



CWU 2016 NATIONAL SURVEY OF STUDENT ENGAGEMENT

ENGAGEMENT INDICATORS AND HIGH IMPACT PRACTICES

SENIOR TRANSFER STUDENT ADMITS vs. SENIOR "FIRST YEAR ADMITS"

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I. METHODOLOGY

CWU administered the National Survey of Student Engagement (NSSE) online to all first year and senior students during the spring quarter of 2016. This report compares responses by seniors who were transfer students vs seniors who were admitted to CWU as first year students.

The survey was emailed to 2,174 students. There were 419 responses (partial and complete) for a response rate of 19%

The report compares responses to NSSE “Engagement Indicators” and “High Impact Practices.”

The 2016 NSSE codebook provides summaries of questions, answer scales, and questions that make up “Engagement Indicators” and “High Impact Practices.” See:

http://nsse.indiana.edu/2016_Institutional_Report/data_codebooks/NSSE%202016%20Codebook.pdf

Each “Engagement Indicator” is an average of at least four questions. Table 1 summarizes “EI:”

Table 1 – NSSE’s Ten Engagement Indicators

HO Higher-Order Learning: Amount coursework emphasized challenging learning tasks including applying learned information to practical problems, analyzing ideas and experiences, evaluating information from other sources, and forming new ideas from various pieces of information.
RI Reflective & Integrative Learning: How often students made connections with prior knowledge, other courses, and societal issues, took into account diverse perspectives, and reflected on their own views while examining the views of others.
LS Learning Strategies: How often students enacted basic strategies for academic success, such as identifying key information in readings, reviewing notes after class, and summarizing course material.
QR Quantitative Reasoning: How often students engaged with numerical and statistical information across the curriculum, and used this information to reach conclusions, examine real-world problems, and evaluate what others have concluded.
CL Collaborative Learning: How often students collaborated with others in mastering difficult material by asking for help, explaining material to others, preparing for exams, and working on group projects.
DD Discussions with Diverse Others: How often students had discussions with people who differ from themselves in terms of race or ethnicity, economic background, religious belief, or political views.
QI Quality of Interactions: How students rated their interactions with important people in their learning environment, including other students, advisors, faculty, student services, and other administrative staff members.
SE Supportive Environment: Amount the institution emphasized help for students to persist and learn through academic support programs, encouraged diverse interactions, and provided social opportunities, campus activities, health and wellness, and support for non-academic responsibilities.

NSSE also averages several questions to estimate High Impact Practices.

- Learning community or some other formal program where groups of students take two or more classes together
- Courses that included a community-based project (service-learning)
- Work with a faculty member on a research project
- Internship, co-op, field experience, student teaching, or clinical placement
- Study abroad
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

This NSSE Publication provides a summary of the content of Engagement Indicators and High Impact Practices: http://nsse.indiana.edu/pdf/EIs_and_HIPs_2015.pdf

II. SUMMARY FINDINGS

Of the ten engagement indicators analyzed below only two were significantly different assuming an alpha of 0.05. In both case the average rating for Transfer Students was significantly higher than seniors admitted as CWU students.

Learning Strategies and Quality of Interactions.

Note: this was a relatively small sample size, this survey only had a 19% response rate. Making inferences about the spring 2016 CWU population from this report is highly discouraged.

III. SUMMARY STATISTICS

A. ENGAGEMENT INDICATORS

The answer scale for Engagement Indicators is adjusted to 0 to 60 where:

0	Never
20	Sometimes
40	Often
60	Very often

NSSE includes “Effect size” calculations in addition to t-tests of the difference in averages. Effect size emphasizes the size of the difference rather than confounding this with sample size. The samples in this study are relatively small but Effect size calculations are included. NSSE uses the following Effect size scale:

Small	Less than 0.3
Medium	From 0.3 to 0.5
Large	From 0.5 to 0.7
Very large	0.7 or larger

This article contextualizes NSSE Effect Size assumptions:
http://nsse.indiana.edu/pdf/effect_size_guide.pdf

Note: Standard Deviation is abbreviated as “StDev” in the following tables.

Higher Order Learning

	Transfer Seniors	First Year Seniors
Count	226	157
Average	40.7	39.9
Median	40	40
StDev	13.2	14.2

Two-tailed t-test assuming unequal variances = 0.60

Hedge’s g Effect Size = 0.06 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Reflective & Integrative Learning

	Transfer Seniors	First Year Seniors
Count	233	165
Average	40.2	38.9
Median	40	37.14
StDev	12.1	12.3

Two-tailed t-test assuming unequal variances = 0.31

Hedge’s g Effect Size = 0.11 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Learning Strategies

	Transfer Seniors	First Year Seniors
Count	223	149
Average	41.4	37.9
Median	40	40
StDev	13.2	13.8

Two-tailed t-test assuming unequal variances = 0.02

Hedge's g Effect Size = 0.26 (small)

There is sufficient evidence to reject the null hypothesis of equal average ratings.

Quantitative Reasoning

	Transfer Seniors	First Year Seniors
Count	233	159
Average	31.9	30.0
Median	33.3	26.6
StDev	15.7	17.9

Two-tailed t-test assuming unequal variances = 0.27

Hedge's g Effect Size = 0.12 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Collaborative Learning

	Transfer Seniors	First Year Seniors
Count	231	169
Average	33.5	35.6
Median	35	35
StDev	15.9	13.9

Two-tailed t-test assuming unequal variances = 0.17

Hedge's g Effect Size = 0.13 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Discussions with Diverse Others

	Transfer Seniors	First Year Seniors
Count	223	150
Average	42.0	41.5
Median	40	40
StDev	15.9	13.5

Two-tailed t-test assuming unequal variances = 0.74

Hedge's g Effect Size = 0.03 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Student-Faculty Interaction

	Transfer Seniors	First Year Seniors
Count	231	157
Average	25.6	27.3
Median	25	25
StDev	17.5	17.0

Two-tailed t-test assuming unequal variances = 0.34

Hedge's g Effect Size = 0.10 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Effective Teaching Practices

	Transfer Seniors	First Year Seniors
Count	234	161
Average	39.4	38.9
Median	40	40
StDev	12.9	13.4

Two-tailed t-test assuming unequal variances = 0.73

Hedge's g Effect Size = 0.04 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

Quality of Interactions

	Transfer Seniors	First Year Seniors
Count	209	148
Average	43.4	41.1
Median	44	44
StDev	11.1	11.0

Two-tailed t-test assuming unequal variances = 0.048

Hedge's g Effect Size = 0.21 (small)

There is sufficient evidence to reject the null hypothesis of equal average ratings.

Supportive Environment

	Transfer Seniors	First Year Seniors
Count	218	151
Average	31.2	33.6
Median	32.5	35
StDev	13.9	12.9

Two-tailed t-test assuming unequal variances = 0.10

Hedge's g Effect Size = 0.17 (small)

There is NOT sufficient evidence to reject the null hypothesis of equal average ratings.

B. HIGH IMPACT PRACTICES

NSSE High Impact Practices is an average of six questions. Six questions are used to compute High Impact Practices (HIPs):

The question asks "Which of the following have you done or do you plan to do before you graduate?"

- Learning community or some other formal program where groups of students take two or more classes together
- Courses that included a community-based project (service-learning)
- Work with a faculty member on a research project
- Internship, co-op, field experience, student teaching, or clinical placement
- Study abroad
- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)

The NSSE accumulates responses to these six questions into a total called “HIPsumSR.” The response scales are:

0	none
1	Once
2	Twice
3	Three
4	Four
5	Five
6	Six

A “HIPsumSR” of 2.1 would indicate that, on average, seniors have done or plan to do a high impact practice 2.1 times before they graduate.

High Impact Practices

	Transfer Seniors	First Year Seniors
Count	224	153
Average	2.1	2.4
Median	2	2
StDev	1.5	1.4

Two-tailed t-test assuming unequal variances = 0.06

Hedge’s g Effect Size = 0.19 (small)

There is not sufficient evidence to reject the null hypothesis of equal average ratings.

