

State University of New York at Fredonia



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
	Higher-Order Learning
Academic Challenge	Reflective & Integrative Learning
	Learning Strategies
	Quantitative Reasoning
Lograing with Boors	Collaborative Learning
Learning with Peers	Discussions with Diverse Others
Experiences with Faculty	Student-Faculty Interaction
Experiences with rucuity	Effective Teaching Practices
Camana Faninana ant	Quality of Interactions
Campus Environment	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 2019 and 2020 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, 2018). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview (p. 3).

Els 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 El scores vary among your students and those in your comparison groups. The Report Builder and your Major Field Report (both 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: 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.



Overview

State University of New York at Fredonia

Engagement Indicators: Overview

Engagement Indicators are summary measures based on sets of NSSE questions examining key dimensions of student engagement. The ten indicators are organized within four broad themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores for your students with those in your comparison groups.

Use the following key:

- **Your students' average** was significantly higher (p < .05) with an effect size at least .3 in magnitude.
- \triangle Your students' average was significantly higher (p < .05) with an effect size less than .3 in magnitude.
- -- No significant difference.
- ∇ Your students' average was significantly lower (p < .05) with an effect size less than .3 in magnitude.
- **Your students' average** was significantly lower (p < .05) with an effect size at least .3 in magnitude.

First-Year Students		Your first-year students compared with	Your first-year students compared with
Engagement Indicator	Peer Institutions	Aspirational group	NSSE 2019 & 2020
Higher-Order Learning	∇	▼	V
Reflective & Integrative Learning		∇	∇
Learning Strategies	lacksquare	•	▼
Quantitative Reasoning	▼	▼	▼
Collaborative Learning	∇		∇
Discussions with Diverse Others			
Student-Faculty Interaction			
Effective Teaching Practices		∇	∇
Quality of Interactions			
Supportive Environment			∇
	Engagement Indicator Higher-Order Learning Reflective & Integrative Learning Learning Strategies Quantitative Reasoning Collaborative Learning Discussions with Diverse Others Student-Faculty Interaction Effective Teaching Practices Quality of Interactions	Engagement Indicator Compared with Peer Institutions Higher-Order Learning ▼ Reflective & Integrative Learning Learning Strategies ▼ Quantitative Reasoning ▼ Collaborative Learning ▼ Discussions with Diverse Others Student-Faculty Interaction Effective Teaching Practices Quality of Interactions	compared with compared with Higher-Order Learning

eniors		Your seniors compared with	Your seniors compared with	Your seniors compared with
Theme	Engagement Indicator	Peer Institutions	Aspirational group	NSSE 2019 & 2020
	Higher-Order Learning		∇	∇
Academic	Reflective & Integrative Learning		∇	
Challenge	Learning Strategies			
	Quantitative Reasoning	∇	▼	▼
Learning with	Collaborative Learning			
Peers	Discussions with Diverse Others			
Experiences	Student-Faculty Interaction		Δ	Δ
with Faculty	Effective Teaching Practices			
Campus	Quality of Interactions			
Environment	Supportive Environment			



Academic Challenge

State University of New York at Fredonia

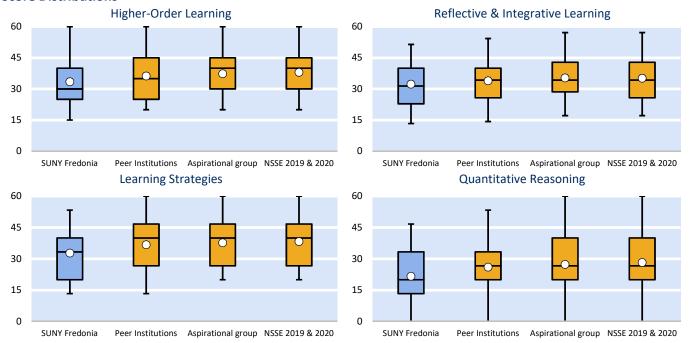
Academic Challenge: First-year students

Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote 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		Your	first-year students compared w	ith
	SUNY Fredonia	Peer Institutions Effect	Aspirational group Effect	NSSE 2019 & 2020 Effect
Engagement Indicator	Mean	Mean size	Mean size	Mean size
Higher-Order Learning	33.5	36.2 **22	37.3 ***31	38.1 ***35
Reflective & Integrative Learning	32.3	34.014	35.3 ***26	35.2 ***24
Learning Strategies	32.8	36.8 ***30	37.7 ***37	38.3 ***40
Quantitative Reasoning	21.6	26.0 ***31	27.3 ***39	28.2 ***43

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

Score Distributions



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) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.



Academic Challenge

State University of New York at Fredonia

Academic Challenge: First-year students (continued)

Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

		Percentage point of	difference ^a between yo	ur FY students and
Higher-Order Learning	SUNY Fredonia	Peer Institutions	Aspirational group	NSSE 2019 & 2020
Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized		montations	Broak	2020
4b. Applying facts, theories, or methods to practical problems or new situations	% 58	-8	-11	-13
4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	54	-10	-14	-15
4d. Evaluating a point of view, decision, or information source	57	-9	-13	-13
4e. Forming a new idea or understanding from various pieces of information	57	-8	-11	-12
Reflective & Integrative Learning				
Percentage of students who responded that they "Very often" or "Often"				
2a. Combined ideas from different courses when completing assignments	45	-4	-9	-7
2b. Connected your learning to societal problems or issues	43	-7	-10	-8
2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	45	-2	-10	-6
2d. Examined the strengths and weaknesses of your own views on a topic or issue	52	-8	-9	-12
2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	65	-3	-4	-6
2f. Learned something that changed the way you understand an issue or concept	59	-4	-7	-8
2g. Connected ideas from your courses to your prior experiences and knowledge	70	-4	-8	-7
Learning Strategies				
Percentage of students who responded that they "Very often" or "Often"				
9a. Identified key information from reading assignments	58	-15	-18	-16
9b. Reviewed your notes after class	57	-7	-8	-9
9c. Summarized what you learned in class or from course materials	53	-7	-9	-11
Quantitative Reasoning				
Percentage of students who responded that they "Very often" or "Often"				
6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	37	-9	-13	-16
6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	26	-9	-14	-14
6c. Evaluated what others have concluded from numerical information	23	-10	-13	-17

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.



Academic Challenge

State University of New York at Fredonia

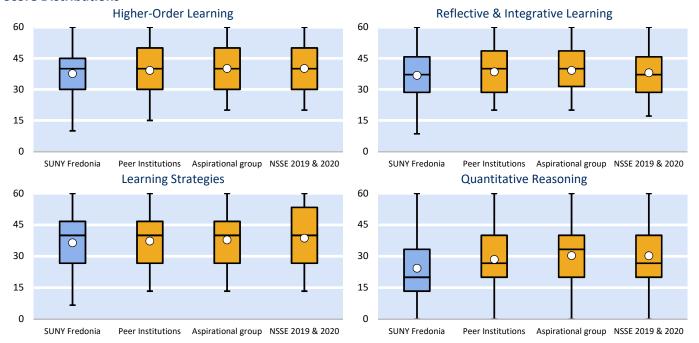
Academic Challenge: Seniors

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lean Comparisons				Your seniors com	pared with		
	SUNY Fredonia	Peer Institutions Effect		Aspirational group Effect		NSSE 2019 & 2020 Effect	
Engagement Indicator	Mean	Mean	size	Mean	size	Mean	size
Higher-Order Learning	37.6	39.2	11	40.1 *	18	40.1 *	18
Reflective & Integrative Learning	36.8	38.5	14	39.2 *	20	38.1	10
Learning Strategies	36.4	37.3	06	37.8	10	38.6	15
Quantitative Reasoning	24.2	28.5 **	26	30.3 ***	37	30.2 ***	37

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

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Academic Challenge

State University of New York at Fredonia

Academic Challenge: Seniors (continued)

Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

		Percentage poin	nt difference ^a between j	your seniors and
Higher-Order Learning	SUNY Fredonia	Peer Institutions	Aspirational group	NSSE 2019 & 2020
Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized		motitutions	8.004	2020
4b. Applying facts, theories, or methods to practical problems or new situations	% 73	-2	-6	-4
		1		
4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	65	-6	-10	-10
4d. Evaluating a point of view, decision, or information source	65	-5	-6	-6
4e. Forming a new idea or understanding from various pieces of information	69	-2	-3	-3
Reflective & Integrative Learning				
Percentage of students who responded that they "Very often" or "Often"				
2a. Combined ideas from different courses when completing assignments	64	-7	-9	-4
2b. Connected your learning to societal problems or issues	59	-5	-7	-2
2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	55	-1	-2	+3
2d. Examined the strengths and weaknesses of your own views on a topic or issue	61	-5	-7	-5
2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	66	-8	-7	-7
2f. Learned something that changed the way you understand an issue or concept	68	-2	-6	-4
2g. Connected ideas from your courses to your prior experiences and knowledge	84	+1	-1	+0
Learning Strategies				
Percentage of students who responded that they "Very often" or "Often"				
9a. Identified key information from reading assignments	75	-2	-4	-3
9b. Reviewed your notes after class	56	-2	-5	-6
9c. Summarized what you learned in class or from course materials	58	-3	-3	-7
Quantitative Reasoning				
Percentage of students who responded that they "Very often" or "Often"				
6a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	40	-11	-16	-16
6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	31	-12	-15	-15
6c. Evaluated what others have concluded from numerical information	35	-8	-13	-11

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.



Learning with Peers

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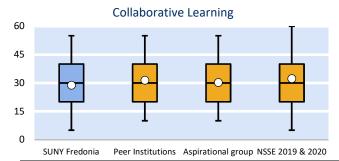
Learning with Peers: First-year students

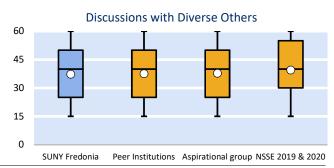
Collaborating with others in mastering difficult material and developing interpersonal and social competence prepare students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions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

Mean Comparisons			Your	first-year stude	nts compared w	rith	
	SUNY Fredonia	Peer Ins	titutions Effect	Aspirati	onal group Effect	NSSE 2019	9 & 2020 Effect
Engagement Indicator	Mean	Mean	size	Mean	size	Mean	size
Collaborative Learning	28.8	31.4 **	20	30.2	10	32.3 ***	24
Discussions with Diverse Others	37.3	37.5	02	37.8	04	39.5	14

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

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		Percento	age point difference	^a between j	your FY students and
		Pee	r Asp	irational	NSSE 2019 &
Collaborative Learning	SUNY Fredonia	Institut	tions g	group	2020
Percentage of students who responded that they "Very often" or "Often"	%				
1e. Asked another student to help you understand course material	44		-7	-5	-9
1f. Explained course material to one or more students	50		-5	-5	-8
1g. Prepared for exams by discussing or working through course material with other students	37		-10	-5	-12
1h. Worked with other students on course projects or assignments	46		-7	-3	-9
Discussions with Diverse Others					
Percentage of students who responded that they "Very often" or "Often" had discussions with					
8a. People of a race or ethnicity other than your own	65	+1	+0)	-5
8b. People from an economic background other than your own	70	+0	+1	1	-2
8c. People with religious beliefs other than your own	58		-5	-6	-8
8d. People with political views other than your own	54		-11	-6	-10

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.



Learning with Peers

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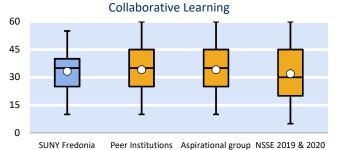
Learning with Peers: Seniors

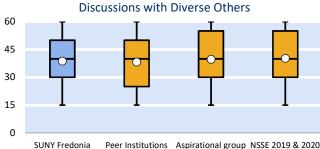
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Mean Comparisons				Your seniors co	mpared with		
	SUNY Fredonia			Aspirational group		NSSE 2019 & 202	
Engagement Indicator	Mean	Mean	Effect size	Mean	Effect size	Mean	Effect size
Collaborative Learning	33.3	34.2	06	34.2	06	32.0	.08
Discussions with Diverse Others	38.8	38.2	.04	39.8	06	40.2	09

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

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		Percentage poin	t difference ^a between j	your seniors and
		Peer	Aspirational	NSSE 2019 &
Collaborative Learning	SUNY Fredonia	Institutions	group	2020
Percentage of students who responded that they "Very often" or "Often"	%			
1e. Asked another student to help you understand course material	47	-0	+0	+4
1f. Explained course material to one or more students	63	-1	-2	+6
1g. Prepared for exams by discussing or working through course material with other students	49	-2	+0	+2
1h. Worked with other students on course projects or assignments	66	-2	-2	+3
Discussions with Diverse Others				
Percentage of students who responded that they "Very often" or "Often" had discussions with				
8a. People of a race or ethnicity other than your own	75	+10	+5	+3
8b. People from an economic background other than your own	76	+6	+3	+3
8c. People with religious beliefs other than your own	62	-1	-5	-6
8d. People with political views other than your own	54	-9	-9	-12

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Experiences with Faculty

State University of New York at Fredonia

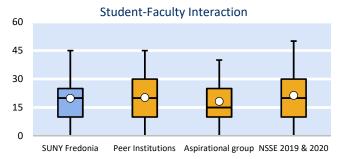
Experiences with Faculty: First-year students

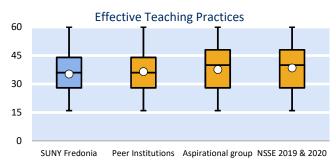
Students learn firsthand how experts think about and solve problems by interacting with faculty members inside and outside of instructional settings. As a result, faculty become role models, mentors, and guides for lifelong learning. In addition, effective teaching requires that faculty deliver course material and provide feedback in student-centered ways. Two Engagement Indicators investigate this theme: *Student-Faculty Interaction* and *Effective Teaching Practices*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons			Your	first-year studer	nts compared w	rith			
	SUNY Fredonia	i cei ilistitutions		i cei mottations /topinational group				NSSE 20:	19 & 2020
			Effect		Effect		Effect		
Engagement Indicator	Mean	Mean	size	Mean	size	Mean	size		
Student-Faculty Interaction	19.8	20.2	03	18.2	.12	21.4	11		
Effective Teaching Practices	35.3	36.5	10	37.6 *	18	38.4 **	24		

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

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		Percen	tage point	difference ^a	between yo	ur FY students and
		Peer		Aspir	ational	NSSE 2019 &
Student-Faculty Interaction	SUNY Fredonia	Instit	utions	gr	oup	2020
Percentage of students who responded that they "Very often" or "Often"	%					
3a. Talked about career plans with a faculty member	29		-4		-1	-9
3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.)	17		-2	+1)	-4
3c. Discussed course topics, ideas, or concepts with a faculty member outside of class	24	+2	l	+4	1	-2
3d. Discussed your academic performance with a faculty member	22		-4		-1	-8
Effective Teaching Practices						
Percentage responding "Very much" or "Quite a bit" about how much instructors have						
5a. Clearly explained course goals and requirements	68		-5		-7	-9
5b. Taught course sessions in an organized way	68		-2		-5	-5
5c. Used examples or illustrations to explain difficult points	64		-4		-10	-10
5d. Provided feedback on a draft or work in progress	63	+3		+2	Ì	-0
5e. Provided prompt and detailed feedback on tests or completed assignments	53		-2		-7	-7

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Experiences with Faculty

State University of New York at Fredonia

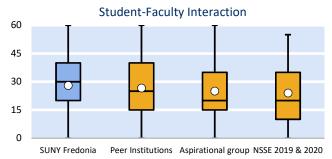
Experiences with Faculty: Seniors

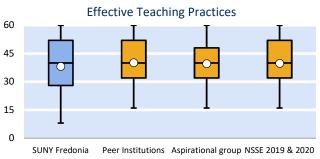
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Mean Comparisons				Your seniors cor	compared with					
Engagement Indicator	SUNY Fredonia	Peer In	stitutions Effect	Aspiratio	onal group Effect	NSSE 201	. 9 & 2020 Effect			
	Mean	Mean	size	Mean	size	Mean	size			
Student-Faculty Interaction	28.0	26.6	.08	25.0 *	.18	23.9 **	.25			
Effective Teaching Practices	38.1	40.0	14	39.5	11	39.7	12			

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		Perce	entage poin	t difference	^a between	your senior.	s and
Student Ferulty Interaction		Peer		Aspirational			2019 &
Student-Faculty Interaction	SUNY Fredonia	Institu	itions	gro	oup	2	020
Percentage of students who responded that they "Very often" or "Often"	%						
3a. Talked about career plans with a faculty member	53	+4		+9		+10	
3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.)	41	+9		+11		+13	
3c. Discussed course topics, ideas, or concepts with a faculty member outside of class	39	+1		+4	+7		
3d. Discussed your academic performance with a faculty member	33		-5	I	-1		-1
Effective Teaching Practices							
Percentage responding "Very much" or "Quite a bit" about how much instructors have							
5a. Clearly explained course goals and requirements	75		-7		-6		-5
5b. Taught course sessions in an organized way	75		-3		-3		-2
5c. Used examples or illustrations to explain difficult points	78	+0			-3	+1)
5d. Provided feedback on a draft or work in progress	60	l l	-3	ļ	-1		-2
5e. Provided prompt and detailed feedback on tests or completed assignments	60		-5		-4		-5

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

State University of New York at Fredonia

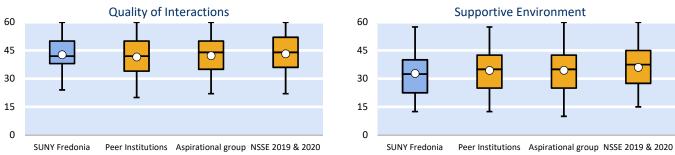
Campus Environment: First-year students

Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons			Your	first-year stude	nts compared w	rith	
	SUNY Fredonia	Peer In	stitutions	Aspirati	onal group	NSSE 201	9 & 2020
			Effect		Effect		Effect
Engagement Indicator	Mean	Mean	size	Mean	size	Mean	size
Quality of Interactions	42.7	41.5	.10	42.2	.04	43.2	05
Supportive Environment	32.8	34.4	12	34.5	13	36.0 **	24

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

Score Distributions



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) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

		Percentage point difference ^a between your FY students and							
		Pe		Aspir	ational	NSSE 20			
Quality of Interactions	SUNY Fredonia	Institu	utions	gr	oup	2020	0		
$Percentage\ rating\ their\ interactions\ a\ 6\ or\ 7\ (on\ a\ scale\ from\ 1="Poor"\ to\ 7="Excellent")\ with$	%								
13a. Students	42		-7		-6		-11		
13b. Academic advisors	48	+4	l		-1		-6		
13c. Faculty	40		-8		-10		-13		
13d. Student services staff (career services, student activities, housing, etc.)	47	+2	1	+1)	(-1		
13e. Other administrative staff and offices (registrar, financial aid, etc.)	43	+3			-3		-4		
Supportive Environment		'							
Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized									
14b. Providing support to help students succeed academically	63		-7		-9		-12		
14c. Using learning support services (tutoring services, writing center, etc.)	64		-8		-13		-12		
$14 d. \ \ Encouraging \ contact \ among \ students \ from \ diff. \ backgrounds \ (soc., \ racial/eth., \ relig., \ etc.)$	53		-3	(-5		-8		
14e. Providing opportunities to be involved socially	70	(-0	+1)	- (-1		
14f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	57		-8		-12		-12		
14g. Helping you manage your non-academic responsibilities (work, family, etc.)	30		-9		-8		-12		
14h. Attending campus activities and events (performing arts, athletic events, etc.)	63	+0		+9			-1		
14i. Attending events that address important social, economic, or political issues	39		-9		-6		-8		

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

State University of New York at Fredonia

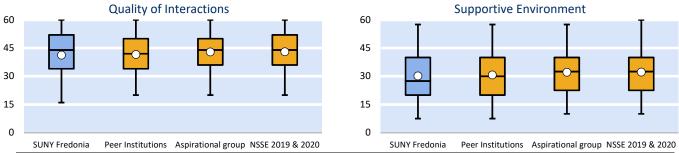
Campus Environment: Seniors

Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment*. Below are three views of your results alongside those of your comparison groups.

Mean Comparisons				Your seniors co	mpared with		
	SUNY Fredonia	Peer Ir	nstitutions Effect	Aspirati	onal group Effect	NSSE 20	019 & 2020 Effect
Engagement Indicator	Mean	Mean	size	Mean	size	Mean	size
Quality of Interactions	41.2	41.6	03	43.0	15	43.0	15
Supportive Environment	30.2	30.7	03	32.2	14	32.2	14

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 before rounding; *p < .05, **p < .01, ***p < .001 (2-tailed).

Score Distributions



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) percentile scores. The dot represents the mean score. Refer to Detailed Statistics for your institution's sample sizes.

Performance on Indicator Items

The table below displays how your students responded to each EI item, and the difference, in percentage points, between your students and those of your comparison group. Blue bars indicate how much higher your institution's percentage is from that of the comparison group. Dark red bars indicate how much lower your institution's percentage is from that of the comparison group.

		Percentage poin	t difference ^a between j	your seniors and
		Peer	Aspirational	NSSE 2019 &
Quality of Interactions	SUNY Fredonia	Institutions	group	2020
$Percentage\ rating\ their\ interactions\ a\ 6\ or\ 7\ (on\ a\ scale\ from\ 1="Poor"\ to\ 7="Excellent")\ with$	%			
13a. Students	57	+1	-4	-1
13b. Academic advisors	59	+10	+12	+5
13c. Faculty	50	-5	-11	-8
13d. Student services staff (career services, student activities, housing, etc.)	37	-4	-11	-8
13e. Other administrative staff and offices (registrar, financial aid, etc.)	37	-1	-8	-8
Supportive Environment				
Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized				
14b. Providing support to help students succeed academically	63	-1	-7	-7
14c. Using learning support services (tutoring services, writing center, etc.)	59	-3	-11	-7
$14d. \ \ Encouraging \ contact \ among \ students \ from \ diff. \ backgrounds \ (soc., racial/eth., relig., etc.)$	44	-4	-9	-11
14e. Providing opportunities to be involved socially	73	+7	+8	+9
14f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	46	-10	-17	-14
14g. Helping you manage your non-academic responsibilities (work, family, etc.)	18	-9	-13	-14
14h. Attending campus activities and events (performing arts, athletic events, etc.)	63	+10	+17	+11
14i. Attending events that address important social, economic, or political issues	40	+1	-1	+0

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.

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Comparisons with High-Performing Institutions State University of New York at Fredonia

Comparisons with Top 50% and Top 10% Institutions

While NSSE's policy is not to rank institutions (see **go.iu.edu/NSSE-PnP**), the results below are designed to compare the engagement of your students with those attending two groups of institutions identified by NSSE a for their high average levels of student engagement:

- (a) institutions with average scores placing them in the top 50% of all 2019 and 2020 NSSE institutions, and
- (b) institutions with average scores placing them in the top 10% of all 2019 and 2020 NSSE institutions.

While the average scores for most institutions are below the mean for the top 50% or top 10%, your institution may show areas of distinction where your average student was as engaged as (or even more engaged than) the typical student at high-performing institutions. A check mark (\checkmark) signifies those comparisons where your average score was at least comparable to that of the high-performing group. However, the presence of a check mark does not necessarily mean that your institution was a member of that group.

It should be noted that most of the variability in student engagement is within, not between, institutions. Even "high-performing" institutions have students with engagement levels below the average for all institutions.

First-Year S	Students			Your first-year stude	ents compared with	h	
		SUNY Fredonia	NSSE T	Гор 50%	NSSE T	op 10%	
Theme	Engagement Indicator	Mean	Mean	Effect size ✓	Mean	Effect size	✓
	Higher-Order Learning	33.5	39.3 ***	45	41.4 ***	62	
Academic	Reflective and Integrative Learning	32.3	36.7 ***	37	39.0 ***	57	
Challenge	Learning Strategies	32.8	39.9 ***	52	42.3 ***	68	
	Quantitative Reasoning	21.6	29.4 ***	51	31.4 ***	64	
Learning	Collaborative Learning	28.8	35.2 ***	47	37.4 ***	64	
with Peers	Discussions with Diverse Others	37.3	41.5 ***	28	43.6 ***	44	
Experiences	Student-Faculty Interaction	19.8	24.5 ***	32	28.1 ***	54	
with Faculty	Effective Teaching Practices	35.3	40.5 ***	40	42.3 ***	49	
Campus	Quality of Interactions	42.7	45.2 **	22	47.2 ***	39	
	Supportive Environment	32.8	37.9 ***	39	40.0 ***	56	
Seniors				Your seniors co	ompared with		
		SUNY Fredonia	NSSE T	Гор 50%	NSSE T	op 10%	
Theme	Engagement Indicator	Mean	Mean	Effect size ✓	Mean	Effect size	\checkmark
	Higher-Order Learning	37.6	41.7 ***	30	43.2 ***	42	
Academic	Reflective and Integrative Learning	36.8	39.8 **	25	41.8 ***	41	
Challenge	Learning Strategies	36.4	40.7 **	30	42.7 ***	43	
	Quantitative Reasoning	24.2	31.4 ***	45	33.4 ***	57	
Learning	Collaborative Learning	33.3	35.9 *	19	38.4 ***	38	
with Peers	Discussions with Diverse Others	38.8	42.1 *	21	43.8 ***	32	
Experiences	Student-Faculty Interaction	28.0	29.7	11	33.2 ***	33	
with Faculty	Effective Teaching Practices	38.1	41.8 **	27	43.7 ***	42	
Campus	Quality of Interactions	41.2	45.2 **	34	47.4 ***	51	
Environment	Supportive Environment	30.2	34.6 ***	31	36.8 ***	47	

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

a. Precision-weighted means (produced by Hierarchical Linear Modeling) were used to determine the top 50% and top 10% institutions for each Engagement Indicator from all NSSE 2019 and 2020 institutions, separately by class. Using this method, Engagement Indicator scores of institutions with relatively large standard errors were adjusted toward the mean of all students, while those with smaller standard errors received smaller corrections. As a result, schools with less stable data—even those with high average scores—may not be among the top scorers. NSSE does not publish the names of the top 50% and top 10% institutions because of our commitment not to release institutional results and our policy against ranking institutions.

b. Check marks are assigned to comparisons that are either significant and positive, or non-significant with an effect size > -.10.



Detailed Statistics^a State University of New York at Fredonia

Detailed Statistics: First-Year Students

Map	betanea statistics. This	Moa	n ctatict	icc		Porco	ntile ^d sco	aroc		Co	mnaricon	roculto	
Marca Marc	_	IVICa	iii statist	103	-	reite	TILLIE SCI	JI 63				resuits	Effect
Higher-Order Learning		Mean	SD b	SE c	5th	25th	50th	75th	95th			Sig. f	
SUNY Freedmin (N = 176)	Academic Challenge												
Peer Institutions	Higher-Order Learning												
Aspirational group	SUNY Fredonia (N = 176)	33.5	13.2	.99	15	25	30	40	60				
NSSE 2019 & 2020	Peer Institutions	36.2	12.7	.37	20	25	35	45	60	1,351	-2.8	.008	216
Top 50%	Aspirational group	37.3	12.5	.26	20	30	40	45	60	2,487	-3.9	.000	308
Reflective & Integrative Learning SUNY Fredonia (N = 202) 32.3 11.7 8.3 13 23 31 40 51	NSSE 2019 & 2020	38.1	13.2	.03	20	30	40	45	60	193,008	-4.6	.000	347
Reflective & Integrative Learning SUNY Fredomia (N = 202) 32.3 11.7 .83 13 23 31 40 51 Peer Institutions 34.0 11.7 .32 14 26 34 40 54 1.515 -1.6 0.64 -1.40 Aspirational group 35.5 11.7 .23 17 29 34 43 57 2.706 .3.0 .000 -2.256 NSSE 2019 & 2020 35.2 12.0 .03 17 26 34 43 57 208.880 -2.8 .001 -2.38 Top 50% 36.7 11.8 .04 17 29 37 46 57 106.855 -4.4 .000 .371 Top 10% 39.0 11.7 .09 20 31 40 49 60 16.949 .6.7 .000 .566 Learning Strategies SUNY Fredonia (N = 100) 32.8 12.8 1.01 13 20 33 40 53 Peer Institutions 36.8 13.3 .40 13 27 40 47 60 12.44 -4.0 .000 -302 Aspirational group 37.7 13.4 29 20 27 40 47 60 12.45 4.9 .000 -369 NSSE 2019 & 2020 38.3 13.8 .03 20 27 40 47 60 182.450 -5.5 .000 -400 Top 50% 39.9 13.7 .05 20 33 40 53 60 92.736 .7.1 .000 -5.77 Quantitative Reasoning SUNY Fredomia (N = 163) 21.6 14.4 1.13 0 13 20 33 40 53 60 92.736 .7.1 .000 -5.77 Quantitative Reasoning SUNY Fredomia (N = 163) 21.6 14.4 1.13 0 13 20 33 40 53 60 122 .9.5 .000 .677 Ever Institutions 26.0 14.1 .42 0 20 27 40 60 182.450 .5.5 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185.539 .6.6 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185.539 .6.6 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185.539 .6.6 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185.539 .6.6 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185.539 .6.6 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185.539 .6.6 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 120.566 .7.8 .000 .512 Top 10% 31.4 13.3 10 7 20 33 40 55 1.696 .7.8 .000 .530 Aspirational group 30.2 13.7 .05 20 30 40 55 5 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 5 20 30 40 55 5 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 5 20 30 40 65 5 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 5 20 30 40 65 5 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 5 20 30 40 65 5 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 5 20 30 40 65 5 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 5 20 5 5 5 60 60 2.363 .5 60 0	Top 50%	39.3	13.1	.04	20	30	40	50	60	109,403	-5.8	.000	447
SUNY Fredonia (N = 202) 32.3 11.7 .83 13 23 31 .40 .51 Peer Institutions 34.0 11.7 .32 .14 .26 .34 .40 .51 Peer Institutions 34.0 .17 .23 .17 .29 .34 .40 .51 .51 .57 .60 .40 .00 .25 NSSE 2019 & 2020 .35 .21 .20 .03 .17 .26 .34 .43 .57 .20 .8880 .2.8 .001 .238 Top 50% .36.7 .18 .04 .17 .29 .37 .46 .57 .16 .655 .4.4 .000 .371 Top 10% .39.0 .11.7 .09 .20 .31 .40 .49 .60 .16,949 .6.7 .000 .566 Learning Strategies	Top 10%	41.4	12.8	.09	20	35	40	50	60	21,109	-7.9	.000	617
Peer Institutions	Reflective & Integrative Learning	g											
Aspirational group 35.3 11.7 2.3 17 29 34 43 57 2.706 -3.0 .000 -2.56 NSSE 2019 & 2020 35.2 12.0 .03 17 26 34 43 57 20.88.80 -2.8 .001 -2.38 Top 50% 36.7 11.8 .04 17 29 37 46 57 106.855 -4.4 .000 .37	SUNY Fredonia (N = 202)	32.3	11.7	.83	13	23	31	40	51				
NSSE 2019 & 2020	Peer Institutions	34.0	11.7	.32	14	26	34	40	54	1,515	-1.6	.064	140
Top 50% 36.7 11.8 .04 17 29 37 46 57 106.855 -4.4 .000 .371	Aspirational group	35.3	11.7	.23	17	29	34	43	57	2,706	-3.0	.000	256
Top 10% 39.0 11.7 .09 20 31 40 49 60 16.949 -6.7 .000 -5.66	NSSE 2019 & 2020	35.2	12.0	.03	17	26	34	43	57	208,880	-2.8	.001	238
Learning Strategies SUNY Fredonia (N = 160) 32.8 12.8 1.01 13 20 33 40 53 Peer Institutions 36.8 13.3 .40 13 27 40 47 60 1.244 -4.0 .000 .302 Aspirational group 37.7 13.4 .29 20 27 40 47 60 1.244 -4.0 .000 .302 Aspirational group 37.7 13.8 .29 20 27 40 47 60 1.245 .4.9 .000 .309 NSSE 2019 & 2020 38.3 13.8 .03 20 27 40 47 60 182.450 .5.5 .000 .400 Top 50% 39.9 13.7 .05 20 33 40 53 60 162 .9.5 .000 .520 Top 10% 42.3 14.1 .10 20 33 40 53 60 162 .9.5 .000 .520 SUNY Fredonia (N = 163) 21.6 14.4 1.13 0 13 20 33 47 Peer Institutions 26.0 14.1 .42 0 20 27 33 53 1.267 -4.3 .000 .387 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 125.56 -7.8 .000 .429 Top 50% 29.4 15.2 .04 7 20 27 40 60 120.566 -7.8 .000 .512 Top 10% 31.4 15.3 .10 7 20 33 40 55 .65 .000 .257 Learning with Peers Collaborative Learning SUNY Fredonia (N = 237) 28.8 14.0 .91 5 20 30 40 55 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 2.924 .1.4 .123 .105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 0 139.077 .6.4 .000 .236 Top 50% 35.2 13.7 .04 15 25 35 45 60 139.077 .6.4 .000 .466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29.308 8.6 .000 .366 .006 .0	Top 50%	36.7	11.8	.04	17	29	37	46	57	106,855	-4.4	.000	371
SUNY Fredonia (N = 160) 32.8 12.8 1.01 13 20 33 40 53	Top 10%	39.0	11.7	.09	20	31	40	49	60	16,949	-6.7	.000	566
Peer Institutions 36.8 13.3 .40 13 27 40 47 60 1,244 .4.0 .000 .302	Learning Strategies												
Aspirational group 37.7 13.4 .29 .20 27 40 47 60 .2,345 .4.9 .000 .369 NSSE 2019 & 2020 38.3 13.8 .03 .20 .27 .40 .47 .60 .182,450 .5.5 .000 .400 Top 50% 39.9 13.7 .05 .20 .33 .40 .53 .60 .92,736 .7.1 .000 .520 Top 10% 42.3 14.1 .10 .20 .33 .40 .53 .60 .162 .9.5 .000 .677 Quantitative Reasoning .	SUNY Fredonia (N = 160)	32.8	12.8	1.01	13	20	33	40	53				
NSSE 2019 & 2020	Peer Institutions	36.8	13.3	.40	13	27	40	47	60	1,244	-4.0	.000	302
Top 50%	Aspirational group	37.7	13.4	.29	20	27	40	47	60	2,345	-4.9	.000	369
Top 10% 42.3 14.1 1.10 20 33 40 53 60 162 -9.5 0.00 -6.677	NSSE 2019 & 2020	38.3	13.8	.03	20	27	40	47	60	182,450	-5.5	.000	400
Quantitative Reasoning SUNY Fredonia (N = 163) 21.6 14.4 1.13 0 13 20 33 47	Top 50%	39.9	13.7	.05	20	33	40	53	60	92,736	-7.1	.000	520
SUNY Fredonia (N = 163) 21.6	Top 10%	42.3	14.1	.10	20	33	40	53	60	162	-9.5	.000	677
Peer Institutions 26.0 14.1 .42 0 20 27 33 53 1,267 -4.3 .000 -306	Quantitative Reasoning												
Aspirational group 27.3 14.7 .31 0 20 27 40 60 2,378 -5.7 .000 -3.87 NSSE 2019 & 2020 28.2 15.3 .04 0 20 27 40 60 185,539 -6.6 .000429 Top 50% 29.4 15.2 .04 7 20 27 40 60 120,566 -7.8 .000512 Top 10% 31.4 15.3 .10 7 20 33 40 60 25,563 -9.8 .000637 Top 10% 31.4 15.3 .10 7 20 33 40 60 25,563 -9.8 .000637 Top 10% 31.4 15.3 .10 5 20 30 40 55 SUNY Fredonia (N = 237) 28.8 14.0 .91 5 20 30 40 55 1,696 -2.7 .004 -200 Aspirational group 30.2 13.7 .26 10 20 30 40 55 2,924 -1.4 .123 -105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 2,924 -1.4 .123 -105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 55 2,924 -1.4 .123 -105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000636 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 1,2503 .839017 2.3030303030303030 -	SUNY Fredonia (N = 163)	21.6	14.4	1.13	0	13	20	33	47				
NSSE 2019 & 2020	Peer Institutions	26.0	14.1	.42	0	20	27	33	53	1,267	-4.3	.000	306
Top 50% 29.4 15.2 .04 7 20 27 40 60 120.566 -7.8 .000512 Top 10% 31.4 15.3 .10 7 20 33 40 60 25.563 -9.8 .000637 Learning with Peers Collaborative Learning SUNY Fredonia (N = 237) 28.8 14.0 .91 5 20 30 40 55 1.696 -2.7 .004200	Aspirational group	27.3	14.7	.31	0	20	27	40	60	2,378	-5.7	.000	387
Top 10% 31.4 15.3 .10 7 20 33 40 60 25,563 -9.8 .000637 Learning with Peers Collaborative Learning SUNY Fredonia (N = 237) 28.8 14.0 .91 5 20 30 40 55 Peer Institutions 31.4 13.2 .35 10 20 30 40 55 1,696 -2.7 .004200 Aspirational group 30.2 13.7 .26 10 20 30 40 55 2,924 -1.4 .123105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 Peer Institutions 37.5 14.4 .44 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000 -280	NSSE 2019 & 2020	28.2	15.3	.04	0	20	27	40	60	185,539	-6.6	.000	429
Learning with Peers Collaborative Learning SUNY Fredonia (N = 237)	Top 50%	29.4	15.2	.04	7	20	27	40	60	120,566	-7.8	.000	512
Collaborative Learning SUNY Fredonia (N = 237) 28.8 14.0 .91 5 20 30 40 55 Peer Institutions 31.4 13.2 .35 10 20 30 40 55 1,696 -2.7 .004 -200 Aspirational group 30.2 13.7 .26 10 20 30 40 55 2,924 -1.4 .123 105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000 237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000 466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000 636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 1,250 3 .839	Top 10%	31.4	15.3	.10	7	20	33	40	60	25,563	-9.8	.000	637
SUNY Fredonia (N = 237) 28.8 14.0 .91 5 20 30 40 55 Peer Institutions 31.4 13.2 .35 10 20 30 40 55 1,696 -2.7 .004 -200 Aspirational group 30.2 13.7 .26 10 20 30 40 55 2,924 -1.4 .123105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	_												
Peer Institutions 31.4 13.2 .35 10 20 30 40 55 1,696 -2.7 .004 200 Aspirational group 30.2 13.7 .26 10 20 30 40 55 2,924 -1.4 .123 105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000 237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000 466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000 636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 1,250 3 .839 017 Aspirational group 37.8 14.9 .32 <t< td=""><td>Collaborative Learning</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Collaborative Learning												
Aspirational group 30.2 13.7 2.6 10 20 30 40 55 2,924 -1.4 .123105 NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 29,308 -8.6 .000017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	SUNY Fredonia $(N = 237)$	28.8	14.0	.91	5	20	30	40	55				
NSSE 2019 & 2020 32.3 14.7 .03 5 20 30 40 60 224,974 -3.5 .000237 Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 Peer Institutions 37.5 14.4 .44 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	Peer Institutions	31.4	13.2	.35	10	20	30	40	55	1,696	-2.7	.004	200
Top 50% 35.2 13.7 .04 15 25 35 45 60 139,077 -6.4 .000466 Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	Aspirational group	30.2	13.7	.26	10	20	30	40	55	2,924	-1.4	.123	105
Top 10% 37.4 13.5 .08 15 30 40 45 60 29,308 -8.6 .000636 Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 Peer Institutions 37.5 14.4 .44 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	NSSE 2019 & 2020	32.3	14.7	.03	5	20	30	40	60	224,974	-3.5	.000	237
Discussions with Diverse Others SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 Peer Institutions 37.5 14.4 .44 15 25 40 50 60 1,2503 .839017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	Top 50%	35.2	13.7	.04	15	25	35	45	60	139,077	-6.4	.000	466
SUNY Fredonia (N = 154) 37.3 15.2 1.22 15 25 40 50 60 Peer Institutions 37.5 14.4 .44 15 25 40 50 60 1,250 3 .839 017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,363 5 .665 036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073 144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000 280	Top 10%	37.4	13.5	.08	15	30	40	45	60	29,308	-8.6	.000	636
Peer Institutions 37.5 14.4 .44 15 25 40 50 60 1,250 3 .839 017 Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,363 5 .665 036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073 144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000 280	Discussions with Diverse Others												
Aspirational group 37.8 14.9 .32 15 25 40 50 60 2,3635 .665036 NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	SUNY Fredonia (N = 154)	37.3	15.2	1.22	15	25	40						
NSSE 2019 & 2020 39.5 15.6 .04 15 30 40 55 60 183,786 -2.3 .073144 Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	Peer Institutions	37.5	14.4	.44	15	25	40	50	60	1,250		.839	017
Top 50% 41.5 15.0 .04 20 30 40 55 60 123,460 -4.2 .000280	Aspirational group	37.8	14.9	.32	15	25	40	50	60	2,363	5	.665	036
		39.5	15.6	.04	15	30	40	55	60	183,786	-2.3	.073	144
Top 10% 43.6 14.5 .09 20 35 45 60 60 25,682 -6.4 .000438	Top 50%	41.5	15.0	.04	20	30	40	55	60	123,460	-4.2	.000	280
	Top 10%	43.6	14.5	.09	20	35	45	60	60	25,682	-6.4	.000	438



Detailed Statistics^a State University of New York at Fredonia

Detailed Statistics: First-Year Students

	Mea	n statist	ics	Percentile ^d scores					Comparison results				
									Deg. of	Mean		Effect	
	Mean	SD ^b	SE c	5th	25th	50th	75th	95th	freedom ^e	diff.	Sig. ^f	size ^g	
Experiences with Faculty													
Student-Faculty Interaction													
SUNY Fredonia (N = 182)	19.8	12.9	.96	0	10	20	25	45					
Peer Institutions	20.2	13.9	.40	0	10	20	30	45	1,412	4	.707	030	
Aspirational group	18.2	13.3	.27	0	10	15	25	40	2,580	1.6	.112	.122	
NSSE 2019 & 2020	21.4	14.6	.03	0	10	20	30	50	181	-1.5	.109	106	
Top 50%	24.5	14.7	.06	5	15	20	35	55	182	-4.6	.000	316	
Top 10%	28.1	15.5	.16	5	15	25	40	60	191	-8.3	.000	537	
Effective Teaching Practices													
SUNY Fredonia (N = 173)	35.3	13.4	1.02	16	28	36	44	60					
Peer Institutions	36.5	12.6	.37	16	28	36	44	60	1,327	-1.2	.236	097	
Aspirational group	37.6	12.6	.26	16	28	40	48	60	2,472	-2.3	.021	182	
NSSE 2019 & 2020	38.4	13.2	.03	16	28	40	48	60	192,279	-3.2	.002	240	
Top 50%	40.5	13.2	.05	20	32	40	52	60	80,114	-5.2	.000	398	
Top 10%	42.3	14.1	.10	16	32	44	56	60	22,194	-7.0	.000	495	
Campus Environment													
Quality of Interactions													
SUNY Fredonia (N = 149)	42.7	10.4	.85	24	38	42	50	60					
Peer Institutions	41.5	11.4	.36	20	34	42	50	60	1,163	1.2	.242	.103	
Aspirational group	42.2	11.7	.26	22	35	44	50	60	176	.5	.571	.044	
NSSE 2019 & 2020	43.2	11.8	.03	22	36	44	52	60	148	5	.523	046	
Top 50%	45.2	11.2	.04	24	38	46	54	60	74,862	-2.5	.007	222	
Top 10%	47.2	11.6	.09	25	40	50	58	60	151	-4.5	.000	389	
Supportive Environment													
SUNY Fredonia (N = 151)	32.8	12.4	1.01	13	23	33	40	58					
Peer Institutions	34.4	13.3	.41	13	25	35	43	58	1,191	-1.6	.173	119	
Aspirational group	34.5	13.5	.29	10	25	35	43	60	2,275	-1.7	.134	126	
NSSE 2019 & 2020	36.0	13.5	.03	15	28	38	45	60	176,554	-3.2	.003	238	
Top 50%	37.9	13.1	.04	18	30	38	48	60	90,300	-5.1	.000	388	
Top 10%	40.0	12.9	.10	18	33	40	50	60	16,052	-7.2	.000	562	

 $a. \ Results \ weighted \ by \ institution-reported \ sex \ and \ enrollment \ status \ (and \ institutional \ size \ for \ comparison \ groups).$

IPEDS: 196158

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^a State University of New York at Fredonia

Detailed Statistics: Seniors

	Mea	n statisti	CS		Percei	ntile ^d scc	res			mparison	results	
	Mean	SD ^b	SE ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge	Wicum	- 55		301	2501	30111	7501	<i>33111</i>	j.ccuo	۵.,,,	3.9.	5,20
Higher-Order Learning												
SUNY Fredonia (N = 130)	37.6	14.9	1.30	10	30	40	45	60				
Peer Institutions	39.2	13.9	.41	15	30	40	50	60	1,287	-1.6	.228	112
Aspirational group	40.1	13.3	.29	20	30	40	50	60	2,199	-2.5	.041	185
NSSE 2019 & 2020	40.1	13.5	.03	20	30	40	50	60	209,562	-2.5	.038	182
Top 50%	41.7	13.4	.04	20	35	40	55	60	92,508	-4.1	.001	304
Top 10%	43.2	13.3	.09	20	35	40	55	60	22,592	-5.5	.000	416
Reflective & Integrative Learnin	g											
SUNY Fredonia (N = 143)	36.8	13.9	1.16	9	29	37	46	60				
Peer Institutions	38.5	12.4	.35	20	29	40	49	60	1,409	-1.7	.121	137
Aspirational group	39.2	12.5	.27	20	31	40	49	60	2,342	-2.5	.024	195
NSSE 2019 & 2020	38.1	12.5	.03	17	29	37	46	60	222,152	-1.3	.217	103
Top 50%	39.8	12.2	.04	20	31	40	49	60	91,871	-3.0	.003	249
Top 10%	41.8	12.0	.10	20	34	40	51	60	14,936	-5.0	.000	414
Learning Strategies												
SUNY Fredonia (N = 118)	36.4	16.4	1.51	7	27	40	47	60				
Peer Institutions	37.3	14.8	.45	13	27	40	47	60	1,214	9	.552	058
Aspirational group	37.8	14.5	.33	13	27	40	47	60	2,106	-1.4	.305	097
NSSE 2019 & 2020	38.6	14.6	.03	13	27	40	53	60	200,667	-2.2	.098	152
Top 50%	40.7	14.5	.05	20	33	40	53	60	117	-4.3	.005	296
Top 10%	42.7	14.4	.08	20	33	40	60	60	33,061	-6.3	.000	434
Quantitative Reasoning												
SUNY Fredonia $(N = 121)$	24.2	17.3	1.57	0	13	20	33	60				
Peer Institutions	28.5	16.7	.50	0	20	27	40	60	1,240	-4.3	.008	255
Aspirational group	30.3	16.4	.37	0	20	33	40	60	2,132	-6.1	.000	370
NSSE 2019 & 2020	30.2	16.2	.04	0	20	27	40	60	203,195	-6.0	.000	371
Top 50%	31.4	16.1	.04	0	20	33	40	60	131,009	-7.2	.000	446
Top 10%	33.4	15.9	.10	7	20	33	40	60	25,735	-9.1	.000	575
Learning with Peers												
Collaborative Learning												
SUNY Fredonia $(N = 159)$	33.3	13.9	1.10	10	25	35	40	55				
Peer Institutions	34.2	14.6	.39	10	25	35	45	60	1,566	9	.464	061
Aspirational group	34.2	14.0	.29	10	25	35	45	60	2,458	9	.439	064
NSSE 2019 & 2020	32.0	15.6	.03	5	20	30	45	60	158	1.3	.255	.081
Top 50%	35.9	14.0	.04	15	25	35	45	60	121,600	-2.7	.016	191
Top 10%	38.4	13.6	.09	15	30	40	50	60	21,283	-5.1	.000	377
Discussions with Diverse Others												
SUNY Fredonia ($N = 117$)	38.8	14.7	1.36	15	30	40	50	60				
Peer Institutions	38.2	15.3	.46	15	25	40	50	60	1,229	.6	.688	.039
Aspirational group	39.8	15.0	.34	15	30	40	55	60	2,106	9	.510	063
NSSE 2019 & 2020	40.2	15.9	.04	15	30	40	55	60	201,536	-1.4	.345	087
Top 50%	42.1	15.5	.04	15	30	40	60	60	130,229	-3.2	.024	208
Top 10%	43.8	15.3	.08	20	35	45	60	60	32,778	-4.9	.000	324



Detailed Statistics^a State University of New York at Fredonia

Detailed Statistics: Seniors

	Mea	n statisti	ics	Percentile ^d scores Compar				mparison	parison results			
									Deg. of	Mean		Effect
	Mean	SD ^b	SE c	5th	25th	50th	75th	95th	freedom ^e	diff.	.364 .038 .003 .217 .000 .135 .306 .170 .002 .000 .775 .188 .115 .003 .000	size ^g
Experiences with Faculty												
Student-Faculty Interaction												
SUNY Fredonia (N = 137)	28.0	16.1	1.37	0	20	30	40	60				
Peer Institutions	26.6	16.4	.47	0	15	25	40	60	1,352	1.3	.364	.082
Aspirational group	25.0	16.4	.35	0	15	20	35	60	2,270	3.0	.038	.183
NSSE 2019 & 2020	23.9	16.1	.03	0	10	20	35	55	215,156	4.1	.003	.253
Top 50%	29.7	15.9	.07	5	20	30	40	60	48,595	-1.7	.217	106
Top 10%	33.2	16.0	.17	10	20	35	45	60	8,491	-5.3	.000	329
Effective Teaching Practices												
SUNY Fredonia (N = 128)	38.1	15.6	1.38	8	28	40	52	60				
Peer Institutions	40.0	13.9	.41	16	32	40	52	60	1,281	-2.0	.135	140
Aspirational group	39.5	13.4	.29	16	32	40	48	60	138	-1.5	.306	107
NSSE 2019 & 2020	39.7	13.8	.03	16	32	40	52	60	209,321	-1.7	.170	121
Top 50%	41.8	13.7	.05	20	32	40	52	60	78,954	-3.7	.002	272
Top 10%	43.7	13.4	.10	20	36	44	56	60	17,429	-5.7	.000	421
Campus Environment												
Quality of Interactions												
SUNY Fredonia (N = 113)	41.2	13.7	1.29	16	34	44	52	60				
Peer Institutions	41.6	11.8	.36	20	34	42	50	60	130	4	.775	032
Aspirational group	43.0	11.6	.27	20	36	44	50	60	122	-1.7	.188	148
NSSE 2019 & 2020	43.0	12.1	.03	20	36	44	52	60	185,776	-1.8	.115	148
Top 50%	45.2	11.7	.04	24	38	48	54	60	112	-4.0	.003	341
Top 10%	47.4	12.0	.07	24	40	50	58	60	26,720	-6.1	.000	510
Supportive Environment												
SUNY Fredonia (N = 115)	30.2	14.6	1.36	8	20	28	40	58				
Peer Institutions	30.7	13.9	.43	8	20	30	40	58	1,185	5	.725	035
Aspirational group	32.2	13.5	.31	10	23	33	40	58	2,057	-1.9	.138	142
NSSE 2019 & 2020	32.2	14.2	.03	10	23	33	40	60	195,921	-2.0	.131	141
Top 50%	34.6	14.0	.05	13	25	35	45	60	86,796	-4.4	.001	314
Top 10%	36.8	14.1	.11	13	28	38	48	60	15,633	-6.6	.000	467

 $a. \ Results \ weighted \ by \ institution-reported \ sex \ and \ enrollment \ status \ (and \ institutional \ size \ for \ comparison \ groups).$

IPEDS: 196158

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.