Academic Experiences
2014 College Senior Survey

In spring 2014, we asked graduating seniors at Case Western Reserve University (CWRU) to participate in the *College Senior Survey*. The survey was administered by the Higher Education Research Institute (HERI) in conjunction with the Office of Planning and Institutional Research. It is a follow-up to *The Freshman Survey* (TFS) which was administered to this cohort in fall of 2010. Of 983[1] potential participants, 33% (n=326)[2] submitted responses. Their results are compared to students from a comparison group of universities[3]. Additionally, 154 students completed both the TFS and CSS, allowing us to make comparisons over time[4]. This report provides information about students' satisfaction with their academic experiences on campus.

Measures

The results include constructs derived from multiple items on the survey instrument. The constructs are designed to capture the experiences and outcomes that institutions are often interested in but find challenging to measure because of their complex and multifaceted nature. Constructs are particularly helpful in examining trends over time and making comparisons to other institutions. The construct scores detailed in this report are more than a basic summation of individual items. Rather, they are computed using Item Response Theory (IRT)[5] and have been scaled such that the population means equal 50. *Construct scores should not be converted into percentages or compared to other constructs.*

In addition to the constructs, additional individual items are highlighted in the report. The full distribution for constructs and individual items is available on the IR website at: https://www.case.edu/ir/srvyresults/. All significant differences also include a measure of

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[1] Population n=983: Women=399 (41%), Men=584 (59%); Caucasian=515 (52%), Asian=189 (19%), Black=41 (4%), Hispanic=33 (3%), Other=29 (3%), Unknown=106 (11%), International=70 (7%)
[2] Sample n=326: Women=166 (51%), Men=160 (49%); Caucasian=184 (56%), Asian=53 (16%), Black=10 (3%), Hispanic=8 (3%), Other=11 (3%), Unknown=42 (13%); International=17 (5%)
[3] Pepperdine University, Northeastern University, Fordham University, Texas Christian University and Biola University
[4] Longitudinal comparisons examine change in students who completed both TFS and CSS (includes data from 33 non-graduating seniors).
[5] Item Response Theory (IRT) uses response patterns to derive construct score estimates while simultaneously giving greater weight in the estimation process to survey items that tap into the construct more directly. This results in more accurate construct scores.

effect size, Cohen's d. Effect size allows us to estimate the size of the differences between two means[6]. For ease of reference, bulleted items which demonstrate significant differences are italicized.

Satisfaction with Coursework

The *Satisfaction with Coursework* construct measures the extent to which students see their coursework as relevant, useful, and applicable to their academic success and future plans. CWRU students were moderately less satisfied with their coursework than students at the comparison institutions; (*M*=47, *SD*=10.20) vs. (*M*=50, *SD*=9.68); *d*=-0.35, *p*<.001. Below is a breakdown of the satisfaction with coursework construct by item:

- *Relevance of coursework to future career plans: 24% vs. 31% very satisfied; (M=3.66, SD=1.05) vs. (M=3.92, SD=0.96); d=-0.27, p<.001*
- *Relevance of coursework to everyday life: 14% vs. 25% very satisfied; (M=3.47, SD=1.00) vs. (M=3.86, SD=0.92); d=-0.42, p<.001*
- *Courses in your major field: 35% vs. 42% very satisfied; (M=3.98, SD=1.05) vs. (M=4.18, SD=0.91); d=-0.22, p<.001*
- *General education or core curriculum courses: 15% vs. 22% very satisfied; (M=3.67, SD=0.91) vs. (M=3.84, SD=0.90); d=-0.19, p<.01*

Pluralistic Orientation

The *Pluralistic Orientation* construct is a unified measure of skills and dispositions appropriate for living and working in a diverse society. These skills and dispositions include ability to work cooperatively with diverse people, openness to having one's views challenged, and ability to discuss and negotiate controversial issues. Graduating seniors at CWRU scored slightly higher on pluralistic orientation than those at the comparison institutions; (*M*=52, *SD*=7.51) vs. (*M*=51, *SD*=7.96), *d*=0.14, *p*<.05. This construct was comprised of the following items:

- *Tolerance of others with different beliefs: 36% vs. 29% self-rated as highest ten percent; (M=4.24, SD=0.66) vs. (M=4.09, SD=0.71); d=0.21, p<.01*
- Ability to work cooperatively with diverse people: 35% vs. 32% self-rated as highest ten percent; (M=4.21, SD=0.68) vs. (M=4.15, SD=0.69); No meaningful difference
- *Openness to having my views challenged: 23% vs. 21% self-rated as highest ten percent; (M=3.96, SD=0.72) vs. (M=3.86, SD=0.77); d=0.13, p<.05*
- Ability to see the world from someone else's perspective: 30% vs. 29% self-rated as highest ten percent; (M=4.14, SD=0.68) vs. (*M*=4.10, *SD*=0.70); No meaningful difference
- Ability to negotiate and discuss controversial issues: 25% vs. 23% self-rated as highest ten percent; (M=3.94, *SD*=0.78) vs. (*M*=3.89, *SD*=0.79); No meaningful difference

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[6] The effect size is the size of the difference between two means. Cohen's d values were interpreted according to the criteria used by the Indiana University Center for Postsecondary Research: small ~ .1, medium ~ .3, large ~ .5, very large ~ .7. These benchmark criteria were applied unilaterally to both constructs and individual items for simplicity.

Habits of Mind

The *Habits of Mind* construct is a unified measure of the behaviors and traits associated with academic success. These learning behaviors are seen as the foundation for lifelong learning. CWRU's score on habits of mind did not change significantly from TFS (*M*=55, *SD*=8.72) to CSS (*M*=56, *SD*=10.87). Habits of mind scores at the comparison institutions increased slightly from TFS (*M*=53, *SD*=8.62) to CSS (*M*=55, *SD*=11.55); *d*=0.17, *p*<.001. No meaningful difference was found between CWRU and the comparison institutions on habits of mind in the 2014 CSS; (M=54, SD=11.08) vs. (M=55, SD=11.47).
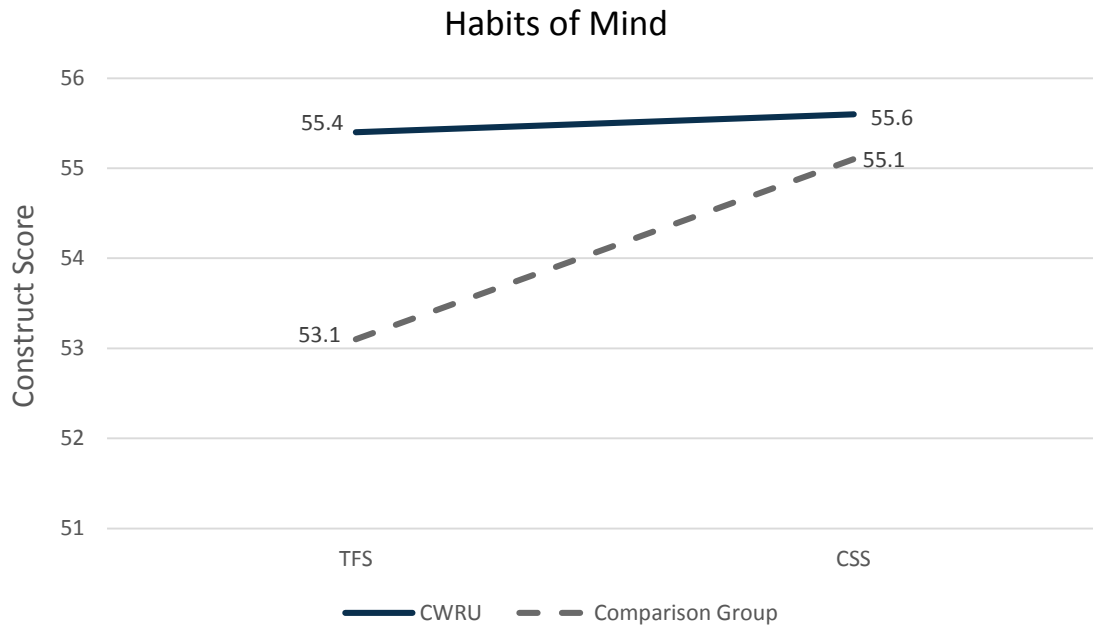
Habits of Mind

The habits of mind construct included the following items:

- Support your opinions with a logical argument: 75% vs. 71% frequently; (*M*=2.74, *SD*=0.46) vs. (*M*=2.69, *SD*=0.50); No meaningful difference
- Seek solutions to problems and explain them to others: 70% vs. 67% frequently; (*M*=2.68, *SD*=0.49) vs. (*M*=2.65, *SD*=0.50); No meaningful difference
- Seek alternative solutions to a problem: 56% vs. 58% frequently; (*M*=2.53, *SD*=0.56) vs. (*M*=2.55, *SD*=0.54); No meaningful difference
- Evaluate the quality or reliability of information you received: 61% vs. 62% frequently; (*M*=2.57, *SD*=0.58) vs. (*M*=2.59, *SD*=0.55); No meaningful difference
- *Ask questions in class: 29% vs. 42% frequently; (M=2.17, SD=0.62) vs. (M=2.34, SD=0.62); d=-0.27, p<.001*
- Take a risk because you felt you had more to gain: 35% vs. 41% frequently; (*M*=2.27, *SD*=0.60) vs. (*M*=2.34, *SD*=0.61); No meaningful difference
- *Seek feedback on your academic work: 49% vs. 56% frequently; (M=2.42, SD=0.63) vs. (M=2.51, SD=0.59); d=-0.15, p<.05*

- *Explore topics on your own, even though it was not required for a class: 44% vs. 50% frequently; (M=2.33, SD=0.66) vs. (M=2.42, SD=0.63); d=-0.14, p<.05*
- *Revise your papers to improve your writing: 42% vs. 54% frequently; (M=2.32, SD=0.65) vs. (M=2.48, SD=0.61); d=-0.26, p<.001*
- *Look up scientific research articles and resources: 64% vs. 57% frequently; (M=2.57, SD=0.61) vs. (M=2.47, SD=0.66); d=0.15, p<.05*
- Accept mistakes as part of the learning process: 64% vs. 64% frequently; (M=2.63, SD=0.51) vs. (M=2.62, SD=0.53); No meaningful difference

Academic Self-Concept

The *Academic Self-Concept* construct is a unified measure of students' beliefs about their abilities and confidence in academic environments. While students at CWRU and the comparison institutions both reported a moderate decline in academic self-concept between administration of the TFS and CSS, CWRU students indicated a greater decline (*M*=58, TFS; *M*=54, CSS; *d*=-0.31, *p*<.01). Despite this decline, when compared to students at the comparison institutions, CWRU students scored slightly higher on academic self-concept in the 2014 CSS; (*M*=53, *SD*=10.08) vs. (*M*=51, *SD*=9.46), *d*=0.21, *p*<.01.

Academic Self-Concept
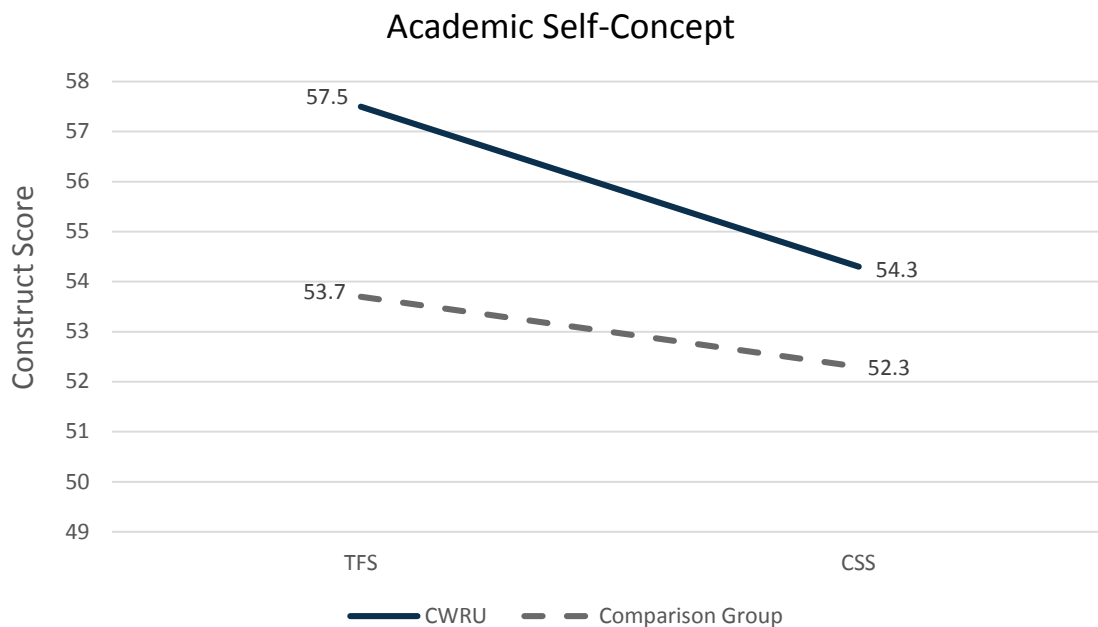
The academic self-concept construct comprises the following items:

- *Academic ability: 42% vs. 32% self-rated as highest ten percent; (M=4.24, SD=0.77) vs. (M=4.12, SD=0.73); d=0.16, p<.05*
- Self-confidence (intellectual): 24% vs. 20% self-rated as highest ten percent; (*M*=3.83, *SD*=0.91) vs. (*M*=3.79, *SD*=0.87); No meaningful difference
- Drive to achieve: 39% vs. 40% self-rated as highest ten percent; (*M*=4.11, *SD*=0.89) vs. (*M*=4.14, *SD*=0.85); No meaningful difference

- *Mathematical ability self-rated as highest ten percent: 23% vs. 13%; (M=3.76, SD=0.92) vs. (M=3.38, SD=0.98); d=0.39, p<.001*

Academic Disengagement

The *Academic Disengagement* construct measures the extent to which students engage in behaviors that are inconsistent with academic success. CWRU seniors reported moderately higher academic disengagement than did students at the comparison institutions (*M*=53, *SD*=8.66) vs. (*M*=51, *SD*=8.00), *d*=0.24, *p*<.001. Following is a breakdown of these behaviors by item:

- *Came late to class: 15% vs. 10% frequently; (M=1.90, SD=0.63) vs. (M=1.79, SD=0.60); d=0.18, p<.01*
- *Missed class for other reasons (than employment): 10% vs. 6% frequently; (M=1.96, SD=0.49) vs. (M=1.89, SD=0.47); d=0.15, p<.05*
- *Fell asleep in class: 6% vs. 3% frequently; (M=1.58, SD=0.60) vs. (M=1.36, SD=0.54); d=0.41, p<.001*
- Failed to complete homework on time: 6% vs. 8% frequently; (*M*=1.59, *SD*=0.60) vs. (*M*=1.60, *SD*=0.62); there was no meaningful difference in this particular behavior.

Courses and Performance

The CSS included items related to student satisfaction with their courses, application of concepts, access to courses, and GPA's. CWRU performed slightly to moderately better on the following:

- *Science and mathematics courses: 27% vs. 18% very satisfied; (M=3.89, SD=0.96) vs. (M=3.68, SD=0.94); d=0.22, p<.001*
- *Had difficulty getting the courses they needed: 5% vs. 8% frequently; (M=1.50, SD=0.58) vs. (M=1.59, SD=0.63), d=-0.14, p<.05*

CWRU performed slightly to moderately lower on the following:

- *Applied concepts from courses to everyday life: 24% vs. 37% frequently; (M=2.15, SD=0.56) vs. (M=2.31, SD=0.58); d=-0.28, p<.005*
- *Class size: 35% vs. 43% very satisfied; (M=4.14, SD=0.78) vs. (M=4.28, SD=0.74); d=-0.19, p<.01.*

The following items demonstrated no meaningful difference between CWRU and comparison institutions:

- Overall college career GPA: 30% vs. 24% "A" or "A+"; (*M*=6.53, *SD*=1.37) vs. (*M*=6.45, *SD*=1.33)
- Primary major GPA across college career: 33% vs. 32% "A" or "A+"; (*M*=6.58, *SD*=1.38) vs. (*M*=6.66, *SD*=1.33)
- Arts and Humanities courses: 23% vs. 25% very satisfied; (*M*=3.84, *SD*=0.86) vs. (*M*=3.93, *SD*=0.83)
- Social Science courses: 24% vs. 26% very satisfied; (*M*=3.89, *SD*=0.80) vs. (*M*=3.93, *SD*=0.83)
- Tutoring or other academic assistance: 23% vs. 18% very satisfied; (*M*=3.75, *SD*=0.90) vs. (*M*=3.68, *SD*=0.86)

Knowledge and Abilities

The 2014 CSS asked students to provide self-ratings of their knowledge and abilities. CWRU students rated themselves slightly higher on critical thinking, problem solving, and computer skills than did those at the comparison institutions.

- *Critical thinking skills: 54% vs. 48% self-rated as a major strength; (M=4.43, SD=0.70) vs. (M=4.33, SD=0.74); d=0.14, p<.05.*
- *Problem solving skills: 59% vs. 50% self-rated as a major strength; (M=4.50, SD=0.66) vs. (M=4.37, SD=0.71); d=0.18, p<.01.*
- *Computer skills: 14% vs. 9% self-rated as highest ten percent; (M=3.62, SD=0.79) vs. (M=3.46, SD=0.79); d=0.21, p<.01.*

CWRU students did not rate themselves as stronger than those at the comparison institutions in their self-ratings of the following attributes:

- General knowledge: 38% vs. 34% self-rated as a major strength; (*M*=4.19, *SD*=0.74) vs. (*M*=4.17, *SD*=0.70)
- Knowledge of a particular field or discipline: 40% vs. 41% self-rated as a major strength; (*M*=4.27, *SD*=0.72) vs. (*M*=4.29, *SD*=0.68)
- Ability to conduct research: 31% vs. 26% self-rated as a major strength; (*M*=3.82, *SD*=1.02) vs. (*M*=3.80, *SD*=0.95)

In addition, CWRU students were not meaningfully different from those at the comparison institutions in rating themselves as being in the "highest 10%" on the following items:

- Artistic ability: 7% vs. 7%; (*M*=2.96, *SD*=1.00) vs. (*M*=3.03, *SD*=1.01)
- Writing ability: 17% vs. 21%; (*M*=3.77, *SD*=0.85) vs. (*M*=3.83, *SD*=0.83)

Written and Oral Communication

Students were asked about the extent to which academic coursework included writing-focused assignments. Students were also asked about their self-rating of foreign language ability. CWRU students reported slightly to moderately less activity on writing items, as described below:

- *Took a class that required one or more 10+ page papers: 36% vs. 45% frequently; (M=2.31, SD=0.57) vs. (M=2.40, SD=0.58); d=-0.16, p<.05*
- *Took a class that required multiple short papers: 52% vs. 69% frequently; (M=2.50, SD=0.53) vs. (M=2.68, SD=0.49); d=-0.37, p<.001*
- Made a presentation in class: 63% vs. 68% frequently; (*M*=2.63, *SD*=0.48) vs. (*M*=2.68, *SD*=0.48); No meaningful difference
- Foreign language ability: 11% vs. 15% self-rated as a major strength; (*M*=2.79, *SD*=1.29) vs. (*M*=2.91, *SD*=1.33); No meaningful difference
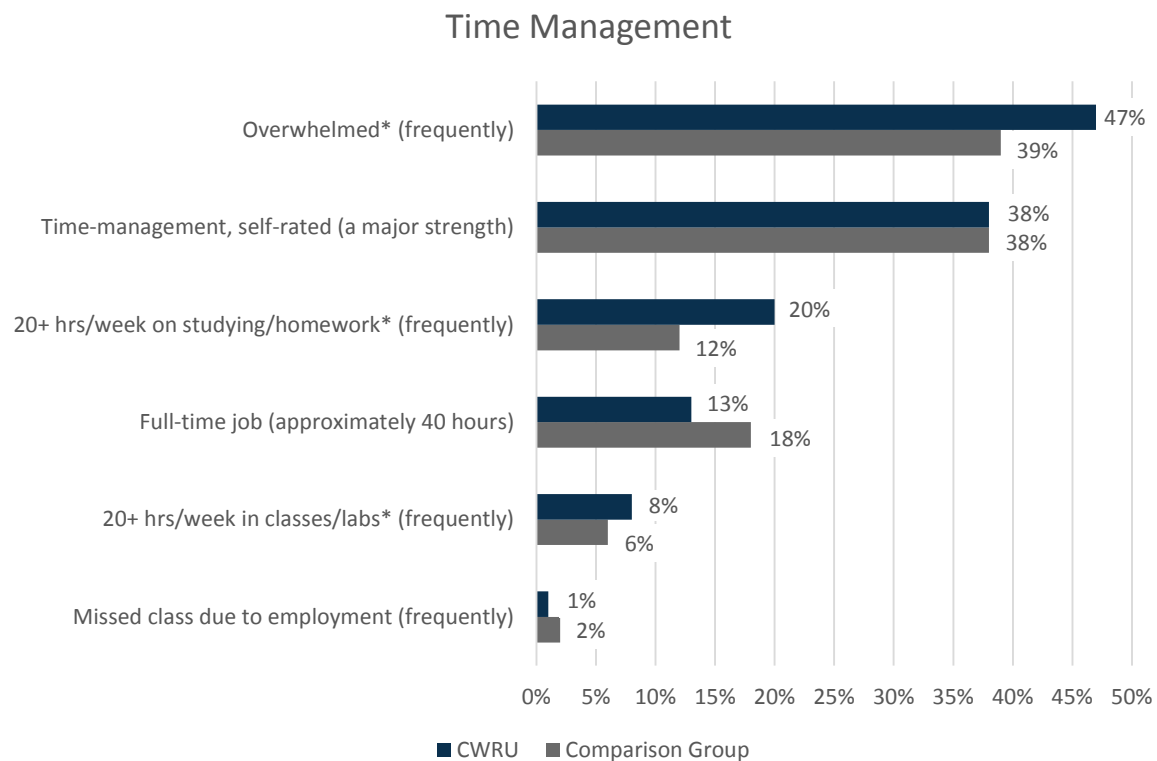
Advising

The survey also contained items that asked students about their experiences with academic advising. There were no meaningful differences between CWRU students and those in the comparison group in terms of those who reported frequent meetings with an advisor or counselor about their career plans: 25% vs. 24%; (M=2.11, SD=0.61) vs. (M=2.10, SD=0.61). However, CWRU students reported being moderately less satisfied with academic advising than students in the comparison group: 16% vs. 21% very satisfied; (M=3.17, SD=1.23) vs. (M=3.56, SD=1.11); d=-0.35, p<.001.

The CWRU version of the survey asked specifically about SAGES advising. The mean response was "Neutral" (M=2.95, SD=1.22). Of the respondents, 9.5% (n=31) reported being very satisfied and 20.2% (n=66) reported being generally satisfied with the advising received from their SAGES advisor.

Time Management

The CSS also included several items on time management and how students perceived their time. CWRU students reported slightly more time attending classes/labs (M=6.02 vs. M=5.87, d=0.13), and studying/doing homework (M=5.82 vs. M=5.47; d=0.24) than did students in the comparison group. They also were slightly more likely to feel overwhelmed (M=2.43 vs. M=2.34; d=0.16).

Time Management

Category	CWRU	Comparison Group
Overwhelmed* (frequently)	47%	39%
Time-management, self-rated (a major strength)	38%	38%
20+ hrs/week on studying/homework* (frequently)	20%	12%
Full-time job (approximately 40 hours)	13%	18%
20+ hrs/week in classes/labs* (frequently)	8%	6%
Missed class due to employment (frequently)	1%	2%

■ CWRU   ■ Comparison Group

*Slight differences: overwhelmed (d=0.16), studying/homework (d=0.24), classes/labs (d=0.13)