Research in BRIEF

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2003 – 2011 NATIONAL SURVEY OF STUDENT ENGAGEMENT (NSSE) BENCHMARKS OF EFFECTIVE EDUCATIONAL PRACTICE

Executive Summary (Administered in the Spring)

INTRODUCTION

In December 2011, the Institutional Research Office published cross-sectional results from the 2011 National Survey of Student Engagement (NSSE), a national survey administered by the Indiana University's Center for Postsecondary Research to freshmen (FR) and seniors (SR). This Research in BRIEF focuses on highlighting longitudinal results from the 2003, 2005, 2009, and 2011 NSSE administrationsⁱ. The NSSE developed five benchmarks to measure educational practices deemed as empirically beneficial to learning and personal development: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Supportive Campus Environment and Enriching Educational Experiences. These benchmarks are derived from 42 questions on the NSSE, each of which aim to measure a vital aspect of student and institutional behavior. The response rates for the NSSE in 2003, 2005, 2009, and 2011 were 57%, 40%, 41%, and 37% respectively.

The racial/ethnic categories between the population and survey samples are slightly different, but close enough to obtain a snapshot of the sample's representativeness.

Race/Ethnicity - Percentage Breakdown

		20	2003		2005		09	2011	
		FR	SR	FR	SR	FR	SR	FR	SR
	Am. Indian	1	4	0	1	1	1	1	1
	Asian	13	11	9	8	12	6	13	11
	African Am.	0	3	2	2	2	2	2	2
NSSE%	White	78	72	60	55	62	67	64	65
NSS	Hispanic	9	17	10	13	9	10	8	8
	Multiracial	7	7	7	6	5	6	5	6
	Other	3	1	6	4	2	2	1	1
	No response	N/A	N/A	7	9	7	7	6	7
	Am. Indian	1	0	1	0	0	1	0	1
%	Asian	7	7	9	9	11	8	10	9
on	African Am.	3	3	3	3	3	2	2	2
llati	White	66	66	63	60	64	70	64	65
Population %	Hispanic	9	10	10	13	10	11	12	12
Ā	International	6	4	3	2	3	2	-	-
	Unknown	7	9	11	13	9	7	12	11

The NSSE sample matches the population characteristics reasonably well in most years. Asian students tend to be slightly overrepresented while Hispanic students are slighted underrepresented. But the percentage of white students in the sample matches the population closely except for 2003.ⁱⁱ

Gender

3	73		03	20	05	20	09	2011	
	. / (FR	SR	FR	SR	FR	SR	FR	SR
NSSE	F	71%	63%	68%	67%	65%	62%	64%	66%
NSSE	M	29%	38%	32%	33%	35%	38%	36%	34%
Population	F	50%	55%	61%	55%	60%	56%	57%	60%
Fopulation	M	50%	45%	39%	45%	40%	44%	43%	40%

The findings show that the survey sample is slightly skewed toward females particularly in 2003. Overall, the survey samples are reasonably similar to the Chapman population, except for 2003. In that year, females are overrepresented, particularly among freshmen, and White and Asian students are also overrepresented among freshmen and seniors.

In the tables throughout this report, Chapman University NSSE benchmark results are compared to a sample of students attending similar types of institutions – i.e., Master's colleges and universities as classified by the Carnegie Foundation. Unfortunately the Carnegie classification scheme may include a host of institutions with little in common with Chapman University besides their institutional size and scope. The results from this group should be interpreted under this context.

FINDINGS

Level of Academic Challenge

The Level of Academic Challenge (LAC) benchmark consists of eleven items measuring student workload and perceptions about the skill sets emphasized in coursework. According to NSSE, colleges and universities that score high on this benchmark "promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations

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for student performance." The results show that Chapman's benchmark scores dipped in 2005 then stabilized. In comparison to the Master's group scores, Chapman freshmen and seniors have outperformed these students in each year.

Level of Academic Challenge (LAC) Items

		2003	2005	2009	2011
Chapman LAC Benchmark		55.9	55.5	54.4	55.3
Chapman LAC Benchmark	SR	61.3	57.2	58.2	58.6
Master's Group LAC Benchmark	FY	52.7	51.6	53.1	53.2
Master's Group LAC Benchmark		56.4	56.0	56.9	57.4
Preparing for class (studying, reading, writing, doing homework or lab work,	FY	4.16	3.93	4.04	4.24
etc. related to academic program) ^a	SR	4.05	3.83	4.19	4.50
Number of assigned textbooks, books, or	FY	3.62	3.51	3.40	3.41
book-length packs of course readings ^b	SR	3.41	3.17	3.44	3.21
Number of written papers or reports of	FY	1.40	1.22	1.20	1.19
20 pages or more ^b	SR	1.90	1.71	1.70	1.73
Number of written papers or reports of	FY	2.83	2.74	2.48	2.46
between 5 and 19 pages ^b	SR	3.04	2.73	2.77	2.74
Number of written papers or reports	FY	3.46	3.20	3.17	3.15
fewer than 5 pages ^b	SR	3.52	2.94	3.02	3.06
Coursework emphasizes: Analysis of the basic elements of an idea, experience	FY	3.23	3.28	3.27	3.30
or theory ^c	SR	3.39	3.37	3.39	3.37
Coursework emphasizes: Synthesis and organizing of ideas, information, or experiences into new, more complex	FY	2.90	3.01	2.98	3.06
interpretations and relationships ^c	SR	3.21	3.21	3.15	3.18
Coursework emphasizes: Making of judgments about the value of	FY	2.80	2.95	2.99	3.03
information, arguments, or mehtods ^c	SR	3.00	3.06	3.06	3.11
Coursework emphasizes: Applying theories or concepts to practical	FY	2.98	3.07	3.17	3.15
problems or in new situations ^c	SR	3.26	3.27	3.26	3.28
Working harder than you thought you could to meet an instructor's standards	FY	2.67	2.68	2.60	2.64
or expectations ^d	SR	2.83	2.77	2.68	2.75
Campus environment emphasizes: Spending significant amount of time	FY	2.99	3.02	2.96	3.06
studying and on academic worke	SR	3.19	2.96	3.07	3.02

^aAbout how many hours do you spend in a typical 7-day week doing: 1) 0, 2) 1-5, 3) 6-10, 4) 11-15, 5) 16-20, 6) 21-25, 7) 26-30, 8) More than 30.

A review of the individual questions reveals that the decline in freshmen reading and writing score stabilized in 2011 after consistent declines between 2003 and 2009. In contrast, the "making of judgments about the value of information, arguments, or methods," and "applying theories or concepts to practical problems" items showed small but steady annual increases since 2003.

Student-Faculty Interaction

The Student-Faculty Interaction (SFI) benchmark consists of six items measuring the quality of interaction between faculty and students. According to NSSE, "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." The benchmark score shows a small decrease among Chapman freshmen and seniors. The freshmen and seniors scores decreased from 43.2 to 41.1 and 50.9 to 49.7 respectively between 2009 and 2011. Despite the decline, the Chapman benchmark scores were still higher than the Master's group for freshmen and seniors.

Student-Faculty Interaction (SFI) Items

		2003	2005	2009	2011
Chapman SFI Benchmark	FY	39.9	42.6	43.2	41.1
Chapman 311 Benchmark	SR	51.6	53.8	50.9	49.7
Master's Group SFI Benchmark	FY	35.7	33.9	35.2	34.5
waster's Group St I Benefithark	SR	42.4	43.6	41.7	41.6
Discuss grades or assignment with	FY	2.65	2.72	2.64	2.64
an instructor ^a	SR	3.04	2.99	2.96	2.88
Talked about career plans with	FY	2.11	2.27	2.38	2.13
faculty/advisor ^a	SR	2.56	2.68	2.56	2.47
Discussed ideas from your reading or classes	FY	1.92	1.98	1.95	1.93
with faculty members outside of class ^a	SR	2.27	2.37	2.26	2.20
Worked with faculty members on activities other than coursework (committees,	FY	1.56	1.55	1.64	1.65
orientation, student-life activities, etc.) ^a	SR	1.83	2.05	1.94	1.99
Received prompt feedback from faculty on	FY	2.74	2.86	2.86	2.78
your academic performance ^a	SR	3.04	2.98	2.89	2.88
Worked on a research project with	FY	N/A*	0.04	0.02	0.03
faculty outside of course requirements ^b	SR	N/A*	0.18	0.24	0.23

^aDuring the current school year, about how often have you done each of the following? 1) Very much, 2) Quite a bit, 3) Some, 4) Very little.

Two items are responsible for the decline in the freshmen scale score. The "Talked about career plans with a faculty member or advisor," and "received prompt feedback" items dropped from 2.38 to 2.13 and 2.86 to 2.78 respectively between 2009 and 2011. Among seniors, the "discussed grades or assignments," "talked about career plans," and "discussed ideas from your readings with a faculty member," all declined between 2009 and 2011.

Enriching Educational Experiences

The Enriching Educational Experiences (EEE) benchmark consists of twelve items measuring learning opportunities inside and outside the classroom that augment students' academic program. According to NSSE, "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." The coding for some questions that comprise the EEE benchmark changed between 2003 and 2005. As a result, these items and the EEE benchmark scores are not comparable across all years. The EEE benchmark for Chapman freshmen have increased a bit since 2005, while the senior benchmark score has increased from 47.0 to 52.2 between 2005 and 2011. Chapman students consistently outperformed the Master's group especially among seniors.

^bDuring the current school year, about how much reading and writing have you done? 1) None, 2) 1-4, 3) 5-10, 4) 11-20, 5) More than 20.

During the current school year, how much has your cousework emphasized the following? 1) Very much, 2) Quite a bit, 3) Some, 4) Very little.

^dDuring the current school year, how often have you done each of the following? 1) Very often, 2) Often, 3) Sometimes, 4) Never.

e1) Very much, 2) Quite a bit, 3) Some, 4) Very little.

^bWhich of the following have you done or do you plan to do before you graduate from your institution? 0) Plan to do, Do not plan to, Have not decided 1) Done.

^{*} The 2003 score is not comparable to subsequent years because the coding scheme changed in comparison to later years.

Enriching Educational Experiences (EEE) Items

		2003	2005	2009	2011
Change of FFE Bandon ale	FY	N/A*	29.9	30.4	31.9
Chapman EEE Benchmark	SR	N/A*	47.0	50.3	52.2
Master's Group EEE Benchmark	FY	N/A*	26.7	27.0	26.7
Waster's Group ELE Benefithark	SR	N/A*	40.3	38.4	38.3
Participating in co-curricular activities (organizations, campus publications, student government, social fraternity	FY	2.71	2.27	2.64	2.72
or sorority, etc.) ^a	SR	2.47	2.28	2.75	2.73
Practicum, internship, field experience,	FY	N/A*	0.09	0.07	0.09
co-op experience, or clinical assignment ^b	SR	N/A*	0.54	0.55	0.66
Community service or volunteer work ^b	FY	N/A*	0.33	0.33	0.36
Community service of volunteer work		N/A*	0.61	0.58	0.64
Foreign language coursework ^b	FY	N/A*	0.43	0.49	0.52
Torogramigange course work	SR	N/A*	0.75	0.73	0.74
Study abroad ^b	FY	N/A*	0.02	0.01	0.00
,	SR	N/A*	0.26 0.3	0.34	0.35
Independent study or self-designed major ^b		N/A*	0.02	0.01	0.01
map on the study of the acongress mayor		0.28	0.24	0.25	
Culminating senior experience (capstone course, senior project or thesis,	FY	N/A*	0.01	0.01	0.01
comprehensive exam, etc.) ^b	SR	N/A*	0.40	0.64	0.63
Serious conversations with students of different religious beliefs, political	FY	3.08	3.11	2.94	2.97
opinions, or personal values ^c	SR	2.89	3.00	3.00	2.97
Serious conversations with students of a	FY	2.95	2.97	2.88	2.94
different race or ethnicity than your own ^c	SR	2.89	2.98	2.91	2.92
Using electronic medium (e.g., listserv, chat group, Internet, instant messaging,	FY	2.68	2.72	2.76	2.89
etc.) to discuss or complete an assignment ^c	SR	2.96	2.78	3.02	2.95
Campus environment encouraging contact	FY	2.59	2.51	2.66	2.78
among students from different economic, social, and racial or ethnic backgrounds ^d	SR	2.61	2.35	2.47	2.60
Participate in a learning community or some other formal program where groups of students take two or more	FY	0.32	0.08	0.08	0.08
classes together ^b	SR	0.29	0.25	0.25	0.26

^{*} The 2003 score is not comparable to subsequent years because the coding scheme changed in comparison to later years.

The individual items show small participation gains in practicum/ internships and community services among seniors, but several of the other items remained stable such as study aboard, foreign language, and independent studies. The item "Campus environment encouraging contact among students from different economic, social, and racial or ethnic backgrounds," shows consistent increases among Chapman freshmen and seniors between 2005 and 2011.

Supportive Campus Environment

The Supportive Campus Environment (SCE) benchmark consists of six items measuring student emotional support from faculty and staff. According to NSSE, "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." The freshman SCE benchmark score was stable between 2009 and 2011, but the senior SCE benchmark score increased 1.4 points between 2009 and 2011. The benchmark scores for the Master's group slightly increased between 2009 and 2011, but remained below Chapman's scores.

Supportive Campus Environment(SCE) Items

		2003	2005	2009	2011
Chanman SCE Panahmank	FY	60.2	60.8	64.0	64.0
Chapman SCE Benchmark	SR	63.5	57.4	59.6	61.0
Master's Group SCE Benchmark		61.1	60.1	61.8	62.7
waster's Group SCE Benchmark	SR	58.6	58.0	58.8	59.5
Campus environment provides academic	FY	3.16	3.16	3.22	3.27
support ^a	SR	3.12	2.97	3.10	3.12
Campus environment helps you cope with non-academic responsibilities (work, family,	FY	1.91	2.08	2.35	2.26
etc.) ^a	SR	2.08	1.88	1.95	2.05
Campus environment provides the support	FY	2.30	2.42	2.58	2.59
you need to thrive socially ^a	SR	2.27	2.23	2.37	2.42
Quality of relationships with other students ^b	FY	5.48 5.47	5.47	5.47	5.50
Quality of relationships with other students	SR	5.84	5.47	5.38	5.55
Quality of relationships with	FY	5.53	5.53	5.58	5.49
faculty members ^b	SR	6.07	5.71	5.72	5.65
Quality of relationships with	FY	4.88	4.53	4.71	4.80
administrative personnel and offices ^b	SR	5.02	4.27	4.47	4.59

^aTo what extent does your institution emphasize each of the following?

The increase in the benchmark score among Chapman seniors corresponds with an increase in several items especially the "quality of relationships with other students," and "quality of relationships with administrative personal and offices," items. Among freshmen, the "Campus environment helps you cope with your non-academic responsibilities," and "Quality of relationships with faculty members," items declined between 2009 and 2011. But the several items underwent small gains especially the "Quality of relationships with administrative personnel and offices," item.

Active and Collaborative Learning

The Active and Collaborative Learning (ACL) benchmark consists of seven items measuring student reported participation in learning activities requiring collaboration. According to the NSSE, "Students learn more when they are intensely involved in their education and are 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." The ACL benchmark scores increased about a point for both Chapman freshmen and seniors between 2009 and 2011. These increases allowed the Chapman benchmark scores to remain slightly ahead of the Master's group for freshmen and seniors.

^aAbout how many hours do you spend in a typical 7-day week doing: 1) 0, 2) 1-5, 3) 6-10, 4) 11-15, 5) 16-20, 6) 21-25, 7) 26-30, 8) More than 30.

 $^{^{\}mathrm{b}}$ Which of the following have you done or do you plan to do before you graduate from your institution? 0) Plan to do, Do not plan to, Have not decided 1) Done.

During the current school year, how often have you done each of the following?

¹⁾ Very often, 2) Often, 3) Sometimes, 4) Never.

^dTo what extent does your institution emphasize each of the following? 1) Very much, 2) Quite a bit, 3) Some, 4) Very little.

¹⁾ Very much, 2) Quite a bit, 3) Some, 4) Very little.

^bMark the box that best represents the quality of your relationships with people at your institution. 1) Unfriendly, Unsupportive, Sense of Alienation to 7) Friendly, Supportive, Sense of belonging.

Active and Collaborative Learning (ACL) Items

		2003	2005	2009	2011
Chapman ACL Benchmark	FY	43.2	45.8	45.2	46.7
Chapman ACD Benefiliark	SR	53.1	54.4	53.8	54.2
Master's Group ACL Benchmark	FY	41.1	42.5	43.3	43.3
Waster's Group ACL Benchmark	SR	50.2	52.2	51.5	52.1
Asked questions in class or contributed to	FY	3.06	3.02	2.94	2.93
class discussions ^a	SR	3.19	3.29	3.24	3.26
Made a class presentation ^a	FY	2.34	2.40	2.41	2.48
wade a class presentation	SR	2.94	3.01	3.02	3.05
Worked with other students on projects	FY	2.23	2.46	2.28	2.38
during class ^a	SR	2.58	2.60	2.49	2.51
Worked with classmates outside of class ^a to	FY	2.46	2.57	2.67	2.77
prepare class assignments ^a	SR	2.76	2.89	2.93	2.96
Tutored or taught other students (paid or	FY	1.77	1.75	1.73	1.67
voluntary) ^a	SR	2.01	1.95	1.92	1.84
Participated in a community-based project (e.g., service learning) as part of a regular	FY	1.36	1.38	1.42	1.50
course ^a	SR	1.68	1.61	1.62	1.68
Discussed ideas from your reasings or class with others outside of class (students, family		2.87	2.91	2.94	2.93
members, co-workers, etc.) ^a	SR	2.98	3.03	3.03	2.97

^{*}During the current school year, about how often have you done each of the following?

1) Very much, 2) Quite a bit, 3) Some, 4) Very little.

Among Chapman freshmen, several items showed small and steady gains among freshmen such as making a class presentation, working with classmates outside of class, and participating in community-based projects. In contrast, the tutored or taught other students item slightly decreased steadily among seniors.

CONCLUSION

The availability of 2011 NSSE data allows the opportunity to detect any changes in the trends found in the previous NSSE longitudinal report.ⁱⁱⁱ In that report, the following areas of strength were identified using NSSE data from 2003 to 2009.

- An increase in the Enriching Educational Experiences benchmark among seniors.
- An increase in the Supportive Campus Environment and Student-Faculty Interaction benchmarks among freshmen.
- An increase in co-curricular activities and study abroad participation.

The 2011 NSSE results show continued growth in the Enriching Educational Experiences benchmark scores among seniors from 50.3 in 2009 to 52.2 in 2011. But the Student-Faculty Interaction benchmark score underwent a small decline for both freshmen and seniors. The Supportive Campus Environment benchmark score remained exactly the same between 2009 and 2011 for freshmen but it increased from 59.6 to 61.0 for seniors. The level of reported participation in study abroad programs remained consistent between 2009 and 2011 at about 35%. In comparison, the percentage for the Master's group was 11% in 2011. Lastly, Chapman University outperformed the Master's group in many of the surveyed items and constructed benchmarks in previous years and this trend continued in 2011.

In terms of areas of improvement, the results from the previous NSSE longitudinal report noted the following areas.

- Freshmen and seniors reported writing less between 2003 and 2009 as measured by short (4 pages or less), mid-length (between 5 and 19 pages), and long papers (20 pages or longer).
- Freshmen reported that their course work emphasized less synthetic, evaluative and application skills over time.

The mean scores do not show much of a change between 2009 and 2011 for the writing items. Freshmen and seniors are writing about the same amount today as they were two years ago. And the items about synthetic, evaluative, and application skills show that Chapman freshmen reported similar scores to 2009. The main concern from the 2011 findings is the decline in the Student-Faculty Interaction benchmark score among both freshmen and seniors. This decline is notable since personalized education is a hallmark of a student's education at Chapman University.

In looking at the individual item results to find possible areas to target in order to improve the Student-Faculty Interaction benchmark score, the "talking about career plans with a faculty member," item declined among both seniors and freshmen. Among seniors, the "discussed grades or assignments with an instructor," and "discussed ideas from your readings or classes with faculty members outside of class," items also slightly declined. Encouraging faculty to discuss career plans with students and meeting with students more outside the classroom could help the Student-Faculty Interaction benchmark score. That said, Chapman's Student-Faculty Interaction benchmark score is better than the selected peer group score.iv And other measures of personalized education remain strong. For example, about a quarter of seniors have worked on a research project with a faculty member and completed an independent study and both of these percentages are higher than the Master's group.

In order to produce comparable statistics across years, weighting procedures were applied to all three data sets as recommended by the Center for Postsecondary Research. The weights compensate for non-response bias among other issues.

ⁱⁱ In 2003, NSSE respondents could choose multiple racial categories. After 2003, respondents were forced to choose one category. Also, "I prefer not to respond" and "multi-racial" options were added and Hispanic respondents were given more ethnic choices (e.g., Mexican, Puerto Rican) in 2005 and onwards. In the CU population, the international category was eliminated in 2011. Also, the Asian category includes Pacific Islanders and the unknown category includes multi-racial students and non-resident aliens.

iii See CIRO Research in Brief, Vol. 6, Number 19.

ivSee CIRO Research in Brief, Vol. 8, Number 24.

Prepared by: Chapman's Institutional Research Office (CIRO), March 2012 www.chapman.edu/Chancellor/ciro