

# Hobart and William Smith Colleges

Benchmark Comparisons August 2008



## **Interpreting the Benchmark Comparisons Report**

To focus discussions about the importance of student engagement and guide institutional improvement efforts, NSSE created five Benchmarks of Effective Educational Practice: Level of Academic Challenge, Active and Collaborative Learning, Student-Faculty Interaction, Enriching Educational Experiences, and Supportive Campus Environment. This Benchmark Comparisons Report compares the performance of your institution with your selected peers or consortium. In addition, page 9 provides two other comparisons between your school and (a) above-average institutions with benchmarks in the top 50% of all NSSE institutions and (b) high-performing institutions with benchmarks in the top 10% of all NSSE institutions. These displays allow you to determine if the engagement of your typical student differs in a statistically significant, meaningful way from the average student in these comparison groups. More detailed information about how benchmarks are created can be found on the NSSE Web site at www.nsse.iub.edu/2008 Institutional Report/.

#### **Statistical Significance** Benchmarks with mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks, denoting one of three Class and Sample significance levels (p<.05, p<.01, and p<.001). The smaller the significance level, Means are reported for the smaller the likelihood that the difference is due to chance. Please note that Effect Sizea first-year students and statistical significance does not guarantee that the result is substantive or Effect size indicates the seniors. Institutionimportant. Large sample sizes (as with the NSSE project) tend to produce more practical significance of the reported class ranks statistically significant results even though the magnitude of mean differences may mean difference. It is are used. All randomly be inconsequential. It is recommended to consult effect sizes to judge the practical calculated by dividing the selected students are meaning of the results. mean difference by the pooled included in these standard deviation. In practice, analyses. Students in an effect size of .2 is often targeted or locally considered small, .5 moderate, administered Level of Academic Challenge (LAC) and .8 large. A positive sign oversamples are not Benchmark Comparisons indicates that your included. institution's mean was greater, thus showing an affirmative NSSEville State Mid East Public result for the institution. A First-Year .02 00 negative sign indicates the -.02 51.7 55.7 55.2 55.6 55.1 institution lags behind the comparison group, suggesting that the student behavior or institutional practice represented by the item may Mean warrant attention. The mean is the weighted arithmetic average of student level benchmark scores. NSSEville State 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.

Number of assigned textbooks, books, or book-length packs of course readings

Number of written papers or reports of 20 pages or more; number of written papers or reports of between 5 and 19 pages; and number of written papers or reports of fewer than 5 pages

A visual display of first-year and senior mean benchmark scores for your institution and your selected peer or consortium groups.

A description of the benchmark and the individual items used in its creation are summarized.

Preparing for class (studying, reading, writing, rehearsing, etc. related to academic program)

Coursework emphasizing analysis of the basic elements of an idea, experience or theory

- Coursework emphasizing synthesis and organizing of ideas, inform

**Bar Charts** 

Benchmark **Description & Survey** Items

can relationships

Coursework emphasizing the making of judgments about the value of information, arguments, or methods.

Coursework emphasizing application of 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 emphasizing time studying and on academic work

<sup>&</sup>lt;sup>a</sup> See the NSSE Effect Size Interpretation Guide at www.nsse.iub.edu/html/effect size guide.cfm for additional information.

## Level of Academic Challenge (LAC)

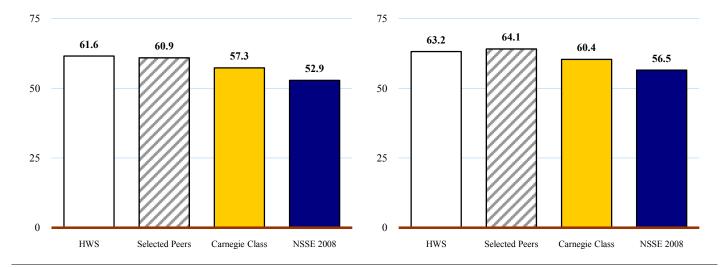
### **Benchmark Comparisons**

HWS compared with:

	HWS	Selected	Peers	Carnegi	ie Clas	SS	NSSE	2008	
			Effect			Effect			Effect
Class	Mean <sup>a</sup>	Mean <sup>a</sup> Sig	b Size c	Mean a	Sig b	Size c	Mean <sup>a</sup>	Sig b	Size c
First-Year	61.6	60.9	.05	57.3	***	.33	52.9	***	.65
Senior	63.2	64.1	08	60.4	**	.20	56.5	***	.47

First-Year Senior

100



#### 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.

- 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 <u>20 pages or more</u>; number of written papers or reports of <u>between 5 and 19 pages</u>; and number of written papers or reports of <u>fewer than 5 pages</u>
- 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.

weighted by genuci, emonment status, and institutional size.

<sup>&</sup>lt;sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>&</sup>lt;sup>c</sup> Mean difference divided by the pooled standard deviation.

## Active and Collaborative Learning (ACL)

#### **Benchmark Comparisons**

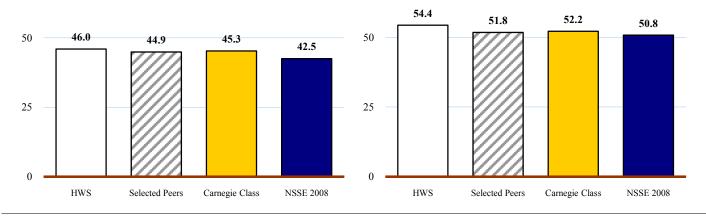
HWS compared with:

	HWS	<b>Selected Peers</b>	Carnegie	Class	NSSE	2008	8		
		Effect		Effect			Effect		
Class	Mean <sup>a</sup>	Mean <sup>a</sup> Sig <sup>b</sup> Size <sup>c</sup>	Mean <sup>a</sup>	Sig <sup>b</sup> Size <sup>c</sup>	Mean <sup>a</sup>	Sig b	Size c		
First-Year	46.0	44.9 .07	45.3	.04	42.5	***	.20		
Senior	54.4	51.8 * .17	52.2	.13	50.8	**	.20		

First-Year Senior

100

75 — 75



#### 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.)

weighted by genuci, embinient status, and institutional size.

<sup>&</sup>lt;sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>&</sup>lt;sup>c</sup> Mean difference divided by the pooled standard deviation.

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

#### **Benchmark Comparisons**

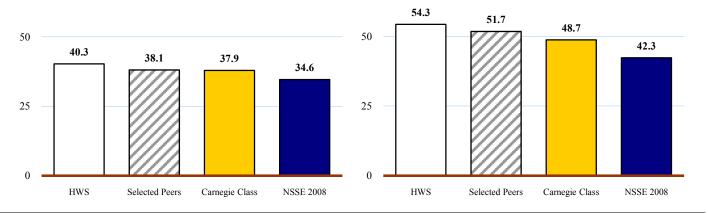
HWS compared with:

	HWS	Selected	Peers	Carneg	ie Clas	SS	NSSE	2008	
			Effect			Effect			Effect
Class	Mean <sup>a</sup>	Mean <sup>a</sup> Sig	b Size c	Mean a	Sig b	Size c	Mean a	Sig b	Size c
First-Year	40.3	38.1	.13	37.9	*	.13	34.6	***	.30
Senior	54.3	51.7	.12	48.7	***	.26	42.3	***	.57

First-Year Senior







#### 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

weighted by genuci, embinient status, and institutional size.

<sup>&</sup>lt;sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>&</sup>lt;sup>c</sup> Mean difference divided by the pooled standard deviation.

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

### **Benchmark Comparisons**

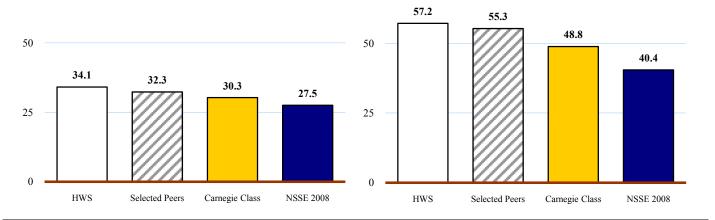
HWS compared with:

	HWS	Select	ted Peers	Carnegi	ie Clas	SS	NSSE	2008	
			Effect			Effect			Effect
Class	Mean <sup>a</sup>	Mean a	Sig b Size c	Mean a	Sig b	Size c	Mean a	Sig b	Size c
First-Year	34.1	32.3	* .14	30.3	***	.29	27.5	***	.48
Senior	57.2	55.3	.11	48.8	***	.44	40.4	***	.92

First-Year Senior







#### 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.

- Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, etc.)
- Practicum, internship, field experience, co-op experience, or clinical assignment
- Community service or volunteer work
- Foreign language coursework / 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., listsery, 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

weighted by genuci, embinient status, and institutional size.

<sup>&</sup>lt;sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>&</sup>lt;sup>c</sup> Mean difference divided by the pooled standard deviation.

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

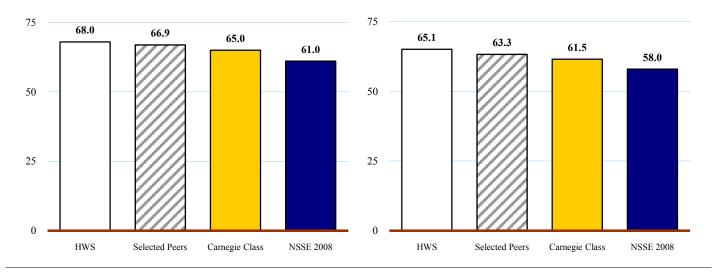
#### **Benchmark Comparisons**

HWS compared with:

	HWS	Selected	Peers	Carneg	ie Clas	SS	NSSE 2008			
			Effect			Effect			Effect	
Class	Mean <sup>a</sup>	Mean <sup>a</sup> Sig	b Size c	Mean a	Sig b	Size c	Mean a	Sig b	Size c	
First-Year	68.0	66.9	.06	65.0	*	.16	61.0	***	.37	
Senior	65.1	63.3	.11	61.5	**	.19	58.0	***	.37	

First-Year Senior

100



#### 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

weighted by genuci, embinient status, and institutional size.

<sup>&</sup>lt;sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>&</sup>lt;sup>c</sup> Mean difference divided by the pooled standard deviation.



## NSSE 2008 Benchmark Comparisons With Highly Engaging Institutions

### **Interpreting the Top 10% and Top 50% Comparisons**

This section of the NSSE Benchmark Comparisons report allows you to estimate the performance of your average student in relation to the average student attending two different institutional peer groups identified by NSSE for their high levels of student engagement: (a) those with benchmark scores placing them in the top 50% of all NSSE schools in 2008 and (b) those with benchmark scores in the top 10% for 2008. These comparisons allow an institution to determine if their engagement of their students differs in significant, meaningful ways from these high performing peer groups.

### **Example**

		NSSEville State		NSSE Top :		NSSE 2008 Top 10%				
		Mean	Mean	Sig	Effect size	Mean	Sig	Effect size		
	LAC	57.1	55.8	*	.10	60.5	***	-0.28		
ear	ACL	50.3	45.8	***	.28	50.7		-0.02		
7	SFI	37.3	37.2		.01	42.0	***	-0.24		
First	EEE	21.8	30.0	***	63	34.4	***	-0.98		
<u> </u>	SCE	60.9	64.7	***	21	69.7	***	-0.49		

#### NSSEville State CAN conclude...

- ◆ The average score for NSSEville State first-year students is slightly above (i.e., small positive effect size) that of the average student attending NSSE 2008 schools that scored in the top 50% on Level of Academic Challenge (LAC).
- The average NSSEville State first-year student is as engaged (i.e., not significantly different) as the average student attending NSSE 2008 schools that scored in the top 10% on Active and Collaborative Learning (ACL).
- It is *likely* that NSSEville State is in the top 50% of all NSSE 2008 schools for first-year students on Level of Academic Challenge (LAC) and Active and Collaborative Learning (ACL).<sup>a,b</sup>

#### NSSEville State CANNOT conclude<sup>a</sup>...

- NSSEville State is in the top half of all schools on the Student-Faculty Interaction (SFI) benchmark for first-year students.<sup>b</sup>
- NSSEville State is a "top ten percent" institution on Active and Collaborative Learning (ACL) for first-year students.<sup>b</sup>

For additional information on how to understand and use the Top 50% and Top 10% section of the benchmark report, see www.nsse.iub.edu/2008\_Institutional\_Report/.

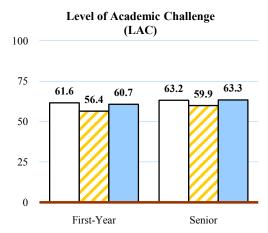
- <sup>a</sup> Precision-weighted means (produced by Hierarchical Linear Modeling) were used to determine the top 50% and top 10% institutions for each benchmark, separately for first-year and senior students. Using this method, benchmark scores of institutions with relatively large standard errors are adjusted substantially toward the grand mean of all students, while those with smaller standard errors receive smaller corrections. Thus, schools with less stable data, though they may have high scores, may not be identified among the top scorers.
- <sup>b</sup> NSSE does not publish the names of the top 50% and top 10% institutions because of our commitment not to release individual school results and because our policy against the ranking of institutions.



## **NSSE 2008 Benchmark Comparisons** With Highly Engaging Institutions **Hobart and William Smith Colleges**

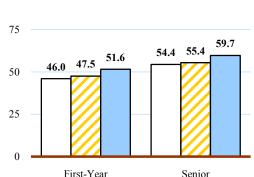
	SCE 68.0 LAC 63.2 ACL 54.4 SFI 54.3	HWS compared with										
		HWS		SSE 2 Top 50		NSSE 2008 Top 10%						
			Mean a	Sig b	Effect size c	* .		Effect size c				
	LAC	61.6	56.4	***	.40	60.7		.07				
First-Year	ACL	46.0	47.5		09	51.6	***	31				
t-Y	SFI	40.3	39.7		.03	43.6	**	16				
Firs	EEE	34.1	30.3	***	.27	33.0		.08				
	SCE	68.0	65.8		.12	68.5		03				
-	LAC	63.2	59.9	***	.24	63.3		01				
Ä	ACL	54.4	55.4		06	59.7	***	31				
Senior	SFI	54.3	49.3	**	.23	55.3		05				
Š	EEE	57.2	47.3	***	.56	54.3	*	.17				
	SCE	65.1	63.5		.09	66.7		09				

100



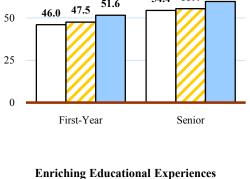


This display compares your students with those attending schools that scored in the top 50% and top 10% of all NSSE 2008 institutions on a particular benchmark.

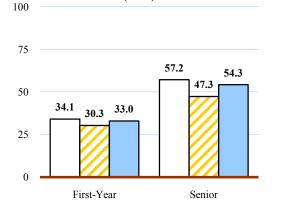


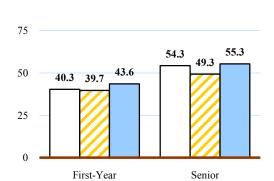
**Active and Collaborative Learning** 

(ACL)



(EEE)

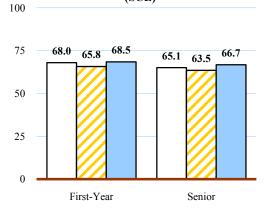




**Student-Faculty Interaction** 

(SFI)

100



**Supportive Campus Environment** (SCE)

<sup>&</sup>lt;sup>a</sup> Weighted by gender, enrollment status, and institutional size.

<sup>&</sup>lt;sup>b</sup> \* p<.05 \*\* p<.01 \*\*\*p<.001 (2-tailed).

<sup>&</sup>lt;sup>c</sup> Mean difference divided by the pooled standard deviation.



## NSSE 2008 Benchmark Comparisons Detailed Statistics and Effect Sizes <sup>a</sup> Hobart and William Smith Colleges

## First-Year Students

		Me	an Stati	stics		Distrib	ution S	tatistic	s	Co	•\$		
		1110	un stati	Stics			ercentile			Deg. of	Mean	on Statistic	Effect
		Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Freedom e	Diff.	Sig. f	size <sup>g</sup>
LEVEL OF ACADEMIC CH	ALLENGE (L	AC)											
HWS	(N = 260)	61.6	11.8	.7	42	53	62	69	80				
Selected Peers		60.9	12.1	.3	40	53	61	70	80	2,356	.6	.431	.05
Carnegie Class		57.3	13.1	.1	35	49	57	67	78	265	4.2	.000	.33
NSSE 2008		52.9	13.5	.0	31	44	53	62	75	259	8.7	.000	.65
Top 50%		56.4	13.1	.0	35	48	56	66	77	260	5.2	.000	.40
Top 10%		60.7	12.8	.1	38	52	61	70	80	19,716	.9	.253	.07
ACTIVE AND COLLABORA	ATIVE LEARN	NING (AC	CL)										
HWS	(N = 278)	46.0	14.9	.9	24	38	43	52	76				
Selected Peers		44.9	15.1	.3	24	33	43	52	71	2,555	1.1	.266	.07
Carnegie Class		45.3	15.9	.1	24	33	43	57	71	283	.7	.447	.04
NSSE 2008		42.5	16.9	.0	19	29	42	52	71	278	3.4	.000	.20
Top 50%		47.5	17.0	.1	24	33	48	57	76	279	-1.6	.080	09
Top 10%		51.6	17.9	.1	24	38	50	62	83	287	-5.6	.000	31
STUDENT-FACULTY INTE	RACTION (SE	FI)											
HWS	(N = 260)	40.3	17.9	1.1	17	28	39	50	72				
Selected Peers		38.1	17.5	.4	13	28	33	50	72	2,364	2.2	.055	.13
Carnegie Class		37.9	18.3	.1	11	22	33	50	72	27,813	2.4	.035	.13
NSSE 2008		34.6	18.7	.0	11	22	33	44	72	311,730	5.7	.000	.30
Top 50%		39.7	19.4	.1	11	28	39	50	78	261	.6	.604	.03
Top 10%		43.6	21.2	.2	13	28	39	56	83	270	-3.3	.004	16
ENRICHING EDUCATIONA	AL EXPERIEN	ICES (EE	EE)										
HWS	(N = 253)	34.1	13.1	.8	14	26	34	41	55				
Selected Peers		32.3	12.6	.3	13	23	31	40	52	2,291	1.8	.036	.14
Carnegie Class		30.3	13.2	.1	11	21	29	38	52	27,070	3.8	.000	.29
NSSE 2008		27.5	13.6	.0	8	18	26	36	51	300,219	6.6	.000	.48
Top 50%		30.3	13.7	.0	11	21	29	38	54	136,286	3.8	.000	.27
Top 10%		33.0	14.3	.1	11	23	32	42	58	257	1.1	.179	.08
SUPPORTIVE CAMPUS EN	VIRONMENT	(SCE)											
HWS	(N = 247)	68.0	17.4	1.1	39	56	69	81	97				
Selected Peers		66.9	17.3	.4	36	56	67	81	94	2,246	1.1	.344	.06
Carnegie Class		65.0	18.4	.1	33	53	67	78	94	26,639	3.0	.010	.16
NSSE 2008		61.0	18.9	.0	30	47	61	75	92	292,958	6.9	.000	.37
Top 50%		65.8	18.4	.1	33	53	67	78	94	87,820	2.2	.061	.12
Top 10%		68.5	18.4	.1	36	56	69	81	97	20,472	5	.687	03

<sup>&</sup>lt;sup>a</sup> All statistics are weighted by gender, enrollment status, and institutional size.

<sup>&</sup>lt;sup>b</sup> Standard Deviation is a measure of the average amount the individual scores deviate from the mean of all the scores in the distribution.

<sup>&</sup>lt;sup>c</sup> The 95% confidence interval for the population mean it is equal to the sample mean plus/minus the product of 1.96 times the standard error of the mean.

<sup>&</sup>lt;sup>d</sup> A percentile is the point in the distribution of student-level benchmark scores at or below which a given percentage of benchmark scores fall.

e Degrees of freedom used to compute the t-tests. Values vary for the total Ns due to weighting and the equal variance assumption.

f Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

g Effect size is calculated by subtracting the comparison group mean from the school mean, and dividing the result by the pooled standard deviation.



## NSSE 2008 Benchmark Comparisons Detailed Statistics and Effect Sizes <sup>a</sup> Hobart and William Smith Colleges

#### **Seniors**

		Mea	an Stati	stics	Reference Group Distribution Statistics Comparison Statistic					:s			
	-						ercentile			Deg. of	Mean		Effect
		Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Freedom e	Diff.	Sig. f	size <sup>g</sup>
LEVEL OF ACADEMIC CH	ALLENGE (LA	C)											
HWS	(N = 196)	63.2	13.3	.9	41	55	64	71	84				
Selected Peers		64.1	12.5	.3	43	56	65	73	83	2,684	9	.310	08
Carnegie Class		60.4	13.9	.1	37	51	61	70	82	32,801	2.8	.005	.20
NSSE 2008		56.5	14.3	.0	33	47	57	67	79	424,317	6.6	.000	.47
Top 50%		59.9	13.8	.0	37	51	60	70	81	132,409	3.3	.001	.24
Top 10%		63.3	13.5	.1	40	54	64	73	84	26,019	2	.863	01
ACTIVE AND COLLABORA	ATIVE LEARN	ING (AC	CL)										
HWS	(N = 204)	54.4	15.8	1.1	29	43	52	67	83				
Selected Peers		51.8	15.5	.3	29	43	52	62	81	2,823	2.6	.021	.17
Carnegie Class		52.2	17.0	.1	28	39	52	62	81	34,080	2.2	.067	.13
NSSE 2008		50.8	17.6	.0	24	38	48	62	81	448,182	3.6	.004	.20
Top 50%		55.4	17.2	.0	29	43	56	67	86	137,904	-1.0	.388	06
Top 10%		59.7	17.3	.1	33	48	57	71	90	27,827	-5.3	.000	31
STUDENT-FACULTY INTE	RACTION (SFI	1)											
HWS	(N = 197)	54.3	22.1	1.6	22	39	50	72	94				
Selected Peers		51.7	21.2	.4	22	33	50	67	89	2,698	2.5	.107	.12
Carnegie Class		48.7	21.9	.1	17	33	44	61	89	32,908	5.6	.000	.26
NSSE 2008		42.3	21.2	.0	11	28	39	56	83	426,444	12.0	.000	.57
Top 50%		49.3	21.5	.1	17	33	47	67	89	100,809	5.0	.001	.23
Top 10%		55.3	21.7	.2	22	39	56	72	94	14,109	-1.0	.513	05
ENRICHING EDUCATIONA	AL EXPERIENC	CES (EE	EE)										
HWS	(N = 193)	57.2	17.1	1.2	28	46	58	70	84				
Selected Peers		55.3	16.3	.3	26	46	56	67	82	2,627	1.9	.127	.11
Carnegie Class		48.8	19.0	.1	17	36	50	62	79	195	8.3	.000	.44
NSSE 2008		40.4	18.2	.0	12	27	40	53	72	415,629	16.7	.000	.92
Top 50%		47.3	17.7	.0	18	35	47	60	76	142,301	9.9	.000	.56
Top 10%		54.3	17.3	.1	22	43	55	67	81	21,943	2.9	.022	.17
SUPPORTIVE CAMPUS EN	VIRONMENT (	(SCE)											
HWS	(N = 193)	65.1	17.0	1.2	36	53	67	75	92				
Selected Peers		63.3	16.7	.3	36	53	64	75	92	2,596	1.8	.143	.11
Carnegie Class		61.5	18.6	.1	31	50	61	75	92	31,884	3.6	.008	.19
NSSE 2008		58.0	19.4	.0	25	44	58	72	89	192	7.1	.000	.37
Top 50%		63.5	18.9	.1	31	50	64	78	94	118,790	1.6	.238	.09
Top 10%	-	66.7	18.5	.1	33	56	67	81	97	27,854	-1.6	.219	09

<sup>&</sup>lt;sup>a</sup> All statistics are weighted by gender, enrollment status, and institutional size.

<sup>&</sup>lt;sup>b</sup> Standard Deviation is a measure of the average amount the individual scores deviate from the mean of all the scores in the distribution.

<sup>&</sup>lt;sup>c</sup> The 95% confidence interval for the population mean it is equal to the sample mean plus/minus the product of 1.96 times the standard error of the mean.

<sup>&</sup>lt;sup>d</sup> A percentile is the point in the distribution of student-level benchmark scores at or below which a given percentage of benchmark scores fall.

e Degrees of freedom used to compute the t-tests. Values vary for the total Ns due to weighting and the equal variance assumption.

f Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.

g Effect size is calculated by subtracting the comparison group mean from the school mean, and dividing the result by the pooled standard deviation.