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# **NSSE 2019**

## **Engagement Indicators**

Tennessee Technological University

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### 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 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 2018 and 2019 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).

*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 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](https://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.

## 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.
- △ **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

Theme	Engagement Indicator	Your first-year students compared with Carnegie Class	Your first-year students compared with Quality Assurance	Your first-year students compared with NSSE 2018 & 2019
Academic Challenge	Higher-Order Learning	▽	--	▽
	Reflective & Integrative Learning	▽	▼	▽
	Learning Strategies	△	--	--
	Quantitative Reasoning	--	--	--
Learning with Peers	Collaborative Learning	--	△	△
	Discussions with Diverse Others	▽	--	--
Experiences with Faculty	Student-Faculty Interaction	--	--	--
	Effective Teaching Practices	--	--	--
Campus Environment	Quality of Interactions	△	△	△
	Supportive Environment	--	▼	--

### Seniors

Theme	Engagement Indicator	Your seniors compared with Carnegie Class	Your seniors compared with Quality Assurance	Your seniors compared with NSSE 2018 & 2019
Academic Challenge	Higher-Order Learning	--	▽	--
	Reflective & Integrative Learning	▽	▼	▽
	Learning Strategies	--	▼	--
	Quantitative Reasoning	--	△	△
Learning with Peers	Collaborative Learning	△	△	▲
	Discussions with Diverse Others	▽	▼	▽
Experiences with Faculty	Student-Faculty Interaction	△	--	△
	Effective Teaching Practices	--	▼	▽
Campus Environment	Quality of Interactions	△	△	△
	Supportive Environment	▽	▼	▽

### Academic Challenge: First-year students

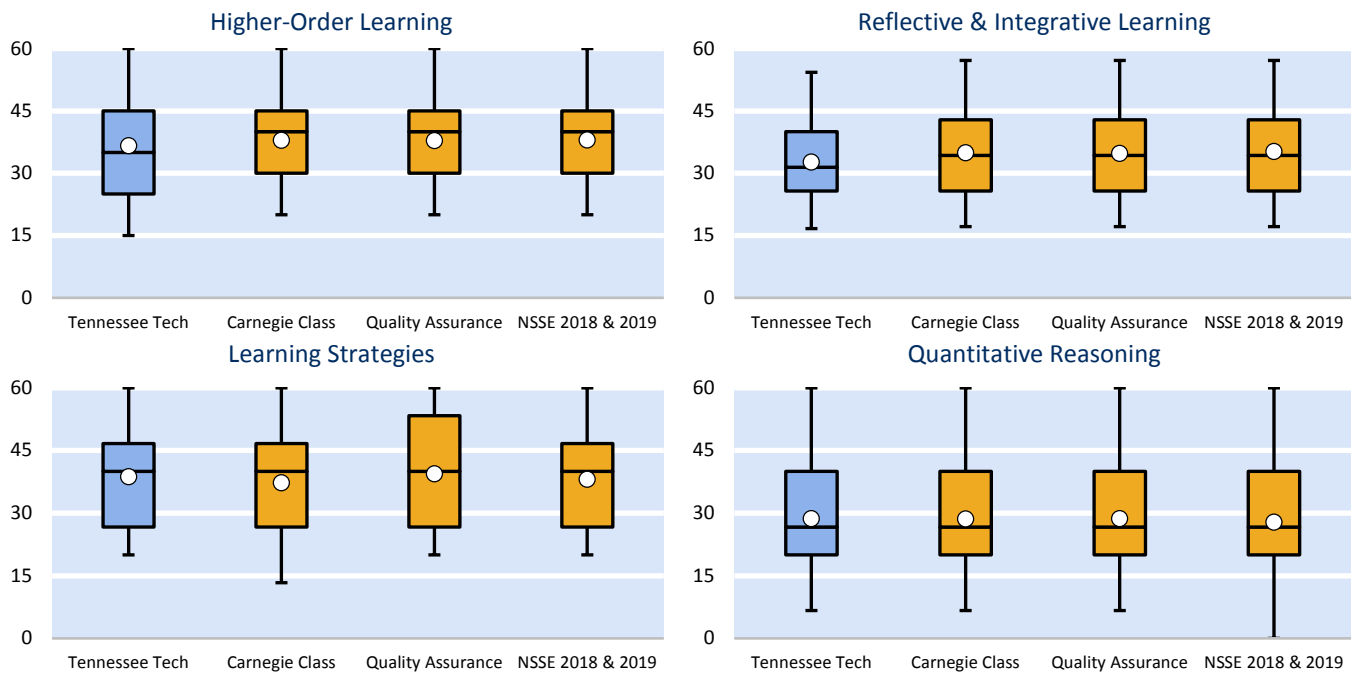
Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote student learning by challenging and supporting them to engage in various forms of deep learning. Four Engagement Indicators are part of this theme: *Higher-Order Learning*, *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

Engagement Indicator	Tennessee Tech  Mean	Your first-year students compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Higher-Order Learning	36.6	38.0 *	-.10	37.9	-.09	38.0 *	-.10
Reflective & Integrative Learning	32.7	35.0 ***	-.19	34.8 ***	-.17	35.2 ***	-.21
Learning Strategies	38.7	37.3 *	.10	39.4	-.05	38.1	.04
Quantitative Reasoning	28.7	28.6	.01	28.7	.00	27.8	.06

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: 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 difference <sup>a</sup> between your FY students and			
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019	
Higher-Order Learning					
Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized...					
	%				
4b. Applying facts, theories, or methods to practical problems or new situations	72	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></di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Notes: Refer to your *Frequencies and Statistical Comparisons* 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.

## Academic Challenge: Seniors

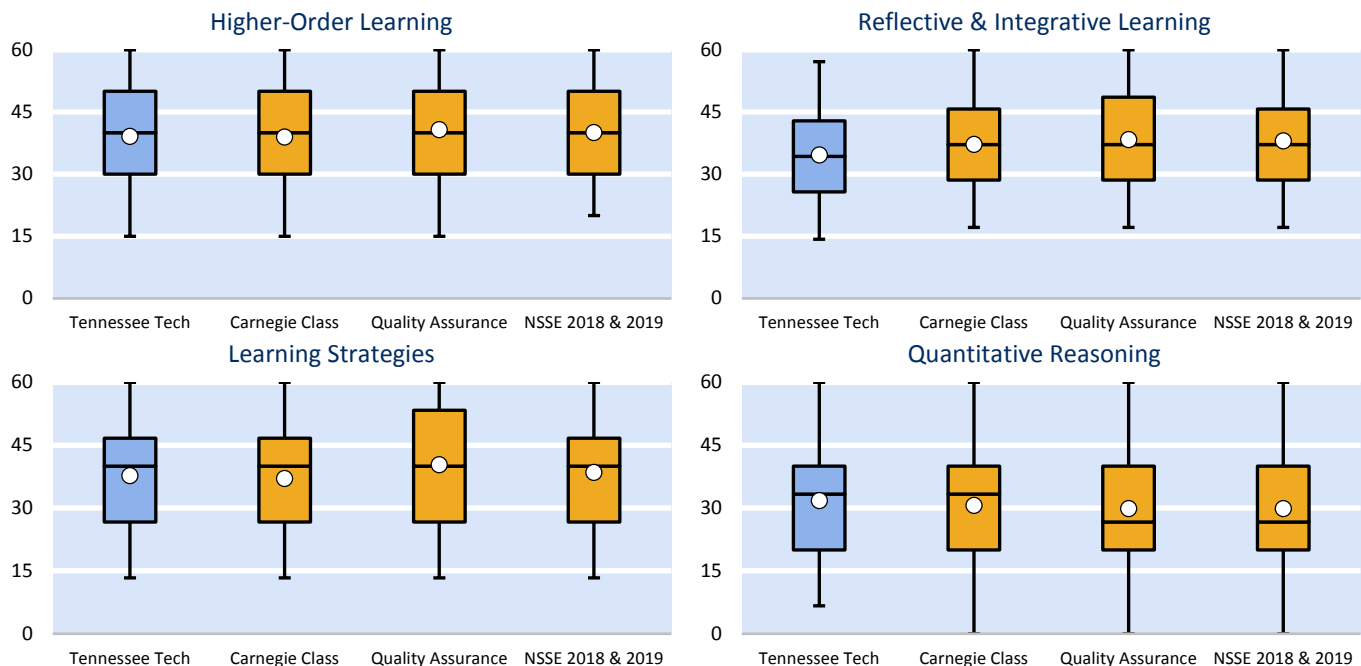
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### Score Distributions



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: 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 point difference <sup>a</sup> between your seniors and		
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019
Higher-Order Learning				
Percentage responding "Very much" or "Quite a bit" about how much coursework emphasized...				
	%			
4b. Applying facts, theories, or methods to practical problems or new situations	80	+3	+2	+3
4c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	73	-1	-4	-2
4d. Evaluating a point of view, decision, or information source	60	-6	-11	-11
4e. Forming a new idea or understanding from various pieces of information	66	-2	-7	-6
Reflective & Integrative Learning				
Percentage of students who responded that they "Very often" or "Often"...				
2a. Combined ideas from different courses when completing assignments	72	+3	+3	+4
2b. Connected your learning to societal problems or issues	51	-7	-11	-10
2c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	39	-10	-15	-14
2d. Examined the strengths and weaknesses of your own views on a topic or issue	56	-8	-12	-10
2e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	62	-10	-11	-11
2f. Learned something that changed the way you understand an issue or concept	62	-9	-10	-10
2g. Connected ideas from your courses to your prior experiences and knowledge	78	-4	-5	-5
Learning Strategies				
Percentage of students who responded that they "Very often" or "Often"...				
9a. Identified key information from reading assignments	69	-7	-10	-10
9b. Reviewed your notes after class	69	+11	-1	+7
9c. Summarized what you learned in class or from course materials	62	+2	-7	-2
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.)	63	+5	+7	+7
6b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	48	+2	+3	+3
6c. Evaluated what others have concluded from numerical information	47	-1	+3	+2

Notes: Refer to your *Frequencies and Statistical Comparisons* 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.

## Learning with Peers: First-year students

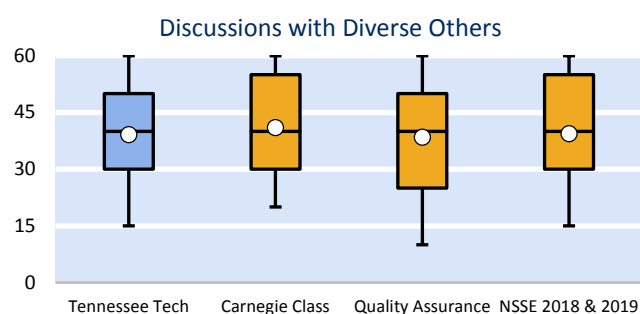
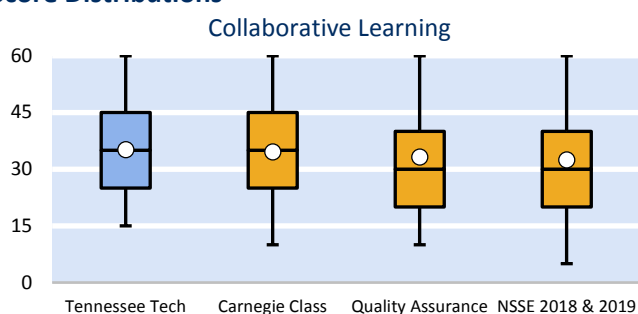
Collaborating with others in mastering difficult material and developing interpersonal and social competence prepare students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions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

### Mean Comparisons

Engagement Indicator	Tennessee Tech Mean	Your first-year students compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Collaborative Learning	35.2	34.5	.04	33.2 **	.14	32.4 ***	.19
Discussions with Diverse Others	39.2	41.0 **	-.13	38.4	.05	39.4	-.01

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 <sup>a</sup> between your FY students and			
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019	
Collaborative Learning					
Percentage of students who responded that they "Very often" or "Often"...	%				
1e. Asked another student to help you understand course material	62	+4 	+7 	+9 	
1f. Explained course material to one or more students	63	-1 	+5 	+5 	
1g. Prepared for exams by discussing or working through course material with other students	55	-0 	+2 	+5 	
1h. Worked with other students on course projects or assignments	63	+5 	+10 	+8 	
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	66	-8 	+0 	-4 	
8b. People from an economic background other than your own	73	-2 	+4 	+2 	
8c. People with religious beliefs other than your own	66	-6 	+1 	-1 	
8d. People with political views other than your own	72	+6 	+8 	+8 	

Notes: Refer to your *Frequencies and Statistical Comparisons* 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.



## Learning with Peers: Seniors

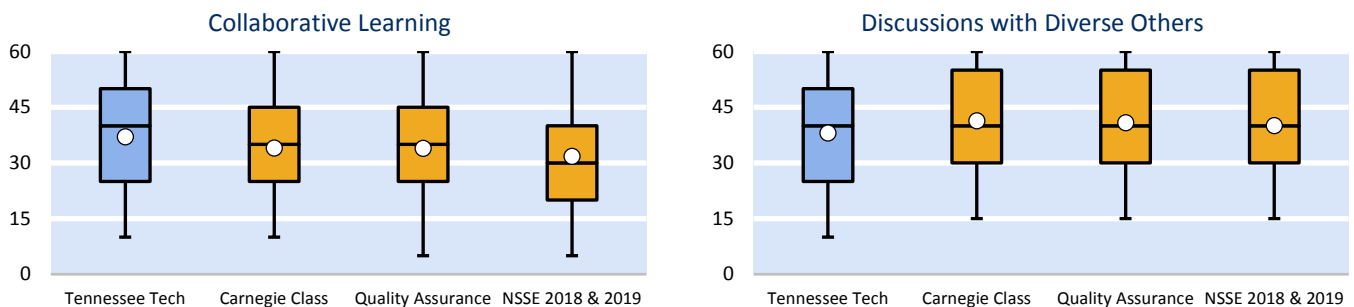
Collaborating with others in mastering difficult material and developing interpersonal and social competence prepare students to deal with complex, unscripted problems they will encounter during and after college. Two Engagement Indicators make up this theme: *Collaborative Learning* and *Discussions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

### Mean Comparisons

Engagement Indicator	Tennessee Tech Mean	Your seniors compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Collaborative Learning	37.0	34.0 ***	.20	33.9 ***	.20	31.8 ***	.33
Discussions with Diverse Others	38.1	41.4 ***	-.21	40.8 ***	-.17	40.1 **	-.12

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 <sup>a</sup> between your seniors and		
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019
<b>Collaborative Learning</b>				
Percentage of students who responded that they "Very often" or "Often"...	%			
1e. Asked another student to help you understand course material	51	+3	+4	+8
1f. Explained course material to one or more students	68	+5	+4	+10
1g. Prepared for exams by discussing or working through course material with other students	57	+6	+4	+11
1h. Worked with other students on course projects or assignments	75	+8	+12	+13
<b>Discussions with Diverse Others</b>				
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	61	-13	-9	-10
8b. People from an economic background other than your own	71	-4	-3	-1
8c. People with religious beliefs other than your own	64	-8	-4	-3
8d. People with political views other than your own	69	+3	-0	+4

Notes: Refer to your *Frequencies and Statistical Comparisons* 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.

## Experiences with Faculty: First-year students

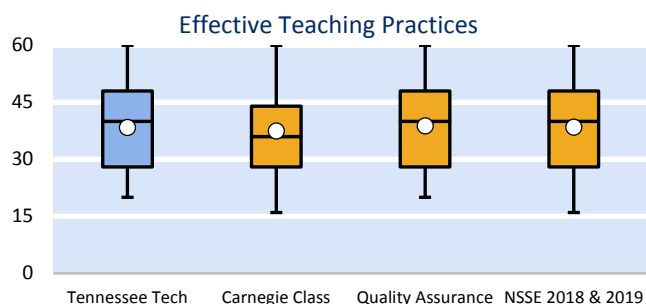
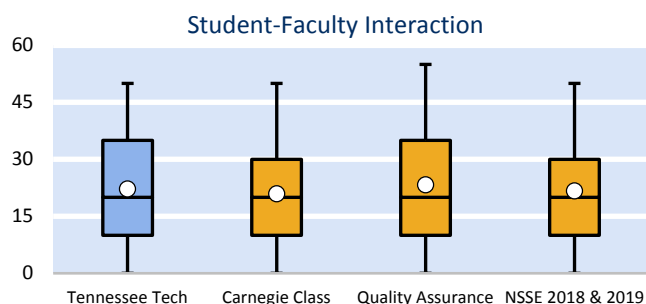
Students learn firsthand how experts think about and solve problems by interacting with faculty members inside and outside of instructional settings. As a result, faculty become role models, mentors, and guides for lifelong learning. In addition, effective teaching requires that faculty deliver course 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

Engagement Indicator	Tennessee Tech Mean	Your first-year students compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Student-Faculty Interaction	22.2	21.0	.08	23.2	-.07	21.7	.04
Effective Teaching Practices	38.3	37.4	.07	38.8	-.04	38.5	-.01

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 <sup>a</sup> between your FY students and			
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019	
Student-Faculty Interaction					
Percentage of students who responded that they "Very often" or "Often"...	%				
3a. Talked about career plans with a faculty member	43	+6	-2	+4	
3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.)	22	+1	-2	+0	
3c. Discussed course topics, ideas, or concepts with a faculty member outside of class	26	+1	-3	-1	
3d. Discussed your academic performance with a faculty member	31	+3	-5	-0	
Effective Teaching Practices					
Percentage responding "Very much" or "Quite a bit" about how much instructors have...					
5a. Clearly explained course goals and requirements	78	+1	+2	+1	
5b. Taught course sessions in an organized way	75	+1	+2	+1	
5c. Used examples or illustrations to explain difficult points	77	+3	+2	+3	
5d. Provided feedback on a draft or work in progress	59	+1	-7	-5	
5e. Provided prompt and detailed feedback on tests or completed assignments	54	-0	-6	-6	

Notes: Refer to your *Frequencies and Statistical Comparisons* 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.

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## Experiences with Faculty: Seniors

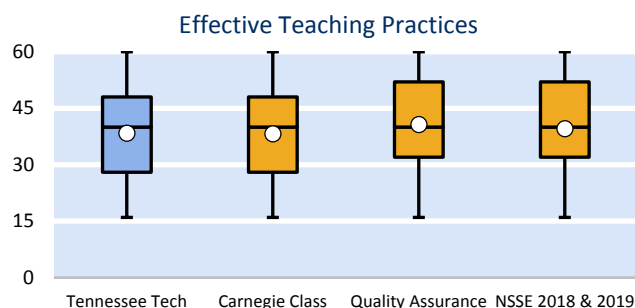
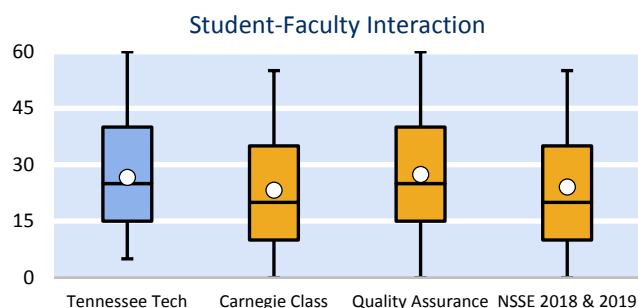
Students learn firsthand how experts think about and solve problems by interacting with faculty members inside and outside of instructional settings. As a result, faculty become role models, mentors, and guides for lifelong learning. In addition, effective teaching requires that faculty deliver course 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

Engagement Indicator	Tennessee Tech Mean	Your seniors compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Student-Faculty Interaction	26.6	23.2 ***	.21	27.3	-.05	24.1 ***	.16
Effective Teaching Practices	38.4	38.2	.01	40.6 ***	-.16	39.6 *	-.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).

### Score Distributions



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### Performance on Indicator Items

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		Percentage point difference <sup>a</sup> between your seniors and			
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019	
Student-Faculty Interaction					
Percentage of students who responded that they "Very often" or "Often"...					
	%				
3a. Talked about career plans with a faculty member	48	+7	-4	+4	
3b. Worked w/faculty on activities other than coursework (committees, student groups, etc.)	35	+7	+3	+7	
3c. Discussed course topics, ideas, or concepts with a faculty member outside of class	37	+7	-2	+5	
3d. Discussed your academic performance with a faculty member	37	+8	-5	+3	
Effective Teaching Practices					
Percentage responding "Very much" or "Quite a bit" about how much instructors have...					
5a. Clearly explained course goals and requirements	79	-1	-4	-1	
5b. Taught course sessions in an organized way	73	-3	-2	-4	
5c. Used examples or illustrations to explain difficult points	78	+2	+0	+1	
5d. Provided feedback on a draft or work in progress	56	+1	-9	-5	
5e. Provided prompt and detailed feedback on tests or completed assignments	61	+3	-5	-3	

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## Campus Environment: First-year students

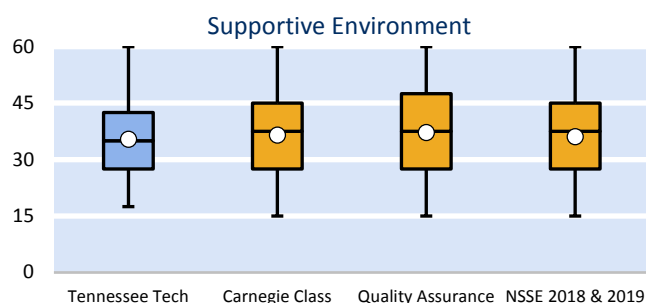
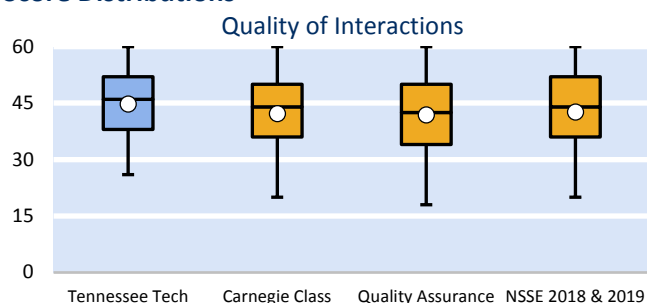
Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment*. Below are three views of your results alongside those of your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

### Mean Comparisons

Engagement Indicator	Tennessee Tech Mean	Your first-year students compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Quality of Interactions	44.8	42.3 ***	.22	41.9 ***	.24	42.6 ***	.18
Supportive Environment	35.4	36.5	-.08	37.2 **	-.14	36.1	-.05

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



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### 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 <sup>a</sup> between your FY students and			
Quality of Interactions	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019	
Percentage rating their interactions a 6 or 7 (on a scale from 1="Poor" to 7="Excellent") with...		%			
13a. Students	57	+6	+8	+6	
13b. Academic advisors	60	+8	+7	+7	
13c. Faculty	55	+8	+6	+4	
13d. Student services staff (career services, student activities, housing, etc.)	53	+8	+7	+7	
13e. Other administrative staff and offices (registrar, financial aid, etc.)	50	+9	+7	+5	
Supportive Environment					
Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized...					
14b. Providing support to help students succeed academically	76	+0	+0	+0	
14c. Using learning support services (tutoring services, writing center, etc.)	78	+1	-2	+1	
14d. Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.)	56	-6	-5	-5	
14e. Providing opportunities to be involved socially	73	-0	+0	+2	
14f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	71	-0	-1	+2	
14g. Helping you manage your non-academic responsibilities (work, family, etc.)	35	-6	-10	-7	
14h. Attending campus activities and events (performing arts, athletic events, etc.)	67	-1	-2	+3	
14i. Attending events that address important social, economic, or political issues	42	-7	-8	-6	

Notes: Refer to your *Frequencies and Statistical Comparisons* 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: Seniors

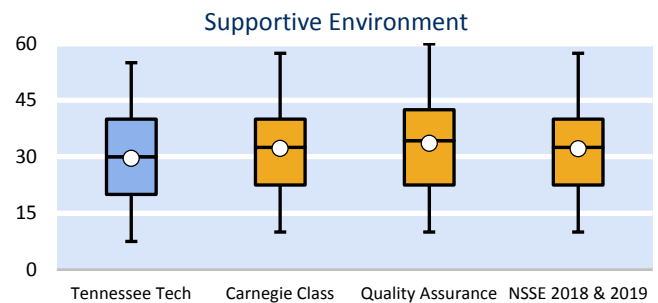
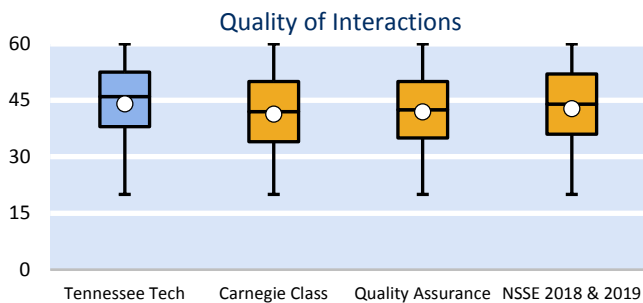
Students benefit and are more satisfied in supportive settings that cultivate positive relationships among students, faculty, and staff. Two Engagement Indicators investigate this theme: *Quality of Interactions* and *Supportive Environment*. Below are three views of your results alongside those of your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

### Mean Comparisons

Engagement Indicator	Tennessee Tech Mean	Your seniors compared with					
		Carnegie Class		Quality Assurance		NSSE 2018 & 2019	
		Mean	Effect size	Mean	Effect size	Mean	Effect size
Quality of Interactions	44.1	41.4 ***	.22	41.9 ***	.17	42.8 *	.11
Supportive Environment	29.6	32.2 ***	-.19	33.6 ***	-.28	32.2 ***	-.19

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 point difference <sup>a</sup> between your seniors and		
	Tennessee Tech	Carnegie Class	Quality Assurance	NSSE 2018 & 2019
Quality of Interactions				
Percentage rating their interactions a 6 or 7 (on a scale from 1="Poor" to 7="Excellent") with...	%			
13a. Students	66	+11	+10	+10
13b. Academic advisors	58	+10	+6	+5
13c. Faculty	54	+3	-2	-3
13d. Student services staff (career services, student activities, housing, etc.)	46	+5	+3	+2
13e. Other administrative staff and offices (registrar, financial aid, etc.)	47	+9	+9	+2
Supportive Environment				
Percentage responding "Very much" or "Quite a bit" about how much the institution emphasized...				
14b. Providing support to help students succeed academically	68	+0	-2	-3
14c. Using learning support services (tutoring services, writing center, etc.)	60	-3	-6	-6
14d. Encouraging contact among students from diff. backgrounds (soc., racial/eth., relig., etc.)	46	-7	-10	-8
14e. Providing opportunities to be involved socially	60	-5	-8	-4
14f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	54	-7	-9	-5
14g. Helping you manage your non-academic responsibilities (work, family, etc.)	22	-6	-11	-9
14h. Attending campus activities and events (performing arts, athletic events, etc.)	46	-12	-12	-6
14i. Attending events that address important social, economic, or political issues	31	-10	-15	-10

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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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# NSSE 2019 Engagement Indicators

## Comparisons with High-Performing Institutions

### Tennessee Technological University

#### Comparisons with Top 50% and Top 10% Institutions

While NSSE's policy is not to rank institutions (see [nsse.indiana.edu/links/PNP](https://nsse.indiana.edu/links/PNP)), the results below are designed to compare the engagement of your students with those attending two groups of institutions identified by NSSE<sup>a</sup> for their high average levels of student engagement:

- (a) institutions with average scores placing them in the top 50% of all 2018 and 2019 NSSE institutions, and
- (b) institutions with average scores placing them in the top 10% of all 2018 and 2019 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 (✓) signifies those comparisons where your average score was at least comparable<sup>b</sup> 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 Students		Tennessee Tech	Your first-year students compared with						
Theme	Engagement Indicator		NSSE Top 50%				NSSE Top 10%		
			Mean	Mean	Effect size	✓	Mean	Effect size	✓
Academic Challenge	Higher-Order Learning	36.6	39.3 ***	-.21		41.0 ***	-.34		
	Reflective and Integrative Learning	32.7	36.8 ***	-.34		38.8 ***	-.51		
	Learning Strategies	38.7	39.9	-.09	✓	42.5 ***	-.27		
	Quantitative Reasoning	28.7	29.3	-.04	✓	30.8 **	-.13		
Learning with Peers	Collaborative Learning	35.2	35.4	-.02	✓	37.7 ***	-.18		
	Discussions with Diverse Others	39.2	41.3 **	-.15		43.2 ***	-.28		
Experiences with Faculty	Student-Faculty Interaction	22.2	24.9 ***	-.19		28.0 ***	-.37		
	Effective Teaching Practices	38.3	40.6 ***	-.17		42.7 ***	-.31		
Campus Environment	Quality of Interactions	44.8	44.9	-.01	✓	47.1 ***	-.20		
	Supportive Environment	35.4	38.1 ***	-.20		40.1 ***	-.35		
Seniors		Tennessee Tech	Your seniors compared with						
Theme	Engagement Indicator		NSSE Top 50%				NSSE Top 10%		
			Mean	Mean	Effect size	✓	Mean	Effect size	✓
Academic Challenge	Higher-Order Learning	39.1	41.8 ***	-.20		43.0 ***	-.29		
	Reflective and Integrative Learning	34.6	39.9 ***	-.43		41.6 ***	-.57		
	Learning Strategies	37.7	40.8 ***	-.21		42.6 ***	-.34		
	Quantitative Reasoning	31.8	31.3	.03	✓	32.7	-.06	✓	
Learning with Peers	Collaborative Learning	37.0	36.1	.06	✓	38.6 **	-.12		
	Discussions with Diverse Others	38.1	42.0 ***	-.25		43.5 ***	-.35		
Experiences with Faculty	Student-Faculty Interaction	26.6	29.9 ***	-.21		33.9 ***	-.46		
	Effective Teaching Practices	38.4	41.8 ***	-.25		43.5 ***	-.38		
Campus Environment	Quality of Interactions	44.1	45.2 *	-.09		47.4 ***	-.28		
	Supportive Environment	29.6	34.8 ***	-.37		37.0 ***	-.53		

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 < .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 2018 and 2019 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: First-Year Students

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SE <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Academic Challenge</b>												
<b>Higher-Order Learning</b>												
Tennessee Tech (N = 515)	36.6	13.7	.60	15	25	35	45	60				
Carnegie Class	38.0	12.9	.06	20	30	40	45	60	524	-1.3	.030	-.102
Quality Assurance	37.9	13.3	.27	20	30	40	45	60	2,997	-1.3	.053	-.094
NSSE 2018 & 2019	38.0	13.2	.03	20	30	40	45	60	516	-1.4	.025	-.103
Top 50%	39.3	13.0	.04	20	30	40	50	60	518	-2.7	.000	-.208
Top 10%	41.0	13.0	.08	20	35	40	50	60	530	-4.4	.000	-.336
<b>Reflective &amp; Integrative Learning</b>												
Tennessee Tech (N = 549)	32.7	11.3	.48	17	26	31	40	54				
Carnegie Class	35.0	11.8	.05	17	26	34	43	57	51,272	-2.2	.000	-.188
Quality Assurance	34.8	12.3	.24	17	26	34	43	57	839	-2.1	.000	-.171
NSSE 2018 & 2019	35.2	12.0	.03	17	26	34	43	57	551	-2.5	.000	-.210
Top 50%	36.8	11.8	.04	17	29	37	46	57	113,753	-4.1	.000	-.343
Top 10%	38.8	11.8	.08	20	31	40	46	60	23,991	-6.0	.000	-.513
<b>Learning Strategies</b>												
Tennessee Tech (N = 490)	38.7	13.5	.61	20	27	40	47	60				
Carnegie Class	37.3	13.7	.06	13	27	40	47	60	45,472	1.4	.024	.103
Quality Assurance	39.4	14.0	.29	20	27	40	53	60	2,840	-.7	.300	-.051
NSSE 2018 & 2019	38.1	13.8	.03	20	27	40	47	60	199,761	.6	.354	.042
Top 50%	39.9	13.7	.04	20	33	40	53	60	97,173	-1.2	.059	-.085
Top 10%	42.5	14.0	.09	20	33	40	53	60	512	-3.7	.000	-.267
<b>Quantitative Reasoning</b>												
Tennessee Tech (N = 490)	28.7	14.7	.66	7	20	27	40	60				
Carnegie Class	28.6	15.1	.07	7	20	27	40	60	46,252	.1	.891	.006
Quality Assurance	28.7	15.4	.32	7	20	27	40	60	2,885	.0	.999	.000
NSSE 2018 & 2019	27.8	15.3	.03	0	20	27	40	60	202,859	.9	.197	.058
Top 50%	29.3	15.2	.04	7	20	27	40	60	117,848	-.5	.432	-.036
Top 10%	30.8	15.2	.09	7	20	33	40	60	32,041	-2.0	.003	-.135
<b>Learning with Peers</b>												
<b>Collaborative Learning</b>												
Tennessee Tech (N = 570)	35.2	13.3	.56	15	25	35	45	60				
Carnegie Class	34.5	14.1	.06	10	25	35	45	60	583	.6	.264	.044
Quality Assurance	33.2	14.6	.28	10	20	30	40	60	874	2.0	.001	.139
NSSE 2018 & 2019	32.4	14.7	.03	5	20	30	40	60	573	2.8	.000	.188
Top 50%	35.4	13.7	.04	15	25	35	45	60	122,815	-.2	.666	-.018
Top 10%	37.7	13.6	.08	15	30	40	50	60	26,988	-2.5	.000	-.184
<b>Discussions with Diverse Others</b>												
Tennessee Tech (N = 491)	39.2	14.7	.67	15	30	40	50	60				
Carnegie Class	41.0	14.9	.07	20	30	40	55	60	45,837	-1.9	.006	-.126
Quality Assurance	38.4	16.0	.33	10	25	40	50	60	748	.7	.324	.046
NSSE 2018 & 2019	39.4	15.6	.03	15	30	40	55	60	201,246	-.2	.743	-.015
Top 50%	41.3	14.9	.04	20	30	40	55	60	117,146	-2.2	.001	-.145
Top 10%	43.2	14.4	.09	20	35	40	60	60	26,658	-4.1	.000	-.283



#### Detailed Statistics: First-Year Students

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SE <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Experiences with Faculty</b>												
<b>Student-Faculty Interaction</b>												
Tennessee Tech (N = 521)	22.2	14.8	.65	0	10	20	35	50				
Carnegie Class	21.0	14.3	.06	0	10	20	30	50	531	1.2	.062	.085
Quality Assurance	23.2	15.7	.31	0	10	20	35	55	3,074	-1.1	.152	-.069
NSSE 2018 & 2019	21.7	14.7	.03	0	10	20	30	50	216,669	.5	.423	.035
Top 50%	24.9	14.8	.05	5	15	20	35	55	76,979	-2.8	.000	-.186
Top 10%	28.0	15.5	.14	5	15	25	40	60	12,478	-5.8	.000	-.374
<b>Effective Teaching Practices</b>												
Tennessee Tech (N = 512)	38.3	12.5	.55	20	28	40	48	60				
Carnegie Class	37.4	12.7	.06	16	28	36	44	60	47,756	.9	.093	.075
Quality Assurance	38.8	13.1	.26	20	28	40	48	60	2,996	-.5	.448	-.037
NSSE 2018 & 2019	38.5	13.2	.03	16	28	40	48	60	209,905	-.1	.828	-.010
Top 50%	40.6	13.2	.05	20	32	40	52	60	85,775	-2.3	.000	-.172
Top 10%	42.7	14.0	.09	20	32	44	56	60	541	-4.4	.000	-.311
<b>Campus Environment</b>												
<b>Quality of Interactions</b>												
Tennessee Tech (N = 476)	44.8	10.0	.46	26	38	46	52	60				
Carnegie Class	42.3	11.6	.06	20	36	44	50	60	489	2.5	.000	.218
Quality Assurance	41.9	12.5	.26	18	34	43	50	60	824	2.9	.000	.237
NSSE 2018 & 2019	42.6	12.1	.03	20	36	44	52	60	478	2.1	.000	.177
Top 50%	44.9	11.5	.04	24	38	46	54	60	483	-.1	.877	-.006
Top 10%	47.1	11.8	.08	24	40	50	58	60	507	-2.3	.000	-.195
<b>Supportive Environment</b>												
Tennessee Tech (N = 483)	35.4	12.0	.55	18	28	35	43	60				
Carnegie Class	36.5	13.0	.06	15	28	38	45	60	495	-1.1	.051	-.083
Quality Assurance	37.2	13.6	.28	15	28	38	48	60	764	-1.8	.003	-.135
NSSE 2018 & 2019	36.1	13.5	.03	15	28	38	45	60	485	-.7	.226	-.049
Top 50%	38.1	13.2	.04	18	30	40	48	60	488	-2.7	.000	-.204
Top 10%	40.1	13.2	.09	18	30	40	50	60	511	-4.6	.000	-.353

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.

# NSSE 2019 Engagement Indicators

## Detailed Statistics<sup>a</sup>

### Tennessee Technological University

#### Detailed Statistics: Seniors

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SE <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Academic Challenge</b>												
<b>Higher-Order Learning</b>												
Tennessee Tech (N = 550)	39.1	14.5	.62	15	30	40	50	60				
Carnegie Class	39.0	13.6	.06	15	30	40	50	60	558	.2	.806	.011
Quality Assurance	40.7	14.0	.31	15	30	40	50	60	2,602	-1.6	.019	-.112
NSSE 2018 & 2019	40.0	13.6	.03	20	30	40	50	60	551	-.9	.158	-.064
Top 50%	41.8	13.5	.04	20	35	40	55	60	554	-2.6	.000	-.195
Top 10%	43.0	13.5	.08	20	35	40	55	60	26,306	-3.9	.000	-.287
<b>Reflective &amp; Integrative Learning</b>												
Tennessee Tech (N = 576)	34.6	12.8	.53	14	26	34	43	57				
Carnegie Class	37.2	12.4	.05	17	29	37	46	60	60,680	-2.6	.000	-.205
Quality Assurance	38.4	12.6	.27	17	29	37	49	60	2,744	-3.7	.000	-.294
NSSE 2018 & 2019	38.0	12.4	.03	17	29	37	46	60	238,061	-3.4	.000	-.270
Top 50%	39.9	12.2	.04	20	31	40	49	60	90,822	-5.2	.000	-.430
Top 10%	41.6	12.2	.09	20	34	40	51	60	18,200	-6.9	.000	-.568
<b>Learning Strategies</b>												
Tennessee Tech (N = 529)	37.7	15.1	.66	13	27	40	47	60				
Carnegie Class	37.0	14.5	.06	13	27	40	47	60	54,848	.7	.274	.048
Quality Assurance	40.3	14.4	.32	13	27	40	53	60	2,512	-2.6	.000	-.180
NSSE 2018 & 2019	38.5	14.5	.03	13	27	40	47	60	217,367	-.7	.240	-.051
Top 50%	40.8	14.4	.05	20	33	40	53	60	99,332	-3.1	.000	-.213
Top 10%	42.6	14.3	.08	20	33	40	60	60	32,032	-4.9	.000	-.340
<b>Quantitative Reasoning</b>												
Tennessee Tech (N = 535)	31.8	16.0	.69	7	20	33	40	60				
Carnegie Class	30.6	15.9	.07	0	20	33	40	60	55,664	1.1	.110	.070
Quality Assurance	29.8	16.7	.37	0	20	27	40	60	2,531	1.9	.018	.116
NSSE 2018 & 2019	29.8	16.1	.03	0	20	27	40	60	220,059	1.9	.006	.119
Top 50%	31.3	16.0	.05	7	20	33	40	60	121,541	.5	.496	.029
Top 10%	32.7	15.8	.09	7	20	33	40	60	34,235	-1.0	.150	-.063
<b>Learning with Peers</b>												
<b>Collaborative Learning</b>												
Tennessee Tech (N = 595)	37.0	14.6	.60	10	25	40	50	60				
Carnegie Class	34.0	14.9	.06	10	25	35	45	60	63,425	3.0	.000	.202
Quality Assurance	33.9	15.6	.33	5	25	35	45	60	2,838	3.1	.000	.202
NSSE 2018 & 2019	31.8	15.7	.03	5	20	30	40	60	598	5.2	.000	.332
Top 50%	36.1	14.0	.04	15	25	35	45	60	105,622	.9	.114	.065
Top 10%	38.6	13.5	.10	15	30	40	50	60	631	-1.6	.009	-.117
<b>Discussions with Diverse Others</b>												
Tennessee Tech (N = 533)	38.1	15.7	.68	10	25	40	50	60				
Carnegie Class	41.4	15.4	.07	15	30	40	55	60	55,189	-3.3	.000	-.212
Quality Assurance	40.8	15.8	.35	15	30	40	55	60	2,533	-2.7	.000	-.173
NSSE 2018 & 2019	40.1	16.0	.03	15	30	40	55	60	218,191	-2.0	.004	-.124
Top 50%	42.0	15.6	.04	15	30	40	60	60	121,075	-3.9	.000	-.251
Top 10%	43.5	15.4	.09	20	35	45	60	60	32,621	-5.4	.000	-.352

#### Detailed Statistics: Seniors

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SE <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Experiences with Faculty</b>												
<b>Student-Faculty Interaction</b>												
Tennessee Tech (N = 558)	26.6	16.3	.69	5	15	25	40	60				
Carnegie Class	23.2	15.7	.06	0	10	20	35	55	567	3.4	.000	.214
Quality Assurance	27.3	16.9	.37	0	15	25	40	60	2,651	-.8	.337	-.046
NSSE 2018 & 2019	24.1	16.1	.03	0	10	20	35	55	231,110	2.5	.000	.156
Top 50%	29.9	15.9	.07	5	20	30	40	60	49,520	-3.3	.000	-.206
Top 10%	33.9	15.8	.18	10	20	35	45	60	7,979	-7.3	.000	-.464
<b>Effective Teaching Practices</b>												
Tennessee Tech (N = 546)	38.4	14.1	.60	16	28	40	48	60				
Carnegie Class	38.2	13.4	.06	16	28	40	48	60	555	.2	.782	.013
Quality Assurance	40.6	14.4	.32	16	32	40	52	60	2,605	-2.3	.001	-.159
NSSE 2018 & 2019	39.6	13.8	.03	16	32	40	52	60	226,182	-1.2	.040	-.088
Top 50%	41.8	13.6	.05	20	32	40	52	60	79,455	-3.4	.000	-.250
Top 10%	43.5	13.5	.09	20	36	44	56	60	22,081	-5.2	.000	-.381
<b>Campus Environment</b>												
<b>Quality of Interactions</b>												
Tennessee Tech (N = 495)	44.1	12.0	.54	20	38	46	53	60				
Carnegie Class	41.4	12.1	.05	20	34	42	50	60	51,343	2.7	.000	.223
Quality Assurance	41.9	12.5	.29	20	35	43	50	60	2,326	2.1	.001	.171
NSSE 2018 & 2019	42.8	12.2	.03	20	36	44	52	60	202,200	1.3	.018	.106
Top 50%	45.2	11.8	.04	23	38	48	54	60	87,745	-1.1	.038	-.093
Top 10%	47.4	12.0	.07	24	40	50	58	60	29,138	-3.3	.000	-.276
<b>Supportive Environment</b>												
Tennessee Tech (N = 515)	29.6	14.1	.62	8	20	30	40	55				
Carnegie Class	32.2	13.8	.06	10	23	33	40	58	53,739	-2.7	.000	-.193
Quality Assurance	33.6	14.4	.33	10	23	34	43	60	2,442	-4.1	.000	-.284
NSSE 2018 & 2019	32.2	14.1	.03	10	23	33	40	58	212,979	-2.6	.000	-.185
Top 50%	34.8	13.9	.05	13	25	35	45	60	85,656	-5.2	.000	-.372
Top 10%	37.0	14.0	.11	13	28	38	48	60	16,640	-7.4	.000	-.526

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.