

Learning with Peers

2015 National Survey of Student Engagement

In spring 2015, 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 was administered by the Indiana University Center for Postsecondary Research in conjunction with CWRU's Office of Planning and Institutional Research. It is a follow-up to the NSSE which was administered to first-year students and seniors in spring 2012. Of 1,269¹ potential first-year participants, 26% (n=329)² submitted responses. Of 840³ potential senior year participants, 28% (n=232)⁴ submitted responses. Their results are compared to students from a comparison group of universities⁵. This report provides information about students' experiences interacting with peers for the purpose of discussing, understanding, or preparing course material.



Engagement Indicators

The NSSE comprises ten Engagement Indicators (EI's). These EI's are summary measures based on sets of NSSE questions examining key dimensions of student engagement. As summary measures, the EI's are scored. Each EI is scored on a 60-point scale. To produce an EI score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60) and the rescaled items are averaged. Thus, a score of zero means that a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale of every item.

The EI's are organized within four broad themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The *Learning with Peers* theme, the focus of this report, comprises two EI's: Collaborative Learning and Discussion with Diverse Others. Each of these EI's, in turn, comprises four items on the survey instrument. The full distribution for EI's and individual items is available on the IR website at: <http://www.case.edu/ir/reportssurveyresults/>. All significant differences

¹ First-year population n=1,269: Women=575 (45%), Men=694 (55%); Caucasian=628 (50%), Asian=268 (21%), Black=62 (5%), Hispanic=81 (6%), Multiracial=64 (5%), Unknown=20 (2%), International=146 (12%)

² Sample n=329: Women=176 (53%), Men=153 (47%); Caucasian=168 (51%), Asian=65 (20%), Black=14 (4%), Hispanic=19 (6%), Multiracial=16 (5%), Unknown=3 (1%), International=44 (13%)

³ Senior year population n=840: Women=383 (46%), Men=440 (52%); Caucasian=460 (55%), Asian=158 (19%), Black=21 (3%), Hispanic=30 (4%), Multiracial=26 (3%), Unknown=72 (9%), International=55 (7%)

⁴ Sample n=232: Women=106 (46%), Men=118 (51%); Caucasian=136 (59%), Asian=36 (16%), Black=3 (1%), Hispanic=6 (3%), Multiracial=10 (4%), Unknown=18 (8%), International=15 (7%)

⁵ Association of American Universities (AAU) comparison group: Boston University, Georgia Institute of Technology, Indiana University Bloomington, Rutgers University-New Brunswick/Piscataway, Stony Brook University, University at Buffalo-State University of New York, University of Arizona, University of Illinois at Urbana-Champaign, University of Maryland, University of Missouri-Columbia, University of Oregon, University of Wisconsin-Madison

also include a measure of effect size, Cohen's *d*. Effect size allows us to estimate the size of the differences between two means and indicates the practical importance of an observed difference⁶.

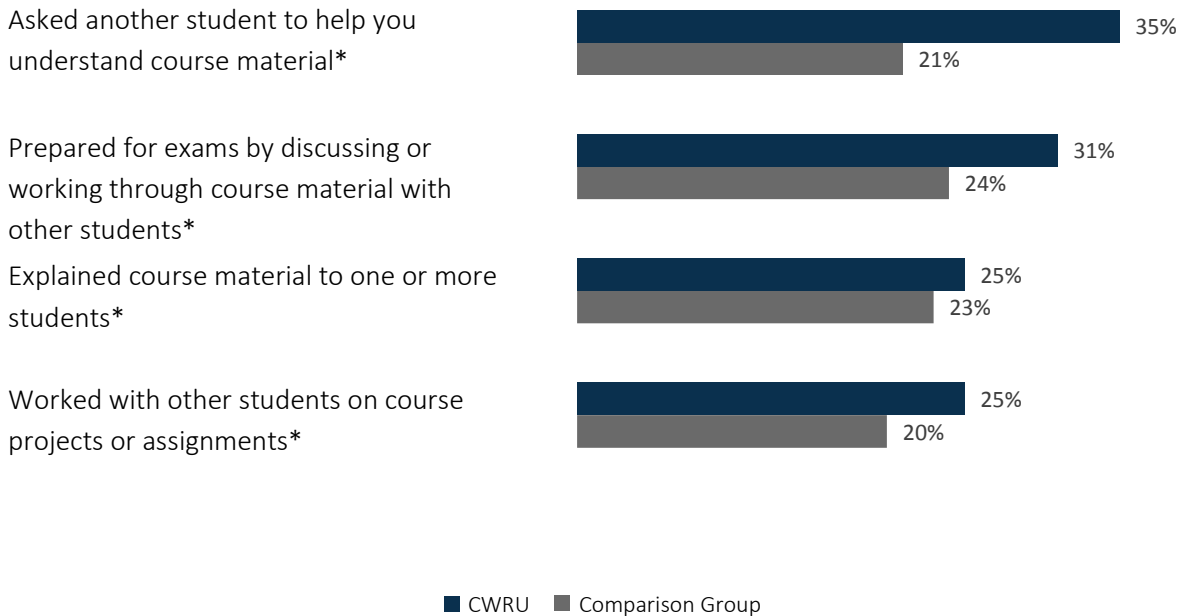
First-Year Students

Collaborative Learning - First-Years

The *Collaborative Learning* EI is a measure of students' involvement with peers in working towards understanding or preparation of course material. CWRU first-year students scored slightly higher on collaborative learning than those in the comparison group; ($M=38, SD=14.3$) vs. ($M=35, SD=14.1$); $d=0.19, p<.001$. Following is a breakdown of the individual items and CWRU's percentages relative to the comparison group. The percentages represent the frequency with which students responded "very often".

Collaborative Learning (First-Years)

Very often:



*Slight differences: asked for help ($d=0.28$), prepared for exams ($d=0.13$), explained course material ($d=0.11$), worked with other students ($d=0.13$)

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 $\sim .1$, medium $\sim .3$, large $\sim .5$, very large $\sim .7$. These benchmark criteria were applied unilaterally to both Engagement Indicators and individual items for simplicity.

Following is a breakdown of the data for the individual items:

- Asked another student to help you understand course material: 35% vs. 21%; ($M=2.98, SD=0.90$) vs. ($M=2.73, SD=0.86$); $d=0.28, p<.001$
- Prepared for exams by discussing or working through course material with other students: 31% vs. 24%; ($M=2.82, SD=1.00$) vs. ($M=2.70, SD=0.93$); $d=0.13, p<.05$
- Explained course material to one or more students: 25% vs. 23%; ($M=2.92, SD=0.78$) vs. ($M=2.84, SD=0.80$); $d=0.11$
- Worked with other students on course projects or assignments: 25% vs. 20%; ($M=2.79, SD=0.86$) vs. ($M=2.68, SD=0.86$); $d=0.13, p<.05$

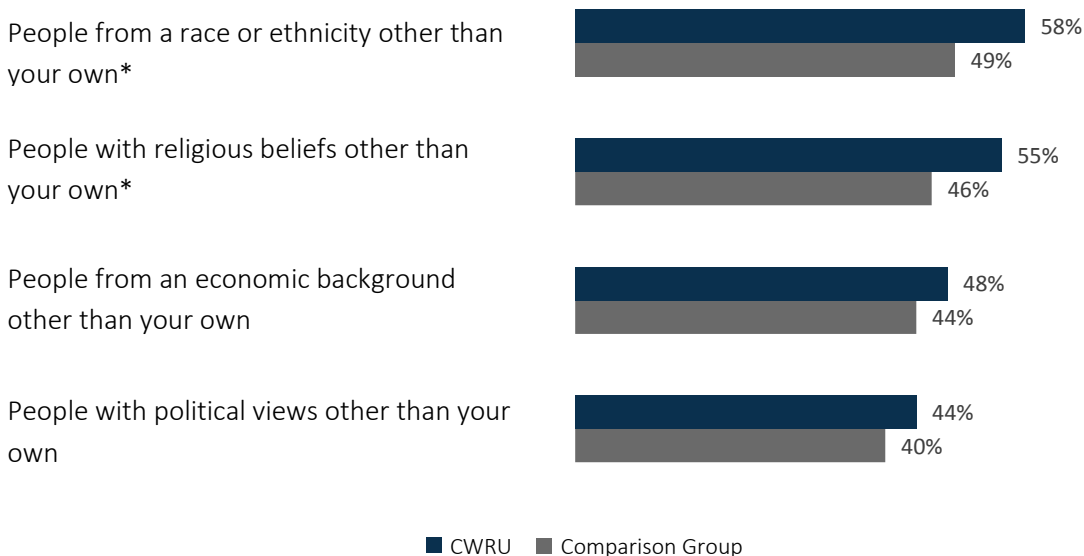
Discussion with Diverse Others - First-Years

The *Discussion with Diverse Others* EI is a measure of the frequency with which students interact with diverse peers to discuss ideas. CWRU first-year students scored slightly better than the comparison group; ($M=45, SD=14.6$) vs. ($M=43, SD=15.0$); $d=0.12$.

Following is a breakdown of the individual items and CWRU's percentages relative to the comparison group. The percentages represent the frequency with which students responded "very often".

Discussion with Diverse Others (First-Years)

Very often had discussions with:



*Slight differences: different ethnicity ($d=0.16$), different religious beliefs ($d=0.16$)

While CWRU students scored slightly higher on discussion with diverse others than the comparison group, only two individual items were of note in their contribution towards this difference, as detailed below:

- Had discussions with people from a race or ethnicity other than your own: 58% vs. 49%; ($M=3.39, SD=0.80$) vs. ($M=3.26, SD=0.85$); $d=0.16, p<.05$
- Had discussions with people with religious beliefs other than your own: 55% vs. 46%; ($M=3.32, SD=0.87$) vs. ($M=3.18, SD=0.88$); $d=0.16, p<.01$

Seniors

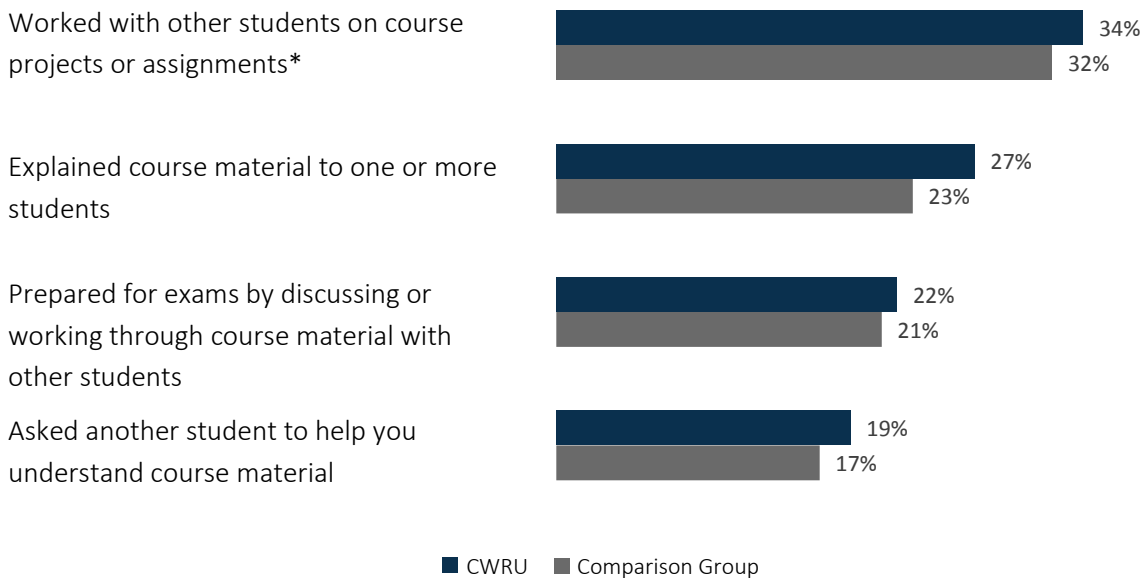
Collaborative Learning - Seniors

Unlike the case with first-year students, there was no meaningful difference between CWRU seniors and those in the comparison group on the Collaborative Learning EI; ($M=35, SD=13.8$) vs. ($M=34, SD=14.2$).

Following is a breakdown of the individual items and CWRU's percentages relative to the comparison institutions. The percentages represent the frequency with which students responded "very often".

Collaborative Learning (Seniors)

Very often:



*Slight difference: worked with other students ($d=0.11$)

Though there was no meaningful difference between CWRU and the comparison group on collaborative learning, CWRU students scored slightly better on one individual item:

- Worked with other students on course projects or assignments: 34% vs. 32%; ($M=3.03, SD=0.84$) vs. ($M=2.94, SD=0.90$); $d=0.11$

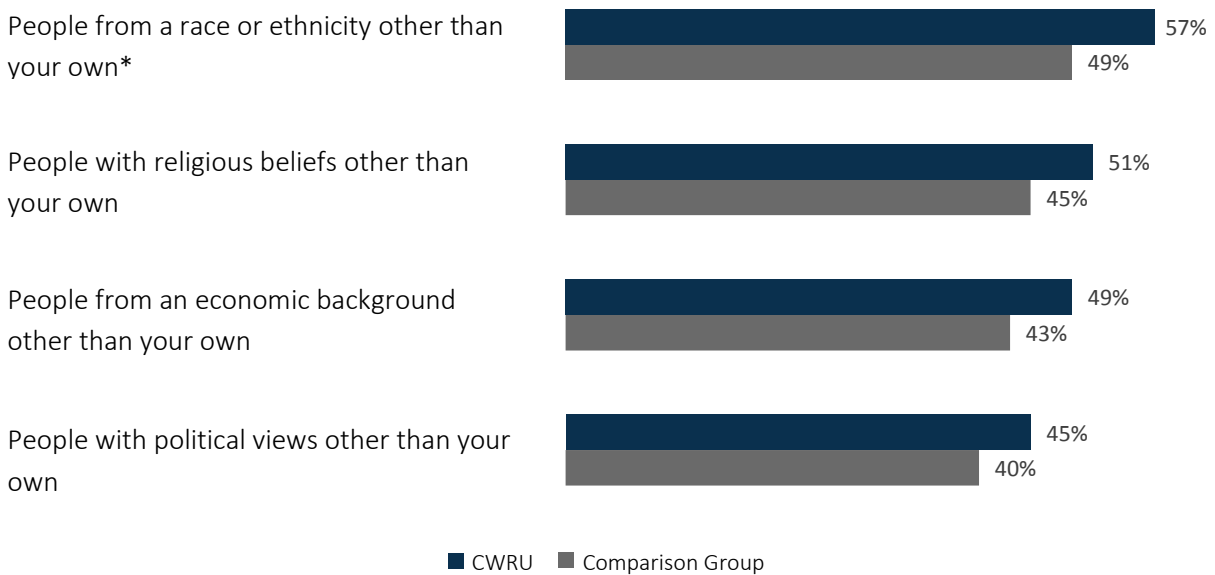
Discussion with Diverse Others - Seniors

As with first-year students, CWRU seniors scored slightly higher than those in the comparison group on the Discussion with Diverse Others EI; ($M=45, SD=13.7$) vs. ($M=43, SD=15.0$); $d=0.14, p<.05$.

Following is a breakdown of the individual items and CWRU's scores relative to the comparison group. The percentages represent the frequency with which students responded "very often".

Discussion with Diverse Others (Seniors)

Very often had discussions with:



*Slight difference: different race or ethnicity ($d=0.24$)

Though CWRU seniors scored slightly higher on discussion with diverse others than the comparison group, only one item indicated any meaningful difference, as detailed below.

- Had discussions with people from a race or ethnicity other than your own; 57% vs. 49%; ($M=3.45, SD=0.71$) vs. ($M=3.24, SD=0.87$); $d=0.24, p<.001$

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