



## Strategies to Increase the 4-year Graduation Rate of Engineering Students at XXX University

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## Abstract

San José State University (SJSU) has implemented several strategies to increase its graduation and retention rates. One of these strategies was block scheduling. Incoming freshmen students in the College of Engineering were put into at least two classes with the same students so that they formed a learning community. This effort began in Fall 2015 and the first four-year graduates received their degrees in 2019. Overall, the percent of engineering students graduating in four years has increased from 7.3% for Fall 2013 freshmen to 17.4% for Fall 2015 freshmen, our first cohort in this project. We surveyed all the engineering students scheduled to graduate either in Spring or Summer 2019 and asked them about their experiences at SJSU. This paper will discuss the results of a survey of the engineering students who graduated in four years and what helped them graduate in a timely manner. In addition, we will analyze the differences in four-year completion rates among different groups of students.

## Review of the Literature

There has been extensive research on the factors that influence retention in engineering. Johnson and Sheppard [1], in their study of the 1990 high school class through undergraduate engineering majors and beyond, identified points where the numbers of engineering majors drop significantly. Much past research has focused in students who leave engineering and why they leave [2].

In a research study across 17 universities, Besterfield-Sacre et al. [3] found that women had lower self-confidence about their studies than men. Women and URM students often feel excluded from engineering due to negative social cues from faculty and students [4], [5], [6], [7]. For STEM undergraduates, the first two years of most STEM fields focus on students “passing” gateway courses in Calculus, Physics, and Chemistry. This process of completing pre-requisite course while sitting in large lecture halls “weeds out” many students, with most dropouts from STEM majors occurring in the first two years [8] and women and URM students leaving STEM majors at disproportionately higher rates [9], [10], [11]. Student retention in engineering is well-known and ranges from 40-60% [12].

In all STEM fields, including engineering, SJSU loses many undergraduate students before graduation; among SJSU students with a declared STEM major upon entering the university, only about 39% obtain a STEM degree and another 18% obtain a non-STEM degree within 6 years. At SJSU, there is a gender gap in STEM, particularly in engineering. The percent of undergraduate women in engineering has increased since 2013; however, it is still below nationwide numbers [13]. SJSU institutional research indicates that fewer URM students persist in STEM majors and receive STEM degrees after six years than non-URM students [14]. For students entering SJSU in Fall 2013, the 6-year graduation rate for URM students is 45.2% compared to 62% for non-URM students [15].

Compared to research on retention in engineering, there is less research on the factors that influence time to graduation. Nationally, the four-year graduation rate for all 2011 freshmen was 41.6%, according to the U.S. Department of Education [16]. Yue and Fu [17] studied the time to graduation for all first-time freshmen at one large public university from 2002 to 2014. Of the 12,069 students in their sample, 58% of them graduated with an average time to graduation of 10 terms (5 years).

ASEE conducts a survey every two years to track persistence and time to graduation rates of undergraduate engineering students [18]. The number of engineering schools participating in this survey has varied each cycle from around 150 schools from 2005 to 2011 to 111 schools from 2013 to 2015. Although there are differences on the numbers of students, the four year graduation rate shows improvement in engineering (see Figure 1). “The overall four-year graduation rate increased from 29 percent in 2006 to 33 percent in 2011. Asian-American graduation rates were highest of all groups, around 10 percent above the national rate. White students graduated at around the same rate as the national average. Black or African-American students and Hispanic or Latin American students’ graduation rates were lower. Both were 15 percent in 2006 and increased to 20 percent and 22 percent in 2015, respectively.”

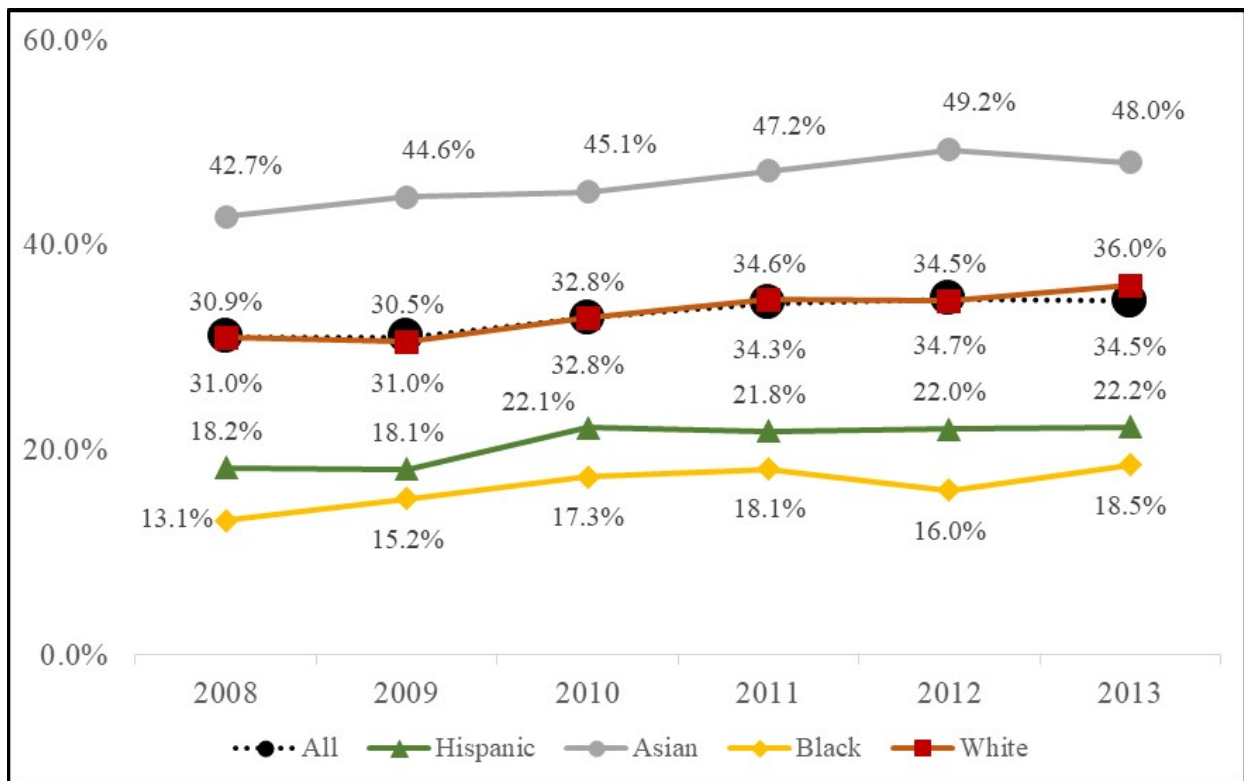


Figure 1. ASEE Benchmark 2.1 Graduation within Four Years for Larger Racial/Ethnic Groups [19]

Although four-year graduation rates are unusual for undergraduate engineering students, some institutions have managed to maintain high four-year graduation rates in engineering. 83% of freshmen engineering students in the University of Virginia School of Engineering graduated in four years according to the ASEE Retention and Time to graduation survey [20]. However, this

graduation rate does not include students who transferred to a non-engineering program at UVA. When considering all freshmen who started UVA in 2011 and earned any bachelor's degree, the four-year graduation rates was 89%. UVA has implemented a system to “total advising” to help students persist in engineering. This approach “integrates academic, career and personal counseling.”

Ohland et al [21] used the MIDFIELD (the Multiple Institution Database for Investigating Engineering Longitudinal Development) which included the student records for 75,686 engineering freshmen in nine public universities in the southeastern United States. The researchers found that eight-semester persistence is a good indicator for six-year graduation in engineering disciplines. This result is consistent with other research on retention in engineering [22], [23]. Krause, Middleton, and Judson [24] analyzed the persistence rates of students at Arizona State University which is one of the top ten producers of bachelor's degrees in engineering [25]. They found that about 50% of students left engineering before graduation; however, the vast majority of those leaving (85%) left in the first two years.

Valle, Leonard and Blasick [26] [27] looked at factors that influence time to graduation; specifically, they looked at issues that cause students to graduate in more than four years. The researchers focused on one institution, Georgia Tech. They found that AP credits and transfer credits helps students graduate faster. In addition, foreign students graduated faster—usually by 11 semesters of attendance. Also, receiving at least one failing grade (D, F, or W) or being a student athlete delayed the time to graduation; however, this factor affected men more than women engineering students.

### Institutional Characteristics

SJSU is one of the oldest postsecondary institutions in California and it is part of the California State University (CSU) system. SJSU enrolls over 33,000 students each year in its undergraduate, graduate and credential programs. It is accredited by the Western Association of Schools and Colleges with many programs, including ones in the College of Engineering, accredited by program-specific organizations.

**Table 1.** SJSU University Enrollment Headcount by Ethnicity and Gender, Fall 2015-Fall 2019

	Fall 2015		Fall 2016		Fall 2017		Fall 2018		Fall 2019		F19 Percent
	F	M	F	M	F	M	F	M	F	M	
Asian	4,884	5,635	4,787	5,495	5,078	5,746	5,112	5,690	5,224	5,838	33.2%
Hispanic	4,172	3,429	4,306	3,492	4,799	3,784	4,912	3,660	5,169	3,822	27.0%
White	3,131	3,380	2,918	3,123	2,760	2,987	2,687	2,701	2,656	2,553	15.7%
Foreign	1,808	2,177	1,727	2,224	1,683	2,361	1,773	2,271	1,827	2,106	11.8%
Other	1,430	1,556	1,399	1,540	1,449	1,539	1,377	1,468	1,419	1,418	8.5%
Black	521	489	495	495	544	517	535	477	571	503	3.2%
Pac. Islander	56	59	58	59	56	71	70	68	68	77	0.4%
Amer. Indian	24	22	19	17	17	18	12	15	11	9	0.1%
	16,026	16,747	15,709	16,445	16,386	17,023	16,478	16,350	16,945	16,326	

SJSU is located in San José, California, one of the most diverse areas in the state and in the U.S. The demographics of SJSU mirror the diversity of the region. Table 1 displays the composition of the student body at SJSU over the past five years. As can be seen from the table, SJSU has high percentages of three ethnic groups: Asian, Hispanic and White. In Fall 2019, 33.2% of the students were Asian, 27% were Hispanic and 15.7% were White. With respect to gender, SJSU has reached parity—50.9% of its students were women in Fall 2019.

The enrollments for the College of Engineering at SJSU differ from the university. The demographics for the College of Engineering are shown in Table 2. As one can see, the percent of Asian students is equivalent to SJSU overall; however, the percentages of Hispanic and White students in Engineering is lower than in the university. Also, the percentage of Foreign students is more than double that of the university. The percentage of women in engineering at SJSU has increased to 25%. This percent of women in engineering is slightly higher than nationwide statistics. The latest numbers from the National Center for Science and Engineering Statistics [28] indicate that 21.4% of all undergraduate engineering students were women in 2016 compared to the 23% of women in engineering at SJSU.

**Table 2.** College of Engineering Enrollment Headcount by Ethnicity and Gender at SJSU, Fall 2015-Fall 2019

	Fall 2015		Fall 2016		Fall 2017		Fall 2018		Fall 2019		F19 Percent
	F	M	F	M	F	M	F	M	F	M	
Asian	392	1,743	409	1,757	484	1,865	505	1,819	473	1,807	33.4%
Hispanic	210	853	205	869	219	891	219	865	233	851	15.9%
White	155	953	161	882	183	845	184	778	170	695	12.7%
Foreign	851	1,540	770	1,485	693	1,539	702	1,425	715	1,267	29.0%
Other	76	406	74	409	86	431	82	440	85	396	7.0%
Black	25	113	28	102	32	94	35	93	31	87	1.7%
Pacific Islander	3	20	6	23	6	22	6	15	2	18	0.3%
American Indian	2	6	1	3	1	4	1	4		1	0.0%
	1,714	5,634	1,654	5,530	1,704	5,691	1,734	5,439	1,709	5,122	
Percent	23.3%	76.7%	23.0%	77.0%	23.0%	77.0%	24.2%	75.8%	25.0%	75.0%	

### Retention Efforts at SJSU

SJSU has been working over the past ten years to improve its retention and graduation rates. As part of its efforts to try initiatives to improve the retention and graduation rates, the university was successful in obtaining a U.S. Department of Education Strengthening Institutions grant in Fall 2014. There are five major initiatives under the grant: block scheduling of freshmen, creating a new First-Year Experience course, creation of new student learning communities in housing, expansion of the peer mentor program, and development of a new Faculty Staff mentor program. Figure 2 shows the goals of objectives of the Strengthening Institutions grant.

<p><b>CDP Goal 1.</b> Strengthen SJSU’s core academic performance in two key areas: retention and graduation.</p>
<p>Objective 1.1. By Fall 2019, SJSU will increase freshman to sophomore student retention by 5%.</p> <p>Objective 1.2. By Fall 2019, SJSU will increase the 6-year graduation rate by 9% for all first-time freshmen.</p> <p>Objective 1.3. By Fall 2019, for upper division transfers, SJSU will increase the 5-year graduation rate by 6%.</p>
<p><b>CDP Goal 2.</b> Providing an academically supportive environment for underrepresented students.</p>
<p>Objective 2.1. By Fall 2019, SJSU will increase the freshman to sophomore retention for URM freshmen by 12%.</p> <p>Objective 2.2. By Fall 2019, SJSU will increase the 6-year graduation rate of URM freshmen by 12%.</p> <p>Objective 2.3. By Fall 2019, SJSU will increase the 5-year graduation rate of URM upper division transfer students by 12%.</p>
<p><b>CDP Goal 3.</b> Improve delivery and integration of academic and co-curricular support services for students to enhance student success and improve retention and graduation rates.</p>
<p>Objective 3.1. By Fall 2019, we will develop and implement SLCs for 1,000 URM freshmen.</p> <p>Objective 3.2. By Fall 2019, we will implement block scheduling for all incoming URM freshmen.</p> <p>Objective 3.3. By Fall 2015, we will implement a Faculty Mentor Program for incoming URM freshmen.</p> <p>Objective 3.4. By Fall 2017, we will coordinate our student success programs &amp; provide a one-stop shop about student success programs to students, advisors, and faculty.</p>

**Figure 2.** Five-Year (2014-2019) Comprehensive Development Plan (CDP) Goals and Objectives

The first initiative that was started under this grant in Fall 2015 were block scheduling. Backer and her colleagues [29] [30] described the block scheduling project in prior papers. We selected the first cohort for block scheduling from volunteers in the university. Two colleges (College of Business and the College of Engineering) and one department (Child and Adolescent Development) volunteered to participate. Department were assigned schedules that included at least two shared classes with other students in their declared majors.

Our Title III Project Succeed components are based on effective research practices developed at SJSU and other institutions. Our overarching theoretical model for student retention is based on Vincent Tinto’s model [31]. Tinto’s model posits student retention as a complex, multifaceted environment where students’ background characteristics and educational goals all contribute to student engagement. According to this model, effective and positive interactions in college should increase the student’s commitment, persistence and effort in college, and thereby, increase student retention. Specifically, for those students who were in blocked classes in the original Fall 2015 cohort, the retention rate after three years [78%] was 3% higher than non-blocked students [75%].

The College of Engineering volunteered to participate in block scheduling because of the historic low retention and graduation numbers in the College. At the time of the grant’s writing in 2013,

the 4-year graduation rates in the College of Engineering was 7.3% (see Table 3). Although the 6-year graduation rates were much higher (57% for Fall 2013 freshmen), the College had a desire to improve them. From our institutional data, SJSU had determined that the first two years were critical to a student's chance on graduating. If a student was retained into their third (junior) year, they were increasingly likely to graduate.

**Table 3.** Four-year Graduation Rates for SJSU College of Engineering, Fall 2010-Fall 2013 Freshmen

	Fall 2010	Fall 2011	Fall 2012	Fall 2013
Asian	5.1%	6.3%	8.2%	8.7%
Hispanic	0.0%	0.0%	1.0%	3.7%
White	6.5%	7.1%	7.2%	6.2%
Foreign	0.0%	15.4%	12.5%	8.5%
Other	3.7%	0.0%	7.9%	16.0%
Black	14.3%	5.3%	13.3%	5.6%
Total	3.9%	4.7%	6.8%	7.3%

## Results

The first cohort of the block scheduling including all of the Fall 2015 freshmen in the College of Engineering. So, in addition to retention data, we have the first data on 4-year graduation rates for Fall 2015 engineering freshmen. Table 4 shows the one-year, two-year, three-year and four-year retention rates of College of Engineering freshmen at SJSU. The percentages in bold indicate the cohorts that were block scheduled.

**Table 4.** One, Two, Three and Four Year Retention Rates of SJSU College of Engineering Freshmen

	FA 2010	FA 2011	FA 2012	FA 2013	FA 2014	FA 2015	FA 2016	FA 2017	FA 2018
1 year retention rate	88.7%	86.8%	87.6%	86.8%	88.0%	<b>90.2%</b>	<b>91.9%</b>	<b>87.8%</b>	<b>88.7%</b>
2 year retention rate	82.0%	76.0%	76.0%	75.6%	78.3%	<b>80.4%</b>	<b>82.8%</b>	<b>80.8%</b>	
3 year retention rate	77.6%	71.2%	71.6%	71.1%	73.8%	<b>75.9%</b>	<b>81.2%</b>		
4 year retention rate	75.6%	67.9%	70.3%	67.8%	71.3%	<b>75.2%</b>			

There are differences in the retention rates of engineering students at SJSU when analyzed by ethnicity. As stated above, the three largest ethnic groups in engineering at SJSU are Asian, Hispanic and White. The one-year retention rates for all of these groups increased in Fall 2015 as compared to the Fall 2013 and Fall 2014 cohorts except for the Caucasian students who had a higher one-year retention rate in Fall 2014. When comparing the one-year retention rates for female and male engineering freshmen, block scheduling appears to have a larger effect on male students. Overall, the number of engineering students retained in all three subgroups (Asian, Hispanic and White) is significantly higher than the Fall 2013 entering freshmen.

Block scheduling appears to have the greatest impact on Hispanic students (see Table 5). The number of Hispanic freshmen retained each year after block scheduling was much higher than prior to block scheduling. For example, the number of Hispanic freshmen retained after two

years was 73.6% for Fall 2015 freshmen, 72.7% for Fall 2016 freshmen, and 70.5% for Fall 2017 freshmen. In comparison, only 66.3% of Fall 2013 and 60.1% of Fall 2014 Hispanic freshmen were retained after two years.

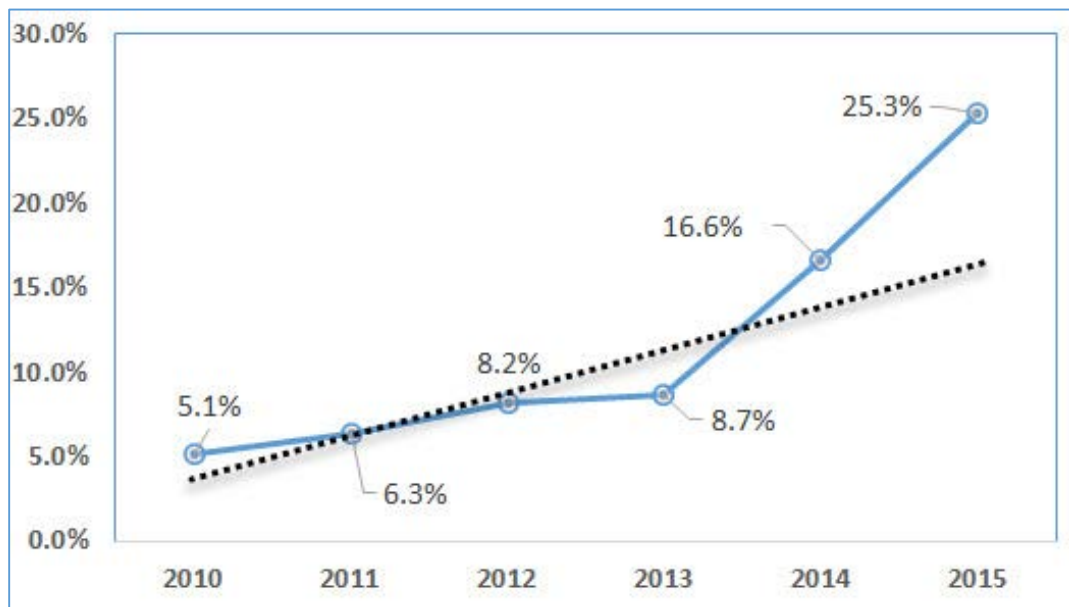
**Table 5.** Retention Data for College of Engineering Freshmen, by Ethnicity, Fall 2013-Fall 2018 freshmen

Before Block Scheduling						
	Fall 2013 freshmen			Fall 2014 freshmen		
	Asian	Hisp	White	Asian	Hisp	White
1 year	92.2%	79.5%	82.2%	92.5%	78.4%	90.1%
2 year	83.5%	66.3%	70.5%	87.5%	60.1%	77.2%
3 year	80.1%	58.4%	67.1%	85.3%	53.6%	72.3%
4 year	75.1%	58.4%	62.3%	83.0%	52.9%	69.3%

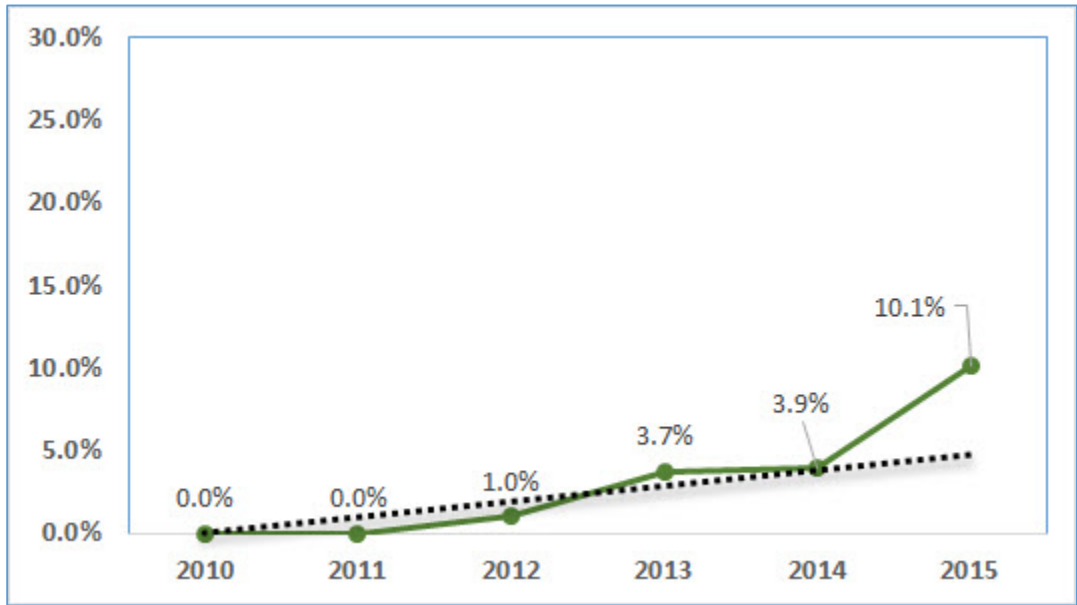
After Block Scheduling												
	Fall 2015 freshmen			Fall 2016 freshmen			Fall 2017 freshmen			Fall 2018 freshmen		
	Asian	Hisp	White	Asian	Hisp	White	Asian	Hisp	White	Asian	Hisp	White
1 year	94.3%	85.0%	86.6%	96.9%	85.9%	89.2%	90.4%	82.2%	86.2%	92.6%	81.7%	84.3%
2 year	87.3%	73.6%	73.2%	90.3%	72.7%	81.9%	85.5%	70.5%	78.9%			
3 year	83.3%	69.2%	68.8%	90.3%	69.5%	78.3%						
4 year	82.0%	68.3%	71.4%									

The four-year graduation rate for Fall 2015 freshmen has increased dramatically as compared to the freshmen cohorts from previous years. Overall, the four-year graduation rate for Fall 2015 freshmen is 17.7% which is much higher than the four graduation rate for Fall 2013 freshmen (7.3%). Figures 2-4 show the four-year graduation rates of the three largest ethnic groups of SJSU engineering freshmen. When compared to a best fitting regression lines from the previous four cohorts of students, the Fall 2015 graduation rates are higher than what would be expected.

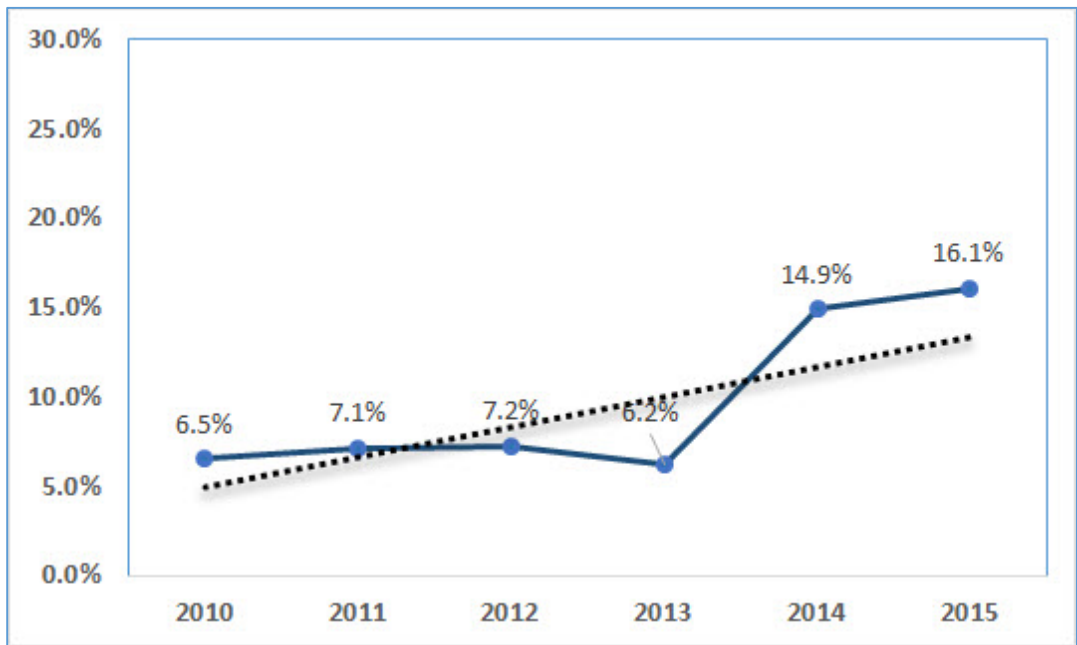


**Figure 2.** Four Year Graduation Rates for Asian Engineering Freshmen, Fall 2010 to Fall 2015





**Figure 3.** Four Year Graduation Rates for Hispanic Engineering Freshmen, Fall 2010 to Fall 2015



**Figure 4.** Four Year Graduation Rates for White Engineering Freshmen, Fall 2010 to Fall 2015

### Survey

We surveyed (see appendix for the survey) all the blocked Fall 2015 students scheduled to graduate either in Spring or Summer 2019 and asked them about their experiences at SJSU.

About one week after our initial email, we sent a reminder to the students who have not filled out the survey or have not finished it. We sent the links through Qualtrics.

The target group of students were all seniors at SJSU who started in Fall 2015. Of the 331 blocked students who applied for graduation, 158 were FA 2015 students in the College of Business, 152 were FA 2015 students in the College of Engineering, and 21 were FA 2015 students in the Department of Child and Adolescent Development. Of the 152 graduating students from the College of Engineering, 35 (23%) responded to this survey. A higher percentage of women responded to this survey—28.5% of the engineering respondents were women. The ethnicity of the respondents differ from the undergraduate demographics in engineering. There were 18 Asian students, 4 Hispanic students, 8 White students and 5 Others who responded. Interestingly, there was a high number of first-generation engineering students who responded. 34% engineering students (12 students) indicated that they were first-generation students.

A small number of the engineering students scheduled to graduate in four years changed their major (4 students). This is not surprising considering that students often extend their time to graduation when they switch majors. Of the four students switching their majors, only two switched out of the College of Engineering.

The first questions asked the students to reflect on their freshmen experiences in blocked scheduling. 51% of the engineering students liked block scheduling either a lot or a little. Another 38% neither liked nor disliked it. Most (24 students) interacted with other students from their block during the Fall 2015 semester and many (22 students) of the engineering students kept in touch with other students from their original blocked classes since freshmen year.

We listed some possible factors that helped students graduate in four years. The highest ranked factors were:

- “Taking a full load almost every semester” (24 students)
- “Spending significant time studying and on my academic work” (22 students)
- “Working with a group of students in a study group” (17 students)
- “Meeting with my advisors frequently” (10 students)

An interesting finding is the students’ perceptions of academic advising; 29 out of 35 engineering students answering this question were satisfied or very satisfied with academic advising. Engineering students felt that academic advising helped them. Table 6 shows the responses of students to the question: To what extent has academic advising HELPED YOU.

**Table 6.** Responses of Engineering Graduating Students to the Question: To what extent has academic advising HELPED YOU (minimum-1; maximum-10)

	Mean	SD	Variance
plan your future coursework	7.03	2.27	5.17
graduate in four years	6.54	2.67	7.11
be a successful student	6.29	2.52	6.38
think about career options	5.14	2.71	7.32
get information about research opportunities or experiences	4.63	3.02	9.09

Engineering students felt that faculty were either somewhat or very helpful when they met with them and a vast majority (33 out of 35 students) were satisfied with their faculty interactions. However, despite the positive experiences that students had with faculty, many faced challenges to graduating in four years. Most of the comments related to issues with getting classes when they were needed or having issues with individual classes.

Student 1—“Some of it was getting the classes I needed. It can be a challenge sometimes with how small classes tend to be. Also the requirement to maintain 15 units per semester is pretty taxing. I took summer classes so I could lessen that load.”

Student 2—“Some teachers do not accept any student to add their class on the first instruction day of the semester. Even if the class is a required class for graduation and cannot be replaced by other classes; even if the student is trying to graduate in this semester and have time conflict with the other section of the same class. So, it takes me one more semester to graduate with only one class in that semester.”

Student 3—“ For a couple semesters I needed a class that had a prerequisite I took at another college. Since the credit was not in my SJSU transcript I needed to apply for an add code. The add codes were so slow to process and be granted that the class I needed filled up two semesters in a row. A friend then told me it helps to confront the records office about getting my transfer units added to the transcript. It would have been more helpful if that procedure was more obvious - there was no other way I would have known about it. The add code process could use streamlining in the first place, perhaps.”

Student 4—“I had to stay every summer to take classes and had to schedule for about six classes per semester during junior and senior year.”

## **Conclusion**

We implemented block scheduling of all freshmen at SJSU beginning with the Fall 2015 cohort. Both yearly retention and four-year graduation rates have increased compared to previous freshmen cohorts. The four-year graduation rate for Fall 2015 freshmen has increased dramatically as compared to the freshmen cohorts from previous years. Overall, the four-year graduation rate for Fall 2015 freshmen is 17.7% which is much higher than the four graduation rate for Fall 2013 freshmen which was 7.3%. The four-year graduation rates were lower for Hispanic (10.1%) and White students (16.1%) as compared to Asian students (25.3%). However, all of the graduation rates for these subgroups were higher than expected.

A survey of engineering students who graduated in four years indicated that significant factors were taking a full load of classes each semester, spending significant time studying and on academic work, and working with a group of students in a study group. Although the students were able to graduate within four years, they faced challenges to graduating in four years. Most of the comments related to issues with getting classes when they were needed or having issues with individual classes.

It is not possible to disaggregate the effects of block scheduling on time to graduation. These results, however, led SJSU to decide to implement block scheduling for all incoming freshmen beginning in the Fall 2019 semester. In addition, the success at SJSU led other CSUs to implement block scheduling of freshmen. We intend to follow up this study with interviews of Fall 2015 freshmen who graduated in four years to get more information about their time at SJSU.

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## Appendix

### **Default Question Block**

#### CONSENT FORM FOR PARTICIPATION IN A RESEARCH STUDY

##### TITLE OF STUDY

Project SUCCEED Graduating Senior Survey

##### NAME OF RESEARCHER

Dr. Patricia Backer, San José State University, SJSU Department of Aviation & Technology

##### THE PURPOSE OF THIS STUDY

You are being asked to take an online survey that asks you questions about your experiences at SJSU while an undergraduate student.

##### THE PROCEDURES TO BE FOLLOWED

Please read through the following information about your rights as a research participant. If you agree to take the survey, please hit the agree button at the bottom of this page.

##### POTENTIAL RISK

There are no direct foreseeable risks anticipated other than those normally encountered in your daily life.

##### POTENTIAL BENEFITS

There are no foreseeable benefits anticipated.

##### COMPENSATION

There is no compensation for participation this study.

##### CONFIDENTIALITY

Although the results of this study may be published, no information that could identify you will be included. Your responses will be coded and kept in a password protected computer.

##### YOUR RIGHTS

Your participation in this study is voluntary. If you choose to participate, you may quit the survey at any time without negative consequences. You can also choose not to answer any survey questions that you do not wish to answer. No service to which

you are otherwise entitled will be lost or jeopardized if you choose not to participate in the study or quit partway through the study.

#### QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study.

\* For further information about the study, please contact Patricia Backer, 408-924-3214, [patricia.backer@sjsu.edu](mailto:patricia.backer@sjsu.edu)

\* Complaints about the research may be presented to Fred Barez, 408-924-4298, [red.barez@sjsu.edu](mailto:red.barez@sjsu.edu)

\* For questions about participants' rights or if you feel you have been harmed in any way by your participation in this study, please contact Dr. Pamela Stacks, Associate Vice President of the Office of Research, San Jose State University, at 408-924-2479.

#### AGREEMENT TO PARTICIPATE

Please select from the choices below. If you click agree, it is implied that you have read the information above about the research, your rights as a participant, and give your voluntary consent. Please print out a copy of this page and keep it for your records.

- I AGREE TO PARTICIPATE IN THE RESEARCH.
- I DO NOT AGREE TO PARTICIPATE IN THE RESEARCH.

1. When you entered SJSU, what college or department were you in?

- Business
- Engineering
- Child and Adolescent Development
- Other, please specify

3. Did you change your major while at SJSU?

- Yes
- No

4. What will be your major when you graduate?

5. When do you plan to graduate from SJSU?

- Spring 2019
- Summer 2019
- Fall 2019 or later

Please tell us your gender

- Male
- Female
- Non-binary

Please share with us your ethnicity/race

- American Indian or Alaska Native
- Asian
- Black or African American
- Chicanx or Latinx
- Native Hawaiian or Pacific Islander
- White, not Chicanx or Latinx
- Two or more races
- Decline to state
- Other, please indicate

Are you a first generation college student?

- Yes
- No

Block Scheduling

During Summer 2015 orientation, students receiving this survey were “blocked” (scheduled/registered) for the Fall 2015 semester into at least two classes with the same group of people. For most students, this means you were in the same major class (Engr 10 lab or Bus 12 or CHAD 60, for example) and a Comm 20 class (or another General Education class).

This section asks a few questions about your impressions of block scheduling in Fall 2015.



How much did you like being in block scheduling?

- I liked it a great deal
- I liked it somewhat
- I neither liked nor disliked it
- I disliked it somewhat
- I disliked it a great deal

Outside of class, how much did you interact with any other students from your block?

- Never
- Once or twice in the semester
- Monthly
- Weekly
- Daily

Did you keep in touch with any other students from your block?

- yes
- no
- I kept in touch infrequently

You are scheduled to graduate from SJSU in four years. What were important factors in graduating in four years?

- Spending significant time studying and on my academic work
- Working a group of students in a study group
- Taking a full load of classes almost every semester
- Meeting with my advisor(s) frequently
- Finding a faculty or staff mentor
- Participating in a Student Success Community (for example, MESA, EOP, etc)
- Participating in a Student Success Center (for example, the African American/Black Student Success Center, the Chicanx/Latinx Student Success Center, the UndocuSpartan Resource Center)
- Participating in an internship, field experience, etc
- Receiving targeted messaging from my college about my progress at SJSU
- Taking advantage of support services on campus (Writing Center, tutoring, etc)

- Participating in a student organization
- Working with a faculty member on a research project
- Other, please indicate

How satisfied have you been with academic advising?

- Very satisfied
- Satisfied
- Dissatisfied
- Extremely dissatisfied

To what extent has your academic advising HELPED YOU:

	Very little	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Very much
be a successful student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
plan your future coursework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
think about career options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
get information about research opportunities or experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
graduate in four years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. How available were faculty during office hours in an usual semester?

- A lot
- Somewhat
- A little
- Not at all

30. How helpful were faculty when you met with them?

- A lot
- Somewhat
- A little
- Not at all

31. How satisfied were you with the quality of your faculty interactions?

- Very satisfied
- Satisfied
- Dissatisfied
- Very dissatisfied

Did you face any challenges to graduating in four years? If yes, please describe these challenges below.

34. Is there anything else you want to tell us about your time at SJSU?

We are looking for students to interview about their experiences at SJSU. If you are interested, please leave your name and email below. Dr. Backer will be contacting you.

We would like to know if the Project Succeed initiatives had a positive impact on grades . Thus, we would like to obtain your permission to access your grades. Also, we would like to know if any of our initiatives had a positive impact on your career at SJSU. We are looking for correlations between your use of SJSU support and curricular services and your success as a student at SJSU.

By clicking the “Agree” button below, you are indicating that you voluntarily agree to allow us to

access your grades and your records, that the details of the study have been explained to you, that you have been given time to read this document, and that your questions have been answered. If you give us permission to access your grades, please also provide your SJSU Student ID Number below. If you want more information about how your data will be used, you can either call the Project Director or email her (Patricia Backer, 408-924-3214, [patricia.backer@sjsu.edu](mailto:patricia.backer@sjsu.edu)). She would be happy to answer any questions you have about this survey.

I agree to my grades and records being used in this study. If yes, please enter your SJSU ID here

I do not agree to my grades and records being used in this study

Thank you for your participation in this survey.