

# Freshman Employment, Academic Performance, and Engagement Results from the 2011 NSSE Survey

**The purpose of this study:** To examine the academic performance and engagement of non-employed freshmen compared to those who are employed. Noticing that the majority of Fresno State freshmen are not employed, we wondered how those that are not working spend their time and how they are progressing academically.

**Data:** Data from the 2011 NSSE survey and IRAP database are used in this study. The findings below are based on descriptive statistics (Table 1 -3). The survey has a margin of error of 3%.

**Summary of the findings:** 59-65% of freshmen did not work at all. Half of them enrolled in less than 15 units in Spring 2011. The academic performance of this group that is not employed is slightly lower than other groups. These freshmen spend less time preparing for class and participating in co-curricular activities than others. They are less engaged in Active and Collaborative Learning (ACL) and Enriching Educational Experiences (EEE) as well. The majority of them spend about the same amount of time as others in commuting to class, caring for dependents and relaxing/socializing.

## Detailed findings:

- The majority of our freshmen didn't work at all. Based on the survey, 59-65% of our freshmen were not employed either off or on campus, 23-29% worked off-campus only, 4-10% worked on campus only and 2-8% worked both off and on campus in Spring 2011. Furthermore, about half of freshmen who didn't work at all enrolled in less than 15 units in Spring 2011. On average, they enrolled for fewer units than others in both Fall and Spring semesters. This is the group referred to in this report as low-workload freshmen. (Table 1)
- These low-workload freshmen's academic performance is not as strong as all other student groups. They have the lowest Term GPA, lowest percentage of good academic standing, and lowest first-year retention rate. (Table 1)
- The low-workload freshmen's academic preparation is poorer than the majority of freshmen but still better than students who worked both off and on campus. That group has the poorest academic preparation in terms of SAT score and percentages requiring English/Math remediation. Their HS GPA is similar to the low-workload freshmen. (Table 1)
- The low-workload freshmen spend less time than others preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities) and participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.). The majority of them spend about the same amount of time (10 hours or less per week) as others in commuting to class (driving, walking, etc.), providing care for dependents (parents, children, spouse, etc.) and relaxing and socializing (watching TV, partying, etc.). A minority of them spends more time (11 hours or more per week) in doing so. (Table 2)
- The low-workload freshmen are less engaged than others in Active and Collaborative Learning (such as asking questions in class or contributing to class discussions, tutoring or teaching other students, participating in a community-based project) and Enriching Educational Experiences (such as practicum/internship/field experience/co-op experience/clinical assignment/community service/volunteer work and participating in a learning community). (Table 3)
- It is worth noting that students who worked both off and on campus are the least-prepared students (Table 1) and they spend more time in providing care for dependents and commuting to class than all others (Table 2). However, they enrolled in more units and had better academic performance than the low-workload freshmen (Table 1). They also have the highest engagement level in terms of Academic Challenge (LAC), Active and Collaborative Learning (ACL) and Student-Faculty Interaction (SFI) (Table 3).

**Question:** Can/should this low workload group enroll in at least 15 units (which is necessary to complete a bachelor's degree in four years) or would an additional course result in higher drop-out rates for this group?

**Table 1 Work status, students' characteristics and performance\***

	Total	Not work at all			Work on-campus only	Work off-campus only	Work off and on campus
		Less than 15 units enrolled in Spring 2011	15 or more units enrolled in Spring 2011	Subtotal			
HC	661	199	213	412	44	170	35
% (% range based on sample error of 3%)**	100.0%			62.3% (59-65%)	6.7% (4-10%)	25.7% (23-29%)	5.3% (2-8%)
<b>Academic performance</b>							
Units enrolled in Fall 2010	14	13	14	14	15	14	14
Units enrolled in Spring 2011	14	13	16	15	15	14	14
Term GPA in Fall 2010	2.95	2.58	3.33	2.97	3.18	2.87	2.88
Term GPA in Spring 2011	2.99	2.71	3.28	3.01	3.19	2.92	2.84
Good standing in Fall 2010 (%)	85.3%	69.8%	98.6%	84.7%	93.2%	83.5%	91.4%
Good standing in Spring 2011(%)	89.0%	80.1%	98.1%	89.5%	88.6%	88.8%	85.7%
1st year (Fall to Fall) retention rate***	92.0%	88.4%	97.2%	93.0%	93.2%	90.6%	85.7%
<b>Academic preparation</b>							
Average SAT composite	937	888	989	942	969	944	814
Average HS GPA	3.44	3.34	3.54	3.44	3.47	3.42	3.37
% requiring Eng remediation	65.2%	76.4%	55.9%	65.8%	43.2%	66.5%	80.0%
% requiring Math remediation	53.0%	59.8%	41.8%	50.5%	52.3%	54.1%	77.1%
<b>Demographics</b>							
% FGS	70.1%	77.0%	67.7%	72.1%	65.0%	66.1%	72.7%
% being eligible for Pell grants	60.7%	74.4%	51.2%	62.4%	54.5%	56.5%	68.6%
% Female	70.0%	66.3%	70.9%	68.7%	72.7%	74.7%	60.0%
<b>Ethnicity</b>							
American Indian	0.3%	0.5%		0.2%		0.6%	
Asian	25.7%	35.7%	19.7%	27.4%	15.9%	22.4%	34.3%
Black	3.2%	2.5%	3.8%	3.2%	4.5%	2.4%	5.7%
Hisp	38.6%	40.7%	35.7%	38.1%	34.1%	41.8%	34.3%
White	25.1%	16.6%	28.6%	22.8%	34.1%	28.8%	22.9%
Foreign	0.6%	0.5%	0.9%	0.7%	2.3%		
Multiple/Unknown	6.5%	3.5%	11.3%	7.5%	9.1%	4.1%	2.9%

\* Freshmen's work status is based on two NSSE survey items related to working off and on campus (hours students spend in working for pay off/on campus in a typical 7-day week, 1=0 hrs/wk, 2=1-5 hrs/wk, 3=6-10 hrs/wk, 4=11-15 hrs/wk, 5=16-20 hrs/wk, 6=21-25 hrs/wk, 7=26-30 hrs/wk, 8=More than 30 hrs/wk).

\*\* Sampling error is an estimate of the margin by which the true percentage on a given item could differ from the reported percentage. For example, if the sampling error is +/- 5% and 60% of students reply "very often" to a particular item, then the true population value is most likely between 55% and 65%. The survey sample error for freshmen is +/- 3%.

\*\*\* Based on Fall 2011 enrollment data on 08/29/2011.

**Table 2 Weekly time usage**

Survey question: about how many hours do you spend in a typical 7-day week doing each of the following (1=0 hrs/wk, 2=1-5 hrs/wk, 3=6-10 hrs/wk, 4=11-15 hrs/wk, 5=16-20 hrs/wk, 6=21-25 hrs/wk, 7=26-30 hrs/wk, 8=More than 30 hrs/wk)? The survey sample error is 3%.

	0 Hrs/wk	1-10 hrs/wk	Subtotal (10 hrs or less/wk)	11 or more hrs/wk
<b>Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)</b>				
Not work at all	0.7%	42.1%	42.8%	57.2%
Less than 15 units enrolled	0.5%	49.2%	49.7%	50.3%
15 or more units enrolled	0.9%	35.4%	36.3%	63.7%
Work off-campus only	0.0%	45.0%	45.0%	55.0%
Work on-campus only	0.0%	43.2%	43.2%	56.8%
Work off and on campus	0.0%	40.0%	40.0%	60.0%
<b>Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)</b>				
Not work at all	57.5%	31.1%	88.6%	11.4%
Less than 15 units enrolled	64.8%	28.6%	93.5%	6.5%
15 or more units enrolled	50.7%	33.3%	84.0%	16.0%
Work off-campus only	57.6%	32.9%	90.6%	9.4%
Work on-campus only	56.8%	29.5%	86.4%	13.6%
Work off and on campus	40.0%	40.0%	80.0%	20.0%
<b>Relaxing and socializing (watching TV, partying, etc.)</b>				
Not work at all	2.7%	57.8%	60.5%	39.5%
Less than 15 units enrolled	3.0%	54.0%	57.1%	42.9%
15 or more units enrolled	2.4%	61.3%	63.7%	36.3%
Work off-campus only	1.2%	67.5%	68.6%	31.4%
Work on-campus only	2.3%	52.3%	54.5%	45.5%
Work off and on campus	0.0%	65.7%	65.7%	34.3%
<b>Providing care for dependents living with you (parents, children, spouse, etc.)</b>				
Not work at all	49.5%	34.9%	84.4%	15.6%
Less than 15 units enrolled	40.9%	36.9%	77.8%	22.2%
15 or more units enrolled	57.5%	33.0%	90.6%	9.4%
Work off-campus only	33.7%	49.1%	82.8%	17.2%
Work on-campus only	55.8%	41.9%	97.7%	2.3%
Work off and on campus	20.0%	45.7%	65.7%	34.3%
<b>Commuting to class (driving, walking, etc.)</b>				
Not work at all	7.1%	74.9%	82.0%	18.0%
Less than 15 units enrolled	3.5%	73.4%	76.9%	23.1%
15 or more units enrolled	10.4%	76.4%	86.8%	13.2%
Work off-campus only	4.1%	81.7%	85.8%	14.2%
Work on-campus only	6.8%	81.8%	88.6%	11.4%
Work off and on campus	8.6%	54.3%	62.9%	37.1%

**Findings:**

- More students who didn't work at all and enrolled in less than 15 units in Spring 2011 spend less time in preparing for class and participating in co-curricular activities per week than others. On the other hand, the majority of them spend about the same amount of time (10 hours or less per week) as others in commuting to class, providing care for dependents and relaxing and socializing. However, a minority of them spends more time (11 hours or more per week) with dependent care and commuting.
- More students who worked both off and on campus spend more time in providing care for dependents and commuting to class than others.

**Table 3 NSSE benchmarks\***

	HC	Level of Academic Challenge (LAC)	Active and Collaborative Learning (ACL)	Enriching Educational Experiences (EEE)	Supportive Campus Environment (SCE)	Student-Faculty Interaction (SFI)
Not work at all	412	53.4	43.6	25.6	61.7	33.8
Less than 15 units enrolled	199	52.5	41.7	23.7	61.9	32.8
15 or more units enrolled	213	54.3	45.3	27.4	61.6	34.7
Work off-campus only	170	53.1	43.7	27.0	59.3	31.9
Work on-campus only	44	52.6	46.1	30.9	67.2	41.4
Work off and on campus	35	53.7	48.4	28.9	64.3	42.1

\* Benchmarks are created by NSSE. Each benchmark is an index of responses to several NSSE questions and reported on a 0-100 scale. A benchmark score of zero would mean that a student chose the lowest response option for an item, and 100 would mean a student chose the highest response option for an item (See Appendix for more information).

### Findings:

- Students who didn't work at all and enrolled in less than 15 units in Spring 2011 are slightly less academically challenged and fewer are engaged in active and collaborative learning and enriching educational experiences than the other groups. Even though fewer of them are experiencing this, the difference is small and could be the result of this particular sample.
- Students who worked on campus, including who worked on-campus only and who worked both on and off campus, have a higher level of active and collaborative learning participation, enriching educational experiences, supportive campus environment and student-faculty interaction than students who didn't work at all and who worked off campus only. Some differences are very small and could be within the margin of error. However, the pattern is that students who worked on campus always have the top 2 means for NSSE benchmarks, except LAC.

## Appendix: NSSE survey benchmarks

### **Level of Academic Challenge (LAC) Items**

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.

- Hours spent preparing for class (studying, reading, writing, doing homework or lab work, etc. related to academic program)
- Number of assigned textbooks, books, or book-length packs of course readings
- Number of written papers or reports of 20 pages or more, between 5 and 19 pages, and fewer than 5 pages
- Coursework emphasizes: **Analysis** of the basic elements of an idea, experience or theory
- Coursework emphasizes: **Synthesis** and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
- Coursework emphasizes: **Making of judgments** about the value of information, arguments, or methods
- Coursework emphasizes: **Applying** theories or concepts to practical problems or in new situations
- Working harder than you thought you could to meet an instructor's standards or expectations
- Campus environment emphasizes: Spending significant amount of time studying and on academic work

### **Active and Collaborative Learning (ACL) Items**

Students learn more when they are intensely involved in their education and asked to think about what they are learning in different settings. Collaborating with others in solving problems or mastering difficult material prepares students for the messy, unscripted problems they will encounter daily during and after college.

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Worked with other students on projects **during class**
- Worked with classmates **outside of class** to prepare class assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project (e.g., service learning) as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

### **Student-Faculty Interaction (SFI) Items**

Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning.

- Discussed grades or assignments with an instructor
- Talked about career plans with a faculty member or advisor
- Discussed ideas from your readings or classes with faculty members outside of class
- Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)
- Received prompt written or oral feedback from faculty on your academic performance
- Worked on a research project with a faculty member outside of course or program requirements

### **Enriching Educational Experiences (EEE) Items**

Complementary learning opportunities enhance academic programs. Diversity experiences teach students valuable things about themselves and others. Technology facilitates collaboration between peers and instructors. Internships, community service, and senior capstone courses provide opportunities to integrate and apply knowledge.

- Hours spent participating in co-curricular activities (organizations, campus publications, student gov., social fraternity or sorority, etc.)
- Practicum, internship, field experience, co-op experience, or clinical assignment
- Community service or volunteer work
- Foreign language coursework and study abroad
- Independent study or self-designed major
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)
- Serious conversations with students of different religious beliefs, political opinions, or personal values
- Serious conversations with students of a different race or ethnicity than your own
- Using electronic medium (e.g., listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment
- Campus environment encouraging contact among students from different economic, social, and racial or ethnic backgrounds
- Participate in a learning community or some other formal program where groups of students take two or more classes together

### **Supportive Campus Environment (SCE) Items**

Students perform better and are more satisfied at colleges that are committed to their success and cultivate positive working and social relations among different groups on campus.

- Campus environment provides the support you need to help you succeed academically
- Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)
- Campus environment provides the support you need to thrive socially
- Quality of relationships with other students
- Quality of relationships with faculty members
- Quality of relationships with administrative personnel and offices