

NSSE 2017

Engagement Indicators

San Jose State University

NSSE 2017 Engagement Indicators

About This Report

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.

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 group.

Performance on Indicator Items

Responses to each item in a given EI are summarized for your institution and comparison group.

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 2016 and 2017 participating 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, 2015). 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. The Report Builder—Institution Version and your *Major Field Report* (to be 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.

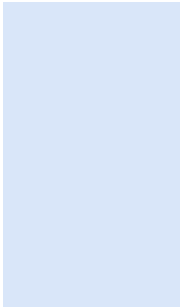
For more information on EIs and their psychometric properties, refer to the NSSE website www.nsse.org or [diana.edu](http://www.diana.edu).

Rocconi, L., & Gonyea, R. M. (2015, May). *Contextualizing student engagement effect sizes: An empirical analysis*. Paper presented at the Association for Institutional Research Annual Forum, Denver, CO.

Academic Challenge: First-year students

Mean Comparisons

Engagement Indicator



NSSE 2017 Engagement Indicators

Academic Challenge

San Jose State University

Academic Challenge: Seniors

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning, Reflective & Integrative Learning, Learning Strategies* and *Quantitative Reasoning*. Below and on the next page are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	SJSU Mean	Your seniors compared with					
		High Grad Rate CSUs		All CSUs		Carnegie Class	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Higher-Order Learning	39.9	39.8	.01	40.1	-.02	39.9	.00
Reflective & Integrative Learning	37.6	38.0	-.03	38.5 **	-.06	38.2 *	-.04
Learning Strategies	37.8	37.7	.01	38.3	-.04	38.5 *	-.05
Quantitative Reasoning	30.5	30.2	.02	29.9	.04	29.7 *	.05

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled st deviation; Symbols on the Overview page are based on effect size and p rounding; † $p < .05$, ** $p < .01$, *** $p < .001$ (2-tailed).

Score Distributions

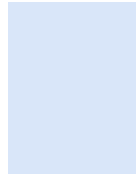
Higher-Order Learning

Reflective & Integrative Learning

Learning Strategies

Quantitative Reasoning

Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentiles. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.



NSSE 2017 Engagement Indicators

Learning with Peers

San Jose State University

Learning with Peers: First-year students

Collaborating with others in mastering difficult material and developing interpersonal and social competence prepare students deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions with Diverse Others*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons

Engagement Indicator	SJSU Mean	Your first-year students compared with					
		High Grad Rate CSUs		All CSUs		Carnegie Class	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Collaborative Learning	33.9	33.3	.04	32.9 *	.07	32.3 ***	.12
Discussions with Diverse Others	40.0	40.1	.00	39.3	.05	39.8	.02

Notes: Results weighted by institution-reported sex and enrollment status (and institution size for comparison groups); Effect size: Mean difference divided by pooled standard deviation; Symbols on the Overview page are based on effect size and p rounding; * $p < .05$, ** $p < .01$, *** $p < .001$ (2-tailed).

Score Distributions

Collaborative Learning

Discussions with Diverse Others

Notes: Each box-and-whiskers chart plots the 5th (bottom of lower bar), 25th (bottom of box), 50th (middle line), 75th (top of box), and 95th (top of upper bar) percentiles. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Performance on Indicator Items

Collaborative Learning

Percentage of students who responded that they "Very often" or "Often"...

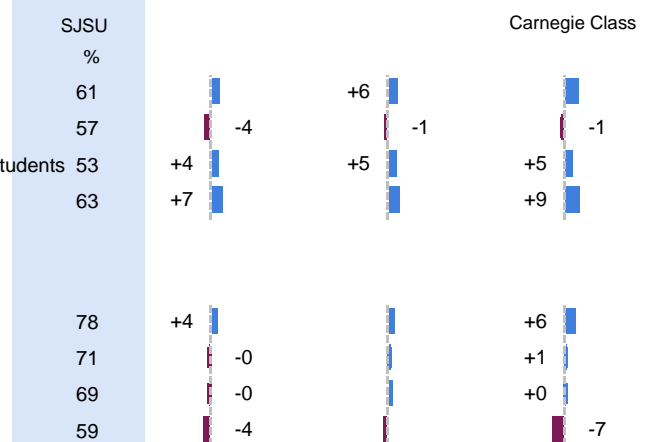
Item	SJSU %
1e. Asked another student to help you understand course material	61
1f. Explained course material to one or more students	57
1g. Prepared for exams by discussing or working through course material with other students	53
1h. Worked with other students on course projects or assignments	63

Discussions with Diverse Others

Percentage of students who responded that they "Very often" or "Often" had discussions with...

Item	SJSU %
8a. People from a race or ethnicity other than your own	78
8b. People from an economic background other than your own	71
8c. People with religious beliefs other than your own	69
8d. People with political views other than your own	59

Percentage point difference between your FY students and



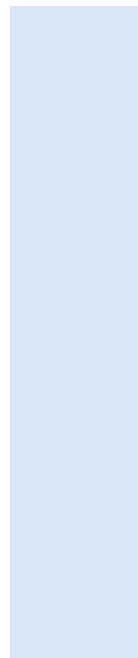
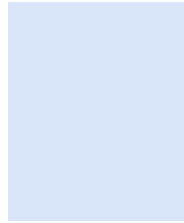
Notes: Refer to your *Frequencies and Statistical Comparison* report for full distributions and significance tests. Item numbering corresponds to the survey facsimile included in your *Institutional Report* and available on the NSSE website.

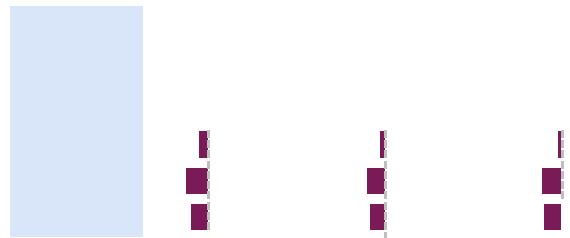
a. Percentage point difference = Institution percentage - comparison group percentage. Because results are rounded to whole numbers, differences of less than 1 point may or may not display a bar. Small, but nonzero differences may be represented as +0 or -0.

Campus Environment: First-year students

Mean Comparisons

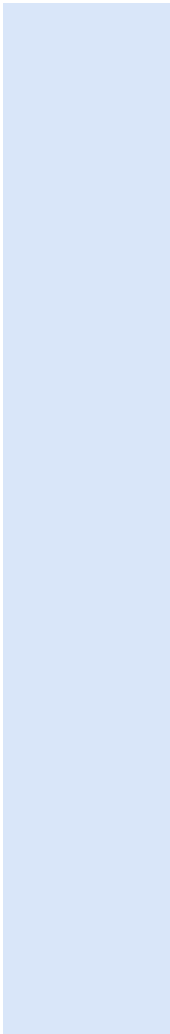
Engagement Indicator
Quality of Interactions





This page intentionally left blank.

Comparisons with Top 50% and Top 10% Institutions



Detailed Statistics: First-year students

	<i>Mean</i>	<i>SD^b</i>	<i>SEM^c</i>	<i>5th</i>	<i>25th</i>	<i>50th</i>	<i>75th</i>	<i>95th</i>	<i>Deg. of freedom^e</i>	<i>Mean diff.</i>	<i>Sig.^f</i>	<i>Effect size^g</i>
Academic Challenge												
Higher-Order Learning												
SJSU(N = 1110)	38.1	12.9	.39	20	30	40	45	60				
High Grad Rate CSUs	37.0	13.2	.14	15	30	40	45	60	10,095	1.1	.011	.081
All CSUs	37.7	13.2	.09	15	30	40	45	60	23,419	.4	.367	.028
Carnegie Class	37.5	13.3	.07	15	30	40	45	60	36,097	.6		

NSSE 2017 Engagement Indicators

Detailed Statistics

San Jose State University

Detailed Statistics: First-year students

	Mean statistics			Percentile ^d scores					Comparison results			
	<i>Mean</i>	<i>SD^b</i>	<i>SEM^c</i>	<i>5th</i>	<i>25th</i>	<i>50th</i>	<i>75th</i>	<i>95th</i>	<i>Deg. of freedom^e</i>	<i>Mean diff.</i>	<i>Sig.^f</i>	<i>Effect size^g</i>
Experiences with Faculty												
Student-Faculty Interaction												
SJSU(N = 1118)	18.8	13.9	.42	0	10	15	25	40				
High Grad Rate CSUs	16.8	13.7	.14	0	5	15	25	45	10,234	2.0	.000	.146
All CSUs	18.2	14.2	.09	0	5	15	25	45	23,746	.6	.184	.041
Carnegie Class	19.3	14.2	.08	0	10	15	25	45	36,675	-.5	.242	-.036
Top 50%	23.8	14.7	.04	0	15	20	35	55	1,136	-5.0	.000	-.338
Top 10%	27.2	15.6	.10	5	15	25	40	60	1,253	-8.4	.000	-.543

Eff. z (.02) 18x B á 8 ! 6 8 B 0 7 10 10 2 8 0 1 1 0 6 4 0 3 5 3 5 8 5 1 5 1 0 3 8 6 1 5 7 0 2 3 5 7 4 9 0 8 1 5 0 2 4

Detailed Statistics: Seniors

	<i>Mean</i>	<i>SD^b</i>	<i>SEM^c</i>	<i>5th</i>	<i>25th</i>	<i>50th</i>	<i>75th</i>	<i>95th</i>	<i>Deg. of freedom^e</i>	<i>Mean diff.</i>	<i>Sig.^f</i>	<i>Effect size^g</i>
Academic Challenge												
Higher-Order Learning												
SJSU(N = 2687)	39.9	13.9	.27	15	30	40	50	60				
High Grad Rate CSUs	39.8	13.7	.12	20	30	40	50	60	15,945	.1	.708	.008
All CSUs	40.1	13.8	.08	20	30	40	50	60	36,021	-.2	.445	-.015
Carnegie Class	39.9	13.8	.06	20	30	40	50	60	49,247	.0	.907	-.002
Top 50%	41.8	13.5	.03	20	35	40	55	60	198,834	-1.9	.000	-.142
Top 10%	43.3	13.4	.06	20	35	40	55	60	60,674	-3.3	.000	-.248
Reflective & Integrative Learning												
SJSU(N = 2735)	37.6	12.4	.24	17	29	37	46	60				
High Grad Rate CSUs	38.0	12.5	.11	17	29	37	46	60	16,499	-.3	.216	-.026
All CSUs	38.5	12.5	.07	17	29	37	49	60	37,170	-.8	.001	-.065
Carnegie Class	38.2	12.5	.06	17	29	37	49	60	50,845	-.6	.023	-.045
Top 50%	40.0	12.3	.03	20	31	40	49	60	204,864	-2.4	.000	-.191
Top 10%	42.0	12.2	.06	20	34	43	51	60	44,796	-4.3	.000	-.355
Learning Strategies												
SJSU(N = 2482)	37.8	14.0	.28	20	27	40	47	60				
High Grad Rate CSUs	37.7	14.5	.13	13	27	40	47	60	3,673	.1	.793	.006
All CSUs	38.3	14.3	.08	13	27	40	47	60	2,931	-.5	.080	-.036

NSSE 2017 Engagement Indicators

Detailed Statistics³

San Jose State University

Detailed Statistics: Seniors

	Mean statistics			Percentile ^d scores					Comparison results			
	<i>Mean</i>	<i>SD^b</i>	<i>SEM^c</i>	<i>5th</i>	<i>25th</i>	<i>50th</i>	<i>75th</i>	<i>95th</i>	<i>Deg. of freedom^e</i>	<i>Mean diff.</i>	<i>Sig.^f</i>	<i>Effect size^g</i>
Experiences with Faculty												
Student-Faculty Interaction												
SJSU (N = 2693)	21.3	15.4	.30	0	10	20	30	55				
High Grad Rate CSUs	22.2	15.6	.13	0	10	20	30	55	16,136	-.9	.006	-.059
All CSUs	22.5	15.5	.08	0	10	20	30	55	36,475	-1.2	.000	