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 provides information about the level of academic challenge at CWRU.

**Level of Academic Challenge for First-Year Students**

Do first-year CWRU students find their courses challenging and if so, to what degree? Almost all (92%) first-year CWRU students said they worked harder than they thought they could to meet an instructor’s expectations, and more than half said they often did. The majority of first-years said they spent 16 or more hours preparing for class during a typical week (68%). In terms of homework, first-years most often said they were assigned 5-10 textbooks, books, or book-length packs of reading. The majority of first-year students wrote five or more short reports (63%) and 47% wrote at least five medium-length reports (see figure 1). However, compared to seniors, first year students wrote relatively fewer long papers.

**Figure 1. Number and Length of Written Reports Completed by First-Year Students During 2011-12**

- **Short (less than 5 pages):**
  - 21%
- **Medium-length (5-19 pages):**
  - 42%
- **Long (20 or more pages):**
  - 34%

In terms of critical thinking, the majority of first-year students said their courses emphasized:

- Analysis of the basic elements of an idea, experience, or theory (quite a bit/very much: 79%)
- Application of theories or concepts to practical problems or new situations (76%)
- Synthesis and organization of ideas, information, or experiences (69%)
- Making judgments about the value of information, arguments, or methods (59%)

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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 2012.² Compared to first-year students at other AAU schools, CWRU first-years were more likely to say their institution emphasized studying and academic work. They also wrote significantly more medium-length reports and spent more hours preparing for class each week. However, they were less likely to say their courses emphasized making judgments about the value of information, arguments, or methods.

**Level of Academic Challenge for Seniors**

Are CWRU seniors challenged academically? Similar to first-year students, almost all seniors (93%) said they worked harder than they thought they could to meet an instructor’s standards or expectations, and more than half said they *often* did. The majority of seniors reported spending 16 or more hours preparing for class each week (58%). In terms of reading, they were most commonly assigned 5-10 textbooks, books, or book-length packs of course readings. In terms of writing, the majority of seniors (55%) wrote five or more medium-length reports (5-19 pages); more than half (61%) also wrote five or more long reports (20 or more pages) (see figure 2).

**Figure 2. Number and Length of Written Reports Completed by Seniors during 2011-12**

The majority of CWRU seniors said their courses emphasized:

- Analysis of the basic elements of an idea, experience, or theory (very much/quite a bit: 90%)
- Synthesis and organization of ideas, information, or experiences (80%)
- Application of theories or concepts (78%)
- Making judgments about the value of information, arguments, or methods (68%)

Compared to seniors at other AAU schools, CWRU seniors were more likely to:

- Spend time preparing for class
- Write long reports
- Say their courses emphasized analysis of the basic elements of an idea, experience, or theory
- Say CWRU emphasized spending significant amounts of time on studying and academic work

²2012 AAU NSSE participants were Rutgers University (New Brunswick/Piscataway), Syracuse University, and the universities of Arizona, Illinois (Urbana-Champaign), Michigan (Ann Arbor), Missouri (Columbia), and Oregon.
**Academic Challenge Benchmark Scores**

Using a combination of the items listed above, the researchers at NSSE developed benchmark scores for level of academic challenge. 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, and while benchmark scores may be used to compare first-years and seniors, the scores should not be compared across different benchmarks (e.g., Level of Academic Challenge vs. Student-Faculty Interaction).

CWRU’s 2012 academic challenge score for first-year students was 57. CWRU’s score was significantly higher than CWRU’s three comparison groups: other AAU schools, schools in CWRU’s Carnegie Class, and all schools that participated in the NSSE during 2012. Schools that scored in the top 10% on academic challenge had an average score of 60 for 2012. Since 2001, CWRU’s academic challenge benchmark score has remained relatively constant for first-year students (see figure 3).

CWRU’s 2012 academic challenge score for seniors was 60. CWRU’s score was significantly higher than other AAU schools and other schools in CWRU’s Carnegie Class; however, there was no detectible difference compared to other NSSE 2012 schools. Schools that scored in the top 10% on academic challenge had an average score of 65 for 2012. Since 2001, CWRU’s academic challenge score for seniors has significantly increased, as shown in figure 4.

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3 The effect sizes for first-years were small: AAU (.15), Carnegie Class (.21), and NSSE 2012 (.20)

4 The effect sizes for seniors were also small: AAU (.19) and Carnegie Class (.21)
What Else Do We Know about Academic Challenge at CWRU?
Up to this point, we have discussed only the items that were included in the Academic Challenge benchmark. There are other items on the survey that relate to the level of academic challenge which were not included in the benchmark. For instance, almost all students (first-years and seniors combined) reported that they put together ideas or concepts from different courses when completing assignments (97%) and worked on a paper or project that required integrating ideas or information from various sources (99%). Most students said that, in a typical week, they worked on 3-4 problems sets that took over an hour each to complete and 1-2 sets that took under an hour each to complete. Over three-fourths of students said they prepared two or more drafts before turning in a paper or assignment (78%). Finally, when asked to rate the extent to which their examinations challenged them to do their best (with 1 being very little and 7 being very much), 93% reported a 4 or higher (as shown in figure 6).

Additional Information
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