

RESULTS OF FRESNO STATE'S FIRST YEAR EXPERIENCE AND ACADEMIC SUCCESS COURSE

For the last six years, Fresno State has been implementing initiatives designed to improve student success, defined as first-year retention and 6-year graduation rates. This goal is part of our strategic plan. In addition, this year the Chancellor's Office launched the Graduation Rate Initiative, part of a national goal to increase graduation rates. So, with all this attention, are Fresno State students doing better?

Beginning with the Fall 2009 cohort of first-time, full-time freshmen (FTFTF), two new initiatives proved beneficial. These initiatives are the First-Year Experience (FYE) program and the Academic Success Course (ASC). The FYE involved 50 first-generation freshmen who applied to participate in the program. They enrolled in the same four courses during Fall semester and stayed together as a group through Spring semester in another 4 courses. Fall semester courses were English 5A, English 50T, History 11, and Math 4R. Spring courses included English 5B, Philosophy 25, Political Science 2, and Communication 8. These courses were taught by 9 faculty members, all of whom volunteered to lead this FYE learning community. The second initiative, the Academic Success Course (ASC), was offered in Spring to all new freshmen whose first-term GPA placed them on academic disqualification or probation. Student characteristics and progress measures are below.

First Year Experience

Learning communities are well-established methods for helping students develop a sense of belonging on campus and to make connections that foster their success. Funded in part by a grant from the Wal-Mart Foundation, faculty, student support professionals, and administrators teamed up to develop an FYE program based on the learning community model. In addition to being a learning community and first year experience with common activities such as participation in a ropes course, the program featured other high impact educational practices (Kuh, 2008). Those practices were writing intensive courses, service learning, and collaborative assignments. The program invited students who are the first in their family to attend college and who needed both math and English remediation. Fifty students were selected from the 131 that applied to participate in the first cohort in Fall 2009. The selection process attempted to identify a cohort that mirrored the campus demographic in terms of race/ethnicity, rural/urban background, and gender although we were not entirely successful as noted below.

Entering Characteristics

Table 1 shows the entering characteristics of FYE students and three comparison groups: University 1, a student success course hereafter denoted as (U1) students, a control group consisting of the 81 students who applied for the FYE program but were not selected due to space limitations, and all other first-time, full-time freshmen (FTFTF). In addition to their first-generation status, students in the FYE and control groups were more likely than those in U1 and other FTFTF to be African American. They also were equivalently or more likely to be Hispanic. The FYE and control groups were less prepared for college. High school GPA is similar for all groups. However, SAT Scores are substantially lower and a larger percentage need remediation than U1 students and other FTFTF.

Progress

During the first semester, FYE students' grades and first-term retention was equivalent to that of the control group and other FTFTF. U1 students' term GPA was slightly higher than other groups.

In the second semester, FYE students earned the highest GPA of the four groups. They also were the group with the highest percentage on the Dean's or President's List. The percentage of FYE students in academic trouble was a little lower than the U1 group and other FTFTF. The FYE and control group were equivalent in this respect. First year retention rates for the FYE, control group, and other FTFTF are equivalent as well. The U1 retention rate was lower.

Interpretation

These findings suggest that the FYE program helps students achieve academically. They are the least prepared, but make as much or more progress than comparison groups. The progress of the control group raises an interesting question. Despite entering characteristics similar to the FYE group, but without the FYE intervention, these students ended their first year with retention and disqualification/probation rates equivalent to the FYE group. However, their term GPA and the percentage that made the Dean's or President's List was lower than for all other groups. This pattern may demonstrate the effect of motivation.

Although these students did not have the support of the FYE program, they had applied to participate, suggesting that they were willing to take extra steps to be successful. They were as successful at staying in school as the other groups. However, they were not as successful academically as the FYE group.

Next Steps

The FYE program is continuing this Fall with a cohort of 100 FTTF and 14 faculty members. Fall semester courses will include Math 4R, History 12, English 5A, and LEE 80T for reading. Spring courses will be Biology 10, Political Science 2, English 5B, Communication 8, and critical thinking—half of the students will enroll in Anthropology 30, the other half in Philosophy 25.

Academic Success Course

In Spring 2010, students who were new freshmen in Fall 2009 and were in academic trouble based on their first semester grades were contacted and assigned to one of three interventions designed to help them raise their Spring semester grades. Those with a Fall term GPA of 1.5 to 1.99 were assigned to a face-to-face Maximizing Academic Potential (MAP) workshop offered by the Academic Advising office. Those with a GPA of 0.5 to 1.49 took a student success (University 20T) course taught by a part-time faculty member with years of experience teaching University 1. Freshmen with a GPA of 0.49 or lower were assigned to SupportNet. SupportNet provided one-on-one counseling and tutoring through the campus' Learning Center. Of the 459 students who were identified to participate in one of these programs, 63% did so¹.

Progress

On average, the Spring term GPA for all three groups improved (Table 2, Row C). The GPAs for those who participated in the interventions improved much more than those who did not participate. In addition, the average GPA earned by each group that participated was considerably higher than the GPA that was predicted without the intervention. Those who did not participate earned a GPA very similar to the predicted GPA and, on average, they remained in academic trouble (Table 2, Row B).

Among the three groups, the group with the lowest Fall term GPA increased its Spring GPA the most. This group's average GPA improved more than one letter grade. However, the gain fell short of returning them to good academic standing (Table 2, Row B). The average Spring term GPA of the other two groups rose above 2.0. However, because probation/disqualification status also depends on the students' campus and cumulative GPA, only the group with the highest Fall term GPA was, on average, able to return to good academic standing within a single semester (Table 2, Row B, D, E). Overall, 156 of the Fall 2009 FTF who were in academic trouble returned to good standing; 105 (67%) did so with the help of the ASC.

To further examine the ASC effect, several potentially influential factors were analyzed using multiple regression analysis. This analysis showed that the intervention had a larger influence on the difference between students' first and second term GPA than did their high school GPA, remediation status, gender, or ethnicity. The only other factor that influenced the difference in term GPAs was a change in major. However, that effect was only evident for the two intervention groups with the highest GPA. For the highest GPA group (MAP intervention), the grade difference was .4 higher for those who changed their major than for those that did not. For the second group (U20 intervention), those who changed their major earned .5 of a grade higher than those who did not change their major. Changing major had no effect on the grade differential of those with the lowest GPA (SupportNet intervention).

Another method we attempted to use to determine the effectiveness of the ASC is comparing the Fall 2008 and Fall 2009 FTF who did and did not participate in an intervention designed to help them return to good academic standing. In Fall 2008, students on academic probation and disqualification status were encouraged, but not required, to take an "online" MAP tutorial rather than the face-to-face interventions provided for the Fall 2009 FTF. Participation showed the same beneficial effects for both FTF cohorts, i.e. higher second term GPA, higher percentage returning to good standing, and higher first-year retention rate (Table 3). The percentage of FTF that returned to good standing after participating in an intervention is similar for both cohorts: 41% and 42%. Overall, however, the degree of improvement in the average second term GPA was larger for the 2009 cohort than the 2008 cohort (.9 vs. .5, respectively). The first-year retention rate for 2009 participants was higher than for the 2008 participants as well (78% vs.

¹ 45 of these were excluded from this analysis because they participated in an intervention other than the one to which they were assigned or they withdrew during Spring semester. Therefore, data tables show a 61% participation rate.

63%, respectively). Another finding that is evident in comparing these two years of data is a confirmation of the common observation that “students don’t do optional.” Only 14% (N=64) of the Fall 2008 FTF who were in academic trouble participated in the “optional” online MAP tutorial. In contrast, 63% of the Fall 2009 FTF cohort participated in the “required” interventions. We had hoped that examining the data for these two cohorts would allow us to compare the three ASC intervention types to the MAP online interventions used in 2008 in order to determine whether a particular type of intervention is more effective than others. However, the large difference in the number and percentage of FTF that participated in the interventions in these two years would make drawing conclusions of this nature from such a post-hoc analysis precarious.

Interpretation

Intervening to offer support resulted in improved grades and first year retention for our most immediately “at risk” students. Some made enough progress to return to good academic standing within the semester. However, most did not. Therefore, the ASC participants should be tracked across time to see if they eventually achieve good standing. A variety of methods were used in the ASC. Whether a particular type of intervention was more effective than another cannot be determined because students were assigned to interventions based on term GPA intervals. Therefore, we cannot separate the effects of the term GPA from the particular type of intervention. To do that, students would need to be randomly assigned to the intervention groups. Determining which interventions are most effective overall or which work best for particular types of students would help in assigning students to interventions from which they are most likely to benefit. Such information also would allow cost considerations to be taken into account.

Next Steps

The ASC will be offered again in Spring 2011 to Fall 2010 FTF who are in academic trouble at the end of Fall semester. Fall 2009 FTF who participated in the ASC in Spring 2010 and raised their grades but not enough to return to good standing will be encouraged to participate in a face-to-face MAP tutorial during their Fall 2010 semester. Those students in a continuing disqualified readmitted status must fully meet their readmission contract or they may be dismissed from future enrollment at Fresno State.

Conclusion

Both the First Year Experience and the Academic Success Course are new programs and the evidence so far shows that they are helping Fresno State freshmen succeed. As we continue assessing the effects of these programs, we plan to address questions that will aid managers and faculty in refining the programs and gaining greater understanding of the types of support that are most effective for Fresno State students. We encourage readers of this report to send us their ideas and to use high-impact practices and research findings in their own work.

References

Kuh, George D. (2008). *High-Impact Educational Practices: What They Are, Who Has Access To Them, and Why They Matter*. Washington, D.C.: Association of American Colleges and Universities.

For More Information

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Table 1 First-year performance between FYE and comparison groups

	FYE		Comparison groups					
			U1		Other FTFTF		FYE Control*	
	HC	%	HC	%	HC	%	N	%
HC	50		403		2167		81	
Student characteristics								
Gender								
Female	28	56.0%	251	62.3%	1296	59.8%	66	81.5%
Ethnicity								
AMER IND		0.0%	1	0.2%	12	0.6%		
ASIAN	5	10.0%	80	19.9%	331	15.3%	8	9.9%
BLACK	12	24.0%	32	7.9%	132	6.1%	15	18.5%
HISP	23	46.0%	195	48.4%	737	34.0%	46	56.8%
International		0.0%	2	0.5%	22	1.0%		
UNK	2	4.0%	25	6.2%	229	10.6%	2	2.5%
WHITE	8	16.0%	68	16.9%	704	32.5%	10	12.3%
Age								
Average	18		18		18		18	
First generation students (FGS)	49	98.0%	305	78.4%	1273	62.0%	81	100.0%
Academic preparation								
Average of HS_GPA	3.18		3.22		3.30		3.19	
Average of SAT_VERB	410		432		474		416	
Average of SAT_MATH	415		448		487		402	
Average of SAT_COMP	825		879		960		818	
Average of SAT_WRIT	356		381		420		348	
English Rem	49	98.0%	316	78.4%	1311	60.5%	81	100.0%
Math Rem	48	96.0%	251	62.3%	1061	49.0%	81	100.0%
First term performances								
Average of Term GPA	2.69		2.87		2.74		2.60	
Average of Cumulative GPA by 1st term	2.69		2.88		2.75		2.62	
Academic standing-Disq/Prob	9	18.0%	61	15.3%	397	18.4%	14	17.3%
Dean's or President's list	1	2.0%	66	16.4%	403	18.6%	4	4.9%
Fall to Spring Retention Rate	48	96.0%	387	96.0%	2100	96.9%	78	96.3%
Second term performances								
Average of 2nd Term GPA	2.89		2.68		2.72		2.62	
Average of Cumulative GPA by 2nd term	2.85		2.73		2.73		2.60	
Academic standing-Disq/Prob	6	12.0%	65	16.1%	340	15.7%	10	12.3%
Dean's or President's list	14	28.0%	73	18.1%	437	20.2%	5	6.2%
Fall to Fall Retention Rate**	44	88.0%	336	83.4%	1891	87.3%	71	87.7%

* FYE control group includes 81 students who applied for FYE and met the criteria but were not selected due to limited space in the program.

** Fall 2010 enrollment data are as of 1st day of instruction.

Table 2 Effects of Academic Success Course (Spring 2010)

	MAP face-to-face (GPA 1.50-1.99)		U20 (GPA 0.50-1.49)		SupportNet (GPA 0.49 and below)	
	Actual	(Projected*)	Actual	(Projected*)	Actual	(Projected*)
Population tested						
Participated		110		114		27
Didn't participate		82		57		24
Question#1: Did students improve their GPA? (on average) Yes, those who participated in the interventions did.						
A. Average of 1st Term GPA						
Participated		1.67		1.04		0.11
Didn't participate		1.70		0.93		0.14
B. Average of 2nd Term GPA						
Participated		2.32 (1.63)*		2.20 (1.13)*		1.82 (0.37)*
Didn't participate		1.71 (1.65)*		1.07 (1.04)*		0.56 (0.42)*
C. Average of difference in Term GPA						
Participated		0.66		1.16		1.71
Didn't participate		0.01		0.14		0.42
Question#2: Did GPA improve enough to remove prob/disq status? (on average) Only for students in the highest GPA group (MAP face-to-face)						
D. Average Campus GPA After 2nd Term						
Participated		2.08		1.68		1.14
Didn't participate		1.76		1.05		0.38
E. Average Cumulative GPA After 2nd Term**						
Participated		2.07		1.70		1.22
Didn't participate		1.78		1.06		0.39
Question#3: How many of these students changed their major?						
Participated						
HC		23		19		1
%		20.9%		16.7%		3.7%
Didn't participate						
HC		14		6		1
%		17.1%		10.5%		4.2%
Question#4: Did Academic Success Course affect the difference between 1st and 2nd term GPA? (on average) Yes						
Using multiple regression to examine the effects of intervention group, change in major, high school GPA, English and Math remediation status, gender and ethnicity on the difference between 1st and 2nd term GPA, participation in the intervention showed the largest effects. The MAP workshop and U20 grades were also affected slightly by students changing their major. The models explain 38% of the grade improvement for the SupportNet group, 21% for the U20 group and 14% for the MAP face-to-face group.						
* Projected 2nd term GPA based on the linear regression equation generated by using the 1st and 2nd term GPA and high school GPA of Fall 2008 First-time freshmen whose 1st term GPA is below 2.0. Projected term GPA without intervention is in parentheses.						
** May be different from the Campus GPA After 2nd Term due to units transferred in. Included in this report because Probation/Disqualification status is based on both Campus GPA and Cumulative GPA.						

Table 3 Comparison of FTF on Probation/Disqualification Status

Fall 2008 FTF Cohort		
	Participated MAP Online	Did Not Participate
Headcount	64 (14%*)	395
%of Total	100%	100%
Avg.HS GPA	2.97	3.02
Avg. SAT	844	893
Engl Rem.	75%	75%
Math Rem.	66%	65%
GPA_T1	1.14	1.22
GPA_T2	2.14	1.59
GoodStand_T2	41%	30%
Reten1yr	63%	42%
Fall 2009 FTF Cohort		
	Participated in ASC	Did Not Participate
Headcount	251 (61%*)	163
%of Total	100%	100%
Avg.HS GPA	3.04	3.05
Avg. SAT	868	941
Engl Rem.	77%	71%
Math Rem.	62%	55%
GPA_T1	1.21	1.20
GPA_T2	2.21	1.32
GoodStand_T2	42%	21%
Reten1yr	78%	33%

* Participation rate. 2009 rate excludes 45 students who either participated in a different intervention than the one to which they were assigned or withdrew from school during Spring semester.