



NSSE 2023

Engagement Indicators

Central Washington University

About Your Engagement Indicators Report

Engagement Indicators (EIs) provide a useful summary of the detailed information contained in your students' NSSE responses. By combining responses to related NSSE questions, each EI offers valuable information about a distinct aspect of student engagement. Ten indicators, based on three to eight survey questions each (a total of 47 survey questions), are organized into four broad themes as shown at right. The specific items within each EI are listed below, starting on page 5.

Theme	Engagement Indicator
<i>Academic Challenge</i>	Higher-Order Learning Reflective & Integrative Learning Learning Strategies Quantitative Reasoning
<i>Learning with Peers</i>	Collaborative Learning Discussions with Diverse Others
<i>Experiences with Faculty</i>	Student-Faculty Interaction Effective Teaching Practices
<i>Campus Environment</i>	Quality of Interactions Supportive Environment

Report Sections

- Overview (p. 3)** Displays how average EI scores for your students compare with those of students at your comparison group institutions.
- Theme Reports (pp. 4-13)** Detailed views of EI scores within the four themes for your students and those at comparison group institutions. Three views offer varied insights into your EI scores:
 - Mean Comparisons**
Straightforward comparisons of average scores between your students and those at comparison group institutions, with tests of significance and effect sizes (see below).
 - Score Distributions**
Box-and-whisker charts show the variation in scores *within* your institution and comparison groups.
 - Performance on Indicator Items**
Responses to each item in a given EI are summarized for your institution and comparison groups.
- Comparisons with High-Performing Institutions (p. 15)** Comparisons of your students' average scores on each EI with those of students at institutions whose average scores were in the top 50% and top 10% of all current- and prior-year institutions.
- Detailed Statistics (pp. 16-19)** Detailed information about EI score means, distributions, and tests of statistical significance.

Interpreting Comparisons

Mean comparisons report both statistical significance and effect size. Effect size indicates the practical importance of an observed difference. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2018). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview (p. 3).

EIs vary more among students within an institution than between institutions, like many experiences and outcomes in higher education. As a result, focusing attention on average scores alone amounts to examining the tip of the iceberg. It's equally important to understand how student engagement varies within your institution. Score distributions indicate how EI scores vary among your students and those in your comparison groups. Your NSSE Tableau dashboards and Report Builder (released in the fall) offer valuable perspectives on internal variation and help you investigate your students' engagement in depth.

How Engagement Indicators are Computed

Each EI is scored on a 60-point scale. To produce an indicator 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 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 on every item.

For more information on EIs and their psychometric properties, refer to the NSSE website: nsse.indiana.edu

Rocconi, L.M., & Gonyea, R.M. (2018). Contextualizing effect sizes in the National Survey of Student Engagement: An empirical analysis. *Research & Practice in Assessment*, 13 (Summer/Fall), pp. 22-38.

Detailed Statistics: First-Year Students

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SE ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
CWU (N = 107)	34.5	12.5	1.21	15	25	35	40	60				
WA State only	38.1	13.0	.61	20	30	40	45	60	552	-3.6	.009	-.282
NSSE 2022 & 2023	38.3	13.3	.06	20	30	40	45	60	52,702	-3.9	.003	-.289
Reflective & Integrative Learning												
CWU (N = 126)	33.7	12.2	1.09	17	26	34	43	54				
WA State only	36.5	11.6	.53	17	29	37	43	57	611	-2.8	.019	-.236
NSSE 2022 & 2023	35.8	12.2	.05	17	29	37	43	57	57,646	-2.1	.054	-.172
Learning Strategies												
CWU (N = 101)	34.6	13.0	1.29	13	27	33	40	60				
WA State only	36.9	13.4	.66	13	27	40	47	60	515	-2.4	.111	-.177
NSSE 2022 & 2023	38.2	13.9	.06	20	27	40	47	60	48,555	-3.6	.009	-.260
Quantitative Reasoning												
CWU (N = 104)	27.0	14.4	1.41	0	20	27	40	60				
WA State only	30.2	14.8	.72	7	20	27	40	60	524	-3.2	.046	-.219
NSSE 2022 & 2023	29.4	15.5	.07	0	20	27	40	60	49,409	-2.4	.114	-.155
Learning with Peers												
Collaborative Learning												
CWU (N = 139)	25.1	14.2	1.20	0	15	25	35	50				
WA State only	30.8	14.5	.63	5	20	30	40	60	661	-5.7	.000	-.394
NSSE 2022 & 2023	29.2	15.0	.06	5	20	30	40	55	62,732	-4.1	.001	-.274
Discussions with Diverse Others												
CWU (N = 103)	35.0	15.6	1.54	5	25	40	45	60				
WA State only	39.1	14.6	.72	15	30	40	50	60	517	-4.1	.013	-.275
NSSE 2022 & 2023	38.1	15.8	.07	10	25	40	50	60	48,913	-3.1	.047	-.196
Experiences with Faculty												
Student-Faculty Interaction												
CWU (N = 116)	21.4	14.2	1.32	0	10	20	30	50				
WA State only	21.7	14.6	.68	0	10	20	30	50	577	-.3	.847	-.020
NSSE 2022 & 2023	21.6	15.1	.06	0	10	20	30	50	54,964	-.2	.900	-.012
Effective Teaching Practices												
CWU (N = 106)	36.8	13.6	1.32	16	28	36	48	60				
WA State only	36.7	12.8	.61	16	28	36	44	60	548	.1	.931	.009
NSSE 2022 & 2023	38.4	13.3	.06	16	28	40	48	60	52,480	-1.6	.221	-.119
Campus Environment												
Quality of Interactions												
CWU (N = 96)	42.3	10.3	1.05	24	36	44	50	56				
WA State only	42.0	10.9	.55	24	36	42	50	60	489	.4	.764	.034
NSSE 2022 & 2023	43.0	11.8	.06	22	36	44	52	60	44,702	-.7	.555	-.060
Supportive Environment												
CWU (N = 100)	30.0	12.6	1.26	8	20	30	40	53				
WA State only	32.9	12.7	.63	13	23	33	40	58	501	-2.9	.039	-.232
NSSE 2022 & 2023	34.6	13.5	.06	13	25	35	43	60	46,969	-4.6	.001	-.339

a. Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).
b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.
c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI (equal to the sample mean +/- 1.96 x SE) is the range that is 95% likely to contain the true population mean.
d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.
e. Degrees of freedom used to compute the t-tests. Values vary from the total Ns due to weighting and whether equal variances were assumed.
f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.
g. Effect size is the mean difference divided by the pooled standard deviation.

Detailed Statistics: Seniors

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SE ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
CWU (N = 196)	40.8	13.2	.94	20	35	40	50	60				
WA State only	41.3	12.9	.45	20	35	40	50	60	1,026	-.5	.596	-.042
NSSE 2022 & 2023	40.7	13.8	.05	20	30	40	50	60	76,930	.1	.928	.006
Reflective & Integrative Learning												
CWU (N = 207)	39.9	12.6	.88	20	31	40	51	60				
WA State only	39.5	12.3	.42	20	31	40	49	60	1,077	.4	.661	.034
NSSE 2022 & 2023	38.7	12.9	.05	17	29	40	49	60	82,119	1.3	.155	.099
Learning Strategies												
CWU (N = 181)	38.4	14.3	1.06	13	27	40	47	60				
WA State only	39.4	14.1	.50	20	27	40	53	60	979	-.9	.424	-.066
NSSE 2022 & 2023	39.2	14.6	.05	13	27	40	53	60	72,344	-.7	.503	-.050
Quantitative Reasoning												
CWU (N = 183)	29.7	15.7	1.16	0	20	27	40	60				
WA State only	32.8	16.2	.57	7	20	33	40	60	988	-3.1	.019	-.192
NSSE 2022 & 2023	31.4	16.6	.06	0	20	33	40	60	73,336	-1.6	.179	-.099
Learning with Peers												
Collaborative Learning												
CWU (N = 221)	28.2	16.0	1.08	5	15	25	40	60				
WA State only	33.4	14.9	.49	10	25	35	45	60	1,131	-5.2	.000	-.344
NSSE 2022 & 2023	30.3	16.0	.05	0	20	30	40	60	86,322	-2.0	.059	-.127
Discussions with Diverse Others												
CWU (N = 179)	39.1	16.2	1.21	15	25	40	55	60				
WA State only	39.8	15.2	.54	15	30	40	55	60	977	-.7	.569	-.047
NSSE 2022 & 2023	38.8	16.2	.06	10	25	40	55	60	72,709	.3	.816	.017
Experiences with Faculty												
Student-Faculty Interaction												
CWU (N = 200)	24.2	16.0	1.13	0	15	20	35	60				
WA State only	25.3	16.0	.55	0	15	20	35	60	1,050	-1.1	.384	-.068
NSSE 2022 & 2023	23.7	16.5	.06	0	10	20	35	60	79,296	.4	.712	.026
Effective Teaching Practices												
CWU (N = 194)	39.6	13.9	1.00	16	32	40	52	60				
WA State only	40.3	13.2	.46	16	32	40	52	60	1,027	-.7	.488	-.055
NSSE 2022 & 2023	40.0	14.1	.05	16	32	40	52	60	76,788	-.4	.667	-.031
Campus Environment												
Quality of Interactions												
CWU (N = 168)	42.9	12.8	.99	18	32	46	52	60				
WA State only	43.4	11.5	.42	22	36	44	52	60	233	-.4	.696	-.036
NSSE 2022 & 2023	43.0	12.4	.05	20	36	44	52	60	65,875	-.1	.905	-.009
Supportive Environment												
CWU (N = 173)	28.3	14.1	1.07	8	18	28	40	55				
WA State only	31.2	13.5	.48	10	20	30	40	58	953	-2.9	.013	-.210
NSSE 2022 & 2023	32.0	14.5	.05	8	20	33	40	60	70,639	-3.7	.001	-.253

a. Results weighted by institution-reported sex and enrollment status (and institutional size for comparison groups).
b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.
c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI (equal to the sample mean +/- 1.96 x SE) is the range that is 95% likely to contain the true population mean.
d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.
e. Degrees of freedom used to compute the t-tests. Values vary from the total Ns due to weighting and whether equal variances were assumed.
f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance.
g. Effect size is the mean difference divided by the pooled standard deviation.