

**2009 National Survey of Student Engagement**  
**Individual School Report for**  
**School of Science**

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## Executive Summary

In spring 2009, the Office of Information Management and Institutional Research coordinated IUPUI's data collection and analysis for the *National Survey of Student Engagement (NSSE)*. This survey, distributed to a randomly selected sample of first-year and senior students, is designed to collect information regarding the types of experiences that are believed to foster integration into the university and facilitate academic success. During the spring 2009 survey administration, 778 out of 2,524 graduating seniors who were invited to complete the survey did so for a response rate of 31%.

Included in the final NSSE report are five scales termed Benchmarks of Effective Educational Practice (Benchmarks). These Benchmarks are intended to compare institutions against specified peer groups and the entire NSSE cohort with regards to practices that are related to student success. Each Benchmark consists of a group of scaled items derived from the NSSE survey. The five Benchmarks are Level of Academic Challenge (LAC), Active and Collaborative Learning (ACL), Student-Faculty Interaction (SFI), Enriching Educational Experiences (EEE), and Supportive Campus Environment (SCE).

The following summarizes the Benchmark scores for all senior respondents who were enrolled in the School of Science during the spring 2009 semester (n=104). For further information on NSSE, please contact Steven Graunke in the Office of Information Management and Institutional Research.

**Section 1. Level of Academic Challenge (LAC)**

	N	Mean	Standard Deviation	Standard Error	IUPUI Mean	Effect Size
Preparing for class (studying, reading, writing, doing homework or lab work, etc. related to academic program)	95	4.25	1.83	0.19	4.23	0.01
Number of assigned textbooks, books, or book-length packs of course readings	99	3.01	0.92	0.09	3.13	-0.13
Number of written papers or reports of 20 pages or more	99	1.66	0.80	0.08	1.66	0.00
Number of written papers or reports of between 5 and 19 pages	99	2.53	1.04	0.11	2.54	-0.01
Number of written papers or reports of fewer than 5 pages *	99	2.68	1.26	0.13	2.98	-0.24
Coursework emphasizes: Analysis of the basic elements of an idea, experience or theory	98	3.14	0.86	0.09	3.25	-0.13
Coursework emphasizes: Synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and relationships	96	2.98	0.92	0.09	3.13	-0.16
Coursework emphasizes: Making of judgments about the value of information, arguments, or methods	97	2.87	0.95	0.10	3.01	-0.15
Coursework emphasizes: Applying theories or concepts to practical problems or in new situations	98	3.14	0.92	0.09	3.25	-0.12
Working harder than you thought you could to meet an instructor's standards or expectations	99	2.58	0.86	0.09	2.73	-0.17
Campus environment emphasizes: Spending significant amount of time studying and on academic work	93	3.13	0.81	0.08	3.13	0.00
<b>LAC Cumulative</b>	98	53.39	16.43	1.66	56.50	-0.19

\* Statistically significant difference between school mean and IUPUI Mean at  $\alpha < .05$

**Section 2. Active and Collaborative Learning (ACL)**

	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>SE</b>	<b>IUPUI Mean</b>	<b>Effect Size</b>
Asked questions in class or contributed to class discussions *	103	2.84	0.88	0.09	3.13	-0.33
Made a class presentation *	104	2.31	0.86	0.08	2.78	-0.55
Worked with other students on projects during class *	104	2.38	0.92	0.09	2.63	-0.27
Worked with classmates outside of class to prepare class assignments *	104	2.20	0.81	0.08	2.64	-0.54
Tutored or taught other students (paid or voluntary) *	101	2.29	1.12	0.11	1.84	0.41
Participated in a community-based project (e.g., service learning) as part of a regular course	100	1.73	0.91	0.09	1.83	-0.11
Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.) *	100	2.67	0.87	0.09	2.93	-0.30
<b>ACL Cumulative *</b>	104	44.96	18.15	1.78	51.44	-0.36

\* Statistically significant difference between school mean and IUPUI Mean at  $\alpha < .05$

**Section 3. Student-Faculty Interaction (SFI)**

	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>SE</b>	<b>IUPUI Mean</b>	<b>Effect Size</b>
Discussed grades or assignments with an instructor *	100	2.62	0.87	0.09	2.83	-0.25
Talked about career plans with a faculty member or advisor	101	2.29	0.98	0.10	2.30	-0.01
Discussed ideas from your readings or classes with faculty members outside of class	101	2.01	0.93	0.09	2.00	0.01
Worked with faculty members on activities other than coursework (committees, orientation, student-life activities, etc.)	99	1.80	0.98	0.10	1.70	0.10
Received prompt written or oral feedback from faculty on your academic performance	99	2.58	0.88	0.09	2.69	-0.13
Worked on a research project with a faculty member outside of course or program requirements ^*	97	0.37	0.49	0.05	0.18	0.39
<b>SFI Cumulative</b>	101	41.14	23.68	2.36	39.42	0.07

\* Statistically significant difference between school mean and IUPUI Mean at  $\alpha < .05$

^ Means reported represent percentage of respondents who indicated they have done this

**Section 4. Enriching Educational Experiences (EEE)**

	N	Mean	SD	SE	IUPUI Mean	Effect Size
Participating in co-curricular activities (organizations, campus publications, student government, social fraternity or sorority, etc.)	95	1.82	1.20	0.12	1.66	0.13
Practicum, internship, field experience, co-op experience, or clinical assignment ^	97	0.43	0.50	0.05	0.46	-0.06
Community service or volunteer work ^	97	0.65	0.48	0.05	0.60	0.10
Foreign language coursework ^*	96	0.52	0.50	0.05	0.37	0.30
Study abroad ^	95	0.14	0.35	0.04	0.10	0.10
Independent study or self-designed major ^*	94	0.27	0.44	0.05	0.16	0.23
Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.) ^*	97	0.54	0.50	0.05	0.39	0.30
Serious conversations with students of different religious beliefs, political opinions, or personal values	100	2.84	1.03	0.10	2.74	0.10
Serious conversations with students of a different race or ethnicity than your own	100	2.79	1.04	0.10	2.75	0.04
Using electronic medium (e.g., listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment *	101	2.66	1.09	0.11	2.94	-0.25
Campus environment encouraging contact among students from different economic, social, and racial or ethnic backgrounds	93	2.41	1.05	0.11	2.47	-0.06
Participate in a learning community or some other formal program where groups of students take two or more classes together ^	97	0.31	0.46	0.05	0.35	-0.08
<b>EEE Cumulative</b>	97	43.64	21.77	2.21	40.33	0.15

\* Statistically significant difference between school mean and IUPUI Mean at  $\alpha < .05$

^ Means reported represent percentage of respondents who indicated they have done this

**Section 5. Supportive Campus Environment (SCE)**

	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>SE</b>	<b>IUPUI Mean</b>	<b>Effect Size</b>
Campus environment provides the support you need to help you succeed academically	91	2.74	0.89	0.09	2.82	-0.09
Campus environment helps you cope with your non-academic responsibilities (work, family, etc.)	93	1.78	0.85	0.09	1.80	-0.02
Campus environment provides the support you need to thrive socially	93	1.88	0.92	0.10	1.93	-0.06
Quality of relationships with other students *	95	4.98	1.49	0.15	5.37	-0.26
Quality of relationships with faculty members *	95	4.94	1.46	0.15	5.24	-0.20
Quality of relationships with administrative personnel and offices *	95	4.35	1.73	0.18	4.72	-0.22
<b>SCE Cumulative</b>	93	49.90	20.62	2.14	53.94	-0.20

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