarter and improves their ability to identify a faculty or staff member who they feel cares about their academic success.

Taken together, these results suggest that FYSP boosts participants' academic success through increasing their knowledge and access to support services, improving their time management skills and allowing them to feel that they are not alone and that they are supported by university mentors.

7 Conclusion

In an effort to boost college graduation rates, policymakers often propose providing students with coaching or mentoring. However, evidence on the success of these programs is mixed. This paper evaluates the effectiveness of a coaching program targeting students who are placed on academic probation during their first year at a four-year US college. Program participants attend workshop in which they are provided with group coaching focused on improving goal-setting and time management skills. A few weeks later, students are required to meet one-on-one with their coach or use an academic support service.

We find that the coaching program largely boosts targeted students' academic outcomes. Overall, program participants see substantial improvements in their academic performance

¹⁶These include faculty office hours, on-campus tutoring services, the writing center, student clubs, the recreation center, counseling services, the health center, the disability resource center, and diversity and inclusion services.

and dropout rates. Effects are concentrated among low-income students who also experience an increase in their six-year graduation rate. Further heterogeneity analyses reveal that effects are also concentrated among men and students enrolled in STEM majors.

Our findings indicate that a non-intrusive, short-term but targeted coaching program can be an effective way to increase marginal students' college retention. What perhaps contributed most to the program's success is that the workshop is conducted in a group setting which is then followed by one-on-one coaching. The program's structure may have allowed struggling students to develop a bond with their coaches and peers facing similar difficulties. Indeed, by the end of the program, participants reported feeling more supported by faculty or staff and were less likely to feel that they are the only ones struggling.

Finally, we hope to collect data on earnings of students in our main analysis. This would allow us to examine whether our coaching program's academic benefits extend to the labor market.

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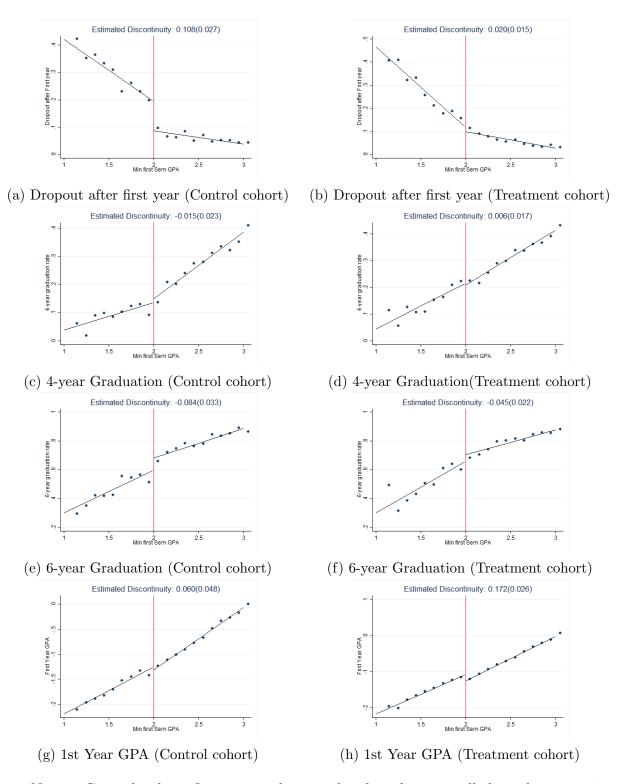
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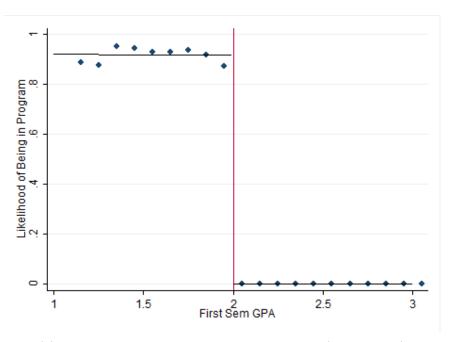
A Figures

Figure 1: Motivating our D-in-RD Research Design: RD Figures



Notes: Control cohort figures use the sample of students enrolled at the university in 2007, 2008 and certain faculties in 2009. Treatment cohort figures use sample of students enrolled at the university in 23 tain faculties in 2009 and all faculties from 2010 to 2018 (except for graduation outcomes which are up to 2014 cohorts). Estimates and standard errors (in parentheses) are reported above each figure.

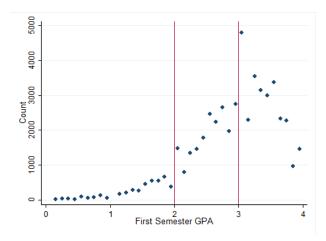
Figure 2: First Stage



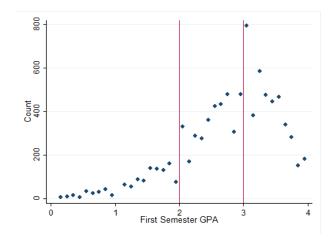
(a) Likelihood of Being in coaching program (First Stage)

Notes: Figure 1 sample is based on students enrolled at the university after the start of FYSP (2010-2011 to 2017-2018 entering cohorts).

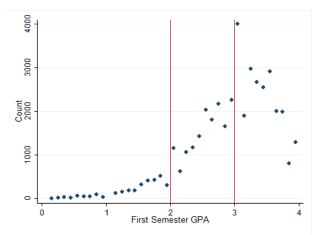
Figure 3: Bunching at Whole GPA Cutoffs



(a) Distribution of First Semester GPA (all cohorts)



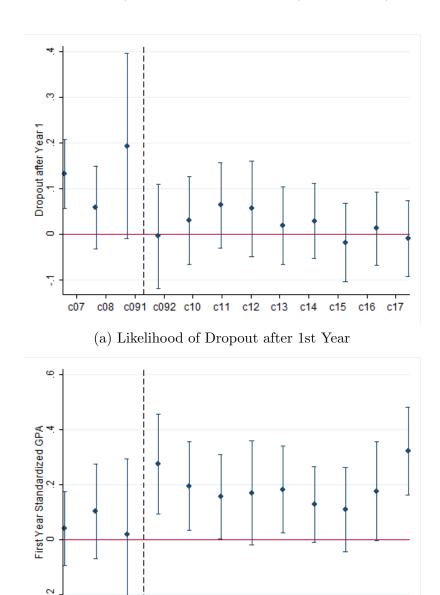
(b) Distribution of First Semester GPA (Control cohorts)



(c) Distribution of First Semester GPA (Treatment cohorts)

Notes: Figure 2A sample includes all first-year students enrolled at the university from 2007-2009 to 2018-2019. Figure 2B includes cohorts never exposed to FYSP (200, 2008 and part of 2009 cohort). Figure 2C includes cohorts exposed to FYSP (part of 2009 cohort and 2010 till 2018 cohorts).

Figure 4: (RD estimates by cohort (Event Study)



(b) Standardized First Year GPA

c11

c12 c13

c14

c15

c16

c08

c091 c092 c10

Notes: Figures include all first-year students enrolled at the university from 2007-2008 to 2017-2018. Each point estimate is derived from a separate RD regression—using a bandwidth of 1 GPA point—for each cohort where treatment is defined as scoring below a 2.0 GPA. All point estimates to the left of the dotted line represent control cohorts (First time freshman students enrolled in 2007, 2008 and two faculties in 2009, i.e. prior to the introduction of FYSP). All point estimates to the right of the dotted line represent treated cohorts (First time freshman students enrolled in four faculties in 2009 and the 2010 to 2017 cohorts, i.e. after the introduction of FYSP). Bars represents upper and lower 95% confidence intervals for each point estimate.

B Tables

Table 1: Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)
	Full	Bandwidth=1	Pre-program yrs.	Pre-program yrs.	Program yrs.	Program yrs.
	Sample	Q1 GPA \in [1, 3]	Q1 GPA $\in [1, 2)$ Probation	Q1 GPA $\in [2,3)$ No Probation	Q1 GPA \in [1,2) Probation + FYSP	Q1 GPA \in [2, 3) Neither
Covariates						
HS GPA	3.84	3.73	3.50	3.66	3.61	3.77
	[0.45]	[0.44]	[0.38]	[0.41]	[0.47]	[0.44]
Female	0.48	0.44	0.30	0.45	0.37	0.45
	[0.50]	[0.50]	[0.46]	[0.50]	[0.48]	[0.50]
Non-White	0.38	0.42	0.47	0.35	0.50	0.43
	[0.48]	[0.49]	[0.50]	[0.48]	[0.50]	[0.49]
Remedial Math	0.02	0.03	0.05	0.05	0.04	0.02
	[0.14]	[0.17]	[0.22]	[0.22]	[0.19]	[0.15]
Remedial English	0.04	0.07	0.18	0.12	0.09	0.04
	[0.21]	[0.25]	[0.39]	[0.33]	[0.28]	[0.20]
Pell Grant Eligible	0.16	0.19	0.21	0.13	0.26	0.19
	[0.37]	[0.39]	[0.41]	[0.34]	[0.44]	[0.39]
EFC Missing	0.59	0.57	0.57	0.66	0.50	0.55
9	[0.49]	[0.50]	[0.50]	[0.47]	[0.50]	[0.50]
Father College +	0.80	[0.77]	[0.70]	0.80	0.71	[0.77]
3 .	[0.40]	[0.42]	[0.46]	[0.40]	[0.45]	[0.42]
Mother College +	0.83	0.80	[0.74]	0.81	0.74	0.80
	[0.38]	[0.40]	[0.44]	[0.39]	[0.44]	[0.40]
Treatment						
Probation Ever	0.38	0.57	1.00	0.53	0.99	0.43
1 Tobation Ever	[0.48]	[0.50]	[0.05]	[0.50]	[0.08]	[0.50]
Probation Yr 1	0.25	0.41	1.00	0.31	0.99	0.28
1 Tobation 11 1	[0.43]	[0.49]	[0.06]	[0.46]	[0.09]	[0.45]
Probation Q1	0.11	0.17	0.99	[0.40]	0.98	[0.40]
1 Tobation Q1	[0.31]	[0.38]	[0.09]		[0.12]	
FYSP Participant Fall	0.06	0.12	[0.03]		0.83	
r 191 Tarticipant Fan	[0.24]	[0.32]			[0.37]	
Obs.	45,898	22,238	922	3,379	2,431	13,816
Outcomes						
Dropout Q1	0.01	0.01	0.04	0.01	0.03	0.01
Diopout Qi	[0.10]	[0.11]	[0.20]	[0.09]	[0.18]	[0.10]
Dropout Q2	0.02	0.02	0.07	0.02	0.08	0.02
Diopout &2	[0.14]	[0.16]	[0.25]	[0.13]	[0.27]	[0.13]
Dropout Year 1	0.06	0.08	0.27	0.05	0.22	0.05
Diopout fear f	[0.23]	[0.26]	[0.44]	[0.22]	[0.41]	[0.22]
Final GPA or GPA at Yr 4	-0.02	-0.51	-1.49	-0.50	-1.28	-0.39
I mai di ii di di ii a	[1.00]	[0.87]	[0.93]	[0.79]	[0.95]	[0.76]
4-Yr Grad Rate	0.37	0.30	0.09	0.28	0.15	0.33
4-11 Grad Hate	[0.48]	[0.46]	[0.29]	[0.45]	[0.36]	[0.47]
Obs.	36,555	18,293	922	3,379	1,941	10,668
2 I G . I D .	0.00		0.40	0.00	0.50	0.00
6-Yr Grad Rate	0.82	0.76	0.46	0.80	0.52	0.80
	[0.39]	[0.43]	[0.50]	[0.40]	[0.50]	[0.40]
Obs.	31,783	16,173	922	3,379	1,671	8,986
1st Yr GPA	0.00	-0.66	-1.66	-0.62	-1.49	-0.54
	[1.00]	[0.77]	[0.75]	[0.69]	[0.72]	[0.66]
Obs.	44,556	21,433	844	3,294	2,178	13,452
0.00.	11,000	21,100	O-T-T	0,204	2,110	10,402

Notes: The sample includes all first-time freshmen enrolled at the University in the entering fall cohorts 2007-2017. Standard deviations are in brackets. The summary statistics reported for the three probation variables (Probation Ever, Probation Yr 1 and Probation Q1) are based only on the 2007-2009 and 2017 entering fall cohorts. The probation variable was not available for the other years. The reported means for the FYSP Participant Fall variable are based only on the program years (entering cohorts 2019-2017 and the subset of faculties that participated in the pilot in 2009) as this variable is undefined for the other years.

Table 2: Baseline covariates balanced check for Diff-in-RD research design

	HS GPA	Female	Non-White	Remedial Math	Remedial English	Pell elig.	EFC Missing	Father college	Mother college
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Bandwidth= 0.5	-0.070 (0.045)	-0.009 (0.051)	0.053 (0.056)	-0.006 (0.027)	$0.022 \\ (0.041)$	-0.003 (0.046)	$0.003 \\ (0.057)$	$0.018 \ (0.052)$	0.029 (0.049)
Bandwidth= 0.75	-0.028 (0.037)	-0.023 (0.042)	0.032 (0.047)	-0.029 (0.022)	-0.033 (0.034)	-0.045 (0.038)	0.057 (0.047)	$0.030 \\ (0.043)$	0.019 (0.041)
Bandwidth= 1	0.006 (0.032)	0.009 (0.037)	0.050 (0.040)	-0.020 (0.018)	-0.008 (0.029)	-0.015 (0.033)	0.022 (0.040)	0.013 (0.037)	-0.028 (0.035)
Observations (BW=0.5) Observations (BW=0.75) Observations (BW=1)	8976 14417 22238								

Note: The sample includes all first-tme freshmen students enrolled at the university from 2007-2008 to 2017-2018. Robust standard errors in parentheses. DiRD results are equivalent to differencing out two local linear RD regressions.

Table 3: Main Diff-in-RD Results

	Dropout Quarter 1	Dropout Quarter 2	Dropout Year-1	Grad. in 4	Grad. in 6	First Year GPA	Total GPA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bandwidth= 0.5	-0.015	-0.007	-0.078*	0.019	0.090	0.134*	0.135
	(0.017)	(0.023)	(0.044)	(0.042)	(0.058)	(0.078)	(0.094)
With Controls	-0.014	-0.005	-0.081*	0.018	0.099*	0.144*	0.149
	(0.017)	(0.023)	(0.044)	(0.041)	(0.058)	(0.077)	(0.091)
Observations	8976	8976	8976	7470	6665	8574	8976
Bandwidth= 0.75	-0.010	0.001	-0.073**	0.025	0.080*	0.114*	0.159**
	(0.016)	(0.021)	(0.037)	(0.035)	(0.049)	(0.066)	(0.080)
With Controls	-0.010	0.001	-0.074**	0.026	0.081*	0.109*	0.150*
	(0.016)	(0.021)	(0.037)	(0.035)	(0.048)	(0.065)	(0.078)
Observations	14417	14417	14417	11904	10580	13830	14417
Bandwidth= 1	-0.007	0.002	-0.087***	0.020	0.046	0.114**	0.137**
	(0.014)	(0.018)	(0.032)	(0.030)	(0.041)	(0.057)	(0.069)
With Controls	-0.007	0.002	-0.087***	0.016	0.044	0.109*	0.125*
	(0.014)	(0.018)	(0.032)	(0.029)	(0.041)	(0.056)	(0.067)
Observations	22238	22238	22238	18293	16173	21433	22238

Note: Sample includes all Freshmen students enrolled at the university from 2007-2008 to 2017-2018 (except for graduation outcomes). First year GPA and total GPA are standardized. Controls include cohort fixed effects, high school GPA, gender, non-white, resident of CA, math and English remedial status, Pell Grant eligibility status, whether EFC scores are missing and indicators for whether parents attended college. Robust standard errors in parentheses. DiRD results are equivalent to differencing out two local linear RD regressions.

Table 4: Diff-in-RD Heterogeneous Student Outcomes Based on Gender and Field of Study

	Dropout Q1	Dropout Q2	Dropout Yr1	Grad. in 4	Grad. in 6	Year 1 GPA	Total GPA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bandwidth=0.75							
Female Student	-0.009 (0.031)	$0.015 \\ (0.037)$	-0.077 (0.062)	0.032 (0.072)	$0.105 \\ (0.081)$	-0.065 (0.113)	0.119 (0.132)
Male Student	-0.013 (0.018)	-0.008 (0.025)	-0.064 (0.047)	0.019 (0.037)	0.059 (0.060)	0.210*** (0.080)	0.161* (0.097)
STEM student	-0.001 (0.022)	0.007 (0.028)	-0.120** (0.051)	$0.008 \\ (0.037)$	0.108* (0.065)	0.204** (0.085)	0.242** (0.103)
Non-STEM student	-0.028 (0.024)	-0.009 (0.031)	-0.004 (0.050)	0.014 (0.062)	$0.009 \\ (0.071)$	-0.069 (0.097)	-0.016 (0.114)
Obs. (Female) Obs. (Male) Obs. (STEM) Obs. (Non-STEM)	6006 8411 7041 7376	6006 8411 7041 7376	6006 8411 7041 7376	4895 7009 5906 5998	4308 6272 5334 5246	5781 8049 6751 7079	6006 8411 7041 7376
Bandwidth=1							
Female Student	-0.018 (0.025)	$0.005 \\ (0.031)$	-0.076 (0.052)	0.034 (0.060)	$0.035 \\ (0.068)$	-0.100 (0.094)	0.079 (0.114)
Male Student	-0.001 (0.016)	$0.001 \\ (0.022)$	-0.084** (0.041)	0.002 (0.032)	$0.029 \\ (0.052)$	0.217*** (0.069)	0.136 (0.083)
STEM student	-0.001 (0.018)	0.012 (0.024)	-0.123*** (0.043)	$0.008 \\ (0.032)$	0.032 (0.055)	0.170** (0.073)	0.175* (0.089)
Non-STEM student	-0.018 (0.022)	-0.016 (0.027)	-0.021 (0.045)	$0.015 \\ (0.053)$	0.024 (0.062)	-0.008 (0.085)	0.031 (0.099)
Obs. (Female) Obs. (Male) Obs. (STEM) Obs. (Non-STEM)	9801 12437 10745 11493	9801 12437 10745 11493	9801 12437 10745 11493	7929 10364 8980 9313	6951 9222 8058 8115	9467 11966 10348 11085	9801 12437 10745 11493

Note: The sample includes all freshmen students enrolled at the university from 2007-2008 to 2017-2018 (except for graduation outcomes). STEM students are those in the college of engineering, architecture and sciences. Non-STEM students are those in the college of agriculture, Business and Liberal Arts. All regressions include controls: cohort fixed effects, high school GPA, whether a student is non-white, gender, Math and English remedial status, Pell eligibility status, whether a student as a missing EFC score, and indicators for whether parents attended college.

Table 5: Diff-in-RD Heterogeneous Student Outcomes Based on Socioeconomic Status

	Dropout Q1	Dropout Q2	Dropout Yr1	Grad. in 4	Grad. in 6	Year 1 GPA	Total GPA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bandwidth=0.75							
Lower SES	-0.012 (0.025)	-0.005 (0.031)	-0.099 (0.058)	-0.049 (0.052)	0.166** (0.074)	0.199** (0.101)	0.222* (0.120)
Higher SES	-0.008 (0.021)	$0.000 \\ (0.028)$	-0.048 (0.048)	0.080* (0.046)	0.009 (0.063)	0.031 (0.085)	0.089 (0.102)
Pell elig.	-0.009 (0.030)	-0.030 (0.040)	-0.130* (0.078)	0.007 (0.071)	0.155 (0.101)	0.128 (0.143)	0.216 (0.168)
Non Pell elig.	-0.013 (0.019)	$0.006 \\ (0.024)$	-0.055 (0.042)	0.035 (0.040)	0.058 (0.054)	0.104 (0.072)	0.135 (0.087)
Obs. (Lower SES) Obs. (Higher SES) Obs. (Pell elig.) Obs. (Non Pell elig.)	6343 8074 3037 11380	6343 8074 3037 11380	6343 8074 3037 11380	5174 6730 2499 9405	4550 6030 2207 8373	6097 7733 2895 10935	6343 8074 3037 11380
Bandwidth=1							
Lower SES	-0.013 (0.020)	-0.014 (0.026)	-0.124** (0.050)	-0.039 (0.044)	0.136** (0.062)	0.144* (0.086)	0.184* (0.103)
Higher SES	-0.003 (0.019)	0.014 (0.025)	-0.056 (0.042)	0.055 (0.039)	-0.023 (0.054)	0.081 (0.073)	0.076 (0.088)
Pell elig.	-0.025 (0.023)	-0.036 (0.033)	-0.117* (0.067)	-0.005 (0.058)	0.084 (0.086)	0.027 (0.121)	0.052 (0.145)
Non Pell elig.	-0.003 (0.016)	0.013 (0.021)	-0.079** (0.036)	0.025 (0.034)	0.037 (0.047)	0.141** (0.062)	0.154** (0.075)
Obs. (Lower SES) Obs. (Higher SES) Obs. (Pell elig.) Obs. (Non Pell elig.)	9625 12613 4436 17802	9625 12613 4436 17802	9625 12613 4436 17802	7860 10433 3661 14632	6887 9286 3223 12950	9286 12147 4247 17186	9625 12613 4436 17802

Note: The sample includes all freshmen students enrolled at the university from 2007-2008 to 2017-2018 (except for graduation outcomes). Higher socioeconomic status (SES) students are those with a missing EFC score while those with a declared EFC score (i.e. eligible for Federal financial aid) are considered lower income students. All regressions include controls: cohort fixed effects, high school GPA, whether a student is non-white, gender, Math and English remedial status, Pell eligibility status, whether a student as a missing EFC score, and indicators for whether parents attended college.

Table 6: Labor Market effects using Diff-in-RD research design

	Likelihood of not being in survey	Employed	Employed or gradschool
	(1)	(2)	(3)
Diff-in-RD Estimates			
Bandwidth= 0.5	0.005	0.202	0.164
	(0.044)	(0.147)	(0.134)
Bandwidth= 0.75	-0.006	0.094	0.047
	(0.037)	(0.126)	(0.116)
Bandwidth= 1	-0.010	0.138	0.097
	(0.032)	(0.101)	(0.090)
Observations (BW=0.5)	6641	1914	1914
Observations (BW=0.75)	10549	3241	3241
Observations (BW=1)	16132	5326	5326

Note: The sample includes all freshmen students enrolled at the university from 2007-2008 to 2013-2014. All regressions include controls: cohort fixed effects, high school GPA, whether a student is non-white, gender, Math and English remedial status, Pell eligibility status, whether a student as a missing EFC score, and indicators for whether parents attended college. Robust standard errors in parentheses. DiRD results are equivalent to differencing out two local linear RD regressions.

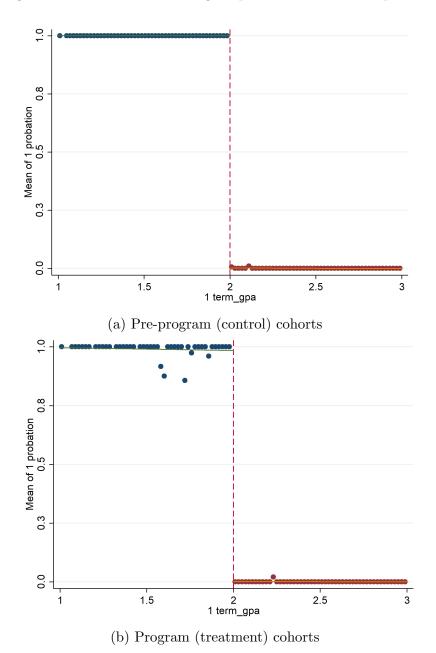
Table 7: Mechanism Exploration

	Resources	Time	Attend	Connected	Motivated	Others	Cares
		Management	Class				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Post	0.742*** (0.030)	0.258*** (0.033)	0.037 (0.034)	0.005 (0.026)	0.009 (0.017)	0.231*** (0.014)	0.422*** (0.017)
Observations	434	434	434	434	434	1,882	1,882
R-squared	0.742	0.219	0.005	0.000	0.001	0.215	0.402
Pre-program mean	0.20	0.65	0.74	0.87	0.95	0.74	0.48

Notes: Data come from FYS pre- and post-program surveys. All regressions include a post program indicator "Post" and individual fixed effects. Columns 1-5 include Fall 2013 participants only because they changed the survey after that year and asked different questions. Columns 6 and 7 include Falls 2015, 2016, 2017 and 2018 and Winters 2017, 2018 and 2019. Standard errors are in parentheses and are clustered at the individual level.*** p<0.01, ** p<0.05, * p<0.1

C Appendix Figures

Figure A1: Likelihood of being on probation after first quarter



Notes: The sample includes all first-year students enrolled at the university in entering cohorts 2007, 2008, 2009 and 2017. 2010-2016 cohorts are excluded because the probation variable is missing. The running variable is first quarter GPA in both figures.

D Appendix Tables

Table A1: Predicted Outcomes Based on Baseline Characteristics (Test of Identifying Assumption)

	Predicted Dropout	Predicted 1st Year GPA
	(1)	(2)
	(1)	(2)
Diff-in-RD Estimates		
Bandwidth= 0.5	0.004	-0.034
	(0.004)	(0.028)
Bandwidth= 0.75	-0.002	0.005
	(0.003)	(0.023)
Bandwidth= 1	-0.001	0.006
	(0.003)	(0.020)
Observations (BW=0.5)	8976	8976
Observations (BW=0.75)	14417	14417
Observations (BW=1)	22238	22238

Note: The sample includes all freshmen students enrolled at the university from 2007-2008 to 2017-2018. All outcomes predicted based on following controls: cohort fixed effects, high school GPA, whether a student is non-white, gender, Math and English remedial status, Pell eligibility status, whether a student as a missing EFC score, and indicators for whether parents attended college. Robust standard errors in parentheses.

Table A2: 'Donut' Diff-in-RD Results

	Dropout Quarter 1	Dropout Quarter 2	Dropout Year-1	Grad. in 4	Grad. in 6	First Year GPA	Total GPA
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bandwidth= 0.5	-0.016	-0.011	-0.093**	0.043	0.095	0.143*	0.116
	(0.018)	(0.024)	(0.045)	(0.047)	(0.063)	(0.085)	(0.102)
With Controls	-0.014	-0.009	-0.092**	0.028	0.088	0.149*	0.118
	(0.018)	(0.024)	(0.045)	(0.045)	(0.062)	(0.083)	(0.099)
Observations	8372	8372	8372	6933	6171	7991	8372
Bandwidth= 0.75	-0.011	-0.004	-0.080**	0.044	0.077	0.116*	0.152*
	(0.016)	(0.021)	(0.038)	(0.038)	(0.050)	(0.069)	(0.084)
With Controls	-0.011	-0.004	-0.076**	0.036	0.068	0.110	0.133
	(0.016)	(0.021)	(0.038)	(0.037)	(0.050)	(0.067)	(0.081)
Observations	13813	13813	13813	11367	10086	13247	13813
Bandwidth= 1	-0.008	-0.001	-0.089***	0.033	0.044	0.112*	0.129*
	(0.014)	(0.018)	(0.032)	(0.032)	(0.042)	(0.058)	(0.071)
With Controls	-0.008	-0.001	-0.087***	0.023	0.035	0.105*	0.110
	(0.014)	(0.018)	(0.032)	(0.031)	(0.042)	(0.057)	(0.068)
Observations	21634	21634	21634	17756	15679	20850	21634

Note: The sample includes all freshmen students enrolled at the university from 2007-2008 to 2017-2018 (except for graduation outcomes). First year GPA and total GPA are standardized. Controls include cohort fixed effects, high school GPA, gender, non-white, resident of CA, math and English remedial status, Pell eligibility status, whether EFC scores are missing and indicators for whether parents attended college. Robust standard errors in parentheses. 'Donut' DiRD results are equivalent to differencing out two local linear RD regressions after excluding the heaping point at GPA = 2.0.

E FYSP Pre- and Post-Surveys

All surveys were administered via the online platform SurveyMonkey.

Pre-Survey for Students Qualifying for FYSP in Fall 2013

Q1:	What is your first name?
Q2:	What is your last name?
Q3:	What is your university email address?
Q4:	Which college are you from?
Q5:	In the Freshman Success Workshop, you will participate in a small group that will be led by an academic coach. An academic coach will lead a discussion and help group members develop an action plan to achieve success after being put on academic probation. Please check all the ways you wish to work with an academic coach.
	\square Identify resources to improve my study skills
	☐ Generally improve my academic performance
	\square Identify ways to achieve my goal GPA
	\square Identify why my grades do not reflect my effort
	\Box Stay motivated and on track to achieve my academic goals
	\square Learn about relevant policies
	\square Reduce anxiety and stress about my academic performance
	\Box Complete the Freshman Success Workshop
	\Box Other, please explain
Q6:	On average, how many hours per week do you study?
Q7:	On average, how many hours do you sleep each night?
Q8:	How many times did you attend faculty office hours last quarter?
Q9:	How many hours each day do you spend socializing or doing extracurricular activities?
Q10:	How many hours each day do you spend watching TV, going on Facebook, gaming, etc.?
Q11:	Please read the below prompts and respond to each with one of the following options: "Always, Sometimes or Rarely".
	\square I feel motivated to focus on school.
	\square I complete the assigned reading for all my classes.

My class notes help me prepare adequately for a test.
I retain the information I read for homework assignments.
I feel confident about my writing ability.
I take the time to revise my writing to make it clear, correct, and consistent.
I easily and effectively communicate my thoughts.
When I do not understand my professor, I ask the right questions to clarify.
I easily remember things I learn in class.
At the end of a lecture, I can summarize what was presented.
I feel confident when taking an exam.
When I think I did poorly on a test I just finished, I go back to my notes and review all the information I had forgotten.
I prepare in advance for a test rather than "cramming" the night before.
I manage my time well.
I change my other priorities to have enough time for studying and completing course assignments.
I can successfully balance many aspects of my life (such as friends, family, school, work, extracurricular, etc.).
I study even when less important things distract me.
When I have to take a course that doesn't interest me, I find a way to motivate myself to earn a good grade.
I attend my classes regularly.
${\bf I}$ ask for help from family members, friends, or other appropriate individuals when needed.
I know about the student services offered by Cal Poly and know how to use them.
I easily adjust my learning style to my instructors' teaching styles.
I feel connected to a community at Cal Poly.

Post-Survey for Students Qualifying for FYSP in Fall 2013

Q1:	What is your first name?
Q2:	What is your last name?
Q3:	What is your university email address?
Q4:	Which college are you from?
Q5:	What day and time did you attend a workshop?
Q6:	Please rate your academic coach in the following areas by selecting "Excellent, Average, Below Average, or Not Applicable" for each of the following:
	 □ Approachability □ Knowledge □ Preparation
Q7:	Which part of the Freshman Success Program was most effective? (select one)
	 □ The presentation at the beginning □ The breakout session □ Both were equally effective
Q8:	What did you find most beneficial from the big session? (please select one)
	 □ Identified resources to improve my study skills □ Identified ways to achieve my goal GPA □ Identified why my grades do not reflect my effort □ Learned about relevant policies □ Learned how to improve my academic performance □ More motivated and on track to achieve my academic goals □ Reduced anxiety and stress about my academic performance □ I didn't find anything beneficial from this session □ Other (please explain)
Q9:	What did you find most beneficial from the small group breakout session? (please select one)
	 □ Discussion with other students □ Learning about resources □ SMART goals/goal setting □ The Self-Evaluation

	\square I didn't find anything beneficial from this session
	\Box Other (please explain)
Q10:	As a result of attending the Freshman Success Program, I am more likely to (check all that apply) $$
	☐ Attend class
	\square Do the assigned reading
	☐ Manage my time more efficiently
	\square Seek out resources I need
	\square None of the above
	\Box Other (please explain)
Q11:	Next year, if we were to incorporate a student panel (video) segment into the big presentation of previous students on academic probation, would you be interested in participating?
Q12:	In what area do you think your behavior has changed the most this quarter? (please select one) $$
	\square Increased the number of hours of sleep per night
	\square Increased the number of hours spent studying per day
	\square Increased the number of visits to office hours
	☐ Managing my time better
	☐ Utilizing campus resources
Q13:	So far this quarter, how many hours per week do you study?
Q14:	So far this quarter, on average, how many hours do you sleep each night?
Q15:	So far this quarter, how many times have you been to faculty office hours?
Q16:	So far this quarter, how many hours each week do you spend socializing or doing extracurricular activities?
Q17:	So far this quarter, how many hours each week do you spend watching ${\rm TV}$, going on Facebook, gaming, etc.?
Q18:	Please read the below prompts and respond to each with one of the following options: Always, Sometimes or Rarely.
	\square I feel motivated to focus on school.
	\square I complete the assigned reading for all of my classes.
	☐ My class notes help me prepare adequately for a test.

I retain the information I read for homework assignments.
I feel confident about my writing ability.
I take the time to revise my writing to make it clear, correct, and consistent.
I easily and effectively communicate my thoughts.
When I don't understand my professor, I ask the right questions to clarify.
I easily remember things I learn in class.
At the end of a lecture, I am able to summarize what was presented.
I feel confident when taking an exam.
When I think I did poorly on a test I just finished, I go back to my notes and locate all the information I had forgotten.
I prepare in advance for a test rather than "cramming" the night before.
I manage my time well.
I change my other priorities to have enough time for studying and completing course assignments.
I can successfully balance many aspects of my life (such as friends, family, school, work, extracurricular, etc.).
I study even when less important things distract me.
When I have to take a course that doesn't interest me, I can find a way to motivate myself to earn a good grade.
I attend my classes regularly.
I ask for help from family members, friends, or other appropriate individuals when needed.
I know about the student services offered by Cal Poly and know how to use them.
I easily adjust my learning style to my instructors' teaching styles.
Although I exert great effort, my grades are lower than I expect them to be.
I feel connected to a community at Cal Poly.

Q19: Do you have any additional comments you would like to add?

Pre-Survey for Students Qualifying for FYSP in Fall or Winter 2015-2018

Q1:	What is your first name?
Q2:	What is your last name?
Q3:	What is your university email address?
Q4:	Which college are you from?
Q5:	What is your major?
Q6:	After taking the StrengthsFinder assessment, what are your top five strengths?
Q7:	Which statement best applies to you?
	 □ I know I am not the only one on academic probation at Cal Poly. □ I feel as though I am the only one on academic probation at Cal Poly.
Q8:	Which statement best applies to you?
	 □ I can identify a staff or faculty member at Cal Poly who cares about my success. □ I am looking for a staff or faculty member at Cal Poly who cares about my success.
Q9:	Looking back at Fall Quarter, were there internal factors affecting your academic performance? Mark up to three that apply to you regarding your Fall Quarter academic difficulties.
	\Box I could not find motivation to focus on academics.
	\Box I felt like I did not have the appropriate study skills to succeed.
	\square I managed my time poorly.
	\square I did not attend all my classes.
	$\hfill \square$ I recognized that I was having difficulty, but I was not comfortable seeking campus resources.
	\Box I focused on extra curricular activities more than I should have.
	$\hfill\square$ None of the above (no internal factors affected my academic performance).
	\Box Other (please explain).
Q10:	Looking back at Fall Quarter, were there external factors affecting your academic performance? Mark up to three that apply to you regarding your Fall Quarter academic difficulties.
	\square I had roommate issues that kept me from studying.
	\square I do not like my major and, therefore, did not do well in my classes.
	\square I had mostly General Education classes and was not interested in my classes.

	\square I got sick and missed too many classes.
	\Box I had a personal crisis and had to focus my energy in other areas besides school.
	\Box I had a bad professor(s) during Fall Quarter, which led to me being on Academic Probation.
	\Box I did not have a choice in my block enrolled schedule, so I didn't like the times I had classes.
	$\hfill\square$ None of the above (no external factors affected my academic performance).
	\Box Other (please explain).
Q11:	Which statement best applies to you?
	\square I know of at least one campus resource that will help me get back on track.
	\Box I do not know of at least one campus resource that will help me get back on track.
Q12:	List your involvement in campus clubs, organizations, or activities.
Q13:	List your interests outside of your academic life.
Q14:	Which statement best applies to you?
	\Box I am motivated to focus on my academics at Cal Poly.
	\Box I am not motivated to focus on my academics at Cal Poly.
Q15:	Which statement best applies to you?
	☐ I feel connected to Cal Poly.
	\square I do not feel connected to Cal Poly.
Q16:	Which statement best applies to you?
	\square I am confident in my time management skills.
	\Box I am not confident in my time management skills.
Q17:	How confident are you in your decision to attend Cal Poly?
Q18:	How confident are you that you will be able to get your grades up enough to be taken off academic probation by the end of Winter Quarter?
Q19:	How confident are you that you will graduate from Cal Poly?

Post-Survey for Students Qualifying for FYSP in Fall or Winter 2015-2018

Q1:	What is your first name?
Q2:	What is your last name?
Q3:	What is your university email address?
Q4:	Which college are you from?
Q5:	After the First Year Success Program, which statement best applies to you?
	 □ I know I am not the only one on academic probation at Cal Poly. □ I feel as though I am the only one on academic probation at Cal Poly.
Q6:	After the First Year Success Program, which statement best applies to you?
	 □ I can identify a staff or faculty member at Cal Poly who cares about my success. □ I still have not yet found a staff or faculty member at Cal Poly who cares about my success.
Q7:	Looking back at Fall Quarter, were there internal factors affecting your academic performance? Mark up to three that apply to you regarding your Fall Quarter academic difficulties.
	\square I could not find motivation to focus on a cademics.
	\Box I felt like I did not have the appropriate study skills to succeed.
	\square I managed my time poorly.
	\square I did not attend all my classes.
	$\hfill \square$ I recognized that I was having difficulty, but I was not comfortable seeking campus resources.
	\square I focused on extra curricular activities more than I should have.
	$\hfill\square$ None of the above (no internal factors affected my academic performance).
	\Box Other (please explain).
Q8:	Looking back at Fall Quarter, were there external factors affecting your academic performance? Mark up to three that apply to you regarding your Fall Quarter academic difficulties.
	\square I had roommate issues that kept me from studying.
	\Box I do not like my major and, therefore, did not do well in my classes.
	\Box I had mostly General Education classes and was not interested in my classes.
	\Box I got sick and missed too many classes.
	☐ I had a personal crisis and had to focus my energy in other areas besides school.

	☐ I had a bad professor(s) during Fall Quarter, which led to me being on Academic Probation.
	\Box I did not have a choice in my block enrolled schedule, so I didn't like the times I had classes.
	□ None of the above (no external factors affected my academic performance).□ Other (please explain).
Q9:	Do you feel that incorporating your top five strengths helped you come up with a relevant and productive Winter Quarter goal?
	□ Yes □ No
	\Box Other (please explain)
Q10:	After the First Year Success Program, which statement best applies to you?
	 □ I know of at least one campus resource that will help me get back on track. □ I do not know of at least one campus resource that will help me get back on track.
Q11:	Which statement best applies to you?
	☐ After identifying a resource (academic advising, Career Services, professor's office hours, etc.) in the First Year Success Program, I have not utilized this resource by the time of completing this survey.
	☐ After identifying a resource (academic advising, Career Services, professor's office hours, etc.) in the First Year Success Program, I have utilized this resource by the time of completing this survey.
Q12:	After the First Year Success Program, which statement best applies to you?
	 □ I am more motivated to focus on my academics at Cal Poly. □ I am equally as motivated to focus on my academics at Cal Poly as before the program.
Q13:	After the First Year Success Program, which statement best applies to you?
	□ I feel more connected to Cal Poly.□ I feel equally as connected to Cal Poly as before the program.
Q14:	After the First Year Success Program, which statement best applies to you?
	 □ I am more confident in my time management skills. □ I am equally as confident in my time management skills as before the program.
Q15:	After the First Year Success Program, how confident are you in your decision to attend Cal Poly?

Q16: After the First Year Success Program, how confident are you that you will be able to get your grades up enough to be taken off academic probation by the end of Winter Quarter?
·
□ Very confident
\Box Confident
☐ Somewhat confident
□ Not confident
Q17: After the First Year Success Program, how confident are you that you will graduate from Cal Poly?