2013 The Freshman Survey:
High School Experiences

Introduction
In summer and fall of 2013, first-year students enrolled at Case Western Reserve University (CWRU) were asked to complete the Cooperative Institutional Research Program’s (CIRP) The Freshman Survey (TFS). The survey covers a variety of topics related to students’ experiences, beliefs, and expectations prior to entering college. Only first-time first-year students who were 18 years and older were eligible to participate. This report focuses on students’ high schools experiences. High school experiences include items related to academic preparation and CIRP constructs related to academics, social engagement, and citizenship.

AP Courses and exams
Students were asked to self-report on the number of AP courses and exams they took in high school. As can be seen in Figure 1, CWRU first-year students were very similar in terms of both the number of exams and AP courses when compared to first-year students at peer institutions.2

Figure 1: AP Courses and Exams

1 Of the 1,021 eligible students, 522 completed the survey resulting in a 51% response rate. Compared to their peers, women, White/Asian students, and domestic students were more likely to participate in the survey.
2 Peer universities included: Boston College, Brown University, California Institute of Technology, Duke University, Emory University, Northeastern University, Northwestern University, Rice University, Tulane University of Louisiana, University of Norte Dame, University of Rochester, University of Southern California, and Vanderbilt University.
Mathematics Courses in High School
In addition to AP courses, students were asked which math courses they completed in high school. Students with stronger math preparation have much better chances of completing a bachelor’s degree in any field. This is especially true for students majoring in STEM fields. As with AP courses and exams, CWRU students were similar to students at peer institutions in terms of math preparation. However, CWRU students were significantly more likely to have taken an AP Calculus course (p<.05).

Figure 2: High School Math Courses

Tutoring and Remedial Work
Students were asked if they had any special tutoring or remedial work during high school. They were also asked if they thought they would need additional help in specific subject areas while in college. Figure 3 highlights responses on these items. Significantly more CWRU students reported receiving special assistance during high school in English, reading, science, and writing when compared to students at peer institutions. Additionally, significantly more CWRU students indicated they would need additional help in English, reading, social studies, science, and writing.

Figure 3: Tutoring and Remedial Work

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CIRP Constructs
CIRP constructs are designed to capture the experiences and outcomes institutions are often interested in understanding, but that present a measurement challenge because of their complex and multifaceted nature. Constructs are particularly useful for benchmarking and allowing stakeholders to determine if the experiences and outcomes for CWRU students differ from comparison group.

Academic Constructs
The CIRP includes several constructs related to academic success and learning. These include habits of the mind, a unified measure of the behaviors and traits associated with academic success (11 items), academic self-concept, a unified measure of students’ beliefs about their abilities in academic environments (4 items), and college reputation orientation, a measure of the degree to which students value academic reputation and future career potential for choosing this college (3 items). Results for these constructs are shown in figure 4. CWRU students scored significantly higher on academic self-concept when compared to peers.

<table>
<thead>
<tr>
<th>Habits of the mind</th>
<th>Academic self-concept</th>
<th>College reputation orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWRU</td>
<td>Peers</td>
<td>CWRU</td>
</tr>
<tr>
<td>42%</td>
<td>43%</td>
<td>54%</td>
</tr>
<tr>
<td>44%</td>
<td>43%</td>
<td>40%</td>
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<tr>
<td>14%</td>
<td>14%</td>
<td>6%</td>
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</tbody>
</table>

Figure 4: Academic constructs
Social Constructs
The CIRP includes several constructs related to social engagement at college. These include social self-concept, a unified measure of students’ beliefs about their abilities and confidence in social situations (4 items) and likelihood of college involvement, a unified measure of students’ expectations about their involvement in college (5 items). CWRU students scored significantly lower on social self-concept when comparison to peers. CWRU students scored significantly higher than peers on likelihood of college involvement.

Citizenship constructs
The CIRP includes several constructs related to citizenship of students. These include pluralistic orientation, a measure of skills and dispositions appropriate for living and working in diverse society (5 items), civic engagement, measures the extent to which students are motivated and involved in civic, electoral, and political activities (7 items), and social agency, a measure of the extent to which students value political and social involvement as a personal goal (6 items). CWRU students were scored significantly lower on social agency and civic engagement then students at peer institutions.

Additional Information
For additional information, please contact Joshua Terchek at (216) 368-1500 or jjt7@case.edu. Additional reports can be found on our website at https://www.case.edu/president/cir/cirhome.html.