NSSE 2018: Engagement Indicators

The National Survey of Student Engagement (NSSE) was administered during the spring 2018 semester to all first-year and senior students at CWRU.

The initial sample consisted of 2,409 students. The groups combined to complete 1,298 surveys, resulting in a 54% response rate. A breakdown of response rate by class and demographics are presented in Appendix A.

This report focuses on the results of the Engagement Indicators. The Engagement Indicators provide a useful summary of the NSSE responses by combining responses to related questions. Each Engagement Indicator offers valuable information about a distinct aspect of student engagement. A breakdown of themes, Indicators, and items is provided in Appendix B. There are ten Indicators, based on three to eight individual survey questions each. The ten Indicators are further organized into four broad themes:

Theme 1: Academic Challenge
Higher-Order Learning
Reflective and Integrative Learning
Learning Strategies
Quantitative Reasoning

Theme 2: Learning with Peers
Collaborative Learning
Discussions with Diverse Others

Theme 3: Experiences with Faculty
Student-Faculty Interaction
Effective Teaching Practices

Theme 4: Campus Environment
Quality of Interactions
Supportive Environment

The data collected during the 2018 administration allow us to compare CWRU students to AAU peers, large-city private institutions, and all institutions administering NSSE during 2017 and 2018.

While a description of Indicators and themes follows, several key takeaways were apparent. Overall, there was consistency in the student experience within CWRU as first-years and seniors responded similarly. Compared to students at the other universities, CWRU students were:

- More likely to engage in *Collaborative Learning* activities, such as asking questions of or explaining course material to other students, preparing for exams with others, and working in groups on course projects or assignments
- More likely to have *Discussions with Diverse Others*, including people from a different race or ethnicity, economic background, religious beliefs or political views other than their own
- Less likely to engage in *Reflective and Integrative Learning*
- Less likely to identify *Effective Teaching Practices* or the institution's emphasis on providing a *Supportive Environment*

The following tables report group means with a flag for effect sizes greater than 0.3. Indicator means can range from 0 to 60, with higher means indicating higher frequency of the component activities. Effect size indicates the practical importance of an observed difference. Effect sizes less than 0.2 are considered small, while 0.5 represents a medium effect size and 0.8 is a large effect size. Thus, a difference between means might be statistically significant but where effect sizes are in the small- to medium- range, the true differences are trivial.

Academic Challenge

The Academic Challenge theme consists of the Indicators of *Higher-Order Learning*, *Reflective and Integrative Learning*, *Learning Strategies*, and *Quantitative Reasoning*. First-year CWRU students reported their coursework emphasized Academic Challenge at about the same level as did the peer groups. Seniors from CWRU reported about the same institutional emphasis on higher-order learning and quantitative reasoning as did peer groups, but less reflective and integrative learning and learning strategies. Academic Challenge Indicator means are presented in Table 1.

Table 1. Academic Challenge Engagement Indicators: Means Comparison

First-years	CWRU	AAU	Large-City Private	NSSE 2017-2018
Higher-Order Learning	**38.6**	38.6	39.5	37.8
Reflective & Integrative Learning	**33.8**	35.8	36.5	35.1
Learning Strategies	**38.0**	37.4	38.8	38.0
Quantitative Reasoning	**30.2**	29.0	28.6	27.5
Seniors				
Higher-Order Learning	**36.6**	38.7	39.9	39.8
Reflective & Integrative Learning	**35.3**	37.2	39.0*	37.9
Learning Strategies	**33.8**	36.0	37.6	38.3*
Quantitative Reasoning	**30.9**	31.1	31.0	29.6

* denotes difference between comparison group and CWRU has an effect size greater than .3

Learning with Peers

The Learning with peers theme consists of the Indicators of *Collaborative Learning* and *Discussions with Diverse Others*. First-year CWRU students reported significantly more collaborative learning than did students from the peer groups, which was also true for seniors. Both groups of students from CWRU also reported a significantly greater frequency of discussions with diverse others, but the effect sizes in all cases were quite low. All Learning with Peers Indicator means are presented in Table 2.

Table 2. Learning with Peers Engagement Indicators: Means Comparison

First-years	CWRU	AAU	Large-City Private	NSSE 2017-2018
Collaborative Learning	**38.3**	34.9	34.0*	32.3*
Discussions with Diverse Others	**43.5**	41.1	41.9	39.4
Seniors				
Collaborative Learning	**38.9**	35.0	33.5*	32.5*
Discussions with Diverse Others	**43.0**	40.6	41.5	40.3

* denotes difference between comparison group and CWRU has an effect size greater than .3

Experiences with Faculty

The Experiences with Faculty theme consists of the Indicators of *Student-Faculty Interaction* and *Effective Teaching Practices*. For the most part, CWRU students closely resemble AAU peers and to a lesser extent large-city private institutions. For both first-year and senior students, CWRU is somewhat behind peers in regards to faculty utilizing effective teaching practices. Specifically, CWRU students reported receiving substantially less feedback on a draft or work in progress and less detailed feedback overall on tests or completed assignments. In most cases, however, the effect sizes are very low. All Experiences with Faculty Indicator means are presented in Table 3.

Table 3. Experiences with Faculty Engagement Indicators: Means Comparison

First-years	CWRU	AAU	Large-City Private	NSSE 2017-2018
Student-Faculty Interaction	20.8	20.8	20.2	21.1
Effective Teaching Practices	37.0	37.7	38.6	38.5
Seniors				
Student-Faculty Interaction	23.2	23.3	23.8	23.9
Effective Teaching Practices	35.1	37.4	38.6	39.4*

* denotes difference between comparison group and CWRU has an effect size greater than .3

Campus Environment

The Campus Environment theme consists of the Indicators of *Quality of Interactions* and *Supportive Environment*. First-year students rated CWRU very similarly to each of the peer groups on the Quality of Interactions Indicator. Compared with the peer groups, senior students rated CWRU well behind others on *Quality of Interactions*. Specifically, both seniors and first-years at CWRU rated their interactions with academic advisors and faculty lower than did students from the peer groups. Both first-year and senior students' ratings suggest CWRU is rated lower than each peer group on the *Supportive Environment* Indicator, but the effect sizes here were also very low. Here, students from CWRU were less likely to attend campus activities and events, or events that address important social, economic, or political issues. All Campus Environment Indicator means are presented in Table 4.

Table 4. Campus Environment Engagement Indicators: Means Comparison

First-years	CWRU	AAU	Large-City Private	NSSE 2017-2018
Quality of Interactions	41.2	41.3	41.0	41.7
Supportive Environment	34.7	36.1	35.3	36.1
Seniors	CWRU			
Quality of Interactions	37.5	39.8	39.1	42.0*
Supportive Environment	28.9	31.6	30.5	32.0

* denotes difference between comparison group and CWRU has an effect size greater than .3

Conclusion

Students from CWRU were consistently more engaged in collaborative learning activities and discussions with diverse others than were students from the comparison groups. Though the effect sizes were quite small, these differences were consistent for both first-year and senior students. Within the Academic Challenge theme, students from the comparison groups were more likely to report reflective and integrative learning as both first-year and senior students. First-year CWRU students reported higher quantitative reasoning than did comparison students, but those differences did not exist as seniors.

Comparing experiences with faculty and campus environments, there were no Indicators in which students from CWRU reported greater scores than peers. First-year students more closely resembled peer groups than did senior students, where greater effect sizes were found in favor of the comparison group on *Effective Teaching Practices* and *Quality of Interactions*. Overall, CWRU students indicated more frequent experiences of learning with peers than did students in each of the comparison groups, while some Indicators within Campus Environment, Experiences with Faculty, and Academic Challenge were less frequent or satisfying for CWRU students than for their peers.

Appendix A: Sample and Administration Information

Sample and Response Breakdowns

Representativeness	First-years		Seniors	
	Respondents	Population	Respondents	Population
Sample and Responses	n = 804	n = 1,298	n = 494	n = 1,111
Response Rate	62%		45%	
	Respondent %		Respondent %	
Female	49		54	
Race/ethnicity[a]				
Asian	22		22	
Black/African American	4		5	
Latinx	7		5	
White	50		55	
International	11		6	
Two or more races	4		4	
Unknown	1		2	

a. Based on the IPEDS categories submitted by the institution.

The 2018 administration saw much greater participation from CWRU relative to peer groups as well as a substantial increase over past rates. Peer groups' response rates range from 21% to 24%, while our 2015 response rate was 27%. The marked increase in participation is likely due to administration through the University's learning management system, Canvas. Ultimately, greater participation from students as evidenced through a stronger response rate suggest the data provide a more accurate depiction of student engagement across the university.

Comparison Groups

The comparison groups included other AAU universities, large-city private institutions, and the full group of universities that administered the NSSE in 2017 and 2018.

The AAU comparison group consisted of 13 other universities. These are considered leading research universities devoted to maintaining a strong system of academic research and education. A total of 60 universities belong to the AAU, but only 13 had administered the NSSE in 2017 or 2018.

The large-city private comparison group consisted of seven institutions. Some are also members of the AAU, but all maintain enrollment of 10,001 to 20,000 students. As the name implies they are private institutions within metropolitan areas, and all seven had administered the NSSE in 2017 or 2018.

The NSSE 2017 and 2018 administration group consisted of colleges and universities from 49 of the 50 states, as well as Guam, D.C., Puerto Rico, and the Virgin Islands. Data from more than 500 institutions is included in this comparison group.

Appendix B: Themes, Indicators, and Component Items

The table below presents a breakdown of themes, Engagement Indicators, and component items:

Theme	Indicator	Component Items
Academic Challenge	Higher-Order Learning	How much has your coursework emphasized… • Applying facts, theories, or methods to practical problems or new situations • Analyzing an idea, experience, or line of reasoning in depth by examining its parts • Evaluating a point of view, decision, or information source • Forming a new idea or understanding from various pieces of information
	Reflective & Integrative Learning	During the current year, about how often have you done the following? • Combined ideas from different courses when completing assignments • Connected your learning to societal problems or issues • Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments • Examined the strengths and weaknesses of your own views on a topic/issue • Tried to better understand someone else's views by imagining how an issue looks from his or her perspective • Learned something that changed the way you understand an issue/concept • Connected ideas from your courses to your prior experiences and knowledge
	Learning Strategies	During the current year, about how often have you done the following? • Identified key information from reading assignments • Reviewed your notes after class • Summarized what you learned in class or from course materials
	Quantitative Reasoning	During the current year, about how often have you done the following? • Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.) • Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) • Evaluated what others have concluded from numerical information
Learning with Peers	Collaborative Learning	During the current year, about how often have you done the following? • Asked another student to help you understand course material • Explained course material to one or more students • Prepared for exams by discussing or working through course material with other students • Worked with other students on course projects or assignments
	Discussions with Diverse Others	During the current year, about how often have you had discussions with people from the following groups? • People from a race or ethnicity other than your own • People from an economic background other than your own • People with religious beliefs other than your own • People with political views other than your own

Theme	Indicator	Component Items
Experiences with Faculty	Student-Faculty Interaction	During the current year, about how often have you done the following? • Talked about career plans with a faculty member • Worked w/faculty on activities other than coursework (committees, student groups, etc.) • Discussed course topics, ideas, or concepts with a faculty member outside of class • Discussed your academic performance with a faculty member
	Effective Teaching Practices	During the current year, to what extent have your instructors done the following? • Clearly explained course goals and requirements • Taught course sessions in an organized way • Used examples or illustrations to explain difficult points • Provided feedback on a draft or work in progress • Provided prompt and detailed feedback on tests or completed assignments
Campus Environment	Quality of Interactions	Indicate the quality of your interactions with the following people at your institution: • Students • Academic advisors • Faculty • Student services staff (career services, student activities, housing, etc.) • Other administrative staff and offices (registrar, financial aid, etc.)
	Supportive Environment	How much does your institution emphasize the following? • Providing support to help students succeed academically • Using learning support services (tutoring services, writing center, etc.) • Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.) • Providing opportunities to be involved socially • Providing support for your overall well-being (recreation, health care, counseling, etc.) • Helping you manage your non-academic responsibilities (work, family, etc.) • Attending campus activities and events (performing arts, athletic events, etc.) • Attending events that address important social, economic, or political issues