In spring 2012, we asked first-year and senior students at Case Western Reserve University (CWRU) to participate in the National Survey of Student Engagement (NSSE). The survey collects information about student engagement in educational practices which are known, through research, to enhance learning. This report looks specifically at the extent to which students work with others to master difficult material or are asked to think about what they are learning in different settings.

**First-Year Students**

The majority of first-year students said they often or very often asked questions in class or contributed to class discussions (97%). The majority of students also said they worked with classmates outside of class to prepare assignments (94%) and discussed ideas from their readings or classes with others outside of class (94%). Almost all first-year students (94%) made at least one class presentation during their first year, and 20% frequently did so. Fewer first-years worked with other students on projects during class, tutored or taught other students, or participated in community-based projects as a part of class (figure 1).

**Figure 1. First-Year Participation in Active and Collaborative Learning**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Sometimes</th>
<th>Often/Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked questions in class/contributed to class discussions</td>
<td>39%</td>
<td>58%</td>
<td></td>
</tr>
<tr>
<td>Worked with classmates outside of class to prepare assignments</td>
<td>37%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Discussed ideas from readings/classes with others outside of class</td>
<td>33%</td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>Made a class presentation</td>
<td>75%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Worked with other students on projects during class</td>
<td>19%</td>
<td>50%</td>
<td>31%</td>
</tr>
<tr>
<td>Tutored/taught other students (paid or voluntary)</td>
<td>40%</td>
<td>38%</td>
<td>22%</td>
</tr>
<tr>
<td>Participated in a community-based project as part of a regular course</td>
<td>67%</td>
<td>20%</td>
<td>14%</td>
</tr>
</tbody>
</table>

1 Of the 1,824 students who received the survey, 33% (n=608) responded. The sample was made up of 45% of first-year students and 55% of seniors. No statistically significant differences existed in response rates by race/ethnicity, citizenship, or school, but seniors and women responded to the survey at a significantly higher rate.
NSSE provides comparison data for each participating school. CWRU’s closest comparison group consists of the other members of the Association of American Universities (AAU) who participated in the NSSE during 2012. Compared to first-year students at other AAU schools, CWRU first-year students were significantly more likely to make a class presentation. They were also more likely to ask questions in class or contribute to class discussions and to work with classmates outside of class to prepare assignments. They were less likely to work with other students on projects during class.

**Figure 2. How often have you made a presentation in class?**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWRU First-Year Students</td>
<td>4%</td>
<td>16%</td>
<td>75%</td>
<td>6%</td>
</tr>
<tr>
<td>AAU First-Year Students</td>
<td>5%</td>
<td>17%</td>
<td>58%</td>
<td>21%</td>
</tr>
</tbody>
</table>

**Seniors**

Almost all seniors (98%) made at least one class presentation during the year, and 61% frequently did so. The majority of seniors said they often or very often:

- Asked questions in class or contributed to class discussions (67%)
- Discussed ideas from their readings/classes with others outside of class (64%)
- Worked with classmates outside of class to prepare assignments (68%)

Similar to first-year students, fewer seniors reported working with others on class projects during class (30%), tutoring or teaching other students (32%), and participating in a community-based project as part of a regular course (11%) (see figure 3).

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2012 AAU NSSE participants - Rutgers University (New Brunswick/Piscataway), Syracuse University, and the universities of Arizona, Illinois (Urbana-Champaign), Michigan (Ann Arbor), Missouri (Columbia), and Oregon.
Compared to seniors at other AAU schools, CWRU seniors were more likely to:

- Ask questions in class or contribute to class discussions
- Make a class presentation
- Work with students outside of class to prepare assignments
- Tutor/teach other students

They were significantly less likely to work with other students on projects during class or participate in a community-based project as part of a regular course.

**Active and Collaborative Learning Benchmark Scores**

Using a combination of the items listed above, the researchers at NSSE developed benchmark scores for active and collaborative learning. Benchmark scores consist of a weighted average of student responses calculated on a scale of 0 to 100. Please note, the score should not be converted into a percentage or be compared across different benchmarks (e.g., active and collaborative learning vs. student-faculty interaction); however, benchmark scores may be used to compare first-year students and seniors.

CWRU’s 2012 active and collaborative learning score for first-year students was 44. CWRU’s score was significantly higher than other AAU schools; however, it was no different than Carnegie or 2012 NSSE schools. Schools that scored in the top 10% on first-year academic challenge had an average score of 52 for 2012. Since 2001, CWRU’s active and collaborative learning benchmark score for first-year students has increased significantly, as shown in figure 4.

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3 The effect size for first year students was small: AAU (.13).
CWRU’s active and collaborative learning score for 2012 seniors was 50. This score has significantly increased since 2001 (see figure 5). That said, schools that scored in the top 10% had an average score of 61 for 2012. While there were no detectible differences between CWRU’s 2012 score and that of other AAU and Carnegie schools, CWRU’s score was significantly lower than other NSSE 2012 participants\(^4\).

**Figure 4. Active and Collaborative Learning**
**CWRU First-Year Students**

\[
\begin{array}{cccccccccc}
  '01 & '02 & '03 & '04 & '05 & '06 & '07 & '08 & '09 & '10 & '11 & '12 \\
  38 & 39 & 42 & 40 & 40 & 41 & 40 & 42 & 44 \\
\end{array}
\]

**Figure 5. Active and Collaborative Learning**
**CWRU Seniors**

\[
\begin{array}{cccccccccc}
  '01 & '02 & '03 & '04 & '05 & '06 & '07 & '08 & '09 & '10 & '11 & '12 \\
  45 & 45 & 43 & 45 & 47 & 47 & 48 & 49 & 50 \\
\end{array}
\]

**Figure 4. 2012 Active and Collaborative Learning Benchmark Scores**

\[
\begin{array}{cccccccccc}
  & & & & & & & & & & \\
  & & & & & & & & & & \\
  First Years & Seniors \\
  CWRU & 44 & 50 & 41 & 49 & 42 & 49 & 44 & 52 & 52 & 61 \\
  AAU & & & & & & & & & & \\
  CWRU Carnegie Class & & & & & & & & & & \\
  2012 NSSE Schools & & & & & & & & & & \\
  Top 10% of Schools & & & & & & & & & & \\
\end{array}
\]

**Additional Information**
For additional information about this report, please contact Amanda Thomas at (216) 368-6119 or ast27@case.edu.

\(^4\) The effect size for seniors was small: NSSE 2012 (.10)