Research in BRIEF

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2009 National Survey of Student Engagement (NSSE)

Executive Summary

(Administered Spring 2009)

Indiana University's Center for Postsecondary Research created the National Survey of Student Engagement (NSSE) in order to "assess the extent to which students are engaged in empirically derived good educational practices and what they gain from their college experience." i The survey is distributed to nearly 1,400 colleges across the U.S. on an annual basis, but it is administered about every two years at Chapman University. This Research in BRIEF highlights findings from the 2009 NSSE spring administration. All freshman and seniors were invited to take the NSSE through an email invitation. Throughout this report, Chapman University NSSE results are compared to a sample of students attending similar types of institutions - i.e., Master's colleges and universities (larger programs) as classified by the Carnegie Foundation. Significant differences between Chapman and the Master's group students are noted in the tables. The Master's group consists of 143 U.S. colleges and universities that also participated in the 2009 NSSE administration.

Response Rate and Survey Sample

In the Spring of 2009, 41 percent of the Chapman University freshmen and seniors completed the NSSE.

Chapman University Population and Sample Demographics

	Popu	lation	Sample	
	FY	SR	FY	SR
Gender				
Female	60%	56%	65%	62%
Male	40%	44%	35%	38%
Race/Ethnicity				
Asian/Asian Am./Pacific Islander	11%	8%	12%	6%
Black/African American	3%	2%	2%	2%
White (non-Hispanic)	64%	70%	62%	67%
Latino/Hispanic/Mexican/Puerto Rican	10%	11%	9%	10%
Other (Multiracial, Am. Indian)	3%	2%	8%	9%
I prefer not to respond/Unknown	9%	7%	7%	7%

Like Chapman's population, the survey sample is disproportionately female. While the racial/ethnic categories between the NSSE and Chapman's student records are not identical, the results show that the sample characteristics closely match the population.ⁱⁱ

FINDINGS

Curricular and Co-Curricular Activities

Students were asked to indicate if they had engaged in a variety of curricular and co-curricular activities during their time at Chapman. Not surprisingly, greater participation in curricular and co-curricular activities was evident by seniors.

Curricular and Co-Curricular Activities

118/2	Chapman		Mas	aster's	
	FY	SR	FY	SR	
Which of the following have you done or do	you				
plan to do before you graduate from your ir	stitutio	n?			
Practicum, internship, field experience, co-op experience, or clinical assignment ¹	6.5%	55.2%	7.2%	48.7%	
Community service or volunteer work ¹	32.7%	58.4%	36.4%	55.2%	
Participate in a learning community or some other formal program where groups of students take two or more classes together ¹	8.3%	24.6%	16.8%	25.2%	
Work on a research project with a faculty member outside of course or program requirements ¹	2.2%	23.6%	5.2%	15.7%	
Study abroad ¹	0.7%	34.0%	3.2%	10.5%	
Independent study or self-designed major ¹	1.4%	24.0%	4.3%	15.4%	
Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.) ¹	1.1%	63.7%	2.3%	30.4%	
Participating in co-curricular activities (org	anizatio	ons,			
campus publications, student government, fi					
or sorority, intercollegiate or intramural spe	orts, etc	·.)			
0 hrs/wk	23.9%	31.2%	46.3%	55.5%	
1-5 hrs/wk	37.3%	26.1%		23.4%	
6 or more hrs/wk	38.8%	42.7%	27.7%	21.1%	

^{1.} Percent Reporting "Done"

The findings show that a higher percentage of Chapman seniors reported participated in educational practices that some researchers (Kuh 2008) have labeled "high impact" because of the essential learning outcomes associated with these activities. When compared to the Master's seniors, the percentage difference is particularly high for Study Abroad (34.0% versus 10.5%) and culminating senior experiences (63.7% versus 30.4%) among seniors. While a smaller

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percentage of Chapman freshmen participated in "high impact" activities in comparison to their peers, only a small percentage of freshmen participated in these activities among both populations overall.

Campus Diversity

The NSSE asks students about campus diversity and their interaction with other racial/ethnic groups. One set of questions ask about their attempts to incorporate diverse perspectives during the current school year.

Campus Diversity - Mean Scores

eumpus Diversity Meum Seores	Chapman		Ması	er's
	FY	SR	FY	SR
How often have you done each of the follo	wing?			
Included diverse perspectives (different				
races, religions, genders, political beliefs,				
etc.) in class discussions or writing				
assignments ¹	2.80	2.91	2.84	2.89
Had serious conversations with students				
of a different race or ethnicity than				
your own ¹	2.88	2.91	2.61*	2.69*
Had serious conversations with students				
who are very different from you in terms				
of their religious beliefs, political				
opinions, or personal values ¹	2.94	3.00	2.68*	2.72*
Tried to better understand someone else's				
views by imagining how an issue looks				
from his or her perspective ¹	2.94	3.00	2.80*	2.88*
To what extent has your experience at this				
contributed to your knowledge, skills, and	person	al		
development in the following areas?				
Encouraging contact among students from	n			
different economic, social, and racial or				
ethnic backgrounds ²	2.66	2.47	2.72	2.57
Understanding people of other racial and				.1.
ethnic backgrounds ²	2.62	2.51	2.74*	2.70*

- 1. Four point scale: 1=Never, 2=Sometimes, 3=Often, 4=Very often
- 2. Four point scale: 1=Very little, 2=Some, 3=Quite a bit, 4=Very much
- * < .05 p-value

The findings show that Chapman freshmen and seniors averaged near the "often" category in experiencing the following four activities: (1) class discussions or writing assignments about diverse perspectives, (2) conversations with students of a different race or ethnicity, (3) conversations with students in terms of their religious beliefs, political opinions, or personal value, and (4) taking the position of another person to understand them better. Among these questions, Chapman's mean scores were significantly higher than the Master's group except for the "class discussions or written assignments about diverse perspectives" item among freshmen.

The NSSE also asks students to evaluate their institution's effort towards promoting diverse interactions. While the mean scores for the "encouraging contact among students of different backgrounds" survey item was comparable between Chapman and the Master's comparison group, Chapman freshmen and seniors scored significantly lower than their

peers on the "understanding people of other racial and ethnic backgrounds" item.

Faculty-Student Interaction

The NSSE contains a variety of questions about student-faculty interaction. The findings show that Chapman freshmen and seniors compare favorably to students attending peer institutions.

Faculty-Student Interaction - Mean Scores

	Chapman		Mast	ter's
	FY	SR	FY	SR
In your experience at your institution dur school year, about how often have you don the following?	0			
Discussed grades or assignments with an ${\sf instructor}^1$	2.64	2.96	2.68	2.86*
Talked about career plans with a faculty member or advisor l	2.38	2.56	2.22*	2.42*
Discussed ideas from your readings or classes with faculty members outside of class ¹	1.95	2.26	1.90	2.09*
Received prompt written or oral feedback from faculty on your academic performance ¹	2.86	2.89	2.70*	2.85
Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.) ¹	1.64	1.94	1.64	1.79*
Mark the box that best represents the quality of your relationship.				
Relationships with faculty members ²	5.58	5.72	5.24*	5.48*

- 1. Four point scale: 1=Never, 2=Sometimes, 3=Often, 4=Very often
- 2. Seven point scale: 1=Unavailable, Unhelpful, Unsympathetic to 7=Available, Helpful, Sympathetic

Among the faculty-student interaction items, Chapman freshmen and/or seniors reported significantly more faculty interaction. Further, Chapman freshmen and seniors reported higher levels of availability/helpfulness/sympathy from faculty than the Master's peer group.

Student Interaction

Students were asked to report how often they interacted with their peers. The range of mean scores typically fell between the "sometimes" and "often" options.

Student Interaction - Mean Scores

	Chapman		Mast	ter's
	FY	SR	FY	SR
In your experience at your institution dur current school year, about how often have each of the following?		ne		
Worked with other students on projects during class	2.28	2.49	2.49*	2.62*
Worked with classmates outside of class to prepare class assignments	2.67	2.93	2.37*	2.71*
Discussed ideas from your readings or classes with others outside of class (students, family members,				
co-workers, etc.)	2.94	3.03	2.74*	2.89*

Four point scale: 1=Never, 2=Sometimes, 3=Often, 4=Very often

^{* &}lt; .05 p-value

^{* &}lt; .05 p-value

Chapman freshmen and seniors reported significantly more student interaction than the Master's group in terms of discussing class readings and working collaboratively on class assignments. However, Chapman freshmen and seniors reported significantly less interaction than their Master's counterparts when asked about working with other students on projects during class.

Analytical Classroom Engagement

Students were asked how often they engaged in various analytical tasks in the classroom. Findings show that Chapman freshmen reported working on projects that required the integration of ideas from various sources significantly less than their comparison group. However, Chapman freshmen and seniors reported significantly more engagement in other activities than their peer groups such as putting together ideas from different courses, memorizing facts, analyzing ideas, and applying theories to practical situations.

Analytical Classroom Engagement - Mean Scores

	Chapman		Mast	ter's
	FY	SR	FY	SR
In your experience at your institution dur	ing the	current		
school year, about how often have you do	1e each	of		
the following?				
Worked on a project that required				
integrating ideas from various sources ¹	3.00	3.48	3.13*	3.36*
Put together ideas or concepts from				
different courses when completing				
assignments or during class discussions ¹	2.78	3.02	2.62*	2.94
During the current school year, how much	has yo	ur		
coursework emphasized the following men	ıtal acti	vities?		
Memorizing facts, ideas, or methods				
from your courses and readings ²	2.80	2.89	2.94*	2.78*
Analyzing the basic elements of an idea,				
experience, or theory ²	3.27	3.39	3.11*	3.27*
Synthesizing ideas into new complex				
interpretations ²	2.98	3.15	2.90	3.08
Making judgments about the value				
of information ²	2.99	3.06	2.94	3.05
Applying theories or concepts to practical			4	
problems or in new situations ²	3.17	3.26	3.05*	3.25

- 1. Four point scale: 1=Never, 2=Sometimes, 3=Often, 4=Very often
- 2. Four point scale: 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Academic Workload

The NSSE contains several questions focused on academic workload. For example, students were asked about the number of books they read, the number of papers they wrote, and how much time they spent studying or preparing for class. The mean score for the number of books assigned was around 3.4 for both Chapman freshmen and seniors, which equates to around 5 to 10 books according to the scale. Chapman freshmen and seniors reported a slightly higher, but significant, mean number of books assigned in comparison to their peer group. The mean number of papers above 20 pages is significantly higher among freshmen in the Master's group,

but the mean number of papers between 5 and 19 pages is significantly higher among Chapman seniors and freshmen.

Time Spent on Academic Work - Mean Scores

	Chapman		man Maste	
	FY	SR	FY	SR
Number of assigned textbooks, books, or				
book-length packs of course readings l	3.40	3.44	3.23*	3.16*
Number of written papers or reports of				
20 pages or more ¹	1.20	1.70	1.31*	1.64
Number of written papers or reports				
between 5 and 19 pages ¹	2.48	2.77	2.26*	2.54*
Number of written papers or reports of				
fewer than 5 pages ¹	3.17	3.02	3.04*	2.97
Number of problem sets that take you				
more than an hour to complete ²	2.56	2.53	2.66	2.65
Number of problem sets that take you les	SS			
than an hour to complete ²	2.82	2.35	2.78	2.42
Preparing for class (studying, reading,				
writing, doing homework or lab work,				
analyzing data, rehearsing, and other				
academic activities) ³	4.04	4.19	3.97	4.11
Spending significant amounts of time				
studying and on academic work ⁴	2.96	3.07	3.10*	3.12

- 1. Five point scale: 1=None, 2=1-4, 3=5-10, 4=11-20, 5=More than 20
- 2. Five point scale: 1=None, 2=1-2, 3=3-4, 4=5-6, 5=More than 6
- 3. Eight point scale: 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
- 4. Four point scale: 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

There were no significant differences between Chapman and the Master's group in the amount of time spent on problem sets and class preparation. However, freshmen in the Master's group reported spending significantly more time on studying than Chapman freshmen.

Student Learning Outcomes

The NSSE asks students to evaluate the institution's contribution to their development of various desired outcomes of college.

Student Learning Outcomes - Mean Scores

	Chapman		Mast	er's
	FY	SR	FY	SR
To what extent has your experience at this contributed to your knowledge, skills, and development in the following areas?				
Acquiring a broad general education	3.22	3.27	3.16	3.26
Acquiring job or work-related				
knowledge and skills	2.93	3.00	2.81*	3.10*
Writing clearly and effectively	2.88	3.12	3.06*	3.13
Speaking clearly and effectively	2.83	3.02	2.92	3.04
Thinking critically and analytically	3.17	3.43	3.20	3.35
Analyzing quantitative problems	2.81	2.88	2.93*	3.09*
Using computing and information				
technology	2.94	3.16	3.03	3.23
Solving complex real-world problems	2.71	2.71	2.71	2.80

Four point scale: 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

The findings show that Chapman freshmen and/or seniors scored significantly below their peer groups on two items: (1)

^{* &}lt; .05 p-value

^{* &}lt; .05 p-value

^{* &}lt; .05 p-value

writing clearly and effectively and (2) analyzing quantitative problems. On the "acquiring job related skills" item, Chapman freshmen attributed significantly more growth to their institution in comparison to their Master's group, but Chapman seniors attributed significantly less growth.

Overall Institutional Satisfaction

Students were asked to rate the overall quality of their education. In comparison to the Master's group, about the same percentage of Chapman freshmen and seniors indicated they would enroll again. The percentage of Chapman freshmen and seniors rating their school's academic advising as "good" or "excellent" is about 8 percent behind their comparison groups. But a higher percentage of Chapman freshmen and seniors viewed their entire educational experience as "good" or "excellent" in comparison to the peer group, although the difference was small.

Overall Institutional Satisfaction

	Chapman		Master's	
	FY	SR	FY	SR
Overall, how would you evaluate the quality of academic advising you have received at your institution? ¹	69.6%	63.1%	78.3%	70.2%
How would you evaluate your entire educational experience at this institution? ¹				
If you could start over again, would you go to the same institution you are now attending? ²	85.5%	82.2%	82.6%	80.9%

- 1. Percent reporting "Good" or "Excellent"
- 2. Percent reporting "Probably Yes" or "Definitely Yes"

NSSE Benchmark Scores

Each of the benchmark scores represents the "weighted arithmetic average" of several survey items in order to measure five important aspects of student development and learning. The higher the scale score, the higher the level of the measured outcome.

NSSE Benchmark Scores

	Chap	Chapman		apman Mastei		er's
	FY	SR	FY	SR		
Level of Academic Challenge	54.4	58.2	53.1	56.9		
Active and Collaborative Learning	45.2	53.8	43.3*	51.5 * *		
Student-Faculty Interaction	36.6	46.4	35.2	41.7 ***		
Enriching Educational Experiences	30.4	50.3	27.0***	38.4***		
Supportive Campus Environment	64.0	59.6	61.6*	58.8		

p < .05, **p < .01, *** p < .001

The findings show that Chapman freshman and seniors significantly outperformed the Master's comparison group in every category except for the Level of Academic Challenge. In this category, there is no significant difference between the two groups. In examining the individual items that compose the Level of Academic Challenge scale, the mean score for Chapman freshmen and seniors was significantly lower on the "worked harder than you thought you could to meet an instructor's standards or expectations" question when asked how often they engaged in this particular activity during the current year. Since this is the only item Chapman is

significantly behind on this scale, an improvement on this item could help push Chapman University significantly past the comparison group in the next NSSE administration. Among seniors, there is a twelve point difference between Chapman and the Master's group for the Enriching Educational Experiences scale. Otherwise, the point differences between the scales typically fall between two and five points.

CONCLUSION

The findings from the 2009 NSSE identify several institutional strengths. Over half of Chapman seniors reported engaging in "high impact" educational practices such as internships and capstone courses. About 30% of seniors reported participating in a study abroad program, a remarkably high percentage in comparison to the Master's group (10.5%). According to George Kuh, these "high impact" activities are effective teaching strategies for several reasons.ⁱⁱⁱ First, they demand high levels of engagement from students which reinforces learning through frequent practice. Second, "high impact" activities create a collaborative learning environment through frequent feedback between students and faculty members. And lastly, activities like internships facilitate the synthesis and application of classroom knowledge to the real world.

True to Chapman's mission of providing a personalized education, students reported significantly higher levels of faculty-student interaction in comparison to the Master's group on multiple measures. Not surprisingly then, the percentage of Chapman seniors who indicated that they would re-enroll at Chapman again and rated their overall educational experience as "good" or "excellent" was 82.2% and 87.9% respectively.

The NSSE findings also highlight areas that may warrant attention. First, Chapman students reported significantly less development in analyzing quantitative problems in comparison to the Master's group. Unfortunately, there are not any other items on the NSSE measuring quantitative skills development to corroborate this finding. And it should be noted that the mean difference is quite small (less than .25) for both freshmen and seniors. Second, only 8.3% of Chapman freshmen participated in a "learning community" compared to 16.3% in the Master's group. In the survey question, a learning community is defined as a group of students who take two or more classes together. Increasing participation in learning communities among freshmen would add another "high impact" activity to the already wide range of available high engagement activities.

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ⁱ George Kuh, The NSSE: Conceptual Framework and Overview of Psychometric Properties.

ⁱⁱ The "other" in the NSSE includes respondents who selected other, multiracial, and American Indian. In Chapman student records, the other category includes International and Native American students.

ⁱⁱⁱ Kuh, George. 2008. High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter.