

2019 Topical Module: Learning with Technology

Profile of Participating Institutions and Respondents and All Bachelor's-Granting U.S. Institutions and Students

Topical modules are short sets of questions on a topic related to current issues in higher education and student engagement that may be appended to the core survey. The **Learning with Technology** module examines the role of technology in student learning, focusing on student use of technology and perceptions of institutional support. In 2019, 21 U.S. institutions elected to append these items to the core survey. Of these, 19 belonged to one of the eight Carnegie classifications shown in the table below.^a

The institutions and respondents participating in a given module are only a subset of all NSSE participating institutions and respondents. The table below displays the characteristics for module participants alongside NSSE 2019 participants as well as all bachelor's-granting U.S. institutions and students (all limited to the eight indicated Carnegie Classification categories).

	Institutions			Students		
	Learning w/ Tech Module (%)	NSSE 2019 (%)	U.S. ^b (%)	Learning w/ Tech Module (%)	NSSE 2019 (%)	U.S. ^b (%)
Carnegie Basic Classification^c						
Doctoral Universities – Very high research activity	16	6	7	18	20	27
Doctoral Universities - High research activity	11	10	6	41	18	14
Doctoral/Professional Universities	16	13	7	9	17	11
Master's Colleges and Universities - Larger programs	21	26	25	20	25	28
Master's Colleges and Universities - Medium programs	5	15	13	3	8	7
Master's Colleges and Universities - Smaller programs	0	6	9	0	3	3
Baccalaureate Colleges: Arts & Sciences Focus	11	12	15	5	5	4
Baccalaureate Colleges: Diverse Fields	21	12	18	4	4	5
Control						
Public	47	42	35	46	62	67
Private	53	58	65	54	38	33
Undergraduate enrollment						
Fewer than 1,000	11	12	21	2	3	2
1,000 – 2,499	26	33	32	7	14	10
2,500 – 4,999	11	21	17	6	14	11
5,000 – 9,999	26	17	14	24	20	18
10,000 – 19,999	5	10	9	9	21	23
20,000 or more	21	7	6	52	29	35

a. All numbers are unweighted and based on U.S. postsecondary institutions that award bachelor's degrees and belong to one of the eight Carnegie Classification categories in the table. Totals may not sum to 100% due to rounding.

b. U.S. percentages are based on the 2018 IPEDS Institutional Characteristics file.

c. For information on the Carnegie Foundation's Basic Classification, see carnegieclassifications.iu.edu

NSSE 2019 Topical Modules

U.S. Summary Frequencies by Class and Sex

Learning with Technology

First-Year Students

Seniors

Item wording or description	Variable name	Response options	Female		Male		Total		Female		Male		Total	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
1. During the current school year, how much has your use of technology contributed to the following:														
a. Your understanding of course materials and ideas	TEC01a	Very little	38	1	37	2	75	2	57	2	61	2	118	2
		Some	386	10	265	12	651	11	457	8	304	9	762	9
		Quite a bit	1,312	34	876	38	2,189	36	1,466	28	1,022	32	2,490	30
		Very much	1,712	55	967	47	2,686	52	2,535	62	1,664	57	4,207	59
		Total	3,448	100	2,145	100	5,601	100	4,515	100	3,051	100	7,577	100
b. Demonstrating your understanding of course content	TEC01b	Very little	55	1	45	3	100	2	70	2	63	2	133	2
		Some	497	11	357	16	854	13	569	11	423	12	993	11
		Quite a bit	1,471	39	935	41	2,408	40	1,622	32	1,131	36	2,757	34
		Very much	1,403	48	793	41	2,202	45	2,223	56	1,422	50	3,651	53
		Total	3,426	100	2,130	100	5,564	100	4,484	100	3,039	100	7,534	100
c. Learning, studying, or completing coursework on your own	TEC01c	Very little	17	0	23	1	40	1	36	1	30	1	66	1
		Some	225	6	161	8	386	7	252	5	213	7	465	6
		Quite a bit	1,067	28	719	32	1,787	29	1,189	24	879	28	2,071	26
		Very much	2,132	66	1,240	59	3,379	63	3,031	70	1,922	64	4,961	67
		Total	3,441	100	2,143	100	5,592	100	4,508	100	3,044	100	7,563	100
d. Learning, studying, or completing coursework with other students	TEC01d	Very little	241	10	206	12	449	10	268	6	200	6	470	6
		Some	801	20	570	26	1,372	22	788	17	638	20	1,428	18
		Quite a bit	1,179	31	706	30	1,885	31	1,386	28	1,006	33	2,395	30
		Very much	1,225	39	663	33	1,893	36	2,065	49	1,199	41	3,268	45
		Total	3,446	100	2,145	100	5,599	100	4,507	100	3,043	100	7,561	100
e. Distracting you from completing your coursework	TEC01e	Very little	378	19	271	17	650	18	812	26	471	20	1,286	23
		Some	1,341	37	865	38	2,209	37	1,728	36	1,177	38	2,912	37
		Quite a bit	1,105	27	618	28	1,725	28	1,213	23	814	23	2,027	23
		Very much	619	17	390	17	1,011	17	760	15	581	19	1,342	17
		Total	3,443	100	2,144	100	5,595	100	4,513	100	3,043	100	7,567	100
2. During the current school year, how much have your courses improved your understanding and use of technology?														
	TEC02	Very little	446	13	303	14	750	13	605	14	394	12	1,000	13
		Some	1,334	34	768	33	2,106	34	1,514	30	864	28	2,384	29
		Quite a bit	1,044	28	658	30	1,702	29	1,406	30	941	32	2,350	31
		Very much	612	24	409	23	1,024	24	967	26	847	28	1,814	27
		Total	3,436	100	2,138	100	5,582	100	4,492	100	3,046	100	7,548	100
3. During the current school year, about how often have you used the following technologies in your courses?														
a. Electronic textbooks	TEC03a	Never	389	8	190	9	581	8	826	13	349	10	1,175	12
		Sometimes	1,153	25	706	31	1,861	27	1,451	26	953	27	2,405	27
		Often	985	26	630	29	1,619	27	941	19	784	22	1,728	20
		Very often	914	41	610	32	1,524	37	1,280	41	959	40	2,246	41
		I don't know what this is	4	0	7	0	11	0	6	0	5	0	11	0
	Total	3,445	100	2,143	100	5,596	100	4,504	100	3,050	100	7,565	100	
b. Online portfolios or e-portfolios	TEC03b	Never	1,294	31	758	29	2,057	30	1,632	33	1,075	32	2,710	32
		Sometimes	769	21	576	29	1,346	25	1,113	24	812	27	1,928	25
		Often	363	11	260	13	624	12	539	11	347	12	887	12
		Very often	244	16	137	11	381	14	470	15	294	14	764	14
		I don't know what this is	769	20	408	18	1,178	19	754	17	513	16	1,271	17
	Total	3,439	100	2,139	100	5,586	100	4,508	100	3,041	100	7,560	100	
c. Blogs	TEC03c	Never	2,396	65	1,523	65	3,925	65	2,756	56	1,876	55	4,637	56
		Sometimes	739	22	448	22	1,188	22	1,238	30	822	30	2,066	30
		Often	168	5	89	6	258	5	280	7	189	7	469	7
		Very often	94	7	52	5	146	6	193	6	118	6	311	6
		I don't know what this is	40	2	33	2	73	2	35	1	37	2	72	1
	Total	3,437	100	2,145	100	5,590	100	4,502	100	3,042	100	7,555	100	

Note: Results weighted by institution-reported sex, enrollment status, and institution size. Counts are not weighted.

NSSE 2019 Topical Modules

U.S. Summary Frequencies by Class and Sex

Learning with Technology

First-Year Students

Seniors

Item wording or description	Variable name	Response options	First-Year Students				Seniors							
			Female		Male		Total		Female		Male		Total	
			Count	%	Count	%	Count	%	Count	%	Count	%		
d. Collaborative editing software (Wikis, Google Docs, etc.)	TEC03d	Never	317	14	263	13	582	14	414	13	275	12	691	13
		Sometimes	925	25	754	34	1,681	29	1,031	25	773	25	1,808	25
		Often	1,063	27	660	29	1,726	28	1,251	25	969	31	2,222	27
		Very often	1,127	34	449	23	1,577	29	1,786	36	1,007	32	2,796	34
		I don't know what this is	12	1	15	1	27	1	24	1	15	1	39	1
		Total	3,444	100	2,141	100	5,593	100	4,506	100	3,039	100	7,556	100
e. Multimedia software (drawing, audio or video production, editing, etc.)	TEC03e	Never	1,840	52	1,003	45	2,846	49	2,053	41	1,209	37	3,268	39
		Sometimes	938	24	671	29	1,612	26	1,377	31	998	32	2,380	32
		Often	365	11	275	14	642	12	552	13	436	15	988	14
		Very often	255	11	164	11	419	11	485	13	379	15	864	14
		I don't know what this is	40	1	28	1	68	1	35	1	20	1	55	1
		Total	3,438	100	2,141	100	5,587	100	4,502	100	3,042	100	7,555	100
f. Social networking (Facebook, Twitter, etc.)	TEC03f	Never	1,683	50	1,134	52	2,820	51	1,975	46	1,542	50	3,524	48
		Sometimes	943	25	613	25	1,556	25	1,445	30	885	26	2,331	28
		Often	438	11	216	11	656	11	565	12	322	11	889	12
		Very often	368	14	167	11	538	12	502	11	286	13	789	12
		I don't know what this is	6	0	13	1	19	0	13	0	9	0	22	0
		Total	3,438	100	2,143	100	5,589	100	4,500	100	3,044	100	7,555	100
g. Mobile computing (handheld devices such as smartphones, tablets, etc.)	TEC03g	Never	349	11	234	12	584	12	521	12	366	13	889	12
		Sometimes	1,179	30	803	34	1,982	32	1,534	32	1,040	32	2,574	32
		Often	952	25	594	26	1,549	25	1,126	24	800	25	1,931	25
		Very often	955	34	504	26	1,463	30	1,299	32	836	31	2,139	31
		I don't know what this is	7	0	7	1	14	0	16	0	4	0	20	0
		Total	3,442	100	2,142	100	5,592	100	4,496	100	3,046	100	7,553	100

4. During the current school year, about how often have you used technology to communicate with the following people?

a. Students	TEC04a	Never	51	3	34	2	87	3	58	2	59	2	118	2
		Sometimes	338	12	297	16	635	14	384	10	319	11	705	10
		Often	744	20	564	25	1,310	22	830	18	707	23	1,538	20
		Very often	2,307	65	1,244	58	3,555	62	3,216	71	1,956	65	5,179	68
		Total	3,440	100	2,139	100	5,587	100	4,488	100	3,041	100	7,540	100
b. Academic advisors	TEC04b	Never	360	7	335	12	697	9	413	7	426	11	839	9
		Sometimes	1,189	32	887	40	2,078	35	1,327	29	1,130	37	2,462	33
		Often	974	29	569	28	1,544	28	1,163	25	744	24	1,909	24
		Very often	917	32	347	20	1,267	27	1,603	39	745	28	2,352	34
		Total	3,440	100	2,138	100	5,586	100	4,506	100	3,045	100	7,562	100
c. Faculty	TEC04c	Never	210	5	215	9	426	7	140	4	129	4	269	4
		Sometimes	1,194	32	880	39	2,076	35	1,038	23	961	32	2,001	27
		Often	1,083	29	643	28	1,728	29	1,424	29	1,023	31	2,451	30
		Very often	955	34	399	24	1,357	30	1,896	45	931	33	2,832	39
		Total	3,442	100	2,137	100	5,587	100	4,498	100	3,044	100	7,553	100
d. Student services staff (career services, student activities, housing, etc.)	TEC04d	Never	726	28	595	32	1,324	30	1,550	39	1,032	36	2,585	37
		Sometimes	1,397	35	922	39	2,321	36	1,434	29	1,091	33	2,529	31
		Often	694	17	375	16	1,071	17	671	13	477	15	1,148	14
		Very often	624	20	243	13	868	17	840	20	442	16	1,286	18
		Total	3,441	100	2,135	100	5,584	100	4,495	100	3,042	100	7,548	100
e. Other administrative staff and offices (registrar, financial aid, etc.)	TEC04e	Never	783	22	569	26	1,353	23	943	20	726	24	1,671	22
		Sometimes	1,449	40	959	43	2,412	41	1,900	40	1,389	43	3,294	41
		Often	607	18	374	18	982	18	784	17	502	17	1,286	17
		Very often	598	21	234	14	834	18	866	22	422	15	1,292	19
		Total	3,437	100	2,136	100	5,581	100	4,493	100	3,039	100	7,543	100

Note: Results weighted by institution-reported sex, enrollment status, and institution size. Counts are not weighted.

NSSE 2019 Topical Modules

U.S. Summary Frequencies by Class and Sex

Learning with Technology

Item wording or description	Variable name	Response options	First-Year Students						Seniors					
			Female		Male		Total		Female		Male		Total	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
5. How much does your institution emphasize the following?														
a. Teaching with new, cutting-edge technologies	TEC05a	Very little	457	12	280	11	738	11	708	14	458	14	1,167	14
		Some	1,433	38	881	36	2,316	37	1,764	35	1,184	35	2,951	35
		Quite a bit	1,111	31	699	35	1,812	33	1,371	33	955	32	2,322	33
		Very much	434	19	276	18	713	19	644	18	443	20	1,088	19
		Total	3,435	100	2,136	100	5,579	100	4,487	100	3,040	100	7,538	100
b. Providing technology to help you learn, study or complete coursework	TEC05b	Very little	254	7	200	9	454	8	440	10	295	11	737	10
		Some	944	26	633	27	1,580	26	1,337	26	917	28	2,257	27
		Quite a bit	1,386	37	867	40	2,256	38	1,681	37	1,173	36	2,858	36
		Very much	844	31	427	25	1,273	28	1,020	27	646	26	1,668	27
		Total	3,428	100	2,127	100	5,563	100	4,478	100	3,031	100	7,520	100
c. Teaching you how to use available technologies to learn, study, or complete coursework	TEC05c	Very little	315	10	193	9	508	9	512	12	327	12	841	12
		Some	1,141	28	699	30	1,842	29	1,547	31	971	28	2,521	30
		Quite a bit	1,270	34	835	38	2,108	36	1,498	33	1,110	37	2,613	35
		Very much	698	28	396	24	1,097	26	919	25	619	24	1,539	24
		Total	3,424	100	2,123	100	5,555	100	4,476	100	3,027	100	7,514	100
d. Providing support services to assist you with your use of technology	TEC05d	Very little	324	9	223	9	548	9	530	11	386	13	918	12
		Some	1,076	28	722	32	1,800	29	1,630	32	1,133	33	2,768	33
		Quite a bit	1,257	35	764	34	2,023	34	1,444	32	1,002	33	2,450	33
		Very much	773	29	416	25	1,192	27	882	25	510	21	1,392	23
		Total	3,430	100	2,125	100	5,563	100	4,486	100	3,031	100	7,528	100

Note: Results weighted by institution-reported sex, enrollment status, and institution size. Counts are not weighted.

NSSE 2019 Topical Modules

U.S. Summary Means and Standard Deviations by Class and Sex

Learning with Technology

Item wording or description	Variable name	First-Year Students						Seniors					
		Female		Male		Total		Female		Male		Total	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1. During the current school year, how much has your use of technology contributed to the following:													
a. Your understanding of course materials and ideas	TEC01a	3.43	.71	3.30	.77	3.38	.74	3.50	.71	3.43	.75	3.47	.73
b. Demonstrating your understanding of course content	TEC01b	3.34	.73	3.20	.80	3.28	.76	3.41	.75	3.33	.78	3.37	.76
c. Learning, studying, or completing coursework on your own	TEC01c	3.59	.62	3.48	.70	3.55	.66	3.64	.61	3.55	.67	3.60	.64
d. Learning, studying, or completing coursework with other students	TEC01d	3.00	.99	2.84	1.01	2.93	1.00	3.19	.93	3.09	.92	3.15	.93
e. Distracting you from completing your coursework	TEC01e	2.44	.98	2.46	.97	2.45	.98	2.26	1.01	2.41	1.01	2.33	1.02
2. During the current school year, how much have your courses improved your understanding and use of technology?													
	TEC02	2.64	.99	2.63	.99	2.63	.99	2.68	1.00	2.76	1.00	2.71	1.00
3. During the current school year, about how often have you used the following technologies in your courses?													
a. Electronic textbooks	TEC03a	3.00	.99	2.84	.97	2.93	.98	2.88	1.10	2.93	1.04	2.90	1.07
b. Online portfolios or e-portfolios	TEC03b	2.16	1.15	2.06	1.02	2.11	1.09	2.09	1.11	2.09	1.08	2.09	1.10
c. Blogs	TEC03c	1.53	.87	1.52	.84	1.52	.86	1.62	.87	1.64	.87	1.63	.87
d. Collaborative editing software (Wikis, Google Docs, etc.)	TEC03d	2.81	1.06	2.63	.98	2.73	1.03	2.85	1.06	2.83	1.01	2.84	1.04
e. Multimedia software (drawing, audio or video production, editing, etc.)	TEC03e	1.81	1.03	1.90	1.02	1.85	1.02	1.97	1.03	2.10	1.07	2.03	1.05
f. Social networking (Facebook, Twitter, etc.)	TEC03f	1.88	1.07	1.79	1.01	1.84	1.05	1.89	1.01	1.86	1.05	1.87	1.03
g. Mobile computing (handheld devices such as smartphones, tablets, etc.)	TEC03g	2.81	1.03	2.67	1.00	2.75	1.02	2.76	1.02	2.74	1.03	2.75	1.03
4. During the current school year, about how often have you used technology to communicate with the following people?													
a. Students	TEC04a	3.46	.83	3.38	.82	3.43	.83	3.58	.73	3.50	.76	3.54	.74
b. Academic advisors	TEC04b	2.86	.96	2.57	.94	2.73	.96	2.95	.99	2.69	1.00	2.83	1.00
c. Faculty	TEC04c	2.93	.92	2.67	.93	2.81	.94	3.14	.90	2.92	.90	3.04	.91
d. Student services staff (career services, student activities, housing, etc.)	TEC04d	2.30	1.08	2.10	1.00	2.21	1.05	2.13	1.13	2.13	1.07	2.13	1.10
e. Other administrative staff and offices (registrar, financial aid, etc.)	TEC04e	2.37	1.04	2.20	.98	2.30	1.01	2.42	1.05	2.24	.99	2.34	1.02
5. How much does your institution emphasize the following?													
a. Teaching with new, cutting-edge technologies	TEC05a	2.57	.93	2.60	.90	2.59	.92	2.54	.94	2.57	.95	2.56	.95
b. Providing technology to help you learn, study or complete coursework	TEC05b	2.91	.91	2.80	.91	2.86	.91	2.82	.95	2.77	.95	2.79	.95
c. Teaching you how to use available technologies to learn, study, or complete coursework	TEC05c	2.80	.96	2.76	.91	2.79	.94	2.71	.97	2.72	.95	2.71	.96
d. Providing support services to assist you with your use of technology	TEC05d	2.84	.94	2.76	.93	2.80	.94	2.70	.96	2.62	.95	2.67	.96

Notes: Results weighted by sex, enrollment status, and institution size. See codebook for variable ranges. Categorical items are not listed.