# Institutional Benchmark Report November 2002

University of Rhode Island





#### Introduction

The National Survey of Student Engagement (NSSE) annually assesses the extent to which undergraduate students are involved in educational practices empirically linked to high levels of learning and development. In an effort to make it easier for people on and off campus to more easily talk about student engagement and the importance to student learning, collegiate quality, and institutional improvement, NSSE created the National Benchmarks of Effective Educational Practice. They are: 1) level of academic challenge, 2) active and collaborative learning, 3) student-faculty interactions, 4) enriching educational experiences, and 5) supportive campus environment.

The benchmarks represent clusters of items on the survey and are expressed in 100-point scales. Each year, NSSE calculates benchmark scores to monitor performance at the institutional, sector, and national level. This year's analysis is based on more than 135,000 randomly selected students at 613 four-year colleges and universities that participated in 2000, 2001, and 2002. The students represent a broad cross-section of first-year and senior students from every region of the country. The institutions are similar in most respects to the universe of four-year schools. More detailed information about the benchmarks can be found in the annual report that accompanies this mailing and on the NSSE website at www.iub.edu/~nsse.

#### **Benchmark Report**

The Benchmark Report presents your institution's benchmark scores and compares them to schools in your Carnegie Classification, and the NSSE national norms. In addition, it provides summary statistics, a decile chart that gauges your institution's performance versus others on the benchmarks, and your Institutional Engagement Index. This index represents the degree to which your students do more or less than expected in terms of their engagement in the five areas of effective educational practice after adjusting for the types of students that attend your school and other institutional characteristics.

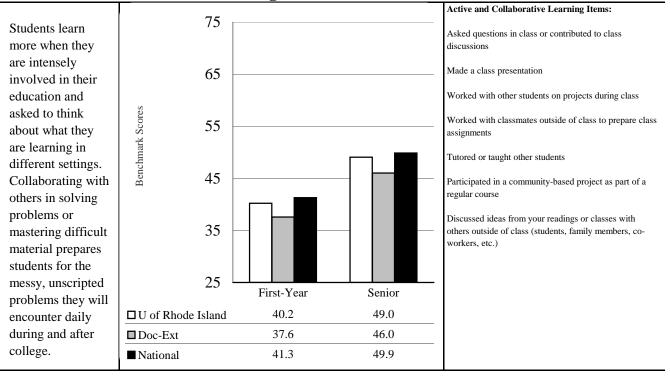
NSSE and the National Benchmarks of Effective Educational Practice provide a new way to look at and talk about teaching and learning. Thus, they are intended to help stimulate conversations on campus and may help determine whether student behavior and institutional practices are headed in the right direction.

				Level of Academic Challenge Items:
Challenging intellectual and	75			Preparing for class (studying, reading, writing, rehearsing, etc. related to academic program)
creative work is central to student	65			Number of assigned textbooks, books, or book-length packs of course readings
learning and collegiate quality. Colleges and	sau SS -			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
universities	aark			Coursework emphasizing analysis of the basic elements
promote high levels of student achievement by	Benchmark Scores Benchmark Scores Benchmark Scores			of an idea, experience or theory Coursework emphasizing synthesis and organizing of ideas, information, or experiences into new, more
emphasizing the importance of academic effort	35 -			complex interpretations and relationships Coursework emphasizing the making of judgments about the value of information, arguments, or methods
and setting high	25			Coursework emphasizing application of theories or concepts to practical problems or in new situations
expectations for student	23	First-Year	Senior	Working harder than you thought you could to meet an
performance	□ U of Rhode Island	49.1	55.0	instructor's standards or expectations Campus environment emphasizing time studying and on
1	Doc-Ext	51.8	54.9	academic work
	■ National	53.4	57.0	

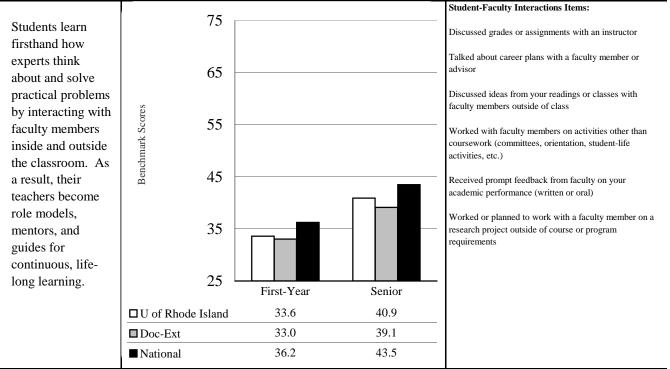
#### Level of Academic Challenge



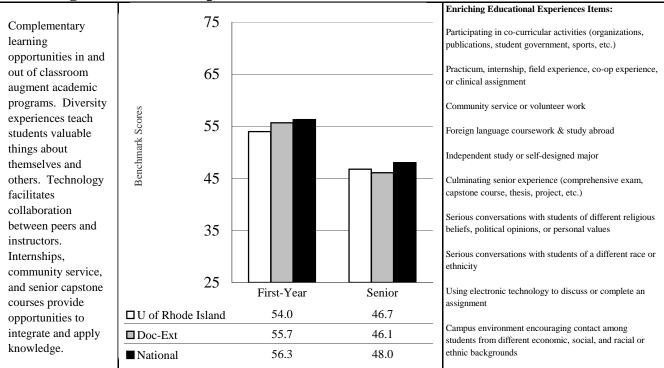
#### **Active and Collaborative Learning**



### **Student-Faculty Interactions**

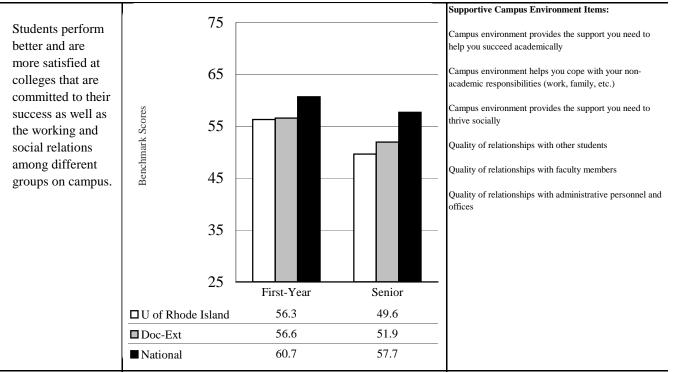






#### **Enriching Educational Experiences**

### **Supportive Campus Environment**





First-Year											
	U of Rhode Island	Comparise	Comparison Group Statistics								
Benchmark	Benchmark Score		Doc-Ext	National							
		Benchmark Score	51.8	53.4							
Level of Academic	49.1	Score Difference	-2.7	-4.3							
Challenge	77.1	Standard Deviation	3.4	4.4							
		Standard Score	-0.8	-1.0							
Active and		Benchmark Score	Standard Score -0.8   Benchmark Score 37.6   Score Difference 2.6   Standard Deviation 2.7   Standard Score 1.0   Benchmark Score 33.0								
Collaborative	40.2	Score Difference	2.6	-1.1							
Learning	40.2	Standard Deviation	2.7	4.6							
Learning		Standard Score	1.0	-0.2							
		Benchmark Score	33.0	36.2							
Student-Faculty	33.6	Score Difference	0.6	-2.6							
Interactions	55.0	Standard Deviation	3.4	5.5							
		Standard Score	0.2	-0.5							
Enriching		Benchmark Score	55.7	56.3							
Educational	54.0	Score Difference	-1.7	-2.3							
Experiences	54.0	Standard Deviation	5.0	7.5							
Ехрепенсез		Standard Score	-0.3	-0.3							
		Benchmark Score	56.6	60.7							
Supportive Campus	56.3	Score Difference	-0.3	-4.4							
Environment	50.5	Standard Deviation	3.9	5.6							
		Standard Score	-0.1	-0.8							
		Number of Institutions	85	610							

Senior										
Comparison Group Statistics										
	U of Rhode Island									
Benchmark	Benchmark Score		Doc-Ext	National						
		Benchmark Score	54.9	57.0						
Level of Academic	55.0	Score Difference	0.1	-2.0						
Challenge	55.0	Standard Deviation	2.4	3.9						
		Standard Score	0.0	-0.5						
Active and		Benchmark Score	46.0	49.9						
Collaborative	49.0	Score Difference	3.0	-0.8						
Learning	49.0	Standard Deviation	2.6	4.3						
Learning		Standard Score	Doc-Ext     Doc-Ext       54.9     0.1       2.4     0.0       46.0     3.0	-0.2						
		Benchmark Score	39.1	43.5						
Student-Faculty	40.9	Score Difference	1.8	-2.6						
Interactions	40.7	Standard Deviation	3.4	6.7						
		Standard Score	0.5	-0.4						
Enriching		Benchmark Score	46.1	48.0						
Educational	46.7	Score Difference	0.7	-1.2						
	40.7	Standard Deviation	4.1	7.2						
Experiences		Standard Score	0.2	-0.2						
		Benchmark Score	51.9	57.7						
Supportive Campus	49.6	Score Difference	-2.3	-8.1						
Environment	49.0	Standard Deviation	4.4	6.3						
		Standard Score	-0.5	-1.3						
		Number of Institutions	85	613						

**Explanation of Statistics** 

Benchmark Score: The institutional benchmark score is the weighted arithmetic average (mean) of the corresponding survey items, calculated by dividing the sum of values for each item by the total number of students responding to that item. Each benchmark was put on a 100-point scale. \_ Comparison group benchmark scores are the average of all institutional benchmark scores within the group.

Score Difference: The result of subtracting the comparison group score (Carnegie Classification or national) from your institution's score on each benchmark.

Standard Deviation: The average amount each institution's benchmark score deviates from the \_ mean of all benchmark scores in the comparison group. The greater the dispersion of scores the larger the standard deviation.

Standard Score (SS): In statistical terms, this is a z score - the standardized magnitude of the difference between your school's benchmark score and the mean of the comparison group. It is calculated by dividing the score difference by the standard deviation of the comparison group.

Assuming the group means are normally distributed, a SS of 0.5 refers to a benchmark score that is greater than 69% of all comparison group schools, and 1.0 is greater than 84%. Likewise, a negative SS of -0.5 corresponds to a score that is better than 31% of the comparision group, and a -1.0 corresponds to an institution score better than only 16% of the comparison group. A SS of zero indicates that the institution and comparison group benchmark scores are equal, and that the institution's score is higher than roughly 50% of the other schools in the group.

Also note the sign of the SS. A positive sign means that your institution's score was greater than the comparison group average, thus showing an affirmative result for the institution. A negative sign indicates the institution lags behind, suggesting that the student behavior or institutional practice represented by the benchmark may warrant attention.



# 2002 National Benchmark Deciles University of Rhode Island

These tables present the range of institutional scores by decile for the five benchmarks of effective educational practice for both firstyear and senior students. Deciles are percentile scores that divide the range of benchmark scores into ten equal groups. Deciles are listed for both the NSSE national results and for each of the Carnegie Classifications. A percentile is the point in a distribution at or below which a given percentage of institutional benchmark scores fall. For example, the 60th percentile represents the point at or below which 60 percent of the institutional benchmark scores fall for the respective comparison group. To help you gauge your institution's performance relative to the comparison groups, the shaded areas on the national and Carnegie Classification tables indicate the deciles that are less than or equal to your benchmark score. For example, if your benchmark score on Level of Academic Challenge for first-year students is 56.1, then your institution falls within the 70th and 80th percentile range on the national table, and between the 80th and 90th percentiles on the Doc-Extensive table.

	First-Year						Senior															
National	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Level of Academic Challenge	42.4	48.2	49.6	50.8	52.0	52.9	54.1	55.5	57.2	59.6	69.3	48.5	52.4	53.6	54.8	55.5	56.5	57.5	58.7	60.0	62.2	74.0
Active and Collaborative Learning	27.6	35.5	37.1	38.4	39.8	41.2	42.3	43.5	45.3	47.4	59.8	37.9	44.4	46.4	47.5	48.6	49.7	50.7	52.0	53.5	55.4	65.0
Student Interactions With Faculty	23.0	30.2	31.9	33.0	34.4	35.7	36.7	38.4	40.4	43.4	74.0	27.8	35.6	37.7	39.5	40.9	42.6	44.6	46.9	49.7	52.6	66.5
Enriching Educational Experiences	39.9	46.6	49.8	52.0	53.9	56.0	57.8	59.9	62.3	65.9	80.6	30.5	39.8	41.9	43.4	45.0	46.7	49.0	51.8	54.0	57.6	77.6
Supportive Campus Environment	44.5	53.7	55.8	57.5	58.9	60.3	61.9	63.4	65.2	68.0	85.4	41.0	49.8	52.2	53.9	55.6	57.5	59.3	61.3	63.3	65.7	77.5
Doc-Extensive	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Level of Academic Challenge	45.0	48.1	49.1	49.8	50.4	51.3	52.2	53.0	54.5	56.7	62.1	50.2	52.3	52.7	53.4	54.2	54.8	55.2	55.8	57.0	58.1	61.7
Active and Collaborative Learning	31.3	34.3	35.2	36.0	36.7	37.4	38.1	38.8	39.6	41.5	45.6	39.3	42.8	43.9	44.7	45.3	46.1	46.7	47.4	48.1	49.0	53.8
Student Interactions With Faculty	23.4	28.9	30.4	31.5	32.2	32.8	34.0	35.0	35.8	36.7	44.2	30.8	35.3	36.3	37.3	37.7	38.6	39.3	41.1	42.3	44.0	47.8
Enriching Educational Experiences	43.5	50.3	51.9	53.1	53.9	55.5	56.9	58.2	59.8	62.1	71.0	36.3	41.6	42.9	43.8	44.9	45.5	46.4	47.5	49.2	52.6	57.6
Supportive Campus Environment	44.5	51.9	53.7	54.2	55.3	56.5	57.8	58.4	59.4	60.4	72.9	41.0	47.0	49.1	49.9	51.1	51.9	52.7	53.5	55.0	57.4	70.2
Doc-Intensive	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Level of Academic Challenge	46.0	48.2	48.6	50.3	51.1	52.4	53.3	53.7	55.1	57.4	60.3	50.8	51.4	52.7	53.7	54.2	55.2	56.1	56.8	57.5	58.4	61.5
Active and Collaborative Learning	33.1	34.5	36.1	37.2	38.2	39.1	39.8	41.2	42.5	45.2	48.4	39.8	42.8	43.9	45.6	46.6	47.0	47.8	49.0	49.9	52.1	56.0
Student Interactions With Faculty	25.1	29.2	31.0	32.5	33.5	34.1	35.2	36.1	37.6	40.1	43.8	29.6	33.8	36.1	36.8	37.6	39.7	41.4	42.9	43.7	46.4	50.2
Enriching Educational Experiences	42.0	47.1	49.7	50.9	53.0	54.4	56.3	58.4	60.4	63.2	68.9	33.2	40.1	41.0	41.3	42.1	43.6	45.3	46.7	51.1	53.2	61.8
Supportive Campus Environment	49.3	51.4	53.0	55.4	56.0	57.7	58.8	60.2	61.2	62.3	66.1	44.4	47.9	50.7	51.6	52.5	53.4	53.8	55.0	56.2	59.5	65.9
Master's I & II	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Level of Academic Challenge	42.4	46.9	49.2	50.2	51.0	52.1	52.8	54.2	55.5	57.4	62.6	48.5	52.4	53.5	54.3	55.2	55.8	56.7	57.7	58.7	60.5	65.4
Active and Collaborative Learning	30.5	35.2	37.0	38.1	39.6	41.0	42.1	43.2	44.2	46.8	51.0	37.9	45.9	47.3	48.2	49.1	49.9	50.8	51.9	53.5	55.1	59.5
Student Interactions With Faculty	23.0	29.8	31.1	32.2	33.6	34.7	35.9	37.1	39.1	41.1	51.7	27.8	34.6	37.5	39.3	40.6	41.3	43.0	45.2	46.9	49.6	57.1
Enriching Educational Experiences	40.1	46.0	48.3	50.1	52.0	53.8	55.3	57.4	59.5	62.3	71.4	30.5	39.3	40.9	42.5	43.4	44.6	46.3	48.3	51.1	54.0	64.0
Supportive Campus Environment	45.6	53.8		57.3	58.8	60.0		63.1			75.1	41.7	50.7	53.0	54.6	55.7		58.7			64.4	72.3
Bac-Liberal Arts		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Level of Academic Challenge	45.7	51.9	54.1	55.6	56.8	57.9	58.8	59.8	61.2	62.8	69.3	51.9	56.1	58.1	59.2	60.0	61.0	61.9	63.0	64.6	66.0	70.8
Active and Collaborative Learning	35.9	39.7	41.1	41.8	42.6	43.8	44.3	46.0	46.9	48.5	56.6	39.8	46.4	48.4	49.5	50.6	51.7	52.6	53.7		56.7	62.7
Student Interactions With Faculty	31.0	34.2	36.8	38.4		41.2	42.2	43.2	45.6	47.9	63.0	34.1	42.0	46.4	49.1	50.4	51.4	52.8	54.3	55.4	57.5	66.5
Enriching Educational Experiences	44.1	54.8	58.5	60.9	63.8	65.3	67.0	68.4	70.0	73.9	80.6	33.7	46.6	51.0	52.4	54.5	56.5	58.0	60.1	61.9	64.3	77.6
Supportive Campus Environment	52.4		61.0		63.0			66.7		70.6	77.3	50.0				60.6		63.5			66.7	73.2
<b>Bac-General Colleges</b>	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Level of Academic Challenge		48.9		51.8										53.7						60.0		
Active and Collaborative Learning		36.8										40.5				50.4						
Student Interactions With Faculty		31.5														45.1						
Enriching Educational Experiences		44.5														46.9					55.7	
Supportive Campus Environment		56.6														58.8						
	.,.1	20.0	20.0	27.7	51.5	52.7	51	55.1	51.5	57.1	. 0.0	.,.0	55.2	20.1	27.0	20.0	51.1	52.7	5.15	50.0		age 6



This report represents the degree to which your students do more or less than expected in terms of engaging in the five areas of effective educational practice described in the *NSSE 2002 Annual Report* after statistically adjusting for the types of students that attend your school and other institutional characteristics.<sup>1</sup> Thus, the Institutional Engagement Index provides an alternative way to view institutional performance.

The report answers three main questions:

- 1) If your actual benchmark scores were statistically adjusted for the types of students at your school and other institutional characteristics, what would happen to your benchmark scores?
- 2) Is your institution doing better or worse than expected given your student and institutional characteristics?
- 3) How does the difference between your actual and predicted benchmark scores compare to other NSSE colleges and universities?

		Firs	t-Year		Senior					
Benchmark	Actual <sup>2</sup>	Predicted <sup>3</sup>	Residual	Standardized Residual <sup>4</sup>	Actual <sup>2</sup>	Predicted <sup>3</sup>	Residual	Standardized Residual <sup>4</sup>		
Level of Academic Challenge	49.0	50.0	-1.0	-0.3	54.3	53.6	0.7	0.3		
Active and Collaborative Learning	40.2	36.5	3.6	1.1	49.0	47.3	1.7	0.5		
Student-Faculty Interactions	33.6	33.0	0.6	0.1	40.9	39.8	1.1	0.3		
Enriching Educational Experiences	54.0	53.2	0.8	0.2	46.7	44.8	1.9	0.5		
Supportive Campus Environment	56.3	56.3	0.0	0.0	49.6	51.2	-1.6	-0.4		

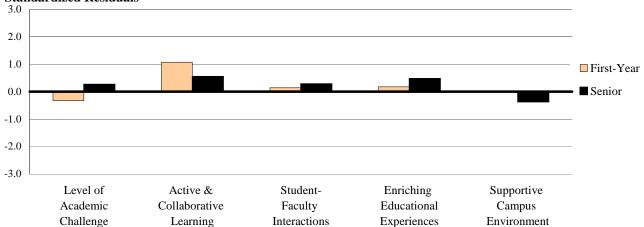
The first column "Actual" highlights your institution's first-year and senior actual benchmark scores, which correspond to the numbers reported in the Institutional Benchmark Report, with one exception<sup>2</sup>.

The second column "Predicted" represents what your students could be predicted or expected to do across this range of important activities, given their background characteristics and selected institutional information.<sup>3</sup>

The third column "Residual" is the difference between the actual and predicted scores. A positive score indicates that students are more engaged in the respective educational practice (and likely benefiting more) *than expected*. A negative score indicates that students are doing less than expected in these areas of effective educational practice.

The last column is a standardized residual (SR), an estimate of the degree to which your institution exceeded or fell short of its predicted score on each benchmark relative to all other NSSE institutions. It expresses the residual score in standard deviation units. When your school's actual benchmark score is equal to the predicted score both the residual score and the SR are equal to zero. A large, positive SR indicates that your school exceeded its predicted score by more than most other schools.<sup>4</sup>

The chart below highlights the value of your institution's standardized residuals for each benchmark.



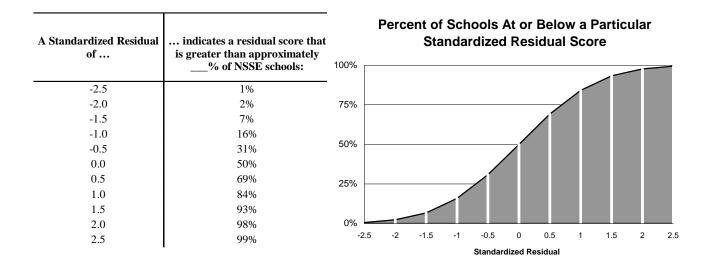
#### Standardized Residuals



#### Notes to NSSE 2000-2002 Institutional Engagement Index

The information in these notes will help in understanding the Institutional Engagement Index.

- <sup>1</sup> Supporting materials related to the Institutional Engagement Index, including the adjusted R<sup>2</sup> and regression coefficients, are available on NSSE's website at [www.iub.edu/~nsse/html/report-2001.shtml].
- <sup>2</sup> The actual score for Level of Academic Challenge reported here might differ somewhat from what is reported in the Benchmark Report. The score in the Benchmark Report includes an enrollment status adjustment. This adjustment was not included here because enrollment status is included in the regression model.
- <sup>3</sup> The following student and institutional characteristics were considered in an ordinary least squares regression model to produce the predicted benchmark scores. Unless noted otherwise, institutional and student characteristics were obtained from Fall 1999-2000 IPEDS data, the most complete database available: (a) public/private, (b) admissions selectivity from *Barron's Profiles of American Colleges* (2001), (c) Carnegie Classification (d) undergraduate enrollment, (e) urbanicity, (f) proportion full-time, (g) proportion female, (h) proportion of different races/ethnicities, (i) proportion of different student-reported major fields, (j) mean student-reported age and, (k) proportion of students reporting on-campus residence. These student and institutional characteristics were included in the regression model since they are not easily changed.
- <sup>4</sup> Since some participating colleges and universities will be interested to know how their residuals compare to other NSSE institutions, we have provided the following table and graphic.



A SR of 1.0 indicates a residual score that is greater than approximately 84 percent of all institutions' scores; a SR of .5 indicates the residual score is greater than about 69 percent of all institutions' scores. In contrast, a negative SR of -.5 indicates the residual score exceeds about 31 percent of all NSSE institutions, and a SR of -1.0 indicates the residual score is greater than only 16 percent of the scores of all other NSSE institutions. Statistically speaking, the SR that we employ is known as the studentized deleted residual or externally studentized residual.