

Table 1. Descriptive Statistics for U.S. News Indicators, NSSE Benchmarks, and Student Background Characteristics

Variable	Min	Max	Mean	St. Dev.
<i>Institution Level (n = 385)</i>				
U.S. News Quality Indicators				
Academic Reputation Peer Score	-2.43	3.14	0.00	1.00
Alumni Giving Rate	-1.60	3.82	0.00	1.00
Graduation & Retention Rate Composite	-2.67	2.51	0.00	1.00
Barron's Selectivity Rating (proxy for high school rank, average standardized test scores, and acceptance rate)	-2.19	2.76	0.00	1.00
Faculty Resources Composite	-2.39	2.91	0.00	1.00
Expenditure per student				
< \$10,000	0.00	1.00	0.13	0.34
\$20,000 to \$30,000	0.00	1.00	0.17	0.38
> \$30,000	0.00	1.00	0.04	0.20
Institutional Type				
Doctoral Research Universities-Extensive & Intensive	0.00	1.00	0.21	0.40
Masters Colleges and Universities I and II	0.00	1.00	0.46	0.50
Baccalaureate Colleges-General	0.00	1.00	0.18	0.38
<i>Student Level (n = 62,594)</i>				
NSSE Benchmark Scores				
Level of Academic Challenge (LAC)	-4.11	3.06	0.00	1.00
Active and Collaborative Learning (ACL)	-3.11	3.00	0.00	1.00
Student-Faculty Interaction (SFI)	-2.05	2.70	0.00	1.00
Enriching Educational Experiences (EEE)	-2.31	3.31	0.00	1.00
Supportive Campus Environment (SCE)	-3.24	2.28	0.00	1.00
Student Background Characteristics				
Student Athlete	0.00	1.00	0.07	0.26
Female Student	0.00	1.00	0.65	0.48
Underrepresented Minority Student	0.00	1.00	0.09	0.28
Multi-racial/other Student	0.00	1.00	0.05	0.22
Foreign Student	0.00	1.00	0.05	0.22
First Generation College Student	0.00	1.00	0.72	0.45
Greek Member	0.00	1.00	0.13	0.34
Fulltime Student	0.00	1.00	0.87	0.34
Live on or near campus	0.00	1.00	0.47	0.50
Double Major	0.00	1.00	0.13	0.34
Major: Biological Science	0.00	1.00	0.06	0.23
Major: Business	0.00	1.00	0.17	0.38
Major: Education	0.00	1.00	0.10	0.30
Major: Engineering	0.00	1.00	0.05	0.21
Major: Physical Science	0.00	1.00	0.03	0.16
Major: Professional	0.00	1.00	0.06	0.24
Major: Social Science	0.00	1.00	0.13	0.33
Major: Other	0.00	1.00	0.15	0.36

Table 2. Description of U.S. News Variables Used to Predict NSSE Benchmark Scores

Institution-Level Variables	Description	Model Transformation	Source
Academic Reputation Peer Score	Campus leaders asked to rate peer institutions' academic programs on a scale of 1 (marginal) to 5 (distinguished); all ratings averaged to produce final score	Standardized	2004 U.S. News
Alumni Giving Rate	Two-year average percentage of undergraduate alumni making a donation (00-01 & 01-02 AY)	Standardized	2004 U.S. News
Graduation & Retention Rate Composite	Combines 1997 freshman cohort 6-year graduation rate (80%) and average freshman retention rate for classes entering in 1999 to 2002 (20%)	Weighted t-score composite	2004 U.S. News 2003 IPEDS
Barron's Selectivity Rating	Combines standardized test scores, high school rank, and acceptance rates to measure institutional selectivity. A ranking of 1 to 11 is used (1 = "non-competitive"; 11 = "most competitive")	Standardized	2003 Barron's
Faculty Resources Composite	Combines percentage of classes with less than 20 students (60%), student-faculty ratio (20%), and percentage of full-time faculty (20%)	Weighted t-score composite	2004 U.S. News 2001 IPEDS
Expenditure per student	Total education expenses for the institution divided by total full-time equivalent enrollment was used to create 3 dummy variables: < \$10,000 \$20,001 to \$30,000 > \$30,000 <i>\$10,000 to \$20,000 (Reference Group)</i>	Dummy Coded 0 = no; 1 = yes	2002 IPEDS
Institutional Type	Using the Carnegie classification system, <i>USNWR</i> groups institutions into 4 categories based upon size and mission; 3 dummy variables are used: Doctoral Research Universities-Extensive & Intensive Masters Colleges and Universities I and II Baccalaureate Colleges-General <i>Baccalaureate Colleges-Liberal Arts (Reference Group)</i>	Dummy Coded 0 = no; 1 = yes	2004 U.S. News

Table 3. Variance Components and Variance Explained Statistics

		NSSE Benchmarks*				
		LAC	ACL	SFI	EEE	SCE
Model 1 ^a	Variance Component for Intercept	0.06 ***	0.05 ***	0.09 ***	0.17 ***	0.07 ***
	Intraclass Correlation (ICC)	6%	5%	9%	17%	7%
	Reliability estimate	0.87	0.85	0.91	0.96	0.90
Model 2 ^b	Variance Component for Intercept	0.05 ***	0.04 ***	0.05 ***	0.09 ***	0.07 ***
	Variance explained at level 1	3%	5%	4%	8%	1%
Model 3 ^c	Variance Component for Intercept	0.03 ***	0.03 ***	0.03 ***	0.05 ***	0.04 ***
	Variance explained at level 2	42%	14%	42%	49%	36%
	Total variance explained by US News variables	2%	1%	2%	5%	2%
Model 4 ^d	Variance Component for Intercept	0.02 ***	0.03 ***	0.02 ***	0.04 ***	0.04 ***
	Variance explained at level 2	53%	25%	53%	54%	45%
	Reliability estimate	0.76	0.78	0.75	0.86	0.82

* LAC: Level of Academic Challenge; ACL: Academic and Collaborative Learning; SFI: Student-Faculty Interaction; EEE: Enriching Educational Experiences; SCE: Supportive Campus Environment

^a Model 1: one-way ANOVA model where no student or institution-level predictors are used.

^b Model 2: one-way ANCOVA model where only student-level predictors are included (functions as the baseline model for models 3 and 4)

^c Model 3: means-as-outcomes model that adds US News variables at level-2 while controlling for student characteristics at level-1

^d Model 4: means-as-outcomes model using US News variables but also controlling for institutional type

+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 4. Model 4 Coefficients for U.S. News Quality Indicators Predicting NSSE Benchmarks

	NSSE Benchmarks*				
	LAC	ACL	SFI	EEE	SCE
Intercept	-0.04	-0.42 ***	-0.06	-0.23 ***	-0.13 **
Academic Reputation Peer Score	0.03 *	0.00	0.01	0.07 ***	-0.02
Alumni Giving Rate	-0.01	-0.01	0.04 *	0.02	0.04 *
Graduation/Retention Composite	0.04 *	0.02	0.01	0.05 **	0.04 +
Barron's Selectivity Rating	0.01	-0.01	-0.01	0.01	0.02
Faculty Resources Composite	0.06 ***	0.05 ***	0.08 ***	0.08 ***	0.09 ***
Expenditure/student < \$10k	-0.03	0.00	0.00	0.01	0.06 +
Expenditure/student \$20 to \$30k	0.09 **	0.04	0.05 +	0.12 **	-0.06 +
Expenditure/student > \$30k	0.07	-0.04	-0.08 *	-0.08	-0.23 ***
<i>Reference Group: \$10-20k</i>					
National Universities	-0.30 ***	-0.22 ***	-0.26 ***	-0.28 ***	-0.21 ***
Masters	-0.18 ***	-0.06	-0.11 **	-0.25 ***	-0.01
Bac-Gen	-0.17 ***	-0.03	-0.06	-0.22 ***	0.07
<i>Reference Group: Bac-LA</i>					

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Note: Student level characteristics controlled for include gender, ethnicity, parental education, greek, full-time status, academic major, and athletic status.

+ p < .10; * p < .05; ** p < .01; *** p < .001

Appendix A. Items Comprising NSSE Benchmarks, Response Sets, and Reliability Statistics

Benchmarks and Associated Survey Items	Response Set
Level of Academic Challenge ($\alpha = .753$)	
Hours per week preparing for class (studying, reading, writing, rehearsing, and other activities related to your academic program)	0, 1-5, 6-10, 11-15, 16-20, 21-25, 26-30, More than 30
Worked harder than you thought you could to meet an instructor's standards or expectations	Very often, often, sometimes, never
Number of assigned textbooks, books, or book-length packs of course readings during the current school year	None, 1-4, 5-10, 11-20, more than 20
Number of written papers or reports of 20 pages or more during the current school year	None, 1-4, 5-10, 11-20, more than 20
Number of written papers or reports between 5 and 19 pages during the current school year	None, 1-4, 5-10, 11-20, more than 20
Number of written papers or reports of fewer than 5 pages during the current school year	None, 1-4, 5-10, 11-20, more than 20
Coursework emphasizes: Analyzing the basic elements of an idea, experience, or theory	Very much, quite a bit, some, very little
Coursework emphasizes: Synthesizing and organizing ideas, information, or experiences into new, more complex interpretations and relationships	Very much, quite a bit, some, very little
Coursework emphasizes: Making judgments about the value of information, arguments, or methods	Very much, quite a bit, some, very little
Coursework emphasizes: Applying theories or concepts to practical problems or in new situations	Very much, quite a bit, some, very little
Campus environments emphasize: Spending significant amounts of time studying and on academic work	Very much, quite a bit, some, very little
Active and Collaborative Learning ($\alpha = .631$)	
Asked questions in class or contributed to class discussions	Very often, often, sometimes, never
Made a class presentation	Very often, often, sometimes, never
Worked with other students on projects during class	Very often, often, sometimes, never
Worked with classmates outside of class to prepare class assignments	Very often, often, sometimes, never
Tutored or taught other students (paid or voluntary)	Very often, often, sometimes, never
Participated in a community-based project as part of a regular course	Very often, often, sometimes, never
Discussed ideas from your readings or classes with others outside of class (students, family members, coworkers, etc.)	Very often, often, sometimes, never
Student Faculty Interaction ($\alpha = .760$)	
Discussed grades or assignments with an instructor	Very often, often, sometimes, never
Discussed ideas from your readings or classes with faculty members outside of class	Very often, often, sometimes, never
Received prompt feedback from faculty on your academic performance (written or oral)	Very often, often, sometimes, never
Talked about career plans with a faculty member or advisor	Very often, often, sometimes, never
Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	Very often, often, sometimes, never
Work on a research project with a faculty member outside of course or program requirements	Done, plan to do, do not plan to do, have not decided
Enriching Educational Experiences ($\alpha = .640$)	
Practicum, internship, field experience, co-op experience or clinical assignment	Done, plan to do, do not plan to do, have not decided
Community service or volunteer work	Done, plan to do, do not plan to do, have not decided
Participate in a learning community or some other formal program where groups of students take two or more classes together	Done, plan to do, do not plan to do, have not decided
Foreign language coursework	Done, plan to do, do not plan to do, have not decided
Study abroad	Done, plan to do, do not plan to do, have not decided
Independent study or self-designed major	Done, plan to do, do not plan to do, have not decided
Culminating senior experience (comprehensive exam, capstone course, thesis, project, etc.)	Done, plan to do, do not plan to do, have not decided
Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions or personal values	Very often, often, sometimes, never
Had serious conversations with students of a different race or ethnicity than your own	Very often, often, sometimes, never
Institutional environment encourages contact among students from different economic, social, and racial or ethnic backgrounds	Very much, quite a bit, some, very little
Participate in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, intercollegiate or intermural sports, etc.)	None, 1-4, 5-10, 11-20, more than 20
Used an electronic medium (list-serv, chat group, Internet, etc. to discuss or complete an assignment)	Very often, often, sometimes, never
Supportive Campus Environment ($\alpha = .780$)	
Campus Environments Emphasize: Providing the support you need to help you succeed academically	Very much, quite a bit, some, very little
Campus Environments Emphasize: Helping you cope with your non-academic responsibilities (work, family, etc.)	Very much, quite a bit, some, very little
Campus Environments Emphasize: Providing the support you need to thrive socially	Very much, quite a bit, some, very little
Quality: Relationships with other students	1=Unfriendly, unsupportive, sense of alienation; 7=friendly, supportive, sense of belonging
Quality: Relationships with faculty members	1=Unavailable, unhelpful, unsympathetic; 7=Available, helpful, sympathetic
Quality: Relationships with administrative personnel and offices	1=Unhelpful, inconsiderate, rigid 7=Helpful, considerate, flexible