



University of Guelph
NSSE 2005 Report

June 1, 2006

NSSE Position Statement: Using Student Engagement Results for College Rankings

Rankings of colleges and universities are a fact of life. While the organizations that produce rankings have every right to do so, it's important that institutions that participate in the National Survey of Student Engagement (NSSE) understand that the NSSE project discourages the use of NSSE results in any way that compromises the integrity of the project or undermines the growing confidence in the survey as a tool for institutional improvement and accountability. For this reason we wish to clarify NSSE's position on using student engagement data for college rankings.

1. NSSE does not support using NSSE results for rankings. The NSSE National Advisory Board and NSSE co-sponsors -- The Carnegie Foundation for the Advancement of Teaching and the Pew Forum on Undergraduate Learning -- believe that rankings reduce complex dimensions of institutional life to a single indicator and are, therefore, inherently flawed as a tool for accountability and improvement, whatever the information on which they are based. Such comparisons become even more problematic in the case of schools with very different profiles in terms of percentages of students who are enrolled full- or part-time, transfers, and majoring in various fields.

2. Whether a participating institution shares their student engagement results with ranking organizations is up to the institution. Consistent with the NSSE participation agreement, NSSE does not make institutional scores available to third parties. Institutions may do so if they wish as stated in the NSSE Participation Agreement. Some people see requests for institutional results from the NSSE survey as an opportunity for NSSE institutions to help educate the public about the value of student engagement as a new metric for examining collegiate quality. At the same time, others are concerned that these requests might be the first wave of an effort to eventually use NSSE data in rankings. It's possible that any perceived link between NSSE and organizations that produce rankings at this stage in NSSE's development could undermine the growing confidence that participating institutions have in NSSE. Thus, while organizations are certainly entitled to request NSSE results, NSSE neither encourages nor discourages institutions to supply it.

<http://nsse.iub.edu/html/usingst.cfm>

Section 1. National Survey of Student Engagement (NSSE)

Administered annually since 2000, the survey measures various aspects of student engagement. It provides an alternative to rankings such as *MacLean's* which are based primarily on input measures. The University of Guelph participated for the first time in the 2005 NSSE as a pilot project. As a result, the University of Guelph did not participate in any of the NSSE consortia. For these reasons, the results of this survey as reported here should be considered to be preliminary.

Because there were few Canadian universities participating in 2005, the comparison group for Guelph, called "Selected Peers," is limited. The group is made up of the University of New Brunswick, Fredericton Campus; Carleton University; the University of Ottawa; Ryerson University; the University of Windsor; and York University. The results for the University of Guelph are also compared to the "Doctoral-Extensive (Doc-Ext)" and to the "NSSE 2005" comparison groups. The "Doc-Ext" comparison group includes US research extensive universities. The "NSSE 2005" comparison group is based on a sample of US participating 4-year colleges and universities.

Some basic variables from the Guelph data are provided in Table 1. The Guelph sample for the 2005 NSSE includes 1,997 first-year students and 1,998 final-year students ("seniors"). With good response rates of 50% and 56%, the number of first-year respondents is 1,003 and the number of final-year respondents is 1,109. The breakdown for males and females at Guelph is roughly consistent with the proportion of first-year and final-year respondents with a 30% / 70% split. The majority of the respondents are full-time with first-year respondents at 96% and final-year respondents at 85%. Seven percent of first-year respondents are athletes and 6% of final-year respondents. It's worth noting that the "Selected Peers" percentage of athletes was only 3%. Guelph's uniqueness in terms of its residential emphasis is evident with 85% of first-year respondents living on-campus while the percentage for "Selected Peers" is only 29%. By final-year, respondents are living predominately off-campus (96%).

This report contains four sections. Section 2 includes the NSSE overall indicators for two general questions with a comparison to the "Selected Peers", "Doc-Ext", and "NSSE 2005." To better understand student engagement, the NSSE developed five benchmarks of effective educational practice: level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus community. The five benchmark or composite measures are presented in section 3 with the *NSSE 2005 Benchmark Report* attached as an appendix. A summary and conclusion section completes the report.

Table 1.

University of Guelph 2005 NSSE Basics :				
		First-Year	Final-Year	Overall
Response Rate :				
	By Class	50%	56%	53%
	NSSE Sample Size	1,997	1,998	3,995
Sampling Error :				
	By Class	2.7%	2.3%	1.80%
	Number of Respondents	1,003	1,109	2,112
	Total Population	3,920	2,938	6,858
Gender :				
	Female	70%	69%	69.5%
	Male	30%	31%	30.5%
Enrollment Status :				
	Full-time	96%	85%	90.5%
	Less than full-time	4%	15%	9.5%
Place of Residence :				
	On-campus	85%	4%	44.5%
	Off-campus	15%	96%	55.5%
Transfer Status :				
	Transfer Students	2%	9%	5.5%
Age :				
	Non-traditional (24 or older)	2%	15%	8.5%
	Traditional (less than 24)	98%	85%	91.5%
Student Athlete:		7%	6%	6.3%
Aboriginal Person :		1%	0%	1.0%
Visible Minority :		12%	11%	11.3%
International Student :		4%	4%	3.7%

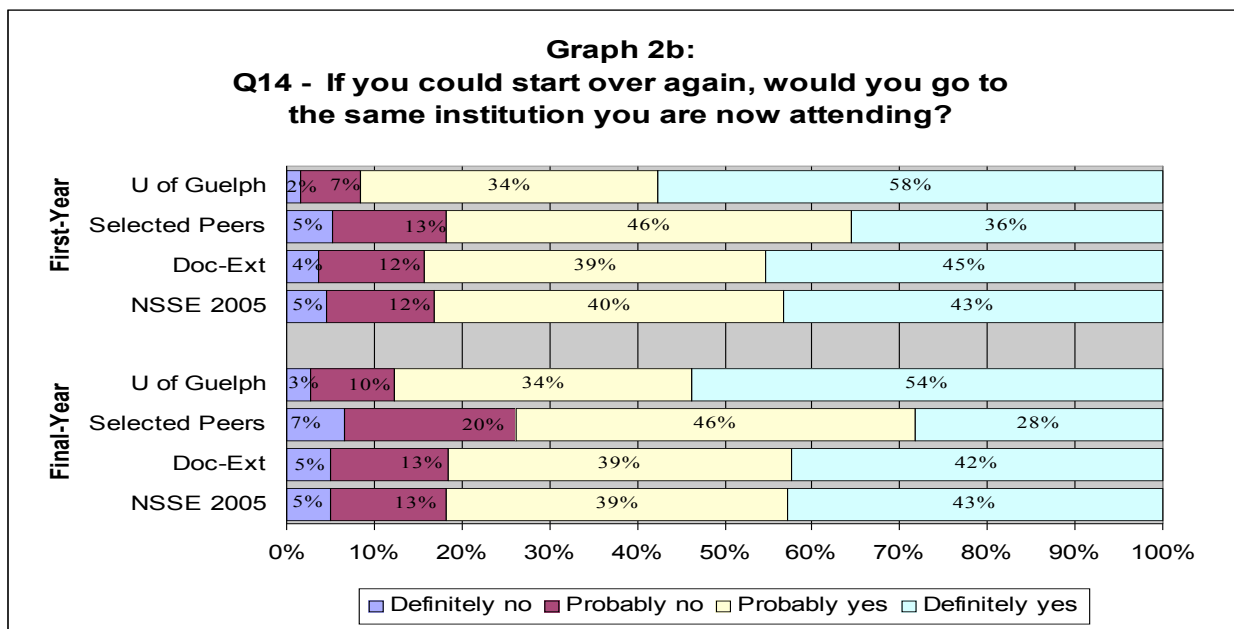
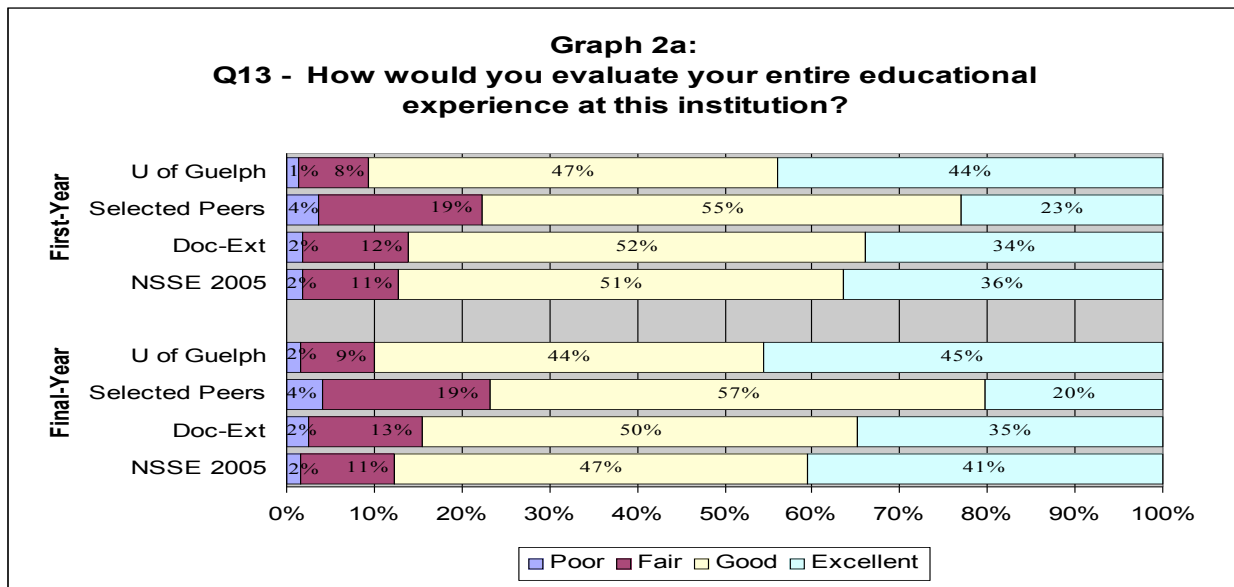
Section 2. NSSE Overall Indicators

The NSSE includes two questions that measure a respondent's overall satisfaction with their educational experience. The wording and the response options for the two questions are:

Q.13. How would you evaluate your entire educational experience at this institution?
response options: poor, fair, good, and excellent

Q.14. If you could start over again, would you go to the same institution you are now attending?
response options: definitely no, probably no, probably yes, and definitely yes

The results are presented in Graphs 2a and 2b.



Asked about the entire educational experience (Q. 13), 91% of Guelph first-year and 89% of final-year students responded good or excellent (Graph 2a). These percentages are higher than all of the comparison groups. When asked if they would pick the University of Guelph again if they were starting over (Q. 14), 92% of first-year and 88% of final-year students said probably yes or definitely yes (Graph 2b). It's also interesting to note that 58% of first-year and 54% of

final-year students said definitely yes. The results for both questions are considerably higher than the “Selected Peers” comparison group comprised of Canadian institutions.

Section 3. NSSE Five Benchmarks

“To focus discussions about the importance of student engagement and guide institutional efforts, NSSE created five benchmarks of effective educational practice: (1) Level of academic challenge, (2) Active and collaborative learning, (3) Student-faculty interaction, (4) Enriching educational experiences, and (5) Supportive campus environment” (*NSSE 2005 Benchmark Report - Appendix to this report*). The *NSSE 2005 Benchmark Report* includes the Guelph means and the comparison group means with statistical significance noted. The benchmarks were developed with factor analysis techniques from a very large sample size. The individual items included in each benchmark are listed at the bottom of the corresponding pages. As noted in the *NSSE 2005 Benchmark Report* (p. 10), statistical significance should be interpreted with care since the large samples employed by NSSE produce statistical significance for very small differences; differences which may not be substantively important.

(1) Level of Academic Challenge

Description: “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.” (Appendix, p.11)

Result: The mean score for first-year students at Guelph in 2005 is 48.0 which is somewhat lower than the comparison groups. The mean score for final-year students is higher than the “Selected Peers” and “Doc-Ext” and only slightly lower than the “NSSE 2005” group. The perceived academic challenge for final-year students is 55.4 which is quite a bit higher than the first-year mean score.

(2) Active and Collaborative Learning

Description: “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 during and after college.” (Appendix, p. 12)

Result: The scores for Guelph first-year students (33.8) and final-year students (44.6) are lower than the comparison groups. The final-year students are not statistically lower than the “Selected Peers” but they are statistically lower than the “Doc-Ext” and “NSSE 2005” comparison groups.

(3) Student-Faculty Interaction

Description: “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.” (Appendix, p. 13)

Result: The pattern for this benchmark is similar to Active and Collaborative Learning. The Guelph first-year students (19.9) are statistically significantly lower than the comparison groups. The final-year students gave much higher scores (33.8) and their score is higher than the “Selected Peers”, while being lower than the “Doc-Ext” and “NSSE 2005” comparison groups.

(4) Enriching Educational Experiences

Description: “Complementary learning opportunities in and out of class augment 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.” (Appendix, p. 14)

Result: The scores for this benchmark are higher for Guelph first-year (25.2) and final-year (37.1) students than for the “Selected Peers”, but somewhat lower than the “Doc-Ext” and “NSSE 2005” comparison groups. It’s interesting to note how much higher the final-year score is for Guelph when compared to the first-year score. This pattern is the same for the comparison groups. As a result, this benchmark might be inclined toward final-year students.

(5) Supportive Campus Environment

Description: “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.” (Appendix, p. 15)

Result: Guelph’s students’ scores are very high on this benchmark. The first-year students score of 60.8 is higher than all three of the comparison groups (statistically significantly for “Selected Peers” and “Doc-Ext”). The final-year students’ score is 56.6 which is also higher than the “Selected Peers” and “Doc-Ext”, but not the “NSSE 2005” comparison group.

Section 4. Summary and Conclusions

The University of Guelph undertook the 2005 NSSE as a pilot project with the purpose of assessing the educational experience at the University of Guelph. It is important to remember, therefore, that this is a preliminary analysis of data from a pilot study.

On the two overall indicators considering the entire educational experience and whether the student would go to Guelph if he or she had to do it over, the data suggests that students are satisfied with their overall learning experience.

For the five educational benchmarks the results for the University of Guelph are mixed. Guelph mean scores are higher on enriching educational experiences and providing a supportive campus environment. For level of academic challenge, active and collaborative learning, and student-faculty interaction, Guelph's mean scores are lower than the comparison groups. These benchmarks of student engagement may be areas that warrant further attention and discussion, particularly with first-year students. Nonetheless, there is some evidence that the gap closes between first-year and final-year mean scores.

Dr. Fred Evers, ERDU

**Appendix:
NSSE 2005 Benchmark Report
for the University of Guelph**

To focus discussions about the importance of student engagement and guide institutional improvement efforts, NSSE created five clusters or benchmarks of effective educational practice: (1) Level of academic challenge, (2) Active and collaborative learning, (3) Student-faculty interaction, (4) Enriching educational experiences, and (5) Supportive campus environment. Using approximately 225,000 randomly selected students from 518 institutions that participated in NSSE 2005, this Benchmark Report compares the performance of your institution with its selected peer group, Carnegie group, and the 2005 national norms. In addition, page 8 provides two other comparisons between your school and above-average institutions with benchmarks in the top 50% nationally and high-performing institutions with benchmarks in the top 10% nationally. 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 in the 2005 annual report and on the NSSE website at nsse.iub.edu.

Guide to Your Benchmark Report

Class
Means are reported for first-year students and seniors. Only students who were part of the base random sample or random oversample are included in these analyses. Students in targeted oversamples are not included.

Mean
The mean is the weighted arithmetic average of student level benchmark scores. Although institutional benchmark score calculations have not changed from prior years, reference group calculations were revised in 2005.

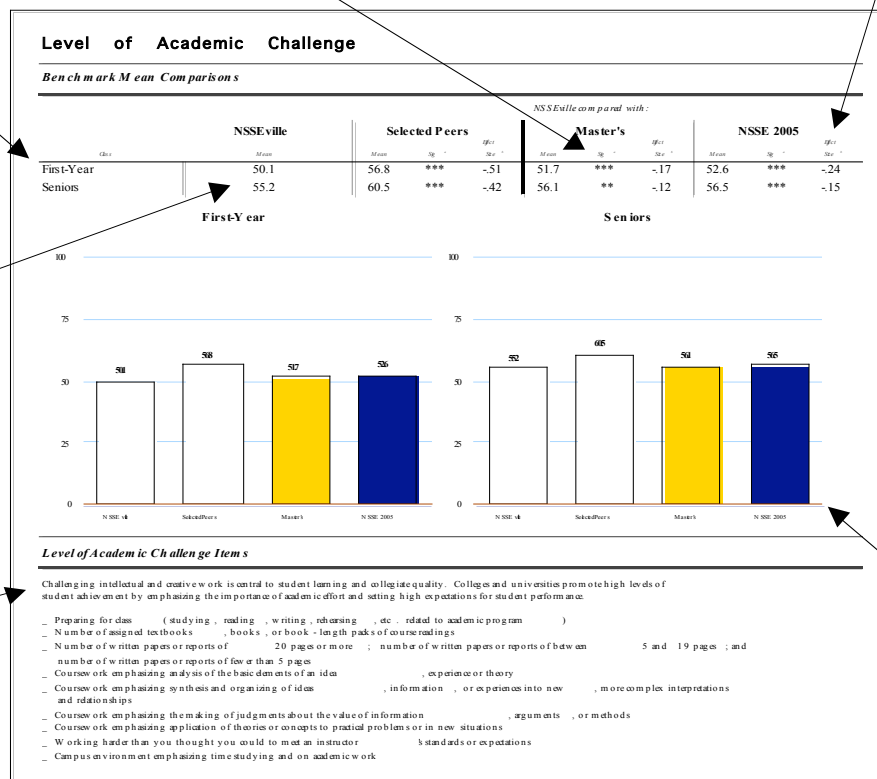
Benchmark Description & Survey Items
A theoretical rationale for measuring the benchmark and the individual items used in its creation are summarized.

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 significance levels ($p < .05$, $p < .01$, and $p < .001$). The smaller the significance level, the smaller the likelihood that the difference is due to chance. Please note that statistical significance does not guarantee that the result is substantive or important. Large sample sizes (like those seen with NSSE data) tend to produce more statistically significant results even though the magnitude of mean differences may be inconsequential.

Effect Size

Effect size indicates the “practical significance” of the mean difference. It is calculated by dividing the mean difference by the standard deviation of the group with which the institution is being compared (selected peers, Carnegie type, or 2005 national norm). In practice, an effect size of .2 is often considered small, .5 moderate, and .8 large. A positive sign indicates that your institution’s mean was greater, thus showing an affirmative result for the institution. A negative sign indicates the institution lags behind the comparison group. Look for patterns of effect sizes that point to areas of student or institutional performance that warrant attention.



**NSSE 2005 Benchmark Report
Mean Comparisons
University of Guelph**

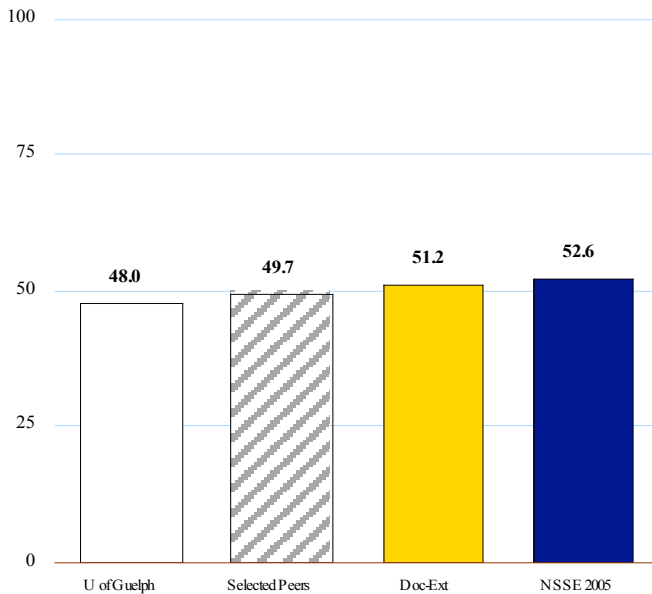
Level of Academic Challenge

Benchmark Mean Comparisons

U of Guelph compared with:

Class	U of Guelph			Selected Peers			Doc-Ext			NSSE 2005		
	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b
First-Year	48.0			49.7	***	-.13	51.2	***	-.25	52.6	***	-.35
Seniors	55.4			54.0	**	.10	55.0		.03	56.5	**	-.08

First-Year



Level of Academic Challenge 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, rehearsing, etc. related to academic program)
- 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
- Coursework emphasizing analysis of the basic elements of an idea, experience or theory
- Coursework emphasizing synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and 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

**NSSE 2005 Benchmark Report
Mean Comparisons
University of Guelph**

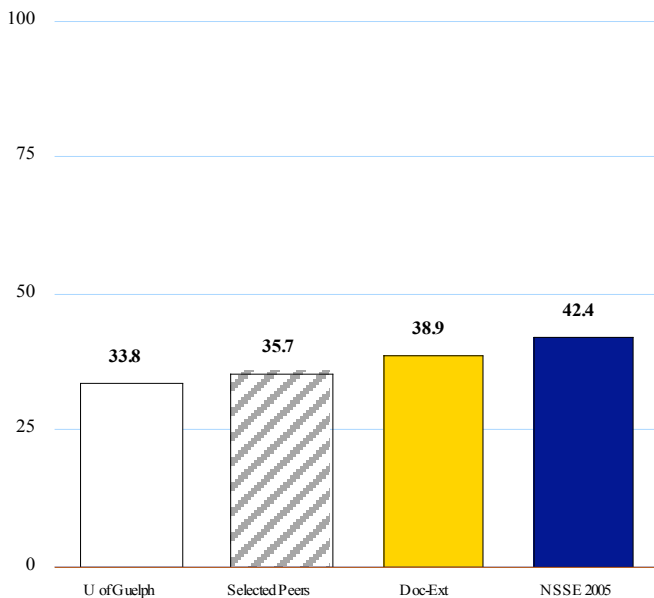
Active and Collaborative Learning

Benchmark Mean Comparisons

U of Guelph compared with:

<i>Class</i>	U of Guelph	Selected Peers			Doc-Ext			NSSE 2005		
	<i>Mean</i>	<i>Mean</i>	<i>Sig^a</i>	<i>Effect Size^b</i>	<i>Mean</i>	<i>Sig^a</i>	<i>Effect Size^b</i>	<i>Mean</i>	<i>Sig^a</i>	<i>Effect Size^b</i>
First-Year	33.8	35.7	***	-.12	38.9	***	-.33	42.4	***	-.55
Seniors	44.6	45.4		-.05	47.8	***	-.20	51.5	***	-.41

First-Year



Active and Collaborative Learning 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
- Participated in a community-based project as part of a regular course
- Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

**NSSE 2005 Benchmark Report
Mean Comparisons
University of Guelph**

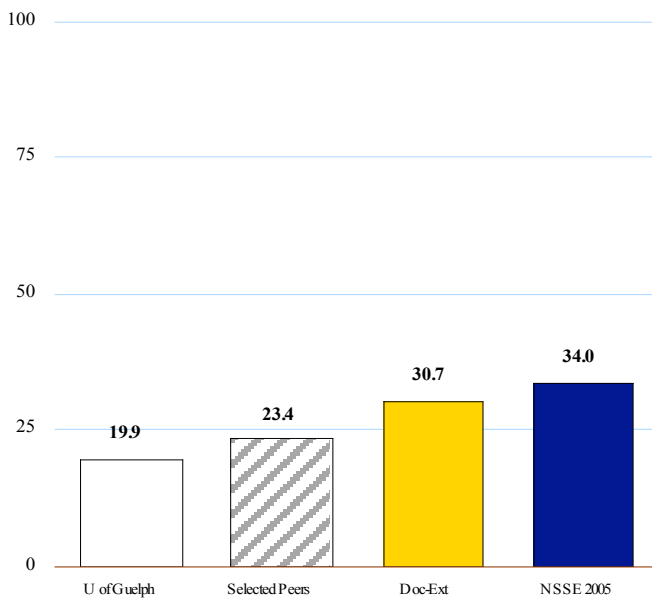
Student-Faculty Interaction

Benchmark Mean Comparisons

U of Guelph compared with:

Class	U of Guelph	Selected Peers			Doc-Ext			NSSE 2005		
	Mean	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b
First-Year	19.9	23.4	***	-.22	30.7	***	-.65	34.0	***	-.81
Seniors	33.8	31.4	***	.12	40.6	***	-.33	44.1	***	-.49

First-Year



Student-Faculty Interaction 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 feedback from faculty on your academic performance (written or oral)
- Worked with a faculty member on a research project outside of course or program requirements

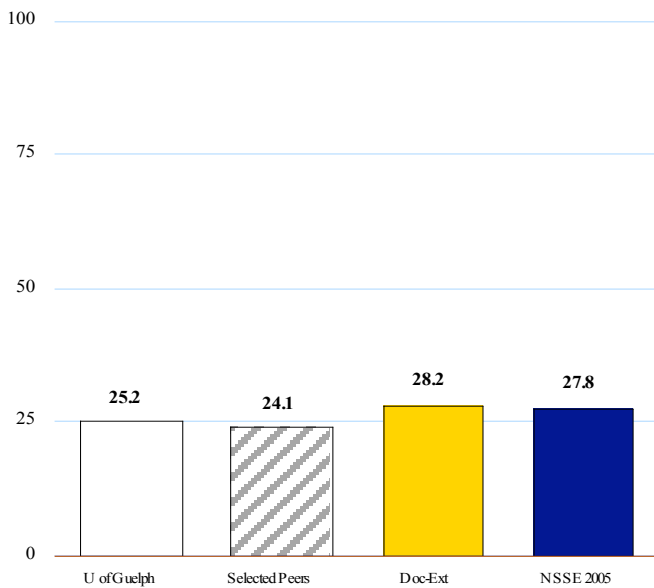
**NSSE 2005 Benchmark Report
Mean Comparisons
University of Guelph**

Enriching Educational Experiences

Benchmark Mean Comparisons

Class	U of Guelph compared with:									
	U of Guelph		Selected Peers			Doc-Ext			NSSE 2005	
	Mean	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b
First-Year	25.2	24.1	**	.09	28.2	***	-.24	27.8	***	-.21
Seniors	37.1	32.9	***	.27	40.9	***	-.22	42.1	***	-.27

First-Year



Enriching Educational Experiences Items

Complementary learning opportunities in and out of class augment 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, publications, student government, sports, 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 (comprehensive exam, capstone course, thesis, project, etc.)
- Serious conversations with students of different religious beliefs, political opinions, or personal values
- Serious conversations with students of a different race or ethnicity
- Using electronic technology 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

**NSSE 2005 Benchmark Report
Mean Comparisons
University of Guelph**

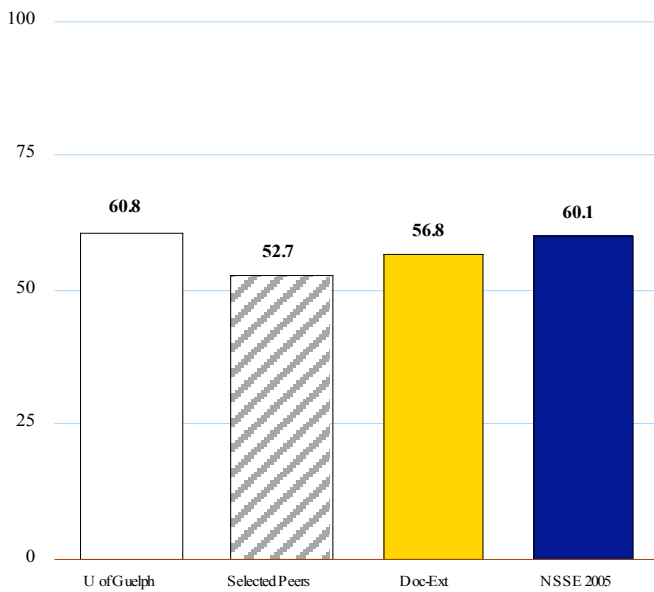
Supportive Campus Environment

Benchmark Mean Comparisons

U of Guelph compared with:

Class	U of Guelph		Selected Peers			Doc-Ext			NSSE 2005		
	Mean		Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b	Mean	Sig. ^a	Effect Size ^b
First-Year	60.8		52.7	***	.45	56.8	***	.23	60.1		.04
Seniors	56.6		49.0	***	.42	53.2	***	.19	57.5		-.05

First-Year



Supportive Campus Environment 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