
Tennessee Technological University

NSSE 2020 Major Field Report, Part II

Comparisons to Other Institutions

Engineering

Comparing your students majoring in the fields shown below to those in the same fields at your comparison group institutions

The Major Field Report group 'Engineering' includes the following majors: Aero-, astronautical engineering; Architecture; Bioengineering; Biomedical engineering; Chemical engineering; Civil engineering; Computer engineering and technology; Computer information systems; Computer science; Electrical or electronic engineering; Engineering (general); Industrial engineering; Information systems; Information technology; Materials engineering; Mechanical engineering; Network security and systems; Other computer science and technology; Other engineering; Petroleum engineering; Software engineering; Telecommunications; Urban planning.

Note:

The Major Field Report was formatted for printing. When viewing on screen in Excel, some content may appear truncated or oddly formatted. This is normal. Increasing the zoom level or viewing the report in Print Preview will improve on-screen display.

About Your Major Field Report, Part II

NSSE data serve to identify institutional strengths and weaknesses in reference to selected comparison institutions, yet institution-level comparisons may not capture important variation in student engagement that can be found within key subpopulations such as major. This report displays selected results for students at your institution and at your selected comparison institutions in the major category: Engineering.

NSSE results included in MFR, Part II

- Engagement Indicators
- High-Impact Practices
- Frequencies and Statistical Comparisons
- Respondent Profile

Related-Major Groups

Self-reported first and second (if applicable) majors were identified from the survey. Your institution had the option to customize how these majors were grouped, using up to ten related-major groups. Institutions choosing not to customize their major categories receive NSSE's ten default groups. The majors used in this report are listed on the cover page of this report.

Sample

This report is based on information from all randomly selected or census-administered students in the indicated group of majors for both your institution and your comparison institutions. Targeted and locally administered oversamples and other non-randomly selected students are not included. Report Sample (if applicable) respondents are also excluded.

Class

Results are presented separately by institution-reported class level. Keep in mind that majors are student-reported. First-year students may report *intended* majors that have not yet been *declared*. Also, much of the first-year experience may take place outside of the major field. For these reasons, first-year results should be interpreted with caution.

Technical Requirements

Frequencies will be reported for related-major groups that have at least 5 respondents, but NSSE requires a group to have at least 20 respondents for statistical comparisons (e.g., means and t-tests). Comparison groups must contain at least 20 respondents in the major category, or they remain blank. Although 20 is a minimum requirement for all other statistics (Engagement Indicators, means, etc.), keep in mind that any statistical result requires a sufficient number of respondents per group to produce a reliable estimate. Due to the disaggregation of results by student-reported major, *Major Field Report* results are unweighted.

Report Sections (Those marked with an asterisk are included if at least one related-major group includes 20 or more respondents.)

Engagement Indicators*	Results on NSSE's ten Engagement Indicators (EIs) organized into four themes. See your <i>Engagement Indicators</i> report for more details.
High-Impact Practices*	Results on student participation in six High-Impact Practices (HIPs). See your <i>High-Impact Practices</i> report for more details.
Frequencies and Statistical Comparisons*	Response frequencies and statistical comparisons (including tests of significance and effect sizes) for all survey items except the demographics for your institution and your three core comparison groups.
Respondent Profile	Response frequencies for all demographic questions for your institution and your three core comparison groups.

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 themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores^a for your students in this related-major category with students in your comparison groups within the same category.

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 in Engineering

Seniors in Engineering

Theme	Engagement Indicator	First-Year Students in Engineering			Seniors in Engineering		
		Your first-year students compared with Southeast Public	Your first-year students compared with Carnegie Class	Your first-year students compared with NSSE 2019 & 2020	Your seniors compared with Southeast Public	Your seniors compared with Carnegie Class	Your seniors compared with NSSE 2019 & 2020
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	▼	▽	▼	--	--	--

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Engineering

Tennessee Technological University

First-year students^a in Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
Tennessee Tech (N = 102)	35.8	14.9	1.48	10	25	35	45	60				
Southeast Public	37.8	13.1	.18	15	30	40	45	60	104	-2.1		-.157
Carnegie Class	37.7	12.3	.16	20	30	40	45	60	103	-1.9		-.155
NSSE 2019 & 2020	38.0	12.7	.08	20	30	40	45	60	102	-2.2		-.174
Reflective & Integrative Learning												
Tennessee Tech (N = 101)	29.9	11.0	1.10	14	23	29	37	49				
Southeast Public	33.2	11.6	.16	14	26	34	40	54	5,197	-3.3	**	-.286
Carnegie Class	32.9	11.1	.14	17	26	31	40	51	6,047	-3.0	**	-.269
NSSE 2019 & 2020	33.4	11.4	.07	17	26	34	40	54	25,954	-3.5	**	-.305
Learning Strategies												
Tennessee Tech (N = 102)	35.9	13.1	1.29	20	27	33	40	60				
Southeast Public	36.9	13.4	.19	13	27	40	47	60	5,134	-1.0		-.073
Carnegie Class	35.4	13.3	.17	13	27	33	47	60	5,989	.5		.036
NSSE 2019 & 2020	36.1	13.5	.08	13	27	33	47	60	25,675	-.2		-.015
Quantitative Reasoning												
Tennessee Tech (N = 101)	28.6	13.3	1.33	7	20	27	40	47				
Southeast Public	30.3	14.9	.21	7	20	27	40	60	5,120	-1.7		-.115
Carnegie Class	29.9	14.4	.19	7	20	27	40	60	5,979	-1.3		-.088
NSSE 2019 & 2020	30.1	14.6	.09	7	20	27	40	60	25,616	-1.5		-.103
Learning with Peers												
Collaborative Learning												
Tennessee Tech (N = 101)	34.3	12.8	1.28	15	25	35	40	55				
Southeast Public	34.4	14.2	.20	10	25	35	45	60	5,183	-.1		-.007
Carnegie Class	35.4	13.9	.18	15	25	35	45	60	6,028	-1.1		-.079
NSSE 2019 & 2020	34.3	14.6	.09	10	25	35	45	60	101	.0		.001
Discussions with Diverse Others												
Tennessee Tech (N = 102)	37.5	14.7	1.46	15	25	40	50	60				
Southeast Public	40.9	15.5	.22	15	30	40	55	60	5,136	-3.3	*	-.214
Carnegie Class	39.0	15.0	.20	15	30	40	50	60	5,992	-1.4		-.095
NSSE 2019 & 2020	39.4	15.5	.10	15	30	40	55	60	25,660	-1.8		-.117

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Engineering

Tennessee Technological University

First-year students^a in Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
Tennessee Tech (N = 101)	15.8	12.3	1.22	0	5	15	25	35				
Southeast Public	19.9	14.6	.21	0	10	15	30	50	5,128	-4.1	**	-.281
Carnegie Class	18.4	13.3	.17	0	10	15	25	45	5,996	-2.6		-.193
NSSE 2019 & 2020	19.6	14.0	.09	0	10	20	30	45	25,646	-3.8	**	-.271
Effective Teaching Practices												
Tennessee Tech (N = 101)	35.8	13.1	1.30	20	24	32	44	60				
Southeast Public	37.5	12.9	.18	16	28	40	48	60	5,171	-1.7		-.132
Carnegie Class	36.7	12.4	.16	16	28	36	44	60	6,036	-1.0		-.077
NSSE 2019 & 2020	37.6	12.7	.08	16	28	40	48	60	25,894	-1.9		-.146
Campus Environment												
Quality of Interactions												
Tennessee Tech (N = 100)	44.6	10.1	1.01	30	38	44	52	60				
Southeast Public	43.5	11.2	.16	24	38	44	52	60	4,912	1.1		.099
Carnegie Class	42.9	11.0	.15	24	36	44	50	60	5,706	1.7		.150
NSSE 2019 & 2020	43.3	11.2	.07	23	36	44	52	60	24,410	1.3		.112
Supportive Environment												
Tennessee Tech (N = 101)	31.2	13.4	1.33	10	20	30	40	55				
Southeast Public	36.5	13.1	.18	15	28	38	45	60	5,153	-5.3	***	-.401
Carnegie Class	34.7	12.7	.17	15	25	35	43	58	6,010	-3.5	**	-.279
NSSE 2019 & 2020	35.3	13.0	.08	15	25	35	43	60	25,763	-4.1	**	-.318

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Engineering

Tennessee Technological University

Seniors^a in Engineering

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
Tennessee Tech (N = 135)	37.3	12.9	1.11	20	25	35	45	60				
Southeast Public	38.0	13.8	.18	15	30	40	45	60	5,978	-.6		-.045
Carnegie Class	37.6	13.2	.16	15	30	40	45	60	7,139	-.2		-.018
NSSE 2019 & 2020	38.1	13.4	.08	15	30	40	45	60	31,038	-.8		-.056
Reflective & Integrative Learning												
Tennessee Tech (N = 137)	31.9	11.5	.98	11	23	31	40	57				
Southeast Public	33.4	12.2	.16	14	26	34	40	54	6,044	-1.5		-.124
Carnegie Class	32.9	11.6	.14	14	26	31	40	54	7,207	-1.0		-.086
NSSE 2019 & 2020	33.6	11.9	.07	14	26	34	40	54	31,366	-1.6		-.137
Learning Strategies												
Tennessee Tech (N = 136)	37.0	13.6	1.17	13	27	37	47	60				
Southeast Public	35.7	14.9	.19	13	27	33	47	60	143	1.3		.086
Carnegie Class	34.0	14.5	.17	13	27	33	40	60	7,142	2.9	*	.202
NSSE 2019 & 2020	34.9	14.7	.08	13	27	33	47	60	31,078	2.1		.140
Quantitative Reasoning												
Tennessee Tech (N = 135)	34.0	15.1	1.30	7	27	33	40	60				
Southeast Public	33.1	15.8	.21	7	20	33	40	60	5,976	.9		.059
Carnegie Class	33.1	15.3	.18	7	20	33	40	60	7,131	.9		.056
NSSE 2019 & 2020	32.8	15.6	.09	7	20	33	40	60	30,990	1.2		.074
Learning with Peers												
Collaborative Learning												
Tennessee Tech (N = 136)	41.2	15.0	1.28	15	30	45	50	60				
Southeast Public	38.1	14.6	.19	15	30	40	50	60	6,032	3.1	*	.211
Carnegie Class	37.8	14.9	.18	10	25	40	50	60	7,190	3.4	**	.228
NSSE 2019 & 2020	36.7	15.4	.09	10	25	40	50	60	31,255	4.5	***	.293
Discussions with Diverse Others												
Tennessee Tech (N = 134)	39.9	15.5	1.34	10	30	40	55	60				
Southeast Public	41.8	15.7	.21	15	30	40	60	60	5,974	-1.9		-.119
Carnegie Class	38.9	16.1	.19	10	25	40	55	60	7,115	1.0		.061
NSSE 2019 & 2020	39.7	16.2	.09	10	30	40	55	60	30,977	.3		.017

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Engineering

Tennessee Technological University

Seniors^a in Engineering

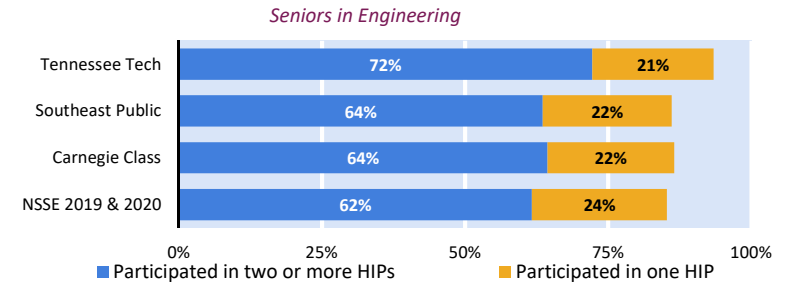
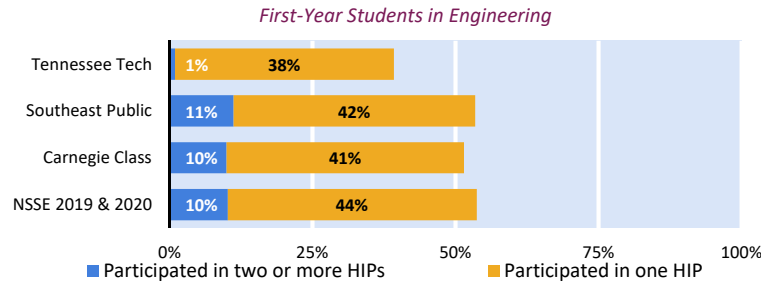
	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
Tennessee Tech (N = 137)	25.7	15.0	1.28	0	15	25	35	55				
Southeast Public	23.0	15.9	.21	0	10	20	35	55	5,999	2.7	*	.172
Carnegie Class	21.8	15.2	.18	0	10	20	30	50	7,138	3.9	**	.258
NSSE 2019 & 2020	22.4	15.4	.09	0	10	20	30	55	31,062	3.3	*	.213
Effective Teaching Practices												
Tennessee Tech (N = 136)	36.7	12.9	1.11	4	28	40	44	56				
Southeast Public	36.7	13.7	.18	16	28	36	48	60	6,038	.0		.003
Carnegie Class	36.3	13.3	.16	16	28	36	44	60	7,191	.4		.029
NSSE 2019 & 2020	37.0	13.5	.08	16	28	36	48	60	31,327	-.3		-.021
Campus Environment												
Quality of Interactions												
Tennessee Tech (N = 129)	43.4	10.8	.95	22	38	45	50	60				
Southeast Public	41.7	12.1	.16	20	34	42	50	60	5,697	1.7		.145
Carnegie Class	40.9	11.9	.14	20	34	42	50	60	6,810	2.5	*	.214
NSSE 2019 & 2020	41.7	11.9	.07	20	34	42	50	60	29,454	1.7		.142
Supportive Environment												
Tennessee Tech (N = 136)	30.2	13.7	1.18	8	23	30	40	58				
Southeast Public	31.1	13.8	.18	8	20	30	40	58	5,992	-1.0		-.070
Carnegie Class	29.5	13.5	.16	8	20	30	40	53	7,158	.7		.050
NSSE 2019 & 2020	30.3	13.8	.08	8	20	30	40	55	31,130	-.1		-.011

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

High-Impact Practices: Engineering Tennessee Technological University

Overall HIP Participation^{a,h}

The figures below display the percentage of students who participated in High-Impact Practices. Both figures include participation in service-learning, a learning community, and research with faculty. The senior figure also includes participation in an internship or field experience, study abroad, and culminating senior experience. The first segment in each bar shows the percentage who participated in at least two HIPs, and the full bar (both colors) represents the percentage who participated in at least one.



Statistical Comparisons

The table below displays the percentage of your students who participated in a given High-Impact Practice, including the percentage who participated overall (at least one, two or more). It also graphs the difference, in percentage points, between your students and those of your comparison groups. Blue bars indicate how much higher your institution's percentage is compared to the comparison group. Dark red bars indicate how much lower your institution's percentage is compared to the comparison group.

	Tennessee Tech	Your students' participation compared with:			
	%	Southeast Public	Carnegie Class	NSSE 2019 & 2020	
		Difference ⁱ	ES ^j	Difference ⁱ	ES ^j
<i>First-Year Students in Engineering</i>					
12. Service-Learning	36	-10	* -0.20	-8	-0.16
11c. Learning Community	4	-12	** -0.42	-11	** -0.39
11e. Research with Faculty	1	-4	-0.27	-4	-0.25
Participated in at least one	39	-14	** -0.29	-12	* -0.25
Participated in two or more	1	-10	** -0.48	-9	** -0.45
<i>Seniors in Engineering</i>					
12. Service-Learning	62	+16	*** 0.32	+17	*** 0.34
11c. Learning Community	22	-1	-0.03	-1	-0.02
11e. Research with Faculty	34	+3	0.06	+5	0.11
11a. Internship or Field Exp.	60	+6	0.13	+2	0.04
11d. Study Abroad	6	-9	** -0.29	-6	* -0.22
11f. Culminating Senior Exp.	65	+13	** 0.26	+12	** 0.23
Participated in at least one	93	+7	* 0.25	+7	* 0.23
Participated in two or more	72	+9	* 0.19	+8	0.17

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Your first-year students compared with						
													Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
1. During the current school year, about how often have you done the following?																			
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	5	5	239	5	237	4	1,139	4	2.7	2.7	-.01	2.7	.01	2.7	-.03	
		2	Sometimes	39	38	2,082	41	2,513	42	10,374	40								
		3	Often	41	40	1,777	35	2,129	36	9,197	36								
		4	Very often	17	17	1,014	20	1,076	18	5,183	20								
		Total		102	100	5,112	100	5,955	100	25,893	100								
b. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1	Very often	1	1	227	4	270	5	1,178	5	3.2	3.1	.17	3.1	.16	3.1	.15	
		2	Often	11	11	593	12	726	12	3,073	12								
		3	Sometimes	57	57	2,974	58	3,357	56	14,532	56								
		4	Never	31	31	1,323	26	1,610	27	7,141	28								
		Total		100	100	5,117	100	5,963	100	25,924	100								
c. Attended an art exhibit, play, or other arts performance (dance, music, etc.)	attendant	1	Never	27	26	2,467	48	2,822	47	12,242	47	1.9	1.7 **	.24	1.7 **	.25	1.7 *	.22	
		2	Sometimes	59	58	1,842	36	2,233	37	9,447	36								
		3	Often	13	13	569	11	676	11	2,981	12								
		4	Very often	3	3	234	5	233	4	1,239	5								
		Total		102	100	5,112	100	5,964	100	25,909	100								
d. Asked another student to help you understand course material	CLaskhelp	1	Never	5	5	385	8	383	6	2,228	9	2.9	2.7 **	.25	2.8	.16	2.7 *	.24	
		2	Sometimes	25	25	1,861	36	2,027	34	8,930	34								
		3	Often	45	45	1,836	36	2,160	36	9,263	36								
		4	Very often	26	26	1,038	20	1,399	23	5,521	21								
		Total		101	100	5,120	100	5,969	100	25,942	100								
e. Explained course material to one or more students	CLexplain	1	Never	2	2	207	4	187	3	1,298	5	2.7	2.8	-.12	2.9	-.20	2.8	-.11	
		2	Sometimes	44	43	1,671	33	1,858	31	8,218	32								
		3	Often	37	36	2,090	41	2,420	41	10,496	41								
		4	Very often	19	19	1,149	22	1,492	25	5,902	23								
		Total		102	100	5,117	100	5,957	100	25,914	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
f. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	10	10	685	13	743	12	3,766	15	2.6	2.6	.02	2.6	-.01	2.6	.04	
		2	Sometimes	37	36	1,713	33	1,960	33	8,440	33								
		3	Often	35	34	1,592	31	1,922	32	8,228	32								
		4	Very often	20	20	1,128	22	1,339	22	5,484	21								
		Total		102	100	5,118	100	5,964	100	25,918	100								
g. Worked with other students on course projects or assignments	CLproject	1	Never	12	12	337	7	280	5	1,873	7	2.6	2.8	-.17	2.8	-.22	2.8	-.17	
		2	Sometimes	36	35	1,681	33	2,027	34	8,337	32								
		3	Often	34	33	1,975	39	2,333	39	9,958	38								
		4	Very often	20	20	1,116	22	1,328	22	5,751	22								
		Total		102	100	5,109	100	5,968	100	25,919	100								
h. Given a course presentation	present	1	Never	14	14	1,159	23	1,268	21	5,600	22	2.3	2.2	.18	2.2 *	.20	2.2	.16	
		2	Sometimes	50	49	2,377	47	2,946	49	12,215	47								
		3	Often	29	28	1,129	22	1,283	22	5,879	23								
		4	Very often	9	9	445	9	462	8	2,225	9								
		Total		102	100	5,110	100	5,959	100	25,919	100								
2. During the current school year, about how often have you done the following?																			
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	12	12	458	9	493	8	2,189	8	2.5	2.5	-.07	2.5	-.07	2.5	-.08	
		2	Sometimes	43	43	2,116	41	2,527	42	10,770	42								
		3	Often	30	30	1,874	37	2,209	37	9,558	37								
		4	Very often	15	15	659	13	730	12	3,384	13								
		Total		100	100	5,107	100	5,959	100	25,901	100								
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	19	19	771	15	881	15	3,658	14	2.2	2.4 *	-.20	2.3	-.17	2.4 *	-.22	
		2	Sometimes	54	53	2,270	44	2,791	47	11,666	45								
		3	Often	18	18	1,537	30	1,722	29	7,767	30								
		4	Very often	10	10	531	10	559	9	2,799	11								
		Total		101	100	5,109	100	5,953	100	25,890	100								
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	21	21	848	17	1,056	18	4,325	17	2.2	2.4 *	-.22	2.3	-.16	2.4 *	-.22	
		2	Sometimes	52	51	2,191	43	2,670	45	11,096	43								
		3	Often	21	21	1,481	29	1,622	27	7,556	29								
		4	Very often	8	8	594	12	613	10	2,930	11								
		Total		102	100	5,114	100	5,961	100	25,907	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
												Your first-year students compared with							
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	7	7	289	6	344	6	1,444	6	2.5	2.7 *	-.25	2.7 *	-.22	2.7 *	-.25	
		2	Sometimes	43	43	1,714	34	2,038	34	8,665	33								
		3	Often	42	42	2,221	43	2,649	45	11,342	44								
		4	Very often	9	9	885	17	921	15	4,416	17								
		Total		101	100	5,109	100	5,952	100	25,867	100								
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIPerspect	1	Never	4	4	167	3	201	3	948	4	2.6	2.9 **	-.29	2.9 **	-.27	2.9 **	-.28	
		2	Sometimes	44	44	1,470	29	1,731	29	7,322	28								
		3	Often	37	37	2,302	45	2,718	46	11,784	46								
		4	Very often	16	16	1,164	23	1,299	22	5,811	22								
		Total		101	100	5,103	100	5,949	100	25,865	100								
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	5	5	202	4	195	3	884	3	2.6	2.8 *	-.21	2.8 *	-.22	2.8 *	-.25	
		2	Sometimes	40	39	1,666	33	1,975	33	8,233	32								
		3	Often	46	45	2,238	44	2,622	44	11,569	45								
		4	Very often	11	11	980	19	1,136	19	5,122	20								
		Total		102	100	5,086	100	5,928	100	25,808	100								
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	4	4	83	2	86	1	403	2	2.9	3.0	-.17	3.0	-.19	3.0 *	-.20	
		2	Sometimes	23	23	1,155	23	1,281	22	5,496	21								
		3	Often	56	55	2,523	50	3,042	51	13,060	51								
		4	Very often	18	18	1,320	26	1,519	26	6,830	26								
		Total		101	100	5,081	100	5,928	100	25,789	100								
3. During the current school year, about how often have you done the following?																			
a. Talked about career plans with a faculty member	SFcareer	1	Never	30	30	1,134	22	1,589	27	6,173	24	2.0	2.2 *	-.24	2.1	-.11	2.2 *	-.19	
		2	Sometimes	45	45	2,293	45	2,664	45	11,606	45								
		3	Often	22	22	1,079	21	1,177	20	5,431	21								
		4	Very often	4	4	581	11	506	9	2,593	10								
		Total		101	100	5,087	100	5,936	100	25,803	100								
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	56	55	2,595	51	3,169	53	12,946	50	1.6	1.7	-.16	1.7	-.10	1.7 *	-.17	
		2	Sometimes	34	33	1,564	31	1,805	30	8,084	31								
		3	Often	10	10	627	12	684	12	3,336	13								
		4	Very often	2	2	300	6	276	5	1,432	6								
		Total		102	100	5,086	100	5,934	100	25,798	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	47	46	1,675	33	1,972	33	8,242	32	1.7	2.0 **	-0.32	1.9 **	-0.27	2.0 **	-0.32	
		2	Sometimes	41	40	2,132	42	2,715	46	11,274	44								
		3	Often	11	11	923	18	931	16	4,610	18								
		4	Very often	3	3	349	7	320	5	1,650	6								
		Total		102	100	5,079	100	5,938	100	25,776	100								
d. Discussed your academic performance with a faculty member	SFperform	1	Never	35	34	1,427	28	1,778	30	7,309	28	1.9	2.1 *	-0.21	2.0	-0.13	2.0 *	-0.20	
		2	Sometimes	48	47	2,315	46	2,817	47	11,854	46								
		3	Often	16	16	962	19	1,034	17	4,900	19								
		4	Very often	3	3	382	8	316	5	1,747	7								
		Total		102	100	5,086	100	5,945	100	25,810	100								
4. During the current school year, how much has your coursework emphasized the following?																			
a. Memorizing course material	memorize	1	Very little	6	6	178	3	226	4	1,079	4	2.8	2.9	-0.07	2.8	-0.02	2.8	.00	
		2	Some	25	25	1,415	28	1,752	30	7,622	30								
		3	Quite a bit	52	51	2,355	46	2,721	46	11,800	46								
		4	Very much	19	19	1,148	23	1,237	21	5,325	21								
		Total		102	100	5,096	100	5,936	100	25,826	100								
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	6	6	145	3	137	2	666	3	2.9	3.0	-0.14	3.0	-0.16	3.0	-0.14	
		2	Some	28	27	1,058	21	1,198	20	5,414	21								
		3	Quite a bit	36	35	2,355	46	2,852	48	12,183	47								
		4	Very much	32	31	1,527	30	1,754	30	7,546	29								
		Total		102	100	5,085	100	5,941	100	25,809	100								
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	7	7	193	4	191	3	859	3	2.8	2.9	-0.10	2.9	-0.12	2.9	-0.13	
		2	Some	27	26	1,310	26	1,514	26	6,481	25								
		3	Quite a bit	43	42	2,249	44	2,706	46	11,675	45								
		4	Very much	25	25	1,329	26	1,520	26	6,764	26								
		Total		102	100	5,081	100	5,931	100	25,779	100								
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	6	6	337	7	379	6	1,568	6	2.7	2.8	-0.13	2.7	-0.10	2.8	-0.14	
		2	Some	40	39	1,543	30	1,894	32	7,942	31								
		3	Quite a bit	39	38	2,147	42	2,555	43	11,066	43								
		4	Very much	17	17	1,050	21	1,094	18	5,186	20								
		Total		102	100	5,077	100	5,922	100	25,762	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	8	8	241	5	244	4	1,102	4	2.7	2.8	-.12	2.8	-.10	2.8	-.14	
		2	Some	32	31	1,471	29	1,774	30	7,254	28								
		3	Quite a bit	41	40	2,264	45	2,735	46	11,845	46								
		4	Very much	21	21	1,102	22	1,178	20	5,569	22								
		Total		102	100	5,078	100	5,931	100	25,770	100								
5. During the current school year, to what extent have your instructors done the following?																			
a. Clearly explained course goals and requirements	ETgoals	1	Very little	1	1	115	2	150	3	614	2	3.0	3.0	-.09	3.0	-.04	3.0	-.08	
		2	Some	27	26	1,116	22	1,352	23	5,599	22								
		3	Quite a bit	49	48	2,356	46	2,831	48	12,110	47								
		4	Very much	25	25	1,491	29	1,602	27	7,465	29								
		Total		102	100	5,078	100	5,935	100	25,788	100								
b. Taught course sessions in an organized way	ETorganize	1	Very little	5	5	212	4	222	4	1,003	4	2.9	3.0	-.10	3.0	-.07	3.0	-.09	
		2	Some	27	27	1,113	22	1,361	23	5,655	22								
		3	Quite a bit	42	42	2,299	45	2,802	47	12,027	47								
		4	Very much	27	27	1,439	28	1,540	26	7,069	27								
		Total		101	100	5,063	100	5,925	100	25,754	100								
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	3	3	159	3	177	3	793	3	3.0	3.0	-.09	3.0	-.08	3.0	-.09	
		2	Some	26	25	1,117	22	1,306	22	5,633	22								
		3	Quite a bit	46	45	2,250	44	2,722	46	11,538	45								
		4	Very much	27	26	1,546	30	1,727	29	7,809	30								
		Total		102	100	5,072	100	5,932	100	25,773	100								
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	12	12	513	10	627	11	2,442	9	2.5	2.7	-.14	2.6	-.09	2.7	-.17	
		2	Some	45	45	1,677	33	2,102	35	8,393	33								
		3	Quite a bit	21	21	1,841	36	2,091	35	9,448	37								
		4	Very much	23	23	1,043	21	1,113	19	5,467	21								
		Total		101	100	5,074	100	5,933	100	25,750	100								
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	10	10	482	9	595	10	2,245	9	2.6	2.7	-.05	2.6	.02	2.7	-.07	
		2	Some	37	36	1,726	34	2,162	36	8,655	34								
		3	Quite a bit	37	36	1,915	38	2,200	37	9,912	38								
		4	Very much	18	18	954	19	967	16	4,957	19								
		Total		102	100	5,077	100	5,924	100	25,769	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k																							
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020			
				Count				Count				Count				Count				Mean				Mean				Mean				Mean			
				%				%				%				%				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ				Effect size ⁿ			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
6. During the current school year, about how often have you done the following?																																			
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	5	5	275	5	337	6	1,500	6	2.7	2.8	-.09	2.8	-.09	2.8	-.08	2.8	-.08	2.8	-.08	2.8	-.08	2.8	-.08	2.8	-.08	2.8	-.08	2.8	-.08	2.8	-.08	
		2	Sometimes	36	35	1,592	31	1,831	31	8,068	31																								
		3	Often	45	44	2,162	43	2,569	43	11,017	43																								
		4	Very often	16	16	1,040	21	1,190	20	5,159	20																								
			Total	102	100	5,069	100	5,927	100	25,744	100																								
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	22	22	1,018	20	1,153	19	4,998	19	2.2	2.4	-.11	2.3	-.08	2.3	-.10	2.3	-.10	2.3	-.10	2.3	-.10	2.3	-.10	2.3	-.10	2.3	-.10	2.3	-.10			
		2	Sometimes	41	41	1,937	38	2,422	41	10,098	39																								
		3	Often	29	29	1,429	28	1,638	28	7,391	29																								
		4	Very often	9	9	684	13	708	12	3,218	13																								
			Total	101	100	5,068	100	5,921	100	25,705	100																								
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	14	14	738	15	878	15	3,690	14	2.3	2.4	-.10	2.4	-.06	2.4	-.09	2.4	-.09	2.4	-.09	2.4	-.09	2.4	-.09	2.4	-.09	2.4	-.09	2.4	-.09			
		2	Sometimes	48	47	2,054	41	2,480	42	10,675	42																								
		3	Often	32	31	1,648	33	1,931	33	8,451	33																								
		4	Very often	8	8	617	12	621	11	2,868	11																								
			Total	102	100	5,057	100	5,910	100	25,684	100																								
7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)																																			
a. Up to 5 pages	wrshortnum	0	None	24	24	492	10	429	7	2,038	8	4.4	5.5 *	-.22	6.2 ***	-.32	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	6.0 ***	-.29	
		1.5	1-2	17	17	1,187	23	1,279	22	5,725	22																								
	(Recorded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	4	3-5	32	32	1,708	34	1,967	33	8,554	33																								
		8	6-10	17	17	968	19	1,200	20	5,237	20																								
		13	11-15	10	10	407	8	553	9	2,295	9																								
		18	16-20	0	0	129	3	215	4	843	3																								
		23	More than 20	1	1	177	3	273	5	1,031	4																								
			Total	101	100	5,068	100	5,916	100	25,723	100																								
b. Between 6 and 10 pages	wrmednum	0	None	66	65	2,339	46	2,319	39	10,590	41	1.4	1.8	-.14	2.0	-.20	2.1 *	-.20	2.1 *	-.20	2.1 *	-.20	2.1 *	-.20	2.1 *	-.20	2.1 *	-.20	2.1 *	-.20	2.1 *	-.20			
		1.5	1-2	21	21	1,665	33	2,247	38	9,002	35																								
	(Recorded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	4	3-5	7	7	686	14	898	15	3,839	15																								
		8	6-10	4	4	248	5	279	5	1,469	6																								
		13	11-15	2	2	95	2	108	2	513	2																								
		18	16-20	0	0	13	0	25	0	103	0																								
		23	More than 20	1	1	20	0	35	1	161	1																								
			Total	101	100	5,066	100	5,911	100	25,677	100																								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions						Statistical Comparisons ^k									
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
												Your first-year students compared with							
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. 11 pages or more	wrlongnum	0	None	86	85	3,931	78	4,537	77	19,604	76	.7	.8	-.07	.8	-.06	.9	-.09	
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	12	12	754	15	990	17	4,023	16								
	4	3-5	0	0	171	3	187	3	929	4									
	8	6-10	0	0	102	2	85	1	501	2									
	13	11-15	2	2	82	2	66	1	406	2									
	18	16-20	0	0	10	0	19	0	97	0									
	23	More than 20	1	1	16	0	30	1	139	1									
	Total			101	100	5,066	100	5,914	100	25,699	100								
Estimated number of assigned pages of student writing.	wpages		(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)									33.4	43.2	-.15	46.6	-.20	47.9 *	-.20	
8. During the current school year, about how often have you had discussions with people from the following groups?																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	3	3	203	4	289	5	1,249	5	2.8	3.1 ***	-.35	3.0 *	-.20	3.0 *	-.25	
		2	Sometimes	37	36	1,120	22	1,626	27	6,495	25								
		3	Often	39	38	1,640	32	1,890	32	8,292	32								
		4	Very often	23	23	2,116	42	2,120	36	9,719	38								
			Total	102	100	5,079	100	5,925	100	25,755	100								
b. People from an economic background other than your own	DDeconomic	1	Never	4	4	220	4	238	4	1,202	5	2.9	3.1	-.18	3.0	-.11	3.0	-.12	
		2	Sometimes	28	27	1,122	22	1,507	25	6,258	24								
		3	Often	44	43	1,846	36	2,223	38	9,432	37								
		4	Very often	26	25	1,880	37	1,950	33	8,810	34								
			Total	102	100	5,068	100	5,918	100	25,702	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	4	4	280	6	468	8	1,775	7	2.9	3.0	-.13	2.9	.01	2.9	-.04	
		2	Sometimes	32	31	1,245	25	1,632	28	6,761	26								
		3	Often	36	35	1,636	32	1,877	32	8,361	32								
		4	Very often	30	29	1,902	38	1,949	33	8,834	34								
			Total	102	100	5,063	100	5,926	100	25,731	100								
d. People with political views other than your own	DDpolitical	1	Never	6	6	297	6	338	6	1,772	7	2.9	3.0	-.07	2.9	-.02	2.9	.01	
		2	Sometimes	26	25	1,353	27	1,705	29	7,413	29								
		3	Often	42	41	1,646	32	2,002	34	8,422	33								
		4	Very often	28	27	1,779	35	1,881	32	8,141	32								
			Total	102	100	5,075	100	5,926	100	25,748	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

First-Year Students^a in Engineering

Item wording or description				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
				Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
9. During the current school year, about how often have you done the following?																			
a. Identified key information from reading assignments				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Variable name ^l				Count		Count		Count		Count		Mean		Mean		Mean		Mean	
Values ^m Response options				%		%		%		%		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ	
1 Never				3	3	167	3	175	3	748	3	2.8	2.9	-.14	2.9	-.11	2.9	-.15	
2 Sometimes				33	32	1,364	27	1,662	28	6,978	27								
3 Often				50	49	2,415	48	2,902	49	12,382	48								
4 Very often				16	16	1,123	22	1,184	20	5,615	22								
Total				102	100	5,069	100	5,923	100	25,723	100								
b. Reviewed your notes after class				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Variable name ^l				Count		Count		Count		Count		Mean		Mean		Mean		Mean	
Values ^m Response options				%		%		%		%		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ	
1 Never				5	5	241	5	338	6	1,464	6	3.0	2.9	.10	2.8 *	.20	2.8	.17	
2 Sometimes				25	25	1,584	31	2,088	35	8,584	33								
3 Often				42	41	1,846	36	2,071	35	9,189	36								
4 Very often				30	29	1,396	28	1,419	24	6,478	25								
Total				102	100	5,067	100	5,916	100	25,715	100								
c. Summarized what you learned in class or from course materials				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Variable name ^l				Count		Count		Count		Count		Mean		Mean		Mean		Mean	
Values ^m Response options				%		%		%		%		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ	
1 Never				6	6	309	6	462	8	1,851	7	2.7	2.8	-.14	2.7	-.02	2.7	-.07	
2 Sometimes				41	40	1,649	33	2,113	36	8,833	34								
3 Often				37	36	1,983	39	2,212	37	9,725	38								
4 Very often				18	18	1,127	22	1,130	19	5,315	21								
Total				102	100	5,068	100	5,917	100	25,724	100								
10. During the current school year, to what extent have your courses challenged you to do your best work?																			
challenge				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Values ^m Response options				Count		Count		Count		Count		Mean		Mean		Mean		Mean	
1 Not at all				2	2	33	1	50	1	208	1	5.6	5.4	.14	5.4	.11	5.4	.13	
2				0	0	89	2	78	1	348	1								
3				2	2	276	5	259	4	1,264	5								
4				9	9	610	12	671	11	3,055	12								
5				38	38	1,657	33	1,966	33	8,526	33								
6				22	22	1,306	26	1,633	28	6,857	27								
7 Very much				28	28	1,100	22	1,252	21	5,445	21								
Total				101	100	5,071	100	5,909	100	25,703	100								
11. Which of the following have you done or do you plan to do before you graduate?^o																			
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Variable name ^l				Count		Count		Count		Count		Mean		Mean		Mean		Mean	
Values ^m Response options				%		%		%		%		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ		Effect size ⁿ	
Have not decided				13	13	516	10	540	9	2,743	11	4%	7%	-.13	6%	-.12	7%	-.12	
Do not plan to do				0	0	227	4	201	3	1,293	5								
Plan to do				85	83	3,991	79	4,801	81	19,987	78								
Done or in progress				4	4	344	7	383	6	1,722	7								
Total				102	100	5,078	100	5,925	100	25,745	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

			Frequency Distributions								Statistical Comparisons ^k							
			Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
b. Hold a formal leadership role in a student organization or group	leader <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	31	30	1,331	26	1,676	28	7,098	28	11%	10%	.04	10%	.02	10%	.02	
		Do not plan to do	20	20	1,193	24	1,422	24	6,378	25								
		Plan to do	40	39	2,057	41	2,216	37	9,655	38								
		Done or in progress	11	11	486	10	603	10	2,590	10								
		Total	102	100	5,067	100	5,917	100	25,721	100								
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	45	44	1,456	29	1,937	33	8,073	31	4%	16% **	-0.42	15% **	-0.39	14% **	-0.38	
		Do not plan to do	26	25	1,581	31	1,763	30	7,623	30								
		Plan to do	27	26	1,231	24	1,334	23	6,280	24								
		Done or in progress	4	4	793	16	873	15	3,706	14								
		Total	102	100	5,061	100	5,907	100	25,682	100								
d. Participate in a study abroad program	abroad <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	41	40	1,448	29	1,787	30	7,396	29	2%	3%	-0.04	3%	-0.05	2%	-0.03	
		Do not plan to do	35	34	1,682	33	2,124	36	8,772	34								
		Plan to do	24	24	1,804	36	1,841	31	8,899	35								
		Done or in progress	2	2	129	3	157	3	634	2								
		Total	102	100	5,063	100	5,909	100	25,701	100								
e. Work with a faculty member on a research project	research <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	51	50	1,832	36	2,334	39	9,760	38	1%	5%	-0.27	5%	-0.25	5%	-0.25	
		Do not plan to do	14	14	943	19	995	17	4,602	18								
		Plan to do	36	35	2,022	40	2,304	39	10,068	39								
		Done or in progress	1	1	271	5	288	5	1,286	5								
		Total	102	100	5,068	100	5,921	100	25,716	100								
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	36	35	1,426	28	1,615	27	7,084	28	1%	2%	-0.06	1%	-0.02	2%	-0.06	
		Do not plan to do	4	4	483	10	423	7	2,212	9								
		Plan to do	61	60	3,078	61	3,810	64	15,987	62								
		Done or in progress	1	1	86	2	72	1	440	2								
		Total	102	100	5,073	100	5,920	100	25,723	100								

12. About how many of your courses at this institution have included a community-based project (service-learning)?

servcourse	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
1 None	65	64	2,759	55	3,356	57	13,869	54	1.4	1.5	-0.16	1.5	-0.12	1.6	-0.19
2 Some	30	30	1,964	39	2,178	37	9,835	38							
3 Most	5	5	281	6	316	5	1,609	6							
4 All	1	1	58	1	60	1	369	1							
Total	101	100	5,062	100	5,910	100	25,682	100							

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

Item wording or description				Frequency Distributions								Statistical Comparisons ^k									
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Your first-year students compared with							
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ			
13. Indicate the quality of your interactions with the following people at your institution.																					
a. Students				QIstudent																	
		1	Poor	1	1	68	1	64	1	368	1	5.6	5.5	.06	5.5	.08	5.5	.08			
		2		2	2	73	1	81	1	421	2										
		3		2	2	219	4	269	5	1,081	4										
		4		11	11	543	11	652	11	2,771	11										
		5		29	28	1,337	26	1,677	28	6,981	27										
		6		28	27	1,496	30	1,677	28	7,374	29										
	7	Excellent		29	28	1,302	26	1,469	25	6,355	25										
	—	Not applicable		0	0	33	1	36	1	392	2										
		Total		102	100	5,071	100	5,925	100	25,743	100										
b. Academic advisors				QIadvisor																	
		1	Poor	1	1	93	2	134	2	573	2	5.6	5.5	.08	5.3	.17	5.4	.14			
		2		4	4	151	3	226	4	837	3										
		3		2	2	311	6	382	6	1,614	6										
		4		16	16	575	11	783	13	3,268	13										
		5		19	19	1,060	21	1,236	21	5,483	21										
		6		25	25	1,161	23	1,326	22	5,844	23										
	7	Excellent		35	34	1,566	31	1,618	27	7,380	29										
	—	Not applicable		0	0	154	3	214	4	720	3										
		Total		102	100	5,071	100	5,919	100	25,719	100										
c. Faculty				QIfaculty																	
		1	Poor	0	0	68	1	69	1	316	1	5.2	5.3	-.08	5.3	-.06	5.4	-.10			
		2		3	3	95	2	113	2	498	2										
		3		6	6	264	5	353	6	1,363	5										
		4		16	16	712	14	831	14	3,423	13										
		5		35	35	1,404	28	1,673	28	7,005	27										
		6		21	21	1,430	28	1,670	28	7,238	28										
	7	Excellent		20	20	1,026	20	1,150	19	5,526	21										
	—	Not applicable		0	0	68	1	52	1	341	1										
		Total		101	100	5,067	100	5,911	100	25,710	100										

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Student services staff (career services, student activities, housing, etc.)	QIstaff	1	Poor	1	1	131	3	162	3	642	2	5.3	5.2	.06	5.2	.09	5.2	.06	
		2		2	2	139	3	162	3	754	3								
		3		5	5	301	6	397	7	1,538	6								
		4		19	19	675	13	813	14	3,368	13								
		5		21	21	1,132	22	1,290	22	5,619	22								
		6		24	24	1,097	22	1,324	22	5,669	22								
		7	Excellent	23	23	1,117	22	1,211	20	5,447	21								
		—	Not applicable	7	7	482	9	561	9	2,690	10								
Total				102	100	5,074	100	5,920	100	25,727	100								
e. Other administrative staff and offices (registrar, financial aid, etc.)	QIadmin	1	Poor	3	3	144	3	149	3	676	3	5.5	5.2 *	.23	5.1 *	.25	5.2 *	.21	
		2		0	0	179	4	225	4	849	3								
		3		3	3	310	6	376	6	1,555	6								
		4		16	16	718	14	852	14	3,602	14								
		5		25	25	1,106	22	1,332	23	5,773	22								
		6		20	20	1,078	21	1,295	22	5,679	22								
		7	Excellent	32	31	1,044	21	1,137	19	5,317	21								
		—	Not applicable	3	3	498	10	553	9	2,291	9								
Total				102	100	5,077	100	5,919	100	25,742	100								
14. How much does your institution emphasize the following?																			
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	1	1	86	2	79	1	375	1	3.2	3.1	.07	3.1	.05	3.1	.08	
		2	Some	14	14	862	17	938	16	4,431	17								
		3	Quite a bit	52	51	2,400	47	2,919	49	12,427	48								
		4	Very much	35	34	1,714	34	1,983	34	8,486	33								
		Total				102	100	5,062	100	5,919	100								25,719
b. Providing support to help students succeed academically	SEacademic	1	Very little	7	7	177	3	181	3	849	3	2.9	3.1 *	-.20	3.1	-.19	3.1	-.19	
		2	Some	24	24	1,019	20	1,217	21	5,256	20								
		3	Quite a bit	42	42	2,171	43	2,626	44	11,203	44								
		4	Very much	28	28	1,695	33	1,891	32	8,373	33								
		Total				101	100	5,062	100	5,915	100								25,681
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	5	5	231	5	237	4	1,191	5	3.0	3.1	-.14	3.1	-.14	3.1	-.11	
		2	Some	23	23	819	16	1,000	17	4,457	17								
		3	Quite a bit	38	37	1,979	39	2,357	40	10,099	39								
		4	Very much	36	35	2,031	40	2,320	39	9,949	39								
		Total				102	100	5,060	100	5,914	100								25,696

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

Item wording or description				Frequency Distributions								Statistical Comparisons ^k									
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020			
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ			
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)				SEdiverse	1	Very little	24	24	564	11	798	13	2,920	11	2.4	2.7 ***	-0.38	2.6 *	-0.25	2.7 ***	-0.36
				2	Some	31	31	1,471	29	1,923	33	7,634	30								
				3	Quite a bit	31	31	1,799	36	2,002	34	9,109	35								
				4	Very much	15	15	1,227	24	1,193	20	6,025	23								
				Total		101	100	5,061	100	5,916	100	25,688	100								
e. Providing opportunities to be involved socially				SEsocial	1	Very little	5	5	246	5	331	6	1,495	6	2.8	3.0 **	-0.27	2.9	-0.15	2.9	-0.17
				2	Some	32	32	1,097	22	1,466	25	6,274	24								
				3	Quite a bit	44	44	2,140	42	2,571	44	10,759	42								
				4	Very much	19	19	1,572	31	1,541	26	7,148	28								
				Total		100	100	5,055	100	5,909	100	25,676	100								
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)				SEwellness	1	Very little	9	9	317	6	390	7	1,675	7	2.7	3.0 **	-0.29	2.9 *	-0.21	2.9 *	-0.22
				2	Some	31	31	1,097	22	1,449	24	6,215	24								
				3	Quite a bit	41	41	2,048	41	2,480	42	10,605	41								
				4	Very much	20	20	1,593	32	1,597	27	7,153	28								
				Total		101	100	5,055	100	5,916	100	25,648	100								
g. Helping you manage your non-academic responsibilities (work, family, etc.)				SEnonacad	1	Very little	36	36	1,085	21	1,433	24	5,791	23	2.0	2.3 ***	-0.34	2.2 *	-0.23	2.3 **	-0.29
				2	Some	33	33	1,877	37	2,327	39	9,764	38								
				3	Quite a bit	27	27	1,406	28	1,525	26	7,004	27								
				4	Very much	5	5	682	14	621	11	3,094	12								
				Total		101	100	5,050	100	5,906	100	25,653	100								
h. Attending campus activities and events (performing arts, athletic events, etc.)				SEactivities	1	Very little	10	10	332	7	520	9	2,543	10	2.6	2.9 ***	-0.36	2.7	-0.18	2.7	-0.17
				2	Some	40	40	1,237	24	1,750	30	7,301	28								
				3	Quite a bit	33	33	2,104	42	2,363	40	10,003	39								
				4	Very much	18	18	1,381	27	1,280	22	5,819	23								
				Total		101	100	5,054	100	5,913	100	25,666	100								
i. Attending events that address important social, economic, or political issues				SEevents	1	Very little	28	28	849	17	1,168	20	4,757	19	2.1	2.4 ***	-0.37	2.3 **	-0.26	2.4 **	-0.31
				2	Some	42	42	1,904	38	2,365	40	9,774	38								
				3	Quite a bit	25	25	1,561	31	1,662	28	7,693	30								
				4	Very much	6	6	742	15	717	12	3,447	13								
				Total		101	100	5,056	100	5,912	100	25,671	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
				Count	%	Count	%	Count	%	Count	%	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
				<i>Your first-year students compared with</i>															
15. To what extent do you agree or disagree with the following statements?																			
a. I feel comfortable being myself at this institution.	SBmyself	1	Strongly disagree	2	2	63	2	47	2	329	2	3.2	3.3	-.16	3.3	-.10	3.3	-.09	
	(Comparison data are limited to NSSE 2020.)	2	Disagree	7	7	253	7	216	8	1,254	8								
		3	Agree	60	59	1,908	50	1,436	52	8,376	51								
		4	Strongly agree	32	32	1,585	42	1,072	39	6,337	39								
		Total		101	100	3,809	100	2,771	100	16,296	100								
b. I feel valued by this institution.	SBvalued	1	Strongly disagree	6	6	159	4	114	4	620	4	2.8	3.0 *	▽	-.22	2.9	-.18	3.0 *	▽
	(Comparison data are limited to NSSE 2020.)	2	Disagree	21	21	675	18	526	19	2,919	18								
		3	Agree	59	59	2,042	54	1,516	55	9,033	55								
		4	Strongly agree	14	14	926	24	612	22	3,705	23								
		Total		100	100	3,802	100	2,768	100	16,277	100								
c. I feel like part of the community at this institution.	SBcommunity	1	Strongly disagree	2	2	130	3	110	4	614	4	2.9	3.0 *	▽	-.18	3.0	-.09	3.0	-.13
	(Comparison data are limited to NSSE 2020.)	2	Disagree	18	18	616	16	498	18	2,774	17								
		3	Agree	67	67	1,998	52	1,500	54	8,765	54								
		4	Strongly agree	13	13	1,063	28	661	24	4,148	25								
		Total		100	100	3,807	100	2,769	100	16,301	100								
16. About how many hours do you spend in a typical 7-day week doing the following?																			
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs	0	0 hrs	0	0	20	0	12	0	90	0	15.7	15.6	.01	16.2	-.06	15.9	-.02	
	(Recorded version of tmprep created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	5	5	527	10	516	9	2,513	10								
		8	6-10 hrs	24	24	1,048	21	1,124	19	5,091	20								
		13	11-15 hrs	24	24	1,102	22	1,289	22	5,566	22								
		18	16-20 hrs	23	23	1,046	21	1,289	22	5,430	21								
		23	21-25 hrs	16	16	619	12	807	14	3,315	13								
		28	26-30 hrs	3	3	295	6	430	7	1,714	7								
		33	More than 30 hrs	6	6	401	8	449	8	1,974	8								
		Total		101	100	5,058	100	5,916	100	25,693	100								
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcoccrrhrs	0	0 hrs	35	35	1,598	32	1,855	31	8,207	32	4.5	5.6 *	▽	-.16	5.4	-.13	5.6 *	▽
	(Recorded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	30	30	1,648	33	2,015	34	8,363	33								
		8	6-10 hrs	23	23	870	17	1,022	17	4,276	17								
		13	11-15 hrs	6	6	487	10	542	9	2,416	9								
		18	16-20 hrs	4	4	247	5	261	4	1,280	5								
		23	21-25 hrs	1	1	98	2	108	2	608	2								
		28	26-30 hrs	0	0	32	1	41	1	196	1								
		33	More than 30 hrs	0	0	68	1	65	1	296	1								
		Total		99	100	5,048	100	5,909	100	25,642	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k						
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Your first-year students compared with				
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ		Effect size ⁿ		
														Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. Working for pay on campus	tmworkonhrs	0	0 hrs	83	83	4,292	85	4,652	79	20,312	79	1.3	2.0	-.12	2.4 *	-.20	2.5 **	-.20
	(Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	7	7	102	2	247	4	953	4							
	8	6-10 hrs	8	8	184	4	387	7	1,628	6								
	13	11-15 hrs	1	1	219	4	306	5	1,318	5								
	18	16-20 hrs	0	0	171	3	232	4	926	4								
	23	21-25 hrs	0	0	55	1	59	1	309	1								
	28	26-30 hrs	0	0	8	0	11	0	60	0								
	33	More than 30 hrs	1	1	23	0	11	0	155	1								
	Total		100	100	5,054	100	5,905	100	25,661	100								
	d. Working for pay off campus	tmworkoffhrs	0	0 hrs	74	73	3,837	76	4,576	77	19,163							
(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)		3	1-5 hrs	3	3	167	3	217	4	919	4							
8		6-10 hrs	4	4	203	4	224	4	1,040	4								
13		11-15 hrs	6	6	236	5	233	4	1,172	5								
18		16-20 hrs	8	8	253	5	266	4	1,209	5								
23		21-25 hrs	4	4	156	3	184	3	780	3								
28		26-30 hrs	1	1	77	2	87	1	395	2								
33		More than 30 hrs	1	1	130	3	130	2	1,022	4								
Total			101	100	5,059	100	5,917	100	25,700	100								
Estimated number of hours working for pay		tmworkhrs		(Continuous variable created by NSSE)									5.4	5.8	-.04	5.9	-.05	6.8
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	63	64	3,164	63	3,895	66	16,809	65	2.1	2.1	-.01	1.8	.07	2.0	.01
	(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	27	27	1,368	27	1,522	26	6,384	25							
	8	6-10 hrs	3	3	239	5	273	5	1,151	4								
	13	11-15 hrs	4	4	148	3	114	2	643	3								
	18	16-20 hrs	1	1	73	1	54	1	339	1								
	23	21-25 hrs	0	0	35	1	33	1	204	1								
	28	26-30 hrs	0	0	12	0	10	0	58	0								
	33	More than 30 hrs	1	1	14	0	14	0	100	0								
Total		99	100	5,053	100	5,915	100	25,688	100									

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k						
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Your first-year students compared with				
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	1	1	78	2	79	1	471	2	13.4	13.4	.00	13.2	.02	13.0	.04
	(Recorded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	22	22	802	16	1,023	17	4,651	18							
	8	6-10 hrs	23	23	1,350	27	1,547	26	6,785	26								
	13	11-15 hrs	20	20	1,144	23	1,297	22	5,449	21								
	18	16-20 hrs	13	13	798	16	906	15	3,903	15								
	23	21-25 hrs	10	10	343	7	456	8	1,793	7								
	28	26-30 hrs	4	4	132	3	170	3	735	3								
	33	More than 30 hrs	8	8	410	8	431	7	1,892	7								
	Total		101	100	5,057	100	5,909	100	25,679	100								
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	88	87	4,227	84	5,009	85	20,672	81	.8	1.6 **	-0.17	1.4 *	-0.13	2.1 ***	-0.22
	(Recorded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	9	9	364	7	428	7	2,091	8							
	8	6-10 hrs	1	1	155	3	184	3	962	4								
	13	11-15 hrs	2	2	130	3	115	2	694	3								
	18	16-20 hrs	1	1	75	1	77	1	456	2								
	23	21-25 hrs	0	0	47	1	39	1	259	1								
	28	26-30 hrs	0	0	7	0	12	0	71	0								
	33	More than 30 hrs	0	0	49	1	42	1	456	2								
	Total		101	100	5,054	100	5,906	100	25,661	100								
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	35	34	1,880	37	2,491	42	10,749	42	3.9	4.3	-0.05	3.6	.06	3.9	.01
	(Recorded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	44	43	1,901	38	2,260	38	9,175	36							
	8	6-10 hrs	15	15	737	15	692	12	3,253	13								
	13	11-15 hrs	4	4	276	5	235	4	1,255	5								
	18	16-20 hrs	1	1	122	2	105	2	561	2								
	23	21-25 hrs	2	2	66	1	51	1	301	1								
	28	26-30 hrs	0	0	11	0	28	0	87	0								
	33	More than 30 hrs	1	1	71	1	60	1	319	1								
	Total		102	100	5,064	100	5,922	100	25,700	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Your first-year students compared with		Mean	Effect size ⁿ	Mean	Effect size ⁿ
														Effect size ⁿ	Effect size ⁿ				
17. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?																			
	reading	1	Very little	19	19	1,252	25	1,229	21	4,976	19	2.1	2.2	-.05	2.3	-.14	2.4 *	▽	-.22
		2	Some	60	59	2,237	44	2,726	46	11,137	43								
		3	About half	15	15	1,048	21	1,246	21	5,845	23								
		4	Most	6	6	396	8	555	9	2,881	11								
		5	Almost all	2	2	123	2	156	3	846	3								
			Total	102	100	5,056	100	5,912	100	25,685	100								
	tmreadinghrs		(Continuous variable created by NSSE. Calculated as a proportion of tmprephrs based on reading, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)									4.9	5.1	-.04	5.5	-.13	5.7 *	▽	-.17
	tmreadinghrscol	1	0 hrs	0	0	20	0	12	0	90	0								
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	66	65	3,272	65	3,547	60	15,013	59								
		3	More than 5, up to 10 hrs	23	23	1,201	24	1,593	27	6,915	27								
		4	More than 10, up to 15 hrs	9	9	285	6	383	6	1,873	7								
		5	More than 15, up to 20 hrs	3	3	138	3	208	4	941	4								
		6	More than 20, up to 25 hrs	0	0	90	2	123	2	569	2								
		7	More than 25 hrs	0	0	30	1	31	1	201	1								
			Total	101	100	5,036	100	5,897	100	25,602	100								
18. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?																			
a. Writing clearly and effectively	pgwrite	1	Very little	16	16	635	13	719	12	2,857	11	2.5	2.6	-.13	2.6	-.09	2.6	-.16	
		2	Some	34	34	1,647	33	2,066	35	8,499	33								
		3	Quite a bit	38	38	1,889	37	2,244	38	9,941	39								
		4	Very much	13	13	888	18	880	15	4,390	17								
			Total	101	100	5,059	100	5,909	100	25,687	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k						
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Your first-year students compared with				
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ		Mean	Effect size ⁿ	
														Mean	Effect size ⁿ		Mean	Effect size ⁿ
b. Speaking clearly and effectively	pgspeak	1	Very little	13	13	813	16	1,041	18	3,898	15	2.5	2.5	.03	.14	2.5	.04	
		2	Some	34	34	1,680	33	2,204	37	8,932	35							
		3	Quite a bit	40	40	1,707	34	1,868	32	8,754	34							
		4	Very much	14	14	848	17	798	14	4,087	16							
		Total		101	100	5,048	100	5,911	100	25,671	100							
c. Thinking critically and analytically	pgthink	1	Very little	6	6	214	4	253	4	957	4	2.9	3.0	-.13	-.11	3.1	-.14	
		2	Some	21	21	1,013	20	1,198	20	5,042	20							
		3	Quite a bit	48	47	2,149	43	2,540	43	11,177	44							
		4	Very much	27	26	1,679	33	1,916	32	8,498	33							
		Total		102	100	5,055	100	5,907	100	25,674	100							
d. Analyzing numerical and statistical information	pganalyze	1	Very little	6	6	362	7	381	6	1,761	7	3.0	2.9	.04	.02	2.9	.04	
		2	Some	26	25	1,196	24	1,407	24	6,248	24							
		3	Quite a bit	37	36	1,974	39	2,354	40	10,088	39							
		4	Very much	33	32	1,509	30	1,771	30	7,565	29							
		Total		102	100	5,041	100	5,913	100	25,662	100							
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	14	14	623	12	758	13	3,166	12	2.5	2.6	-.18	-.17	2.6	-.18	
		2	Some	40	39	1,612	32	1,843	31	8,171	32							
		3	Quite a bit	34	33	1,779	35	2,119	36	9,096	35							
		4	Very much	14	14	1,049	21	1,199	20	5,264	20							
		Total		102	100	5,063	100	5,919	100	25,697	100							
f. Working effectively with others	pgothers	1	Very little	10	10	393	8	442	7	1,896	7	2.7	2.8	-.12	-.08	2.8	-.11	
		2	Some	30	29	1,340	27	1,683	28	7,082	28							
		3	Quite a bit	40	39	2,037	40	2,414	41	10,473	41							
		4	Very much	22	22	1,286	25	1,373	23	6,229	24							
		Total		102	100	5,056	100	5,912	100	25,680	100							
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	23	23	797	16	968	16	3,827	15	2.4	2.6 *	-.24	-.19	2.6 *	-.25	
		2	Some	35	34	1,527	30	1,870	32	7,774	30							
		3	Quite a bit	29	28	1,701	34	1,992	34	8,936	35							
		4	Very much	15	15	1,025	20	1,083	18	5,142	20							
		Total		102	100	5,050	100	5,913	100	25,679	100							

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

First-Year Students^a in Engineering

Item wording or description	Variable name ^l	Values ^m	Response options	Frequency Distributions								Statistical Comparisons ^k						
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020			
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ		
				<i>Your first-year students compared with</i>														
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	28	28	662	13	981	17	3,459	13	2.3	2.6 *** ▼	-0.36	2.5 * ▼	-0.21	2.6 *** ▼	-0.34
		2	Some	29	29	1,568	31	2,029	34	8,023	31							
		3	Quite a bit	30	30	1,708	34	1,867	32	8,847	34							
		4	Very much	14	14	1,117	22	1,036	18	5,361	21							
		Total		101	100	5,055	100	5,913	100	25,690	100							
i. Solving complex real- world problems	pgprobsolve	1	Very little	17	17	600	12	686	12	2,924	11	2.5	2.7	-0.13	2.6	-0.09	2.7	-0.13
		2	Some	29	28	1,558	31	1,942	33	8,156	32							
		3	Quite a bit	39	38	1,785	35	2,161	36	9,175	36							
		4	Very much	17	17	1,118	22	1,133	19	5,449	21							
		Total		102	100	5,061	100	5,922	100	25,704	100							
j. Being an informed and active citizen	pgcitizen	1	Very little	29	28	829	16	1,048	18	4,143	16	2.2	2.5 ** ▼	-0.29	2.4	-0.19	2.5 ** ▼	-0.28
		2	Some	33	32	1,718	34	2,249	38	9,174	36							
		3	Quite a bit	28	27	1,625	32	1,805	31	8,107	32							
		4	Very much	12	12	888	18	816	14	4,300	17							
		Total		102	100	5,060	100	5,918	100	25,724	100							
19. How would you evaluate your entire educational experience at this institution?																		
evalexp		1	Poor	4	4	100	2	118	2	502	2	3.1	3.2	-0.15	3.1	-0.10	3.2	-0.11
		2	Fair	15	15	678	13	835	14	3,632	14							
		3	Good	52	51	2,462	49	3,020	51	12,945	50							
		4	Excellent	31	30	1,836	36	1,954	33	8,689	34							
		Total		102	100	5,076	100	5,927	100	25,768	100							
20. If you could start over again, would you go to the same institution you are now attending?																		
sameinst		1	Definitely no	3	3	171	3	198	3	809	3	3.2	3.3	-0.09	3.2	-0.01	3.2	-0.02
		2	Probably no	15	15	496	10	685	12	3,038	12							
		3	Probably yes	43	42	2,223	44	2,753	46	11,855	46							
		4	Definitely yes	41	40	2,197	43	2,302	39	10,130	39							
		Total		102	100	5,087	100	5,938	100	25,832	100							
21. Do you intend to return to this institution next year?^f																		
(Means indicate the percentage who responded "Yes.")	returnexp	No		2	2	169	3	179	3	851	3	92%	91%	.03	91%	.05	90%	.07
		Yes		93	92	4,650	91	5,373	91	23,255	90							
		Not sure		6	6	270	5	382	6	1,696	7							
		Total		101	100	5,089	100	5,934	100	25,802	100							

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020								
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ					
1. During the current school year, about how often have you done the following?																							
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	5	4	293	5	303	4	1,485	5	2.8	2.8	.00	2.8	.01	2.8	-.02					
		2	Sometimes	46	34	2,225	38	2,719	38	11,268	36												
		3	Often	58	42	1,821	31	2,264	32	9,969	32												
		4	Very often	28	20	1,590	27	1,787	25	8,524	27												
		Total		137	100	5,929	100	7,073	100	31,246	100												
b. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1	Very often	9	7	399	7	461	7	2,093	7	3.2	3.0 **	.26	3.0 **	.25	3.0 **	.24					
		2	Often	8	6	872	15	1,072	15	4,736	15												
		3	Sometimes	70	51	3,192	54	3,737	53	16,324	52												
		4	Never	50	36	1,457	25	1,808	26	8,107	26												
		Total		137	100	5,920	100	7,078	100	31,260	100												
c. Attended an art exhibit, play, or other arts performance (dance, music, etc.)	attendant	1	Never	84	61	3,196	54	3,628	51	16,077	51	1.5	1.6	-.14	1.7 *	-.18	1.7 *	-.18					
		2	Sometimes	40	29	2,009	34	2,525	36	10,974	35												
		3	Often	9	7	499	8	648	9	2,934	9												
		4	Very often	4	3	223	4	272	4	1,253	4												
		Total		137	100	5,927	100	7,073	100	31,238	100												
d. Asked another student to help you understand course material	CLaskhelp	1	Never	10	7	474	8	639	9	3,250	10	2.9	2.7	.12	2.7	.13	2.7 *	.18					
		2	Sometimes	47	35	1,999	34	2,342	33	10,664	34												
		3	Often	32	24	2,013	34	2,382	34	10,233	33												
		4	Very often	47	35	1,445	24	1,724	24	7,134	23												
		Total		136	100	5,931	100	7,087	100	31,281	100												
e. Explained course material to one or more students	CLexplain	1	Never	2	1	197	3	264	4	1,540	5	3.1	3.0	.13	2.9	.14	2.9 *	.19					
		2	Sometimes	34	25	1,635	28	1,912	27	8,881	28												
		3	Often	55	40	2,364	40	2,878	41	12,274	39												
		4	Very often	46	34	1,742	29	2,033	29	8,604	27												
		Total		137	100	5,938	100	7,087	100	31,299	100												

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k										
				Tennessee Tech				NSSE 2019 & 2020				Tennessee Tech		Your seniors compared with								
Item wording or description	Variable name ^l	Values ^m	Response options	Count		Count		Count		Count		Mean	Mean	Effect size ⁿ		Mean	Effect size ⁿ					
				%	%	%	%	%	%	Mean	Mean			Mean	Mean							
f. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	17	12	750	13	984	14	4,681	15	3.0	2.8 **	.24	.27	2.7 **	.27	2.7 ***	.31			
		2	Sometimes	25	18	1,701	29	2,014	28	9,130	29									▲	▲	▲
		3	Often	36	26	1,734	29	2,089	29	9,094	29											
		4	Very often	59	43	1,741	29	2,001	28	8,380	27											
		Total		137	100	5,926	100	7,088	100	31,285	100											
g. Worked with other students on course projects or assignments	CLproject	1	Never	7	5	218	4	280	4	1,825	6	3.3	3.2 *	.17	.18	3.1 **	.25	▲	▲			
		2	Sometimes	17	12	1,088	18	1,337	19	6,164	20											
		3	Often	39	28	2,104	35	2,466	35	10,818	35											
		4	Very often	74	54	2,521	43	3,000	42	12,480	40											
		Total		137	100	5,931	100	7,083	100	31,287	100											
h. Given a course presentation	present	1	Never	16	12	739	12	845	12	3,943	13	2.6	2.6	.02	.01	2.6	.01					
		2	Sometimes	44	32	2,101	35	2,503	35	10,769	34											
		3	Often	51	37	1,778	30	2,219	31	9,638	31											
		4	Very often	26	19	1,308	22	1,516	21	6,918	22											
		Total		137	100	5,926	100	7,083	100	31,268	100											
2. During the current school year, about how often have you done the following?																						
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	6	4	240	4	240	3	1,160	4	2.9	2.9	.01	.04	2.9	.04					
		2	Sometimes	39	29	1,676	28	2,106	30	9,030	29											
		3	Often	50	37	2,361	40	2,903	41	12,953	41											
		4	Very often	41	30	1,646	28	1,829	26	8,114	26											
		Total		136	100	5,923	100	7,078	100	31,257	100											
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	25	18	988	17	1,085	15	4,719	15	2.3	2.4	-.11	-.10	2.4	-.14					
		2	Sometimes	64	47	2,563	43	3,210	45	13,635	44											
		3	Often	34	25	1,571	27	1,942	27	8,795	28											
		4	Very often	14	10	804	14	836	12	4,095	13											
		Total		137	100	5,926	100	7,073	100	31,244	100											
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIDiverse	1	Never	54	39	1,904	32	2,224	31	9,136	29	1.8	2.0 **	-.25	-.23	2.1 ***	-.30	▼	▼			
		2	Sometimes	63	46	2,413	41	3,099	44	13,204	42											
		3	Often	13	9	1,079	18	1,242	18	6,136	20											
		4	Very often	7	5	516	9	508	7	2,763	9											
		Total		137	100	5,912	100	7,073	100	31,239	100											

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

Seniors^a in Engineering

Item wording or description				Frequency Distributions								Statistical Comparisons ^k							
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Your seniors compared with					
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	12	9	538	9	625	9	2,673	9	2.7	2.6	.06	2.6	.11	2.6	.06	
		2	Sometimes	45	33	2,096	35	2,649	37	11,067	35								
		3	Often	54	39	2,257	38	2,761	39	12,387	40								
		4	Very often	26	19	1,022	17	1,041	15	5,112	16								
		Total		137	100	5,913	100	7,076	100	31,239	100								
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIperspect	1	Never	10	7	348	6	432	6	1,822	6	2.7	2.8 *	▽	-0.17	2.8	-0.12	2.8	-0.17
		2	Sometimes	49	36	1,777	30	2,245	32	9,319	30								
		3	Often	54	40	2,436	41	2,973	42	13,312	43								
		4	Very often	23	17	1,351	23	1,419	20	6,777	22								
		Total		136	100	5,912	100	7,069	100	31,230	100								
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	6	4	201	3	249	4	1,056	3	2.8	2.9	-0.10	2.8	-0.07	2.9	-0.10	
		2	Sometimes	45	33	1,798	30	2,163	31	9,319	30								
		3	Often	59	43	2,534	43	3,122	44	13,788	44								
		4	Very often	27	20	1,372	23	1,528	22	7,048	23								
		Total		137	100	5,905	100	7,062	100	31,211	100								
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	2	1	104	2	105	1	524	2	3.0	3.1	-0.05	3.1	-0.04	3.1	-0.04	
		2	Sometimes	27	20	1,191	20	1,405	20	6,167	20								
		3	Often	70	51	2,746	47	3,412	48	14,850	48								
		4	Very often	37	27	1,864	32	2,136	30	9,635	31								
		Total		136	100	5,905	100	7,058	100	31,176	100								
3. During the current school year, about how often have you done the following?																			
a. Talked about career plans with a faculty member	SFcareer	1	Never	27	20	1,291	22	1,610	23	6,874	22	2.4	2.3	.06	2.2	.12	2.3	.09	
		2	Sometimes	55	40	2,436	41	3,040	43	13,085	42								
		3	Often	33	24	1,277	22	1,459	21	6,789	22								
		4	Very often	22	16	905	15	953	13	4,448	14								
		Total		137	100	5,909	100	7,062	100	31,196	100								
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	41	30	2,435	41	2,960	42	13,065	42	2.2	2.0 **	△	.26	1.9 **	.31	2.0 **	.30
		2	Sometimes	47	34	1,833	31	2,267	32	9,878	32								
		3	Often	23	17	937	16	1,100	16	4,974	16								
		4	Very often	26	19	700	12	727	10	3,270	10								
		Total		137	100	5,905	100	7,054	100	31,187	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k													
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with					
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Effect size ⁿ					
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Mean	Mean	Effect size ⁿ	Effect size ⁿ								
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	24	18	1,437	24	1,770	25	7,832	25	2.4	2.2 *	.17	2.2 **	.23	2.2 *	.21	△						
		2	Sometimes	57	42	2,534	43	3,116	44	13,394	43														
		3	Often	39	28	1,261	21	1,502	21	6,738	22														
		4	Very often	17	12	667	11	665	9	3,176	10														
		Total		137	100	5,899	100	7,053	100	31,140	100														
d. Discussed your academic performance with a faculty member	SFperform	1	Never	33	24	1,571	27	2,113	30	8,474	27	2.2	2.1	.06	2.0 *	.17	2.1	.09							
		2	Sometimes	56	41	2,619	44	3,186	45	13,969	45														
		3	Often	39	28	1,158	20	1,253	18	6,110	20														
		4	Very often	9	7	566	10	516	7	2,670	9														
		Total		137	100	5,914	100	7,068	100	31,223	100														
4. During the current school year, how much has your coursework emphasized the following?																									
a. Memorizing course material	memorize	1	Very little	14	10	462	8	614	9	2,680	9	2.7	2.7	-.02	2.6	.05	2.6	.04							
		2	Some	44	32	2,015	34	2,543	36	11,136	36														
		3	Quite a bit	51	37	2,295	39	2,723	39	11,895	38														
		4	Very much	28	20	1,138	19	1,185	17	5,502	18														
		Total		137	100	5,910	100	7,065	100	31,213	100														
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	2	1	162	3	187	3	835	3	3.2	3.1	.11	3.2	.08	3.1	.11							
		2	Some	24	18	1,003	17	1,137	16	5,288	17														
		3	Quite a bit	51	37	2,525	43	3,037	43	13,504	43														
		4	Very much	60	44	2,211	37	2,701	38	11,561	37														
		Total		137	100	5,901	100	7,062	100	31,188	100														
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	4	3	276	5	336	5	1,333	4	3.0	3.0	.01	3.0	.04	3.0	.02							
		2	Some	34	25	1,265	21	1,539	22	6,748	22														
		3	Quite a bit	53	39	2,429	41	2,992	42	13,147	42														
		4	Very much	46	34	1,930	33	2,186	31	9,922	32														
		Total		137	100	5,900	100	7,053	100	31,150	100														
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	22	16	815	14	924	13	3,707	12	2.5	2.6	-.13	2.6	-.09	2.6	-.16							
		2	Some	52	38	1,904	32	2,463	35	10,297	33														
		3	Quite a bit	37	27	1,995	34	2,437	35	11,075	36														
		4	Very much	25	18	1,178	20	1,224	17	6,054	19														
		Total		136	100	5,892	100	7,048	100	31,133	100														

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean				
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	9	7	430	7	461	7	1,973	6	2.7	2.8	-.09	2.8	-.05	2.8	-.10					
		2	Some	41	30	1,643	28	2,102	30	8,796	28												
		3	Quite a bit	62	46	2,372	40	2,965	42	13,103	42												
		4	Very much	24	18	1,447	25	1,528	22	7,284	23												
		Total		136	100	5,892	100	7,056	100	31,156	100												
5. During the current school year, to what extent have your instructors done the following?																							
a. Clearly explained course goals and requirements	ETgoals	1	Very little	6	4	193	3	205	3	895	3	3.0	3.0	.00	3.0	.01	3.0	-.02					
		2	Some	27	20	1,298	22	1,580	22	6,722	22												
		3	Quite a bit	62	46	2,665	45	3,227	46	14,210	46												
		4	Very much	41	30	1,748	30	2,049	29	9,360	30												
		Total		136	100	5,904	100	7,061	100	31,187	100												
b. Taught course sessions in an organized way	ETorganize	1	Very little	11	8	276	5	319	5	1,431	5	2.8	2.9	-.12	2.9	-.13	2.9	-.14					
		2	Some	29	21	1,433	24	1,641	23	7,166	23												
		3	Quite a bit	68	50	2,620	44	3,274	46	14,273	46												
		4	Very much	28	21	1,565	27	1,818	26	8,273	27												
		Total		136	100	5,894	100	7,052	100	31,143	100												
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	3	2	250	4	267	4	1,221	4	3.1	3.0	.01	3.0	.02	3.0	.02					
		2	Some	25	18	1,209	21	1,446	21	6,404	21												
		3	Quite a bit	69	51	2,444	41	3,041	43	13,275	43												
		4	Very much	39	29	1,990	34	2,297	33	10,246	33												
		Total		136	100	5,893	100	7,051	100	31,146	100												
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	19	14	916	16	1,137	16	4,433	14	2.5	2.5	-.06	2.5	.01	2.6	-.08					
		2	Some	47	35	1,975	34	2,573	37	10,744	35												
		3	Quite a bit	53	39	1,895	32	2,181	31	10,023	32												
		4	Very much	16	12	1,108	19	1,157	16	5,940	19												
		Total		135	100	5,894	100	7,048	100	31,140	100												
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	10	7	619	11	745	11	3,013	10	2.8	2.6	.16	2.6 *	.20	2.7	.13					
		2	Some	37	27	1,965	33	2,428	34	10,282	33												
		3	Quite a bit	59	44	2,202	37	2,663	38	11,679	37												
		4	Very much	29	21	1,109	19	1,221	17	6,183	20												
		Total		135	100	5,895	100	7,057	100	31,157	100												

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Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

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				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean				
6. During the current school year, about how often have you done the following?																							
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	5	4	284	5	264	4	1,452	5	3.0	3.0	.04	3.0	.01	2.9	.07					
		2	Sometimes	26	19	1,444	25	1,712	24	8,056	26												
		3	Often	69	51	2,376	40	2,910	41	12,523	40												
		4	Very often	36	26	1,789	30	2,159	31	9,086	29												
			Total	136	100	5,893	100	7,045	100	31,117	100												
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	23	17	1,232	21	1,409	20	6,174	20	2.5	2.4	.06	2.4	.06	2.4	.06					
		2	Sometimes	49	36	1,940	33	2,375	34	10,526	34												
		3	Often	35	26	1,596	27	1,963	28	8,652	28												
		4	Very often	28	21	1,112	19	1,284	18	5,711	18												
			Total	135	100	5,880	100	7,031	100	31,063	100												
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	14	10	765	13	889	13	4,055	13	2.6	2.6	.03	2.5	.05	2.5	.05					
		2	Sometimes	49	36	2,103	36	2,635	37	11,418	37												
		3	Often	51	38	1,972	34	2,359	34	10,424	34												
		4	Very often	21	16	1,029	18	1,150	16	5,136	17												
			Total	135	100	5,869	100	7,033	100	31,033	100												
7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)																							
a. Up to 5 pages	wrshortnum	0	None	21	15	715	12	743	11	3,250	10	6.1	6.1	.01	6.4	-.04	6.5	-.06					
		1.5	1-2	32	23	1,376	23	1,643	23	6,945	22												
	(Recorded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	4	3-5	38	28	1,658	28	1,943	28	8,823	28												
		8	6-10	19	14	1,077	18	1,316	19	5,772	19												
		13	11-15	8	6	460	8	635	9	2,753	9												
		18	16-20	11	8	229	4	287	4	1,340	4												
		23	More than 20	8	6	363	6	453	6	2,171	7												
			Total	137	100	5,878	100	7,020	100	31,054	100												
b. Between 6 and 10 pages	wrmednum	0	None	58	42	2,060	35	2,278	33	9,856	32	3.3	3.1	.05	3.2	.03	3.3	.00					
		1.5	1-2	40	29	1,727	29	2,188	31	9,662	31												
	(Recorded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	4	3-5	11	8	1,089	19	1,332	19	5,904	19												
		8	6-10	12	9	600	10	700	10	3,218	10												
		13	11-15	9	7	197	3	285	4	1,213	4												
		18	16-20	4	3	79	1	95	1	480	2												
		23	More than 20	3	2	108	2	127	2	651	2												
			Total	137	100	5,860	100	7,005	100	30,984	100												

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Frequencies and Statistical Comparisons: Engineering

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Seniors^a in Engineering

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				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. 11 pages or more	wrlongnum	0	None	74	54	2,888	49	3,555	51	15,156	49	2.4	2.2	.03	2.2	.04	2.3	.00	
		(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	32	23	1,683	29	1,951	28	8,942								29
			4	3-5	16	12	680	12	756	11	3,414								11
			8	6-10	7	5	311	5	391	6	1,704								5
			13	11-15	1	1	150	3	222	3	916								3
			18	16-20	4	3	55	1	57	1	328								1
			23	More than 20	3	2	109	2	103	1	606								2
Total				137	100	5,876	100	7,035	100	31,066	100								
Estimated number of assigned pages of student writing.	wrpages	(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)										80.4	76.2	.04	77.2	.03	80.7	.00	
8. During the current school year, about how often have you had discussions with people from the following groups?																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	10	7	273	5	449	6	1,901	6	3.1	3.2	-.11	3.0	.08	3.0	.01	
		2	Sometimes	29	21	1,176	20	1,886	27	7,335	24								
		3	Often	41	30	1,806	31	2,018	29	9,325	30								
		4	Very often	57	42	2,630	45	2,683	38	12,546	40								
		Total		137	100	5,885	100	7,036	100	31,107	100								
b. People from an economic background other than your own	DDeconomic	1	Never	7	5	252	4	350	5	1,686	5	3.0	3.1	-.14	3.0	-.02	3.0	-.03	
		2	Sometimes	30	22	1,183	20	1,725	25	7,226	23								
		3	Often	55	41	2,082	35	2,470	35	10,824	35								
		4	Very often	43	32	2,351	40	2,478	35	11,298	36								
		Total		135	100	5,868	100	7,023	100	31,034	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	10	7	303	5	600	9	2,275	7	2.9	3.1	-.15	2.9	.06	3.0	-.01	
		2	Sometimes	33	24	1,302	22	1,949	28	7,832	25								
		3	Often	48	35	1,880	32	2,107	30	9,754	31								
		4	Very often	46	34	2,399	41	2,369	34	11,188	36								
		Total		137	100	5,884	100	7,025	100	31,049	100								
d. People with political views other than your own	DDpolitical	1	Never	8	6	341	6	465	7	2,272	7	3.0	3.0	-.02	2.9	.09	2.9	.09	
		2	Sometimes	34	25	1,482	25	2,046	29	8,836	28								
		3	Often	46	34	1,871	32	2,226	32	9,787	31								
		4	Very often	48	35	2,190	37	2,292	33	10,181	33								
		Total		136	100	5,884	100	7,029	100	31,076	100								

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				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Tennessee Tech				Your seniors compared with			
				Count		%		Count		%		Count		%		Count		%		Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
Item wording or description	Variable name ^l	Values ^m	Response options																								
9. During the current school year, about how often have you done the following?																											
a. Identified key information from reading assignments	LSreading	1	Never	15	11	372	6	423	6	1,712	6	2.6	2.8 *	-0.21	2.8 *	-0.17	2.8 **	-0.23	▽	▽	▽						
		2	Sometimes	40	29	1,684	29	2,133	30	8,877	29																
		3	Often	60	44	2,369	40	2,936	42	13,041	42																
		4	Very often	22	16	1,459	25	1,540	22	7,457	24																
		Total		137	100	5,884	100	7,032	100	31,087	100																
b. Reviewed your notes after class	LSnotes	1	Never	6	4	445	8	641	9	2,718	9	3.0	2.8 *	.18	2.7 ***	.29	2.7 **	.25	△	△	△						
		2	Sometimes	39	28	1,900	32	2,469	35	10,567	34																
		3	Often	45	33	1,914	33	2,280	32	10,084	32																
		4	Very often	47	34	1,629	28	1,650	23	7,721	25																
		Total		137	100	5,888	100	7,040	100	31,090	100																
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	4	3	538	9	735	10	3,087	10	2.9	2.7 **	.23	2.6 ***	.34	2.7 ***	.29	△	△	△						
		2	Sometimes	35	26	1,946	33	2,592	37	10,840	35																
		3	Often	65	48	2,067	35	2,410	34	10,801	35																
		4	Very often	32	24	1,335	23	1,309	19	6,371	20																
		Total		136	100	5,886	100	7,046	100	31,099	100																
10. During the current school year, to what extent have your courses challenged you to do your best work?																											
challenge		1	Not at all	3	2	95	2	91	1	408	1	5.7	5.4 *	.17	5.4 *	.20	5.4 *	.18	△	△	△						
		2		1	1	128	2	136	2	636	2																
		3		4	3	318	5	330	5	1,620	5																
		4		8	6	640	11	796	11	3,434	11																
		5		35	26	1,663	28	2,154	31	9,128	29																
		6		47	35	1,418	24	1,871	27	7,934	26																
		7	Very much	38	28	1,614	27	1,657	24	7,910	25																
		Total		136	100	5,876	100	7,035	100	31,070	100																
11. Which of the following have you done or do you plan to do before you graduate?^o																											
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	12	9	414	7	434	6	2,221	7	60%	54%	.13	58%	.04	53%	.15									
			Do not plan to do	15	11	709	12	750	11	4,011	13																
			Plan to do	27	20	1,588	27	1,755	25	8,363	27																
			Done or in progress	82	60	3,171	54	4,105	58	16,498	53																
			Total	136	100	5,882	100	7,044	100	31,093	100																

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

			Frequency Distributions								Statistical Comparisons ^k							
			Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
b. Hold a formal leadership role in a student organization or group	leader	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	7	5	600	10	636	9	3,105	10	49%	39% *	.18	43%	.12	40% *	.18
			Do not plan to do	52	38	2,398	41	2,838	40	12,825	41							
			Plan to do	11	8	559	10	552	8	2,816	9							
			Done or in progress	66	49	2,322	39	3,012	43	12,335	40							
			Total	136	100	5,879	100	7,038	100	31,081	100							
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	17	13	700	12	855	12	4,017	13	22%	24%	-.03	23%	-.02	23%	-.01
			Do not plan to do	75	55	3,255	55	3,990	57	17,038	55							
			Plan to do	14	10	546	9	578	8	2,996	10							
			Done or in progress	30	22	1,383	24	1,605	23	6,993	23							
			Total	136	100	5,884	100	7,028	100	31,044	100							
d. Participate in a study abroad program	abroad	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	8	6	625	11	643	9	3,209	10	6%	15% **	-.29	12% *	-.22	12% *	-.23
			Do not plan to do	112	82	3,976	68	5,171	73	21,900	71							
			Plan to do	9	7	429	7	375	5	2,079	7							
			Done or in progress	8	6	854	15	850	12	3,869	12							
			Total	137	100	5,884	100	7,039	100	31,057	100							
e. Work with a faculty member on a research project	research	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	25	18	909	15	1,051	15	4,784	15	34%	31%	.06	29%	.11	27%	.14
			Do not plan to do	46	34	2,304	39	3,002	43	13,245	43							
			Plan to do	19	14	842	14	978	14	4,520	15							
			Done or in progress	46	34	1,831	31	2,016	29	8,517	27							
			Total	136	100	5,886	100	7,047	100	31,066	100							
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone	(Means indicate the percentage who responded "Done or in progress.")	Have not decided	5	4	354	6	401	6	1,923	6	65%	52% **	.26	53% **	.23	52% **	.26
			Do not plan to do	4	3	545	9	665	9	3,232	10							
			Plan to do	39	29	1,936	33	2,230	32	9,846	32							
			Done or in progress	88	65	3,046	52	3,743	53	16,081	52							
			Total	136	100	5,881	100	7,039	100	31,082	100							

12. About how many of your courses at this institution have included a community-based project (service-learning)?

servcourse	1	2	3	4	Total	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
None	52	38	3,161	54	3,845	1.7	.21	1.5 **	.23	1.6 *	.18
Some	78	57	2,347	40	2,723						
Most	6	4	285	5	387						
All	1	1	84	1	79						
Total	137	100	5,877	100	7,034						

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k							
								NSSE 2019 & 2020				Your seniors compared with							
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
13. Indicate the quality of your interactions with the following people at your institution.																			
a. Students	QIstudent	1	Poor	0	0	88	1	82	1	408	1	5.8	5.6 *	.17	5.6 *	.20	5.6 *	.19	
		2		2	1	71	1	101	1	440	1								
		3		3	2	216	4	260	4	1,180	4								
		4		9	7	545	9	669	9	2,954	9								
		5		28	21	1,461	25	1,863	26	7,769	25								
		6		51	38	1,699	29	2,008	28	8,875	29								
		7	Excellent	42	31	1,761	30	1,977	28	8,864	28								
		—	Not applicable	1	1	53	1	89	1	623	2								
			Total	136	100	5,894	100	7,049	100	31,113	100								
b. Academic advisors	QIadvisor	1	Poor	9	7	281	5	407	6	1,467	5	5.2	5.1	.06	5.0	.14	5.1	.06	
		2		6	4	321	5	417	6	1,601	5								
		3		7	5	452	8	614	9	2,483	8								
		4		16	12	781	13	948	13	4,082	13								
		5		20	15	1,153	20	1,372	19	6,056	19								
		6		35	26	1,093	19	1,282	18	6,020	19								
		7	Excellent	41	30	1,735	29	1,866	26	8,886	29								
		—	Not applicable	2	1	68	1	141	2	489	2								
			Total	136	100	5,884	100	7,047	100	31,084	100								
c. Faculty	QIfaculty	1	Poor	1	1	134	2	158	2	603	2	5.5	5.2 *	.19	5.2 **	.21	5.3 *	.17	
		2		4	3	181	3	227	3	908	3								
		3		4	3	393	7	473	7	1,898	6								
		4		15	11	839	14	1,021	14	4,405	14								
		5		30	22	1,533	26	1,882	27	8,252	27								
		6		54	40	1,485	25	1,841	26	8,069	26								
		7	Excellent	26	19	1,274	22	1,394	20	6,710	22								
		—	Not applicable	1	1	45	1	50	1	242	1								
			Total	135	100	5,884	100	7,046	100	31,087	100								

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k													
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with					
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ						
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean						
d. Student services staff (career services, student activities, housing, etc.)	QIstaff	1	Poor	5	4	272	5	351	5	1,335	4	5.2	5.0	.15	4.8 **	.25	4.9	.18							
		2		4	3	255	4	315	4	1,364	4														
		3		8	6	386	7	581	8	2,257	7														
		4		17	13	839	14	1,048	15	4,369	14														
		5		17	13	1,126	19	1,447	21	6,023	19														
		6		41	30	1,003	17	1,215	17	5,572	18														
		7	Excellent	25	18	1,131	19	1,087	15	5,368	17														
		—	Not applicable	19	14	873	15	1,004	14	4,804	15														
Total				136	100	5,885	100	7,048	100	31,092	100														
e. Other administrative staff and offices (registrar, financial aid, etc.)	QIadmin	1	Poor	3	2	344	6	408	6	1,570	5	4.9	4.8	.03	4.8	.03	4.9	-.02							
		2		7	5	307	5	353	5	1,522	5														
		3		18	13	470	8	527	7	2,424	8														
		4		19	14	863	15	1,075	15	4,723	15														
		5		32	24	1,300	22	1,640	23	6,705	22														
		6		28	21	1,054	18	1,347	19	6,055	19														
		7	Excellent	22	16	1,062	18	1,188	17	5,808	19														
		—	Not applicable	7	5	488	8	507	7	2,301	7														
Total				136	100	5,888	100	7,045	100	31,108	100														
14. How much does your institution emphasize the following?																									
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	2	1	107	2	116	2	595	2	3.3	3.2	.11	3.2	.08	3.2	.14							
		2	Some	16	12	987	17	1,083	15	5,102	16														
		3	Quite a bit	59	43	2,427	41	2,954	42	13,511	43														
		4	Very much	59	43	2,365	40	2,889	41	11,884	38														
		Total				136	100	5,886	100	7,042	100								31,092	100					
b. Providing support to help students succeed academically	SEacademic	1	Very little	8	6	353	6	429	6	1,869	6	2.9	2.8	.07	2.8	.08	2.8	.06							
		2	Some	31	23	1,597	27	1,942	28	8,424	27														
		3	Quite a bit	65	47	2,561	44	3,053	43	13,247	43														
		4	Very much	33	24	1,366	23	1,614	23	7,502	24														
		Total				137	100	5,877	100	7,038	100								31,042	100					
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	17	13	603	10	701	10	3,143	10	2.6	2.8 *	-.18	2.7	-.16	2.8 *	-.17							
		2	Some	47	35	1,597	27	2,023	29	8,626	28														
		3	Quite a bit	45	33	2,220	38	2,646	38	11,701	38														
		4	Very much	27	20	1,453	25	1,660	24	7,566	24														
		Total				136	100	5,873	100	7,030	100								31,036	100					

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k						
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Your seniors compared with				
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ		Mean	Effect size ⁿ	
														Mean	Effect size ⁿ			
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	28	21	1,048	18	1,487	21	5,718	18	2.4	2.5	-.13	2.4	-.01	2.5	-.11
		2	Some	50	37	1,949	33	2,483	35	10,287	33							
		3	Quite a bit	37	27	1,728	29	1,952	28	9,293	30							
		4	Very much	21	15	1,141	19	1,105	16	5,720	18							
		Total		136	100	5,866	100	7,027	100	31,018	100							
e. Providing opportunities to be involved socially	SEsocial	1	Very little	10	7	510	9	730	10	3,202	10	2.8	2.8	.01	2.7	.12	2.7	.09
		2	Some	35	26	1,639	28	2,123	30	9,146	29							
		3	Quite a bit	63	46	2,258	38	2,740	39	11,840	38							
		4	Very much	28	21	1,464	25	1,439	20	6,832	22							
		Total		136	100	5,871	100	7,032	100	31,020	100							
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	16	12	664	11	942	13	4,126	13	2.8	2.7	.04	2.6	.13	2.6	.11
		2	Some	34	25	1,707	29	2,121	30	9,238	30							
		3	Quite a bit	55	40	2,111	36	2,555	36	11,215	36							
		4	Very much	32	23	1,380	24	1,404	20	6,426	21							
		Total		137	100	5,862	100	7,022	100	31,005	100							
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	39	29	2,103	36	2,677	38	11,115	36	2.1	2.0	.06	1.9	.14	2.0	.06
		2	Some	60	44	2,137	36	2,590	37	11,187	36							
		3	Quite a bit	26	19	1,109	19	1,236	18	6,005	19							
		4	Very much	11	8	517	9	516	7	2,687	9							
		Total		136	100	5,866	100	7,019	100	30,994	100							
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	16	12	775	13	1,155	16	5,373	17	2.5	2.6	-.11	2.5	.07	2.5	.05
		2	Some	52	38	1,782	30	2,441	35	10,229	33							
		3	Quite a bit	46	34	2,033	35	2,343	33	10,196	33							
		4	Very much	22	16	1,267	22	1,082	15	5,199	17							
		Total		136	100	5,857	100	7,021	100	30,997	100							
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	40	29	1,537	26	2,023	29	8,344	27	2.0	2.2	-.14	2.1	-.04	2.2	-.13
		2	Some	60	44	2,395	41	2,928	42	12,200	39							
		3	Quite a bit	28	20	1,324	23	1,528	22	7,424	24							
		4	Very much	9	7	605	10	541	8	3,033	10							
		Total		137	100	5,861	100	7,020	100	31,001	100							

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ		
15. To what extent do you agree or disagree with the following statements?																							
a. I feel comfortable being myself at this institution.	SBmyself	1	Strongly disagree	4	3	137	3	105	3	558	3	3.4	3.3	.10	3.3	.11	3.3	.13					
		2	Disagree	10	7	309	7	274	8	1,447	8												
		3	Agree	51	37	2,071	45	1,633	45	8,892	46												
		4	Strongly agree	72	53	2,055	45	1,638	45	8,371	43												
			Total	137	100	4,572	100	3,650	100	19,268	100												
b. I feel valued by this institution.	SBvalued	1	Strongly disagree	16	12	479	10	375	10	1,793	9	2.8	2.8	.01	2.8	.01	2.8	-.02					
		2	Disagree	24	18	981	21	806	22	4,151	22												
		3	Agree	68	50	2,136	47	1,686	46	9,121	47												
		4	Strongly agree	28	21	972	21	780	21	4,178	22												
			Total	136	100	4,568	100	3,647	100	19,243	100												
c. I feel like part of the community at this institution.	SBcommunity	1	Strongly disagree	7	5	343	7	279	8	1,376	7	3.0	2.9	.06	2.9	.11	2.9	.10					
		2	Disagree	27	20	814	18	684	19	3,683	19												
		3	Agree	63	46	2,200	48	1,813	50	9,557	50												
		4	Strongly agree	40	29	1,217	27	879	24	4,662	24												
			Total	137	100	4,574	100	3,655	100	19,278	100												
16. About how many hours do you spend in a typical 7-day week doing the following?																							
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs	0	0 hrs	1	1	32	1	34	0	146	0	18.1	17.1	.10	17.3	.08	17.1	.11					
		3	1-5 hrs	7	5	570	10	622	9	2,951	10												
		8	6-10 hrs	24	18	1,070	18	1,237	18	5,666	18												
		13	11-15 hrs	25	18	1,127	19	1,351	19	5,978	19												
		18	16-20 hrs	31	23	1,101	19	1,336	19	5,918	19												
		23	21-25 hrs	18	13	684	12	933	13	3,932	13												
		28	26-30 hrs	8	6	472	8	578	8	2,434	8												
		33	More than 30 hrs	22	16	812	14	936	13	4,021	13												
			Total	136	100	5,868	100	7,027	100	31,046	100												
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs	0	0 hrs	32	24	2,267	39	2,583	37	11,921	38	7.0	5.2 **	.27	5.3 **	.24	5.3 **	.24					
		3	1-5 hrs	44	33	1,671	28	2,178	31	9,011	29												
		8	6-10 hrs	25	19	884	15	1,011	14	4,414	14												
		13	11-15 hrs	20	15	547	9	572	8	2,708	9												
		18	16-20 hrs	4	3	246	4	314	4	1,457	5												
		23	21-25 hrs	1	1	131	2	177	3	757	2												
		28	26-30 hrs	2	1	43	1	84	1	300	1												
		33	More than 30 hrs	6	4	80	1	99	1	449	1												
			Total	134	100	5,869	100	7,018	100	31,017	100												

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020					
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ			
c. Working for pay on campus	tmworkonhrs	0	0 hrs	75	55	4,103	70	4,466	64	20,659	67	4.7	3.9	.10	4.6	.01	4.2	.06					
	(Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	19	14	280	5	395	6	1,717	6												
	8	6-10 hrs	18	13	478	8	743	11	2,945	9													
	13	11-15 hrs	11	8	401	7	544	8	2,294	7													
	18	16-20 hrs	8	6	375	6	629	9	2,236	7													
	23	21-25 hrs	2	1	122	2	134	2	621	2													
	28	26-30 hrs	0	0	38	1	46	1	217	1													
	33	More than 30 hrs	3	2	82	1	75	1	356	1													
	Total			136	100	5,879	100	7,032	100	31,045	100												
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	78	57	3,104	53	3,765	54	16,036	52	7.7	9.4	-.14	9.1	-.12	9.9 *	▽	-0.18				
	(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	10	7	279	5	330	5	1,364	4												
	8	6-10 hrs	10	7	317	5	404	6	1,711	6													
	13	11-15 hrs	8	6	372	6	449	6	2,046	7													
	18	16-20 hrs	5	4	491	8	611	9	2,681	9													
	23	21-25 hrs	9	7	385	7	426	6	1,868	6													
	28	26-30 hrs	4	3	235	4	227	3	1,114	4													
	33	More than 30 hrs	13	9	689	12	813	12	4,209	14													
	Total			137	100	5,872	100	7,025	100	31,029	100												
Estimated number of hours working for pay	tmworkhrs		(Continuous variable created by NSSE)									12.1	13.3	-.09	13.7	-.12	14.1	-.15					
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	71	52	3,589	61	4,275	61	19,389	62	2.6	2.3	.07	2.1	.13	2.2	.09					
	(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	50	36	1,620	28	2,101	30	8,348	27												
	8	6-10 hrs	7	5	314	5	350	5	1,555	5													
	13	11-15 hrs	5	4	160	3	135	2	776	3													
	18	16-20 hrs	2	1	88	1	78	1	449	1													
	23	21-25 hrs	1	1	62	1	49	1	262	1													
	28	26-30 hrs	0	0	9	0	17	0	81	0													
	33	More than 30 hrs	1	1	30	1	26	0	171	1													
	Total			137	100	5,872	100	7,031	100	31,031	100												

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ					
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	3	2	184	3	172	2	892	3	12.9	11.9	.12	11.6	.15	11.7	.14					
	(Recorded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	25	18	1,271	22	1,633	23	6,948	22												
	8	6-10 hrs	36	26	1,632	28	1,999	28	8,812	28													
	13	11-15 hrs	34	25	1,166	20	1,385	20	6,070	20													
	18	16-20 hrs	18	13	788	13	875	12	4,045	13													
	23	21-25 hrs	4	3	324	6	384	5	1,656	5													
	28	26-30 hrs	3	2	154	3	176	3	744	2													
	33	More than 30 hrs	14	10	355	6	401	6	1,867	6													
	Total			137	100	5,874	100	7,025	100	31,034	100												
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	103	76	4,394	75	5,290	75	22,371	72	2.7	3.7	-.11	3.5	-.09	4.1 *	-0.15					
	(Recorded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	13	10	473	8	633	9	2,878	9												
	8	6-10 hrs	7	5	250	4	279	4	1,385	4													
	13	11-15 hrs	5	4	163	3	185	3	1,047	3													
	18	16-20 hrs	0	0	148	3	160	2	771	2													
	23	21-25 hrs	2	1	84	1	78	1	453	1													
	28	26-30 hrs	1	1	39	1	46	1	238	1													
	33	More than 30 hrs	4	3	308	5	356	5	1,858	6													
	Total			135	100	5,859	100	7,027	100	31,001	100												
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	12	9	758	13	1,190	17	5,884	19	4.7	5.6	-.15	4.8	-.02	5.1	-.07					
	(Recorded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	97	71	3,194	54	4,026	57	16,063	52												
	8	6-10 hrs	18	13	1,168	20	1,147	16	5,445	18													
	13	11-15 hrs	5	4	380	6	351	5	1,937	6													
	18	16-20 hrs	0	0	150	3	136	2	742	2													
	23	21-25 hrs	2	1	78	1	57	1	358	1													
	28	26-30 hrs	0	0	36	1	36	1	155	0													
	33	More than 30 hrs	3	2	111	2	100	1	497	2													
	Total			137	100	5,875	100	7,043	100	31,081	100												

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k																					
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with													
Item wording or description	Variable name ^l	Values ^m	Response options	Count		%		Count		%		Count		%		Count		%		Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ							
17. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?																																	
	reading	1	Very little	62	45	2,017	34	2,299	33	9,165	30	1.8	2.1 *	-.21	2.1 **	-.24	2.2 ***	-.32															
		2	Some	47	34	2,254	38	2,733	39	11,899	38																						
		3	About half	19	14	987	17	1,238	18	5,856	19																						
		4	Most	5	4	461	8	578	8	3,069	10									▽			▽						▽				
		5	Almost all	4	3	149	3	183	3	1,062	3																						
		Total		137	100	5,868	100	7,031	100	31,051	100																						
tmreadinghrs																				4.5	5.2	-.13	5.4 *	-.17	5.6 **	-.21							
(Continuous variable created by NSSE. Calculated as a proportion of tmprphrs based on reading, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)																																	
	tmreadinghrscol	1	0 hrs	1	1	31	1	34	0	145	0																						
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	98	72	3,753	64	4,352	62	18,612	60																						
		3	More than 5, up to 10 hrs	26	19	1,387	24	1,726	25	7,906	26																						
		4	More than 10, up to 15 hrs	3	2	295	5	421	6	1,958	6																						
		5	More than 15, up to 20 hrs	6	4	195	3	266	4	1,232	4																						
		6	More than 20, up to 25 hrs	1	1	125	2	154	2	754	2																						
		7	More than 25 hrs	1	1	55	1	53	1	336	1																						
		Total		136	100	5,841	100	7,006	100	30,943	100																						
18. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?																																	
a.	Writing clearly and effectively	pgwrite	1	Very little	17	12	645	11	791	11	3,192	10	2.6	2.7	-.12	2.7	-.08	2.7	-.14														
		2	Some	43	31	1,742	30	2,189	31	9,178	30																						
		3	Quite a bit	55	40	2,157	37	2,608	37	11,715	38																						
		4	Very much	22	16	1,333	23	1,449	21	6,975	22																						
		Total		137	100	5,877	100	7,037	100	31,060	100																						

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
Item wording or description	Variable name ^l	Values ^m	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech	Southeast Public	Carnegie Class	NSSE 2019 & 2020	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean				
b. Speaking clearly and effectively	pgspeak	1	Very little	18	13	690	12	861	12	3,573	12	2.6	2.7	-.10	2.7	-.02	2.7	-.07					
		2	Some	39	29	1,617	28	2,148	31	9,064	29												
		3	Quite a bit	52	38	2,101	36	2,525	36	11,066	36												
		4	Very much	27	20	1,465	25	1,492	21	7,331	24												
		Total		136	100	5,873	100	7,026	100	31,034	100												
c. Thinking critically and analytically	pgthink	1	Very little	1	1	198	3	220	3	996	3	3.4	3.3	.09	3.3	.10	3.3	.12					
		2	Some	16	12	745	13	895	13	4,127	13												
		3	Quite a bit	50	36	2,012	34	2,481	35	11,131	36												
		4	Very much	70	51	2,922	50	3,436	49	14,791	48												
		Total		137	100	5,877	100	7,032	100	31,045	100												
d. Analyzing numerical and statistical information	pganalyze	1	Very little	1	1	230	4	252	4	1,281	4	3.4	3.3 *	.19	3.3 *	.16	3.2 **	.23					
		2	Some	15	11	851	14	959	14	4,873	16												
		3	Quite a bit	44	33	1,897	32	2,286	32	10,178	33												
		4	Very much	75	56	2,901	49	3,539	50	14,735	47												
		Total		135	100	5,879	100	7,036	100	31,067	100												
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	7	5	506	9	539	8	2,558	8	3.0	3.0	.07	3.0	.06	3.0	.08					
		2	Some	31	23	1,307	22	1,608	23	7,126	23												
		3	Quite a bit	48	36	1,970	33	2,410	34	10,676	34												
		4	Very much	49	36	2,100	36	2,481	35	10,705	34												
		Total		135	100	5,883	100	7,038	100	31,065	100												
f. Working effectively with others	pgothers	1	Very little	4	3	299	5	372	5	1,838	6	3.1	3.1	.05	3.0	.11	3.0	.12					
		2	Some	26	19	1,184	20	1,532	22	6,710	22												
		3	Quite a bit	58	42	2,239	38	2,769	39	11,935	38												
		4	Very much	49	36	2,151	37	2,360	34	10,582	34												
		Total		137	100	5,873	100	7,033	100	31,065	100												
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	14	10	969	17	1,144	16	4,879	16	2.8	2.6	.12	2.6	.15	2.6	.12					
		2	Some	39	29	1,687	29	2,094	30	9,007	29												
		3	Quite a bit	50	37	1,768	30	2,253	32	9,842	32												
		4	Very much	33	24	1,445	25	1,544	22	7,308	24												
		Total		136	100	5,869	100	7,035	100	31,036	100												

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering Tennessee Technological University

Seniors^a in Engineering

				Frequency Distributions								Statistical Comparisons ^k											
				Tennessee Tech				Southeast Public				Carnegie Class				NSSE 2019 & 2020				Your seniors compared with			
				Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020					
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ			
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	23	17	982	17	1,465	21	5,317	17	2.5	2.6	-.12	2.4	.03	2.6	-.09					
		2	Some	51	38	1,832	31	2,349	33	9,939	32												
		3	Quite a bit	38	28	1,722	29	1,959	28	9,149	29												
		4	Very much	24	18	1,341	23	1,266	18	6,660	21												
		Total		136	100	5,877	100	7,039	100	31,065	100												
i. Solving complex real-world problems	pgprobsolve	1	Very little	8	6	560	10	587	8	2,810	9	3.1	2.9	.14	2.9 *	.16	2.9 *	.18					
		2	Some	20	15	1,347	23	1,766	25	7,750	25												
		3	Quite a bit	63	47	1,974	34	2,415	34	10,581	34												
		4	Very much	44	33	2,001	34	2,267	32	9,935	32												
		Total		135	100	5,882	100	7,035	100	31,076	100												
j. Being an informed and active citizen	pgcitizen	1	Very little	36	26	1,238	21	1,730	25	6,730	22	2.3	2.4	-.15	2.3	-.03	2.4	-.12					
		2	Some	48	35	2,060	35	2,520	36	10,895	35												
		3	Quite a bit	34	25	1,486	25	1,756	25	8,106	26												
		4	Very much	19	14	1,097	19	1,028	15	5,342	17												
		Total		137	100	5,881	100	7,034	100	31,073	100												
19. How would you evaluate your entire educational experience at this institution?																							
	evalexp	1	Poor	5	4	233	4	284	4	1,227	4	3.3	3.1 *	.17	3.1 *	.21	3.1 *	.20					
		2	Fair	10	7	910	15	1,073	15	4,834	16												
		3	Good	66	48	2,649	45	3,369	48	14,552	47												
		4	Excellent	56	41	2,098	36	2,327	33	10,536	34												
		Total		137	100	5,890	100	7,053	100	31,149	100												
20. If you could start over again, would you go to the same institution you are now attending?																							
	sameinst	1	Definitely no	4	3	316	5	399	6	1,742	6	3.3	3.2	.16	3.1 **	.22	3.1 *	.21					
		2	Probably no	11	8	760	13	995	14	4,420	14												
		3	Probably yes	62	45	2,479	42	3,094	44	13,453	43												
		4	Definitely yes	60	44	2,344	40	2,573	36	11,575	37												
		Total		137	100	5,899	100	7,061	100	31,190	100												

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Engineering

Tennessee Technological University

Engineering

			First-Year Students ^a								Seniors ^a							
			Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
22a. How many majors do you plan to complete? (Do not count minors.)	MAJnum	One	101	99	4,536	89	5,297	89	22,230	86	131	95	5,236	89	6,231	88	27,203	87
		More than one	1	1	556	11	637	11	3,581	14	7	5	659	11	819	12	3,949	13
		Total	102	100	5,092	100	5,934	100	25,811	100	138	100	5,895	100	7,050	100	31,152	100
First major or expected first major, in NSSE's default related-major categories. (This does not reflect any customization made for the Major Field Report.)	MAJfirstcol <i>(Recoded from MAJfirst.)</i>	Arts & Humanities	1	1	202	4	216	4	1,132	4	0	0	186	3	165	2	925	3
		Biological Sci., Agriculture, & Natural Resources	0	0	19	0	12	0	102	0	0	0	19	0	10	0	99	0
		Physical Sci., Mathematics, & Computer Science	25	25	1,314	26	1,275	21	6,843	26	25	18	1,071	18	1,079	15	5,986	19
		Social Sciences	0	0	9	0	14	0	89	0	0	0	12	0	13	0	73	0
		Business	0	0	29	1	32	1	217	1	1	1	38	1	51	1	344	1
		Communications, Media, & Public Relations	0	0	9	0	6	0	59	0	0	0	15	0	7	0	52	0
		Education	0	0	2	0	0	0	14	0	0	0	5	0	4	0	19	0
		Engineering	76	75	3,059	60	4,053	68	14,725	57	110	80	3,754	63	5,071	71	19,100	61
		Health Professions	0	0	2	0	1	0	26	0	0	0	7	0	4	0	44	0
		Social Service Professions	0	0	12	0	14	0	91	0	0	0	25	0	53	1	190	1
		All Other	0	0	479	9	358	6	2,714	10	2	1	816	14	643	9	4,539	14
		Undecided, Undeclared	0	0	0	0	0	0	4	0	0	0	1	0	2	0	4	0
		Total	102	100	5,136	100	5,981	100	26,016	100	138	100	5,949	100	7,102	100	31,375	100
Second major or expected second major, in NSSE's default related-major categories. (This does not reflect any customization made for the Major Field Report.)	MAJsecondcol <i>(Recoded from MAJsecond.)</i>	Arts & Humanities	0	0	68	12	91	15	410	12	0	0	71	11	112	14	349	9
		Biological Sci., Agriculture, & Natural Resources	0	0	17	3	14	2	93	3	0	0	20	3	22	3	105	3
		Physical Sci., Mathematics, & Computer Science	1	100	139	26	162	26	1,065	31	2	33	182	29	170	21	1,041	27
		Social Sciences	0	0	20	4	23	4	150	4	0	0	21	3	32	4	156	4
		Business	0	0	50	9	42	7	264	8	1	17	43	7	44	6	275	7
		Communications, Media, & Public Relations	0	0	5	1	4	1	31	1	0	0	2	0	3	0	14	0
		Education	0	0	5	1	5	1	22	1	1	17	2	0	4	1	13	0
		Engineering	0	0	155	28	181	29	848	24	1	17	179	28	263	33	983	25
		Health Professions	0	0	9	2	10	2	42	1	1	17	8	1	9	1	38	1
		Social Service Professions	0	0	10	2	4	1	53	2	0	0	12	2	14	2	74	2
		All Other	0	0	58	11	67	11	445	13	0	0	93	15	111	14	746	19
		Undecided, Undeclared	0	0	9	2	20	3	68	2	0	0	4	1	15	2	63	2
		Total	1	100	545	100	623	100	3,491	100	6	100	637	100	799	100	3,857	100
23. What is your class level?	class	Freshman/First-year	88	86	4,376	87	5,310	90	22,968	90	0	0	25	0	33	0	123	0
		Sophomore	13	13	540	11	482	8	2,127	8	0	0	110	2	122	2	563	2
		Junior	1	1	108	2	96	2	361	1	11	8	792	13	991	14	4,182	13
		Senior	0	0	9	0	6	0	66	0	115	85	4,857	83	5,779	82	25,547	82
		Unclassified	0	0	20	0	16	0	109	0	9	7	92	2	105	1	603	2
		Total	102	100	5,053	100	5,910	100	25,631	100	135	100	5,876	100	7,030	100	31,018	100

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Engineering

Tennessee Technological University

Engineering

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	NSSE 2019 & 2020								NSSE 2019 & 2020							
			Tennessee Tech		Southeast Public		Carnegie Class		2020		Tennessee Tech		Southeast Public		Carnegie Class		2020	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
24a. How many courses are you taking for credit this current academic term?	coursenum	0	0	0	15	0	14	0	78	0	3	2	125	2	147	2	709	2
		1	0	0	27	1	19	0	153	1	6	4	156	3	173	2	885	3
		2	0	0	50	1	43	1	368	1	3	2	357	6	375	5	1,953	6
		3	3	3	103	2	122	2	864	3	9	7	645	11	620	9	3,273	11
		4	21	21	1,179	23	1,191	20	6,571	26	33	24	1,692	29	1,864	27	8,872	29
		5	53	52	2,104	42	2,628	44	10,447	41	59	43	1,700	29	2,231	32	8,776	28
		6	15	15	958	19	1,207	20	4,274	17	15	11	707	12	1,001	14	3,782	12
		7 or more	10	10	632	12	700	12	2,947	11	9	7	503	9	620	9	2,811	9
		Total	102	100	5,068	100	5,924	100	25,702	100	137	100	5,885	100	7,031	100	31,061	100
b. Of these, how many are taught mostly or entirely online (most or all interactions with instructors and students take place online)?	onlinenum20	0	72	71	2,232	59	1,787	65	10,587	65	113	82	2,677	59	2,230	61	11,868	62
		1	14	14	839	22	554	20	2,794	17	12	9	875	19	689	19	3,360	18
		2	7	7	297	8	174	6	905	6	5	4	366	8	261	7	1,329	7
		3	0	0	107	3	72	3	400	2	3	2	205	5	152	4	851	4
		4	4	4	111	3	70	3	655	4	1	1	211	5	149	4	827	4
		5	2	2	118	3	58	2	429	3	0	0	123	3	71	2	404	2
		6	0	0	55	1	21	1	186	1	2	1	50	1	33	1	210	1
		7 or more	3	3	28	1	21	1	231	1	1	1	34	1	46	1	315	2
		Total	102	100	3,787	100	2,757	100	16,187	100	137	100	4,541	100	3,631	100	19,164	100
Collapsed recode of courses taken online (Based on responses to coursenum and onlinenum20.)	onlinecscol20	No courses taken online	72	71	2,229	59	1,785	65	10,581	65	113	82	2,674	59	2,224	61	11,856	62
		Some courses taken online	22	22	1,234	33	793	29	3,969	25	17	12	1,273	28	924	25	4,630	24
		All courses taken online	8	8	321	8	175	6	1,628	10	7	5	591	13	477	13	2,664	14
		Total	102	100	3,784	100	2,753	100	16,178	100	137	100	4,538	100	3,625	100	19,150	100
25. What have most of your grades been up to now at this institution?	grades	C- or lower	5	5	68	1	85	1	425	2	2	1	41	1	37	1	168	1
		C	1	1	125	2	135	2	613	2	3	2	137	2	174	2	779	3
		C+	7	7	189	4	197	3	918	4	15	11	323	6	342	5	1,424	5
		B-	7	7	296	6	375	6	1,574	6	7	5	407	7	525	7	2,272	7
		B	22	22	722	14	956	16	4,129	16	25	18	1,171	20	1,382	20	6,072	20
		B+	14	14	882	17	1,011	17	4,574	18	22	16	997	17	1,289	18	5,606	18
		A-	19	19	1,051	21	1,274	22	5,424	21	23	17	977	17	1,312	19	5,837	19
		A	27	26	1,724	34	1,881	32	8,000	31	40	29	1,812	31	1,956	28	8,830	28
		Total	102	100	5,057	100	5,914	100	25,657	100	137	100	5,865	100	7,017	100	30,988	100
26. Did you begin college at this institution or elsewhere?	begincol	Started here	93	91	4,544	90	5,456	92	23,371	91	80	59	3,402	58	4,423	63	18,096	59
		Started elsewhere	9	9	492	10	447	8	2,192	9	56	41	2,440	42	2,587	37	12,803	41
		Total	102	100	5,036	100	5,903	100	25,563	100	136	100	5,842	100	7,010	100	30,899	100

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Engineering

Tennessee Technological University

Engineering

			First-Year Students ^a								Seniors ^a							
			Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
27. Since graduating from high school, which of the following types of schools have you attended <i>other than</i> the one you are now attending? (Select all that apply.)	attend_voc	Vocational or technical school	1	1	128	3	138	2	796	3	6	4	352	6	401	6	2,097	7
	attend_com	Community or junior college	13	13	498	10	508	9	2,344	9	53	39	2,157	37	2,374	34	11,740	38
	attend_col	4-year college or university other than this one	4	4	374	7	420	7	2,025	8	31	23	1,517	26	1,646	24	7,618	25
	attend_none	None	85	83	3,994	79	4,752	81	20,232	79	62	46	2,556	44	3,436	49	13,622	44
	attend_other	Other	2	2	127	3	173	3	811	3	4	3	210	4	259	4	1,250	4
28. What is the highest level of education you ever expect to complete?	edaspire	Some college but less than a bachelor's degree	1	1	275	5	297	5	1,522	6	6	4	344	6	439	6	2,093	7
		Bachelor's degree (B.A., B.S., etc.)	46	45	2,134	42	2,436	41	11,049	43	60	44	2,424	41	2,875	41	13,334	43
		Master's degree (M.A., M.S., etc.)	44	43	2,016	40	2,508	43	10,098	39	64	47	2,266	39	2,919	42	12,035	39
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	11	11	617	12	657	11	2,914	11	7	5	831	14	789	11	3,508	11
		Total	102	100	5,042	100	5,898	100	25,583	100	137	100	5,865	100	7,022	100	30,970	100
29. What is the highest level of education completed by either of your parents (or those who raised you)?	parented	Did not finish high school	3	3	173	3	235	4	1,327	5	6	4	211	4	270	4	1,614	5
		High school diploma or G.E.D.	14	14	652	13	709	12	3,549	14	19	14	859	15	945	13	4,684	15
		Attended college, but did not complete degree	10	10	431	9	433	7	1,978	8	12	9	443	8	569	8	2,453	8
		Associate's degree (A.A., A.S., etc.)	14	14	377	7	446	8	1,939	8	9	7	485	8	620	9	2,674	9
		Bachelor's degree (B.A., B.S., etc.)	33	32	1,652	33	2,022	34	8,318	33	51	37	1,901	32	2,345	33	10,127	33
		Master's degree (M.A., M.S., etc.)	25	25	1,291	26	1,539	26	6,278	25	26	19	1,429	24	1,649	24	6,805	22
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	3	3	451	9	501	9	2,126	8	14	10	531	9	606	9	2,536	8
		Total	102	100	5,027	100	5,885	100	25,515	100	137	100	5,859	100	7,004	100	30,893	100
First-generation status (Neither parent holds a bachelor's degree.)	firstgen (Recoded from parented.)	Not first-generation	61	60	3,394	68	4,062	69	16,722	66	91	66	3,861	66	4,600	66	19,468	63
		First-generation	41	40	1,633	32	1,823	31	8,793	34	46	34	1,998	34	2,404	34	11,425	37
		Total	102	100	5,027	100	5,885	100	25,515	100	137	100	5,859	100	7,004	100	30,893	100
30. What is your gender identity?	genderid	Man	82	80	3,323	66	3,961	67	17,132	67	99	72	3,783	65	4,765	68	20,898	68
		Woman	18	18	1,595	32	1,793	30	7,844	31	31	23	1,891	32	2,042	29	9,086	29
		Another gender identity	2	2	53	1	61	1	255	1	5	4	79	1	78	1	351	1
		I prefer not to respond	0	0	71	1	83	1	362	1	2	1	108	2	127	2	599	2
		Total	102	100	5,042	100	5,898	100	25,593	100	137	100	5,861	100	7,012	100	30,934	100
31. Enter your year of birth (e.g., 1994):	agecat (Recoded from the information entered in birthyear.)	19 or younger	94	93	4,647	93	5,318	91	22,727	90	0	0	87	2	66	1	303	1
		20-23	5	5	235	5	409	7	1,501	6	106	79	3,978	69	4,725	68	20,167	66
		24-29	1	1	61	1	61	1	451	2	20	15	1,000	17	1,308	19	5,670	19
		30-39	1	1	36	1	47	1	425	2	7	5	495	9	570	8	2,897	9
		40-55	0	0	24	0	30	1	254	1	1	1	207	4	253	4	1,395	5
		Over 55	0	0	4	0	1	0	34	0	0	0	31	1	23	0	165	1
		Total	101	100	5,007	100	5,866	100	25,392	100	134	100	5,798	100	6,945	100	30,597	100

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Engineering

Tennessee Technological University

Engineering

			First-Year Students ^a								Seniors ^a								
			Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
32a. Are you an international student? [If answered "yes"] Country of citizenship, collapsed into regions by NSSE. Responses to country are in the data file.	internat	No	100	98	4,738	94	5,580	95	23,712	93	130	95	5,455	93	6,585	94	28,747	93	
		Yes	2	2	297	6	305	5	1,821	7	7	5	389	7	411	6	2,103	7	
		Total	102	100	5,035	100	5,885	100	25,533	100	137	100	5,844	100	6,996	100	30,850	100	
	countrycol (Recoded from country.)	Africa Sub-Saharan	0	0	36	14	27	10	176	11	0	0	24	7	36	10	169	9	
		Asia	1	50	129	50	123	47	900	56	3	43	148	42	155	43	950	51	
		Canada	0	0	3	1	6	2	32	2	0	0	3	1	10	3	28	2	
		Europe	0	0	29	11	21	8	139	9	1	14	28	8	29	8	143	8	
		Latin America and Caribbean	1	50	37	14	39	15	216	14	2	29	92	26	65	18	301	16	
		Middle East and North Africa	0	0	24	9	45	17	121	8	0	0	54	15	65	18	262	14	
		Oceania	0	0	0	0	1	0	10	1	1	14	0	0	1	0	8	0	
Unknown region/uncoded		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	2	100	258	100	262	100	1,594	100	7	100	349	100	361	100	1,861	100			
33. How would you describe yourself? (Select all that apply.)	re_amin	American Indian or Alaska Native	0	0	102	2	91	2	489	2	2	1	95	2	121	2	537	2	
		Asian	7	7	658	13	692	12	4,147	16	11	8	708	12	687	10	4,485	15	
		re_black	4	4	805	16	528	9	2,468	10	8	6	680	12	496	7	2,241	7	
		re_latino	12	12	579	12	854	15	3,967	16	8	6	656	11	853	12	4,061	13	
		re_mena	1	1	92	2	106	2	490	2	2	1	146	3	169	2	735	2	
		re_pacific	0	0	38	1	47	1	304	1	1	1	47	1	68	1	343	1	
		re_white	82	80	3,251	65	3,972	68	15,807	62	117	85	3,844	66	4,889	70	19,965	65	
		re_another	0	0	58	1	80	1	374	1	2	1	102	2	99	1	512	2	
	re_pnr	2	2	123	2	177	3	718	3	2	1	190	3	271	4	1,142	4		
	Racial or ethnic identification	re_all19	American Indian or Alaska Native	0	0	15	0	19	0	99	0	0	0	13	0	26	0	101	0
		(Items re_amin to re_pnr recoded where each student is represented only once)	Asian	6	6	492	10	530	9	3,301	13	7	5	576	10	531	8	3,643	12
		Black or African American	4	4	671	13	427	7	1,924	8	6	4	567	10	409	6	1,759	6	
		Hispanic or Latina/o	7	7	285	6	555	9	2,587	10	5	4	393	7	582	8	2,845	9	
		Middle Eastern or N. African	0	0	58	1	73	1	279	1	0	0	98	2	117	2	486	2	
Native Hawaiian/Other Pac. Islander		0	0	3	0	11	0	59	0	0	0	8	0	14	0	83	0		
White		77	75	2,759	55	3,444	59	13,477	53	108	79	3,407	58	4,404	63	17,773	58		
Another race or ethnicity		0	0	22	0	34	1	161	1	0	0	45	1	49	1	268	1		
Multiracial	6	6	596	12	606	10	2,850	11	9	7	530	9	573	8	2,673	9			
I prefer not to respond	2	2	123	2	177	3	718	3	2	1	190	3	271	4	1,142	4			
Total	102	100	5,024	100	5,876	100	25,455	100	137	100	5,827	100	6,976	100	30,773	100			
34. Are you a member of a social fraternity or sorority?	greek	No	92	90	4,612	92	5,435	92	23,776	93	124	91	5,147	88	6,249	89	27,843	90	
		Yes	10	10	424	8	458	8	1,756	7	12	9	692	12	749	11	3,024	10	
		Total	102	100	5,036	100	5,893	100	25,532	100	136	100	5,839	100	6,998	100	30,867	100	

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Engineering

Tennessee Technological University

Engineering

			First-Year Students ^a								Seniors ^a							
Item wording or description	Variable name	Response options	Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020		Tennessee Tech		Southeast Public		Carnegie Class		NSSE 2019 & 2020	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35. Which of the following best describes where you are living while attending college?	living18	Campus housing (other than a fraternity or sorority house)	68	68	3,415	68	4,139	71	16,721	66	9	7	704	12	925	13	4,626	15
		Fraternity or sorority house	1	1	26	1	62	1	196	1	1	1	103	2	137	2	491	2
		House, apartment, or other residence within walking distance to campus	12	12	341	7	403	7	1,627	6	55	40	1,520	26	2,121	30	8,192	27
		House, apartment, or other residence farther than walk. dist. to campus	18	18	1,166	23	1,194	20	6,018	24	69	51	3,326	57	3,405	49	15,391	50
		Not applicable: No campus, entirely online program, etc.	1	1	52	1	52	1	795	3	1	1	153	3	370	5	1,966	6
		Not applicable: Homeless or in transition	0	0	14	0	14	0	73	0	1	1	20	0	26	0	109	0
		Total	100	100	5,014	100	5,864	100	25,430	100	136	100	5,826	100	6,984	100	30,775	100
36. Are you a student-athlete on a team sponsored by your institution's athletics department?	athlete	No	99	97	4,849	97	5,556	95	23,697	93	132	97	5,697	98	6,717	96	29,606	96
		Yes	3	3	173	3	318	5	1,773	7	4	3	129	2	269	4	1,190	4
		Total	102	100	5,022	100	5,874	100	25,470	100	136	100	5,826	100	6,986	100	30,796	100
37. Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?	veteran	No	99	97	4,908	98	5,787	98	24,541	96	133	97	5,424	93	6,512	93	28,250	92
		Yes	3	3	112	2	91	2	943	4	4	3	396	7	472	7	2,546	8
		Total	102	100	5,020	100	5,878	100	25,484	100	137	100	5,820	100	6,984	100	30,796	100
38a. Have you been diagnosed with any disability or impairment?	disability	No	87	85	4,287	85	5,016	85	21,866	86	121	88	4,864	83	5,870	84	25,915	84
		Yes	12	12	539	11	663	11	2,728	11	10	7	737	13	862	12	3,719	12
		I prefer not to respond	3	3	202	4	206	4	922	4	6	4	238	4	273	4	1,222	4
		Total	102	100	5,028	100	5,885	100	25,516	100	137	100	5,839	100	7,005	100	30,856	100
b. [If answered "yes"] Which of the following has been diagnosed? (Select all that apply.)	dis_sense dis_mobility dis_learning dis_mental dis_other	A sensory impairment (vision or hearing)	1	8	92	17	100	15	460	17	0	0	105	14	126	15	542	15
		A mobility impairment	1	8	43	8	26	4	178	7	1	10	65	9	62	7	360	10
		A learning disability (e.g., ADHD, dyslexia)	5	42	271	51	345	52	1,327	49	5	50	329	45	383	45	1,584	43
		A mental health disorder	2	17	182	34	249	38	1,050	39	2	20	298	41	353	41	1,533	42
		A disability or impairment not listed above	6	50	100	19	105	16	482	18	2	20	147	20	172	20	797	22
		Disability or impairment	disability_all (Items dis_sense to dis_other recoded where each student is represented only once.)	1	1	57	1	64	1	279	1	0	0	57	1	75	1	280
		A mobility impairment	0	0	22	0	13	0	80	0	1	1	31	1	28	0	151	0
		A learning disability	3	3	176	4	238	4	862	3	5	4	209	4	245	4	1,006	3
		A mental health disorder	1	1	94	2	145	2	577	2	2	1	167	3	201	3	863	3
		A disability or impairment not listed	4	4	57	1	64	1	280	1	2	1	93	2	106	2	488	2
		More than one disability or impairment	3	3	130	3	137	2	636	2	0	0	173	3	202	3	902	3
		No disability or impairment	87	85	4,287	85	5,016	85	21,866	86	121	88	4,864	83	5,870	84	25,915	84
		Prefer not to respond	3	3	202	4	206	4	922	4	6	4	238	4	273	4	1,222	4
		Total	102	100	5,025	100	5,883	100	25,502	100	137	100	5,832	100	7,000	100	30,827	100

NSSE 2020 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Engineering

Tennessee Technological University

Engineering

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	NSSE 2019 & 2020								NSSE 2019 & 2020							
			Tennessee Tech		Southeast Public		Carnegie Class		2020		Tennessee Tech		Southeast Public		Carnegie Class		2020	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
39. Which of the following best describes your sexual orientation?	sexorient17	Straight (heterosexual)	93	91	4,209	84	4,948	84	21,393	84	119	88	4,932	85	5,878	84	25,984	84
		Bisexual	2	2	288	6	335	6	1,442	6	7	5	297	5	365	5	1,530	5
		Gay	2	2	89	2	90	2	389	2	3	2	97	2	120	2	511	2
		Lesbian	0	0	58	1	53	1	239	1	0	0	55	1	70	1	259	1
		Queer	0	0	26	1	24	0	135	1	0	0	36	1	50	1	212	1
		Questioning or unsure	0	0	82	2	88	1	414	2	0	0	51	1	62	1	282	1
		Another sexual orientation	2	2	60	1	84	1	331	1	4	3	84	1	96	1	420	1
		I prefer not to respond	3	3	222	4	263	4	1,167	5	3	2	284	5	359	5	1,651	5
Total			102	100	5,034	100	5,885	100	25,510	100	136	100	5,836	100	7,000	100	30,849	100
Institution-reported information (Variables provided by your institution in your NSSE population file.)																		
Institution-reported: Sex	IRsex19	Female	18	18	1,696	33	1,864	31	8,164	31	31	22	1,947	33	2,127	30	9,429	30
		Male	84	82	3,439	67	4,115	69	17,784	68	107	78	4,002	67	4,975	70	21,899	70
		Another	0	0	1	0	1	0	3	0	0	0	0	0	0	0	2	0
		Unknown	0	0	0	0	1	0	67	0	0	0	1	0	1	0	49	0
		Total			102	100	5,136	100	5,981	100	26,018	100	138	100	5,950	100	7,103	100
Institution-reported: Race or ethnicity	IRrace	American Indian or Alaska Native	0	0	11	0	7	0	67	0	0	0	16	0	19	0	123	0
		Asian	5	5	336	8	341	7	2,360	10	8	6	389	8	337	6	2,647	9
		Black or African American	4	4	584	13	363	7	1,675	7	7	5	505	10	356	6	1,580	6
		Hispanic or Latino	0	0	487	11	724	14	3,354	14	0	0	554	11	681	11	3,408	12
		Native Hawaiian/Other Pac. Islander	0	0	4	0	65	1	121	1	0	0	5	0	54	1	135	0
		White	82	80	2,494	56	3,042	59	12,472	54	115	83	2,930	59	3,937	65	16,418	58
		Other	0	0	0	0	6	0	6	0	0	0	0	0	7	0	11	0
		Foreign or nonresident	0	0	192	4	253	5	1,508	6	0	0	290	6	331	5	1,780	6
		Two or more races/ethnicities	8	8	207	5	186	4	996	4	6	4	172	3	192	3	1,040	4
Total			102	100	4,418	100	5,120	100	23,245	100	138	100	4,961	100	6,068	100	28,155	100
Institution-reported: Class level	IRclass	Freshman/First-year	102	100	5,136	100	5,981	100	26,018	100	0	0	0	0	0	0	0	0
		Sophomore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Junior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Senior	0	0	0	0	0	0	0	0	138	100	5,950	100	7,103	100	31,379	100
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total			102	100	5,136	100	5,981	100	26,018	100	138	100	5,950	100	7,103	100
Institution-reported: First-time first-year (FTFY) student	IRftfy	Not first-time first-year	11	11	1,012	20	375	6	3,016	12	136	99	5,940	100	7,012	99	31,059	99
		First-time first-year	91	89	4,124	80	5,606	94	23,002	88	2	1	10	0	91	1	320	1
		Total			102	100	5,136	100	5,981	100	26,018	100	138	100	5,950	100	7,103	100
Institution-reported: Enrollment status	IRenrollment	Not full-time	2	2	199	4	142	2	901	3	20	14	977	16	1,006	14	4,718	15
		Full-time	100	98	4,937	96	5,839	98	25,117	97	118	86	4,973	84	6,097	86	26,661	85
		Total			102	100	5,136	100	5,981	100	26,018	100	138	100	5,950	100	7,103	100

Endnotes

- a. All results are unweighted.
- 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 is the range of values that is 95% likely to contain the true population mean, equal to the sample mean $\pm 1.96 * SEM$.
- 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 differ from Ns due to 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: $*p < .05$, $**p < .01$, $***p < .001$ (2-tailed).
- g. Cohen's d : The mean difference divided by the pooled standard deviation. Effect size indicates the practical importance of an observed difference. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview.
- h. Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project.
- i. Percentage point differences (institution – comp. group) rounded to whole numbers. Values less than one may not display a bar and may be shown as +0 or -0.
 $*p < .05$, $**p < .01$, $***p < .001$ (z -test comparing participation rates).
- j. Cohen's h : The standardized difference between two proportions. Effect size indicates the practical importance of an observed difference. NSSE research has found that interpretations vary by HIP: For service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large. For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).
- k. Means calculated from ordered response options (e.g., Very Often, Often, Sometimes, Never) assume equal intervals and should be interpreted with caution. Unless otherwise noted, statistical comparisons are two-tailed independent t -tests. Exceptions are the dichotomous high-impact practice items (11a to 11f) which are compared using a z -test.
- l. Items that make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective and Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.
- m. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook. For items estimating number of papers and hours per week, the values represent actual units using the midpoints of response option ranges and an estimate for unbounded options.
- n. Effect size for independent t -tests uses Cohen's d ; z -tests use Cohen's h .
- o. Statistical comparison uses z -test to compare the percentage who responded "Done or in progress."

Key to symbols:

- ▲ 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.
- ▽ 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.

Note: It is important to interpret the direction of differences relative to item wording and your institutional context.

Reference: 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.