University of Guelph

Benchmark Comparisons
August 2008
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 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 (as with the NSSE project) tend to produce more statistically significant results even though the magnitude of mean differences may be inconsequential. It is recommended to consult effect sizes to judge the practical meaning of the results.

### Effect Size
Effect size indicates the practical significance of the mean difference. It is calculated by dividing the mean difference by the pooled standard deviation. 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, suggesting that the student behavior or institutional practice represented by the item may warrant attention.

### Level of Academic Challenge (LAC)

**Benchmark Comparisons**

<table>
<thead>
<tr>
<th>Item</th>
<th>NSSEville State</th>
<th>Mid East Public</th>
<th>Carnegie Class</th>
<th>NSSE 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Mean *</td>
<td>Sig *</td>
<td>Sig *</td>
<td>Mean *</td>
</tr>
<tr>
<td>First-Year</td>
<td>51.5</td>
<td>0.05</td>
<td>0.05</td>
<td>51.7</td>
</tr>
<tr>
<td>Senior</td>
<td>55.7</td>
<td>0.01</td>
<td>0.01</td>
<td>55.6</td>
</tr>
</tbody>
</table>

**Statistical Significance**

- First-Year: NSSEville State vs. Mid East Public: Mean difference = 4.2, p<.05; NSSEville State vs. Carnegie Class: Mean difference = 4.2, p<.05; NSSEville State vs. NSSE 2008: Mean difference = 4.2, p<.05.
- Senior: NSSEville State vs. Mid East Public: Mean difference = 4.9, p<.05; NSSEville State vs. Carnegie Class: Mean difference = 4.9, p<.05; NSSEville State vs. NSSE 2008: Mean difference = 4.9, p<.05.

### Bar Charts

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

### Mean

The mean is the weighted arithmetic average of student level benchmark scores.

### Benchmark Description & Survey Items

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

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* 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**

<table>
<thead>
<tr>
<th>Class</th>
<th>U of Guelph</th>
<th>Ontario</th>
<th>Effect Size</th>
<th>Carnegie Class</th>
<th>NSSE 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean *</td>
<td>Mean *</td>
<td>Sig b</td>
<td>Mean *</td>
<td>Sig b</td>
</tr>
<tr>
<td>First-Year</td>
<td>49.4</td>
<td>51.4</td>
<td>*** -.16</td>
<td>53.4</td>
<td>*** -.29</td>
</tr>
<tr>
<td>Senior</td>
<td>55.0</td>
<td>56.0</td>
<td>** -.07</td>
<td>57.3</td>
<td>*** -.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56.3</td>
<td>*** -.09</td>
</tr>
</tbody>
</table>

First-Year

Senior

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**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 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 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.

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* Weighted by gender, enrollment status, and institutional size.

** b * p<.05  ** p<.01  ***p<.001 (2-tailed).

c Mean difference divided by the pooled standard deviation.
Active and Collaborative Learning (ACL)

Benchmark Comparisons

<table>
<thead>
<tr>
<th>Class</th>
<th>U of Guelph Mean</th>
<th>Ontario Mean</th>
<th>Sig b</th>
<th>Effect Size c</th>
<th>Carnegie Class Mean</th>
<th>Effect Size c</th>
<th>NSSE 2008 Mean</th>
<th>Effect Size c</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year</td>
<td>35.4</td>
<td>35.3</td>
<td>.01</td>
<td></td>
<td>43.8</td>
<td>***</td>
<td>.49</td>
<td>***</td>
</tr>
<tr>
<td>Senior</td>
<td>44.5</td>
<td>44.0</td>
<td>.03</td>
<td></td>
<td>53.0</td>
<td>***</td>
<td>.49</td>
<td>***</td>
</tr>
</tbody>
</table>

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.)

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* Weighted by gender, enrollment status, and institutional size.

b * p<.05  ** p<.01  ***p<.001 (2-tailed).

c Mean difference divided by the pooled standard deviation.
**Student-Faculty Interaction (SFI)**

**Benchmark Comparisons**

<table>
<thead>
<tr>
<th>Class</th>
<th>U of Guelph Mean</th>
<th>U of Guelph Sig</th>
<th>Ontario Mean</th>
<th>Ontario Sig</th>
<th>Carnegie Class Mean</th>
<th>Carnegie Class Sig</th>
<th>NSSE 2008 Mean</th>
<th>NSSE 2008 Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year</td>
<td>20.5</td>
<td>*</td>
<td>23.6</td>
<td>***</td>
<td>36.0</td>
<td>**</td>
<td>32.6</td>
<td>***</td>
</tr>
<tr>
<td>Senior</td>
<td>33.6</td>
<td>.05</td>
<td>32.7</td>
<td>*</td>
<td>44.2</td>
<td>***</td>
<td>40.8</td>
<td>***</td>
</tr>
</tbody>
</table>

**First-Year**

![Bar chart showing comparison between U of Guelph, Ontario, Carnegie Class, and NSSE 2008 for First-Year students.]

**Senior**

![Bar chart showing comparison between U of Guelph, Ontario, Carnegie Class, and NSSE 2008 for Senior students.]

**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

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* Weighted by gender, enrollment status, and institutional size.

* p<.05  ** p<.01  ***p<.001 (2-tailed).

* Mean difference divided by the pooled standard deviation.
### 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., listserv, 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

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**Enriching Educational Experiences (EEE) Benchmark Comparisons**

<table>
<thead>
<tr>
<th>Class</th>
<th>U of Guelph</th>
<th>Mean *</th>
<th>Ontario</th>
<th>Mean *</th>
<th>Sig b</th>
<th>Effect Size *</th>
<th>Carnegie Class</th>
<th>Mean *</th>
<th>Sig b</th>
<th>Effect Size *</th>
<th>NSSE 2008</th>
<th>Mean *</th>
<th>Sig b</th>
<th>Effect Size *</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year</td>
<td>26.1</td>
<td>25.0</td>
<td>** .09</td>
<td>28.2</td>
<td>***</td>
<td>-.15</td>
<td>27.0</td>
<td>**</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>36.5</td>
<td>34.7</td>
<td>*** .11</td>
<td>42.3</td>
<td>***</td>
<td>-.32</td>
<td>39.6</td>
<td>***</td>
<td>-.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- *Weighted by gender, enrollment status, and institutional size.
- * p<.05  ** p<.01  ***p<.001 (2-tailed).
- Mean difference divided by the pooled standard deviation.
Supportive Campus Environment (SCE)

Benchmark Comparisons

<table>
<thead>
<tr>
<th>U of Guelph</th>
<th>Ontario</th>
<th>Carnegie Class</th>
<th>NSSE 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Class</strong></td>
<td>Mean *</td>
<td>Mean *</td>
<td>Effect Size</td>
</tr>
<tr>
<td>First-Year</td>
<td>62.2</td>
<td>55.6 *** .35</td>
<td>60.8 ** .07</td>
</tr>
<tr>
<td>Senior</td>
<td>58.6</td>
<td>50.9 *** .41</td>
<td>59.0 -.02</td>
</tr>
</tbody>
</table>

First-Year

Senior

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

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* Weighted by gender, enrollment status, and institutional size.

b * p<.05  ** p<.01  ***p<.001 (2-tailed).

c Mean difference divided by the pooled standard deviation.