NSSE 2023

Frequencies and Statistical Comparisons

Virginia Polytechnic Institute and State University

The *Frequencies and Statistical Comparisons* report presents item-by-item student responses and statistical comparisons that allow you to examine patterns of similarity and difference between your students and those at your comparison group institutions. The report uses information from all randomly selected or census-administered students. The display below highlights important details in the report to keep in mind when interpreting your results. For more information please visit our website (nsse.indiana.edu) or contact a member of the NSSE team.

1. *Class level:* As reported by your institution.

2. *Item numbers:* Numbering corresponds to the instrument available on the NSSE website.

3. *Item wording and variable names:* Survey items are in the same order and wording as they appear on the instrument. Variable names are included for easy reference to your data file and codebook.

4. *Values and response options:* Values are used to calculate means. Response options are worded as they appear on the instrument.

5. *Count and column percentage (%):* The Count column contains the number of students who selected the corresponding response option. The column percentage is the weighted percentage of students selecting the corresponding response option.

   Note: Column percentages and statistics are weighted by institution-reported sex and enrollment status. Comparison group statistics are also weighted by institutional size. Counts are unweighted and cannot be used to replicate column percentages. For details visit: go.iu.edu/NSSE-weights

6. *Statistical comparisons:* Items with mean differences that are larger than would be expected by chance are noted with asterisks referring to three significance levels (*p < .05, **p < .01, ***p < .001). Significance levels indicate the probability that an observed difference is due to chance. Statistical significance does not guarantee the result is substantive or important. Large sample sizes will generate more statistically significant results even when the magnitude of mean differences are inconsequential. Consult effect sizes (see #7) to judge the practical meaning of differences. Unless otherwise noted, statistical comparisons are two-tailed independent t-tests. Exceptions are items 11 a-f which are compared using a z-test.

7. *Effect size:* Effect size indicates practical significance. An effect size of .2 is often considered small, .5 moderate, and .8 large (NSSE adjusts this to .1/.3/.5 for the Engagement Indicators). A positive effect size indicates that your institution's mean was greater than that of the comparison group, thus showing a favorable result for your institution. A negative effect size indicates your institution lags behind the comparison group, suggesting that the student behavior or institutional practice represented by the item may warrant attention. Effect sizes for independent t-tests use Cohen's d; z-tests use Cohen's h. Cohen's d is calculated by dividing the mean difference by the pooled standard deviation. Cohen's h is calculated by taking the difference in the proportion of students who responded "Done or in progress" after the proportion has been transformed using a non-linear (arcsine) transformation. See: Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd edition).* New York: Psychology Press.

8. *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. You may not see all of these symbols in your report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a] **Statistical Comparisons**[b]

Your first-year students compared with

Item wording or description	Variable name [c]	Values [d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size [e]	SCHEV Peers Mean	Effect size [e]	NSSE 2023 Mean	Effect size [e]
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	30	4	2,039	5	212	4	4,187	4							
		2	Sometimes	316	41	19,427	41	2,065	42	41,163	37							
		3	Often	248	33	16,221	34	1,574	34	39,283	34	2.7	2.7	.02	2.7	.03	2.8 * ▽	-.08
		4	Very often	162	21	9,841	20	922	20	27,749	24							
			Total	756	100	47,528	100	4,773	100	112,382	100							
b. Asked another student to help you understand course material	CLaskhelp	1	Never	65	9	4,263	10	458	10	14,272	16							
		2	Sometimes	339	45	18,629	40	1,884	40	44,998	40							
		3	Often	218	29	15,562	32	1,603	33	34,033	29	2.5	2.6	-.06	2.6	-.06	2.4 ** △	.09
		4	Very often	125	16	8,907	18	817	17	18,841	16							
			Total	747	100	47,361	100	4,762	100	112,144	100							
c. Explained course material to one or more students	CLexplain	1	Never	47	7	2,966	7	312	6	10,780	12							
		2	Sometimes	297	39	18,734	40	1,953	40	44,672	40							
		3	Often	263	36	17,227	36	1,725	37	37,965	32	2.7	2.6	.04	2.6	.03	2.5 *** △	.16
		4	Very often	137	18	8,359	17	763	17	18,477	16							
			Total	744	100	47,286	100	4,753	100	111,894	100							
d. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	121	17	7,431	17	784	17	22,144	23							
		2	Sometimes	299	40	16,956	36	1,758	37	40,371	36							
		3	Often	203	28	13,958	29	1,377	29	30,767	26	2.4	2.5	-.05	2.5	-.06	2.3 * △	.08
		4	Very often	114	15	8,674	17	821	18	17,931	15							
			Total	737	100	47,019	100	4,740	100	111,213	100							
e. Worked with other students on course projects or assignments	CLproject	1	Never	37	5	3,493	8	361	8	11,862	13							
		2	Sometimes	290	40	17,510	38	1,868	40	40,471	37							
		3	Often	251	35	16,915	35	1,696	36	38,754	33	2.7	2.6 * △	.08	2.6 * △	.11	2.5 *** △	.19
		4	Very often	148	21	8,860	18	781	17	19,453	17							
			Total	726	100	46,778	100	4,706	100	110,540	100							
f. Given a course presentation	present	1	Never	126	18	10,746	24	1,237	27	22,485	22							
		2	Sometimes	376	52	22,101	47	2,387	50	50,030	45							
		3	Often	163	22	9,696	20	764	16	26,017	23	2.2	2.1 * △	.09	2.0 *** △	.23	2.2	.00
		4	Very often	61	8	4,153	8	307	7	11,759	10							
			Total	726	100	46,696	100	4,695	100	110,291	100							

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name [c]	Values [d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size [e]	Mean	Effect size [e]	Mean	Effect size [e]
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	51	7	3,411	8	352	8	8,948	9							
		2	Sometimes	275	39	17,184	38	1,796	39	40,085	37							
		3	Often	276	39	17,854	38	1,784	39	41,297	37	2.6	2.6	-.02	2.6	.01	2.6	.00
		4	Very often	108	15	7,528	16	687	15	18,255	16							
			Total	710	100	45,977	100	4,619	100	108,585	100							
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	55	8	4,103	10	466	10	9,482	10							
		2	Sometimes	295	43	16,985	37	1,774	39	39,364	37							
		3	Often	263	36	16,695	36	1,643	35	39,158	35	2.5	2.6 * ▽	-.08	2.6	-.05	2.6 ** ▽	-.10
		4	Very often	87	12	7,817	17	709	16	19,573	18							
			Total	700	100	45,600	100	4,592	100	107,577	100							
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	77	12	4,094	10	467	10	9,630	10							
		2	Sometimes	301	44	15,956	36	1,649	36	36,653	35							
		3	Often	212	29	16,344	35	1,619	36	38,580	35	2.4	2.6 *** ▽	-.20	2.6 *** ▽	-.18	2.6 *** ▽	-.21
		4	Very often	99	14	8,761	19	814	18	21,590	20							
			Total	689	100	45,155	100	4,549	100	106,453	100							
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	31	5	2,058	5	236	5	4,568	5							
		2	Sometimes	238	36	13,384	30	1,428	31	31,338	30							
		3	Often	296	44	20,661	46	2,072	46	47,761	45	2.7	2.8 ** ▽	-.11	2.8	-.07	2.8 *** ▽	-.13
		4	Very often	106	16	8,458	19	755	18	21,315	21							
			Total	671	100	44,561	100	4,491	100	104,982	100							
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIperspect	1	Never	22	4	1,193	3	149	3	2,852	3							
		2	Sometimes	198	31	11,175	26	1,145	26	26,150	26							
		3	Often	296	45	21,004	47	2,158	49	48,465	46	2.8	2.9 *** ▽	-.13	2.9 * ▽	-.11	2.9 *** ▽	-.15
		4	Very often	132	20	10,418	24	969	22	25,641	25							
			Total	648	100	43,790	100	4,421	100	103,108	100							
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	24	4	1,188	3	111	3	2,745	3							
		2	Sometimes	187	31	12,370	29	1,268	29	28,723	29							
		3	Often	281	45	19,681	45	1,991	46	45,827	44	2.8	2.9	-.07	2.9 * ▽	-.10	2.9 * ▽	-.09
		4	Very often	125	20	9,836	23	968	23	23,995	24							
			Total	617	100	43,075	100	4,338	100	101,290	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]   **Statistical Comparisons[b]**

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	6	1	498	1	45	1	1,313	2							
		2	Sometimes	114	19	8,255	20	840	19	19,089	20							
		3	Often	307	51	21,394	49	2,147	49	49,230	48	3.1	3.1	.02	3.1	-.02	3.1	.01
		4	Very often	173	29	12,448	29	1,263	30	30,355	30							
			Total	600	100	42,595	100	4,295	100	99,987	100							

3. During the current school year, about how often have you done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Talked about career plans with a faculty member	SFcareer	1	Never	114	19	8,390	21	844	20	17,468	19							
		2	Sometimes	280	47	18,389	43	1,902	45	42,188	42							
		3	Often	135	23	10,189	23	1,030	23	25,289	24	2.3	2.3	-.01	2.3	.00	2.3 * ▽	-.09
		4	Very often	71	11	5,535	13	519	12	14,888	14							
			Total	600	100	42,503	100	4,295	100	99,833	100							
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	248	42	18,982	47	1,902	45	43,341	46							
		2	Sometimes	228	38	13,575	31	1,426	33	31,814	31							
		3	Often	78	14	6,589	15	662	15	15,818	15	1.9	1.8	.04	1.8	.02	1.9	.00
		4	Very often	43	7	3,124	7	295	7	8,309	8							
			Total	597	100	42,270	100	4,285	100	99,282	100							
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	167	28	13,328	33	1,443	34	29,031	32							
		2	Sometimes	264	45	17,050	40	1,755	42	40,077	40							
		3	Often	107	19	7,996	18	734	18	19,791	19	2.1	2.0	.06	2.0 * △	.11	2.1	.01
		4	Very often	45	8	3,434	8	289	7	9,244	9							
			Total	583	100	41,808	100	4,221	100	98,143	100							
d. Discussed your academic performance with a faculty member	SFperform	1	Never	145	26	11,295	29	1,312	32	22,103	24							
		2	Sometimes	279	48	18,413	44	1,851	43	43,102	43							
		3	Often	111	19	8,524	20	773	18	22,626	23	2.1	2.1	.00	2.0	.07	2.2 *** ▽	-.13
		4	Very often	39	7	3,600	8	301	7	10,258	10							
			Total	574	100	41,832	100	4,237	100	98,089	100							

4. During the current school year, how much has your coursework emphasized the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Memorizing course material	memorize	1	Very little	20	3	1,368	3	126	3	3,787	4							
		2	Some	159	29	10,267	25	1,065	26	25,458	27							
		3	Quite a bit	253	45	18,535	45	1,853	44	43,234	44	2.9	2.9 * ▽	-.10	3.0 * ▽	-.11	2.9	-.04
		4	Very much	134	23	11,301	27	1,151	27	24,756	25							
			Total	566	100	41,471	100	4,195	100	97,235	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	16	3	1,293	3	130	3	3,377	4	3.0	3.0	.08	3.0	.04	2.9 ** △	.13
		2	Some	117	21	9,638	24	982	23	23,899	25							
		3	Quite a bit	267	47	19,063	46	1,945	46	44,764	46							
		4	Very much	165	29	11,235	27	1,106	28	24,495	25							
			Total	565	100	41,229	100	4,163	100	96,535	100							
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	11	2	1,323	4	151	3	3,316	4	2.9	2.9	-.02	2.9	-.02	2.9	-.01
		2	Some	150	27	10,300	26	1,079	25	24,355	26							
		3	Quite a bit	266	48	18,451	45	1,869	45	42,849	45							
		4	Very much	124	23	10,734	26	1,031	26	24,786	26							
			Total	551	100	40,808	100	4,130	100	95,306	100							
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	30	6	1,725	5	202	5	3,318	4	2.8	2.9 * ▽	-.09	2.8	-.05	2.9 *** ▽	-.16
		2	Some	163	30	10,785	27	1,183	29	23,840	25							
		3	Quite a bit	238	43	18,236	44	1,800	43	43,245	45							
		4	Very much	118	21	9,889	24	919	23	24,280	25							
			Total	549	100	40,635	100	4,104	100	94,683	100							
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	24	5	1,400	4	168	4	2,954	3	2.9	2.9	-.02	2.9	.02	2.9	-.06
		2	Some	136	26	10,345	26	1,124	28	23,150	25							
		3	Quite a bit	253	46	18,658	46	1,847	45	44,121	46							
		4	Very much	128	24	10,030	24	949	23	23,861	25							
			Total	541	100	40,433	100	4,088	100	94,086	100							

5. During the current school year, to what extent have your instructors done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Clearly explained course goals and requirements	ETgoals	1	Very little	6	1	814	2	78	2	1,977	2	3.1	3.0 * △	.09	3.0	.09	3.1	.05
		2	Some	92	18	8,539	21	871	21	18,944	20							
		3	Quite a bit	277	52	19,331	48	1,987	49	43,350	46							
		4	Very much	158	30	11,486	29	1,138	28	29,159	32							
			Total	533	100	40,170	100	4,074	100	93,430	100							
b. Taught course sessions in an organized way	ETorganize	1	Very little	19	3	1,468	4	141	3	3,998	5	3.1	3.0 *** △	.16	3.0 ** △	.13	3.0 *** △	.14
		2	Some	85	16	9,175	23	916	22	20,246	22							
		3	Quite a bit	268	50	18,808	47	1,934	48	42,093	45							
		4	Very much	161	31	10,567	27	1,077	27	26,720	29							
			Total	533	100	40,018	100	4,068	100	93,057	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 6

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

				Frequency Distributions[a]								Statistical Comparisons[b]							
													Your first-year students compared with						
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023		
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	16	3	1,236	3	117	3	3,193	4	3.1	3.0	.07	3.0	.04	3.0	.06
		2	Some	101	19	9,037	23	903	22	20,593	22							
		3	Quite a bit	249	47	17,874	44	1,844	46	40,259	43							
		4	Very much	159	31	11,732	29	1,185	30	28,803	31							
			Total	525	100	39,879	100	4,049	100	92,848	100							
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	48	9	3,386	9	393	10	6,599	8	2.7	2.7	-.03	2.7	.06	2.8 *** ▽	-.15
		2	Some	158	29	12,424	31	1,344	33	25,910	28							
		3	Quite a bit	232	45	15,022	37	1,532	38	35,330	38							
		4	Very much	89	17	8,976	23	768	19	24,769	27							
			Total	527	100	39,808	100	4,037	100	92,608	100							
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	53	9	4,001	10	409	10	7,341	8	2.7	2.6	.03	2.6	.07	2.8 * ▽	-.11
		2	Some	171	32	13,608	35	1,479	37	28,626	31							
		3	Quite a bit	219	43	14,717	37	1,494	37	35,075	38							
		4	Very much	84	16	7,284	19	637	16	21,009	23							
			Total	527	100	39,610	100	4,019	100	92,051	100							
f. Explained in advance the criteria for successfully completing your assignments	etcriteria	1	Very little	12	2	1,433	4	139	3	3,132	4	3.0	2.9	.05	3.0	.04	3.0	-.02
		2	Some	115	22	9,748	25	972	24	20,907	23							
		3	Quite a bit	263	50	17,927	45	1,848	46	40,105	43							
		4	Very much	130	25	10,309	26	1,038	26	27,329	31							
			Total	520	100	39,417	100	3,997	100	91,473	100							
g. Reviewed and summarized key ideas or concepts	etreview	1	Very little	9	2	1,216	3	122	3	2,625	3	3.0	2.9	.07	2.9	.07	3.0	.02
		2	Some	117	22	9,448	24	959	24	20,905	23							
		3	Quite a bit	259	50	18,532	47	1,933	48	41,909	45							
		4	Very much	133	26	10,092	26	981	25	25,706	29							
			Total	518	100	39,288	100	3,995	100	91,145	100							
h. Taught in a way that aligns with how you prefer to learn	etprefer	1	Very little	34	6	3,243	9	338	8	6,917	8	2.7	2.6 * △	.09	2.6 * △	.11	2.7	.01
		2	Some	187	36	14,698	38	1,554	39	31,904	35							
		3	Quite a bit	215	42	15,044	38	1,543	39	35,206	38							
		4	Very much	82	16	6,223	16	543	14	16,868	19							
			Total	518	100	39,208	100	3,978	100	90,895	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

First-Year Students

Frequency Distributions[a] — Statistical Comparisons[b]

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
i. Enabled you to demonstrate your learning through quizzes, assignments, and other activities	etdemonstrate	1	Very little	11	2	1,002	3	84	2	2,393	3							
		2	Some	98	19	7,642	20	728	18	16,914	19							
		3	Quite a bit	240	47	18,074	46	1,895	48	40,444	44	3.1	3.1	.03	3.1	-.01	3.1	.00
		4	Very much	165	32	12,397	32	1,267	32	30,911	34							
			Total	514	100	39,115	100	3,974	100	90,662	100							

6. During the current school year, about how often have you done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	20	4	3,137	8	332	8	8,672	9							
		2	Sometimes	183	37	13,610	35	1,426	35	32,440	36							
		3	Often	212	43	14,926	39	1,476	39	32,885	37	2.7	2.7	.07	2.7	.07	2.6 ** △	.11
		4	Very often	84	17	6,774	18	669	18	15,103	18							
			Total	499	100	38,447	100	3,903	100	89,100	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	59	12	6,109	16	664	16	14,725	16							
		2	Sometimes	197	39	14,796	39	1,568	40	34,721	39							
		3	Often	176	36	12,165	31	1,159	31	27,119	31	2.5	2.4 * △	.09	2.4 * △	.10	2.4 * △	.09
		4	Very often	66	13	5,210	14	497	13	12,029	14							
			Total	498	100	38,280	100	3,888	100	88,594	100							
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	46	9	5,383	14	568	14	14,132	16							
		2	Sometimes	192	39	15,150	40	1,615	41	35,548	40							
		3	Often	191	39	12,844	33	1,281	34	27,823	32	2.6	2.4 ** △	.14	2.4 ** △	.15	2.4 *** △	.17
		4	Very often	63	13	4,715	12	412	11	10,651	12							
			Total	492	100	38,092	100	3,876	100	88,154	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.)

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Up to 5 pages	wrshortnum	0	None	42	9	2,823	8	447	10	5,708	7							
	(Recoded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	99	20	8,059	21	992	25	16,844	20							
		4	3-5	138	29	12,193	32	1,186	32	28,015	32							
		8	6-10	113	23	8,280	21	702	19	20,141	22	6.5	6.1	.07	5.5 *** △	.20	6.5	.00
		13	11-15	49	10	3,762	10	332	9	8,976	10							
		18	16-20	20	4	1,421	4	100	3	3,887	4							
		23	More than 20	24	5	1,501	4	116	3	4,390	5							
			Total	485	100	38,039	100	3,875	100	87,961	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 8

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]
Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
b. Between 6 and 10 pages	wrmednum	0	None	181	38	14,677	40	1,944	48	32,134	38							
	(Recoded version	1.5	1-2	165	33	12,794	33	1,161	31	29,940	33							
	of wrmed created	4	3-5	88	18	6,330	16	441	12	15,377	17							
	by NSSE. Values	8	6-10	31	7	2,602	7	193	5	6,581	8	2.3	2.3	.00	1.9 *	.12	2.5	-.05
	are estimated	13	11-15	15	3	1,019	3	86	3	2,197	3				△			
	number of papers,	18	16-20	2	0	227	1	21	1	564	1							
	reports, etc.)	23	More than 20	1	0	270	1	20	0	799	1							
			Total	483	100	37,919	100	3,866	100	87,592	100							
c. 11 pages or more	wrlongnum	0	None	359	73	28,585	76	3,178	81	65,912	75							
	(Recoded version	1.5	1-2	85	18	5,564	14	390	11	12,811	14							
	of wrlong created	4	3-5	18	4	1,634	4	114	3	3,820	5							
	by NSSE. Values	8	6-10	11	2	1,005	3	81	2	2,294	3	1.0	1.1	-.02	.9	.04	1.2	-.05
	are estimated	13	11-15	9	2	761	2	75	2	1,717	2							
	number of papers,	18	16-20	3	1	149	0	14	0	414	1							
	reports, etc.)	23	More than 20	1	0	245	1	15	0	695	1							
			Total	486	100	37,943	100	3,867	100	87,663	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.)*											53.4	52.5	.01	45.4 * △	.11	56.8	-.04

8. During the current school year, about how often have you had discussions with people from the following groups?

Item wording or description	Variable name	Values	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size	SCHEV Peers Mean	Effect size	NSSE 2023 Mean	Effect size
a. People of races or ethnicities other than your own	DDrace	1	Never	10	2	1,206	4	137	3	4,185	6							
		2	Sometimes	94	20	8,743	23	975	24	21,775	25							
		3	Often	176	36	12,967	34	1,368	36	29,455	33	3.2	3.1 * △	.10	3.1 ** △	.15	3.0 *** △	.20
		4	Very often	204	42	15,011	40	1,384	37	32,179	36							
			Total	484	100	37,927	100	3,864	100	87,594	100							
b. People from economic backgrounds other than your own	DDeconomic	1	Never	15	3	1,203	4	110	3	3,986	6							
		2	Sometimes	100	21	8,568	23	925	24	20,714	24							
		3	Often	189	39	14,459	38	1,532	40	32,771	37	3.1	3.1	.04	3.0	.06	3.0 ** △	.13
		4	Very often	179	37	13,575	36	1,283	33	29,911	33							
			Total	483	100	37,805	100	3,850	100	87,382	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 9

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a] **Statistical Comparisons[b]**

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
c. People with religious beliefs other than your own	DDreligion	1	Never	13	3	1,736	5	150	4	6,554	8							
		2	Sometimes	97	20	9,464	25	1,032	27	24,437	28							
		3	Often	183	38	13,277	34	1,398	36	28,839	33	3.1	3.0 ***	.15	3.0 **	.17	2.9 ***	.28
		4	Very often	192	39	13,321	35	1,279	33	27,513	31		△		△		△	
			Total	485	100	37,798	100	3,859	100	87,343	100							
d. People with political views other than your own	DDpolitical	1	Never	24	5	2,546	7	215	5	7,461	9							
		2	Sometimes	129	27	12,395	32	1,215	32	28,519	32							
		3	Often	171	35	12,048	31	1,262	32	27,594	31	3.0	2.8 ***	.16	2.9 *	.12	2.8 ***	.22
		4	Very often	160	33	10,801	29	1,160	30	23,700	27		△		△		△	
			Total	484	100	37,790	100	3,852	100	87,274	100							
e. People with sexual orientations other than your own	ddsexorient	1	Never	24	5	2,275	7	247	7	7,847	10							
		2	Sometimes	146	32	10,239	28	1,142	30	24,475	29							
		3	Often	161	33	12,540	32	1,252	32	27,203	30	2.9	2.9	-.04	2.9	.00	2.8	.06
		4	Very often	154	30	12,743	33	1,209	31	27,727	31							
			Total	485	100	37,797	100	3,850	100	87,252	100							
f. People from countries other than your own	ddcountry	1	Never	22	5	2,908	8	326	8	8,523	11							
		2	Sometimes	180	36	13,751	37	1,526	37	32,538	37							
		3	Often	152	32	11,005	29	1,062	29	24,326	27	2.8	2.7	.08	2.7	.09	2.7 ***	.16
		4	Very often	130	28	10,170	27	940	26	21,969	25						△	
			Total	484	100	37,834	100	3,854	100	87,356	100							

9. During the current school year, about how often have you done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
a. Identified key information from reading assignments	LSreading	1	Never	6	1	892	3	93	2	1,867	2							
		2	Sometimes	126	26	9,319	25	1,040	26	20,278	24							
		3	Often	233	50	17,899	47	1,782	47	40,747	47	3.0	2.9	.01	2.9	.02	3.0	-.05
		4	Very often	117	23	9,424	25	906	25	23,784	27							
			Total	482	100	37,534	100	3,821	100	86,676	100							
b. Reviewed your notes after class	LSnotes	1	Never	20	5	1,569	5	186	5	3,800	5							
		2	Sometimes	141	30	10,852	30	1,165	31	25,115	29							
		3	Often	188	39	14,115	37	1,439	37	31,671	36	2.9	2.9	-.03	2.9	.01	2.9	-.05
		4	Very often	131	26	10,984	28	1,034	27	26,039	30							
			Total	480	100	37,520	100	3,824	100	86,625	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

NSSE national survey of student engagement

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	23	5	1,706	5	183	5	3,847	5							
		2	Sometimes	151	32	11,063	30	1,204	31	25,409	30							
		3	Often	195	41	15,273	40	1,574	41	34,763	40	2.8	2.8	-.07	2.8	-.03	2.9 * ▽	-.10
		4	Very often	110	22	9,461	24	855	23	22,551	26							
			Total	479	100	37,503	100	3,816	100	86,570	100							

10. During the current school year, to what extent have your courses challenged you to do your best work?

	Variable name	Values	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size	SCHEV Peers Mean	Effect size	NSSE 2023 Mean	Effect size
	challenge	1	Not at all	2	0	284	1	29	1	693	1							
		2		11	3	465	1	48	1	1,069	1							
		3		20	4	1,953	5	168	4	4,301	5							
		4		37	8	4,833	13	471	12	11,077	13	5.4	5.3	.07	5.3	.05	5.4	.04
		5		178	38	13,283	36	1,381	36	29,515	34							
		6		136	28	9,547	25	1,039	27	21,336	24							
		7	Very much	92	19	6,938	18	661	17	18,045	21							
			Total	476	100	37,303	100	3,797	100	86,036	100							

11. Which of the following have you done while in college or do you plan to do before you graduate?[f]

Item wording or description	Variable name		Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size	SCHEV Peers Mean	Effect size	NSSE 2023 Mean	Effect size
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	41	9	4,263	12	381	11	12,506	16							
			Do not plan to do	17	4	2,086	6	182	5	5,694	7							
			Plan to do	358	75	27,937	74	2,891	75	60,629	69	12%	8% *** △	.15	9% * △	.11	8% *** △	.14
			Done or in progress	59	12	2,929	8	340	9	6,927	8							
			Total	475	100	37,215	100	3,794	100	85,756	100							
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	101	21	9,491	26	909	24	24,158	29							
			Do not plan to do	87	19	7,841	22	718	19	20,714	26							
			Plan to do	212	44	15,628	41	1,649	44	31,246	35	15%	11% ** △	.13	13%	.08	11% *** △	.15
			Done or in progress	76	15	4,180	11	506	13	9,412	11							
			Total	476	100	37,140	100	3,782	100	85,530	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	120	25	10,822	30	975	26	28,808	34							
			Do not plan to do	156	33	10,163	28	1,056	29	22,757	28							
			Plan to do	102	22	10,550	28	1,018	27	23,274	27	20%	15% ** △	.14	18%	.04	12% *** △	.22
			Done or in progress	99	20	5,496	15	728	18	10,373	12							
			Total	477	100	37,031	100	3,777	100	85,212	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 11

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]
Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
d. Participate in a study abroad program	abroad		Have not decided	105	22	10,137	28	1,103	29	24,760	30							
(Means indicate the percentage who responded "Done or in progress.")			Do not plan to do	175	37	10,176	29	1,057	29	27,112	34							
			Plan to do	173	35	15,545	40	1,543	40	30,817	34	5%	3% *	.10	2% ***	.17	3% **	.11
			Done or in progress	23	5	1,190	3	76	2	2,570	3		△		△		△	
			Total	476	100	37,048	100	3,779	100	85,259	100							
e. Work with a faculty member on a research project	research		Have not decided	150	32	12,503	35	1,323	35	31,841	38							
(Means indicate the percentage who responded "Done or in progress.")			Do not plan to do	89	19	8,020	22	883	23	20,265	24							
			Plan to do	204	43	14,376	38	1,284	35	28,292	32	7%	6%	.05	8%	-.04	6%	.05
			Done or in progress	33	7	2,126	6	288	8	4,789	6							
			Total	476	100	37,025	100	3,778	100	85,187	100							
f. Complete a culminating senior experience (capstone course, senior project or thesis, portfolio, recital, comprehensive exam, etc.)	capstone		Have not decided	128	27	11,915	33	1,314	35	28,253	34							
(Means indicate the percentage who responded "Done or in progress.")			Do not plan to do	58	12	4,154	11	432	12	9,672	12							
			Plan to do	278	58	20,118	53	1,941	51	45,299	51	2%	2%	.01	2%	.01	2%	.00
			Done or in progress	12	2	823	2	86	2	1,911	2							
			Total	476	100	37,010	100	3,773	100	85,135	100							

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

	Variable name	Values	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size	SCHEV Peers Mean	Effect size	NSSE 2023 Mean	Effect size
	servcourse	1	None	232	49	19,072	53	2,054	56	39,614	48							
		2	Some	213	45	14,374	39	1,372	35	35,831	41							
		3	Most	22	5	2,646	7	253	7	7,138	8	1.6	1.6	.01	1.5	.06	1.7 *	-.09
		4	All	5	1	646	2	67	2	1,852	2						▽	
			Total	472	100	36,738	100	3,746	100	84,435	100							

13. Indicate the quality of your interactions with the following people at your institution.

	Variable name	Values	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size	SCHEV Peers Mean	Effect size	NSSE 2023 Mean	Effect size
a. Students	QIstudent	1	Poor	4	1	501	2	48	2	1,394	2							
		2		9	2	659	2	64	2	1,624	2							
		3		15	3	1,657	5	181	5	3,839	5							
		4		37	8	4,349	12	437	11	10,129	12							
		5		132	28	10,721	29	1,099	29	23,225	27	5.6	5.4 ***	.16	5.4 **	.17	5.4 ***	.17
		6		158	33	10,813	29	1,133	30	23,323	26		△		△		△	
		7	Excellent	115	25	7,880	21	766	21	18,954	22							
		—	Not applicable	1	0	271	1	26	1	2,197	4							
			Total	471	100	36,851	100	3,754	100	84,685	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]   **Statistical Comparisons**[b]

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
b. Academic advisors	QIadvisor	1	Poor	7	1	933	3	72	2	1,979	3							
		2		14	3	1,297	4	137	4	2,641	3							
		3		24	5	2,511	7	249	7	5,143	6							
		4		60	12	4,932	13	472	12	10,099	12							
		5		93	20	7,828	21	776	21	16,836	20	5.6	5.3 ***	.16	5.4 *	.13	5.4	.07
		6		100	21	8,432	23	903	24	18,914	22		△		△			
		7	Excellent	163	36	10,384	28	1,077	28	27,399	32							
		—	Not applicable	8	2	494	2	67	2	1,582	2							
			Total	469	100	36,811	100	3,753	100	84,593	100							
c. Faculty	QIfaculty	1	Poor	2	0	417	1	35	1	1,036	1							
		2		4	1	746	2	86	2	1,480	2							
		3		21	4	1,843	5	170	5	3,726	4							
		4		58	12	5,273	14	569	15	10,446	12							
		5		125	26	10,734	29	1,109	30	21,978	26	5.5	5.3 ***	.18	5.3 ***	.20	5.5	.06
		6		153	33	10,563	28	1,080	28	24,436	28		△		△			
		7	Excellent	105	23	6,769	19	646	17	20,278	25							
		—	Not applicable	1	0	444	1	49	1	1,183	2							
			Total	469	100	36,789	100	3,744	100	84,563	100							
d. Student services staff (career services, student activities, housing, etc.)	QIstaff	1	Poor	10	2	987	3	97	3	2,253	3							
		2		8	2	1,212	3	104	3	2,539	3							
		3		20	4	2,484	7	240	6	5,115	6							
		4		64	13	5,495	15	550	14	11,262	13							
		5		99	22	8,777	23	861	23	18,617	21	5.3	5.1 **	.16	5.2 *	.11	5.2	.08
		6		103	22	8,223	22	894	24	18,605	21		△		△			
		7	Excellent	98	21	6,662	18	687	19	17,919	21							
		—	Not applicable	65	15	2,938	9	314	8	8,166	11							
			Total	467	100	36,778	100	3,747	100	84,476	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

				Frequency Distributions[a]								Statistical Comparisons[b]						
													Your first-year students compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
e. Other administrative staff and offices (registrar, financial aid, etc.)	QIadmin	1	Poor	12	3	1,093	3	85	2	2,278	3							
		2		10	2	1,343	4	120	3	2,770	3							
		3		32	7	2,725	7	261	7	5,447	7							
		4		75	15	5,906	16	594	15	11,928	14							
		5		99	21	8,651	23	858	23	18,755	21	5.1	5.0	.06	5.1	-.01	5.2	-.07
		6		96	21	7,463	20	829	22	18,263	21							
		7	Excellent	70	15	5,946	16	606	16	18,212	22							
		—	Not applicable	76	17	3,677	10	399	12	6,916	9							
			Total	470	100	36,804	100	3,752	100	84,569	100							

14. How much does your institution emphasize the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	5	1	588	2	52	2	1,436	2							
		2	Some	91	20	7,121	20	689	18	17,143	21							
		3	Quite a bit	216	46	17,501	48	1,821	49	40,051	47	3.1	3.1	.04	3.1	.00	3.0	.08
		4	Very much	154	33	11,451	31	1,166	32	25,562	29							
			Total	466	100	36,661	100	3,728	100	84,192	100							
b. Providing support to help students succeed academically	SEacademic	1	Very little	15	3	1,442	4	123	3	3,408	5							
		2	Some	91	20	9,254	25	878	24	19,166	23							
		3	Quite a bit	233	50	16,912	46	1,772	48	36,502	43	3.0	2.9 ** △	.13	2.9	.09	3.0	.05
		4	Very much	125	27	8,950	24	945	25	24,889	29							
			Total	464	100	36,558	100	3,718	100	83,965	100							
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	32	7	2,162	6	203	6	4,996	6							
		2	Some	94	21	7,834	22	787	22	16,210	20							
		3	Quite a bit	206	45	15,332	42	1,557	42	32,724	39	2.9	3.0	-.01	3.0	-.04	3.0	-.09
		4	Very much	135	28	11,179	30	1,169	31	29,951	35							
			Total	467	100	36,507	100	3,716	100	83,881	100							
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	31	6	3,427	10	382	10	8,233	11							
		2	Some	144	31	10,822	30	1,122	30	24,434	29							
		3	Quite a bit	185	41	13,849	38	1,408	38	30,593	36	2.8	2.7	.06	2.7	.08	2.7	.06
		4	Very much	106	22	8,386	23	795	22	20,554	24							
			Total	466	100	36,484	100	3,707	100	83,814	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]

Your first-year students compared with

Item wording or description	Variable name [c]	Values [d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size [e]	SCHEV Peers Mean	Effect size [e]	NSSE 2023 Mean	Effect size [e]
e. Providing opportunities to be involved socially	SEsocial	1	Very little	18	4	1,743	5	148	4	4,725	7							
		2	Some	72	16	8,940	25	836	23	19,691	24							
		3	Quite a bit	217	47	15,759	43	1,651	44	34,342	40	3.1	2.9 ***	.20	3.0 **	.14	2.9 ***	.21
		4	Very much	159	33	9,995	27	1,074	29	24,939	29		△		△		△	
			Total	466	100	36,437	100	3,709	100	83,697	100							
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	24	5	2,579	7	237	6	5,761	8							
		2	Some	85	19	10,021	27	943	26	21,931	27							
		3	Quite a bit	212	45	14,978	41	1,601	43	33,201	39	3.0	2.8 ***	.23	2.9 ***	.18	2.8 ***	.19
		4	Very much	145	31	8,837	24	924	25	22,722	27		△		△		△	
			Total	466	100	36,415	100	3,705	100	83,615	100							
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	107	22	8,721	25	913	25	18,285	23							
		2	Some	169	37	14,063	39	1,483	40	31,443	37							
		3	Quite a bit	127	28	9,446	25	912	24	22,439	27	2.3	2.2	.09	2.2 *	.11	2.3	.00
		4	Very much	62	13	4,104	11	389	11	11,311	14				△			
			Total	465	100	36,334	100	3,697	100	83,478	100							
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	21	5	2,325	7	192	5	7,853	12							
		2	Some	92	21	9,643	26	937	26	20,949	26							
		3	Quite a bit	205	44	15,290	41	1,624	43	32,702	38	3.0	2.9 ***	.18	2.9 *	.13	2.8 ***	.26
		4	Very much	147	30	9,067	25	951	26	21,903	25		△		△		△	
			Total	465	100	36,325	100	3,704	100	83,407	100							
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	81	17	5,690	16	595	15	14,025	18							
		2	Some	184	40	13,992	39	1,461	39	29,946	36							
		3	Quite a bit	136	30	11,543	31	1,160	33	26,245	31	2.4	2.4	-.02	2.4	-.05	2.4	-.03
		4	Very much	65	14	5,101	14	484	14	13,168	15							
			Total	466	100	36,326	100	3,700	100	83,384	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]
Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
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	1	678	2	60	2	1,664	2	**3.3**	3.2 ** △	.15	3.2 ** △	.15	3.2 * △	.12
		2	Disagree	35	7	3,075	9	307	9	7,105	9							
		3	Agree	247	53	21,039	57	2,165	57	46,302	55							
		4	Strongly agree	179	39	11,547	32	1,170	32	28,318	34							
			Total	465	100	36,339	100	3,702	100	83,389	100							
b. I feel valued by this institution.	sbvalued	1	Strongly disagree	17	4	1,605	5	168	5	2,906	4	**3.0**	2.9 *** △	.17	2.9 *** △	.18	3.0	.04
		2	Disagree	72	16	7,310	21	757	21	13,965	17							
		3	Agree	265	56	20,622	56	2,142	57	47,616	56							
		4	Strongly agree	111	24	6,759	19	622	17	18,782	23							
			Total	465	100	36,296	100	3,689	100	83,269	100							
c. I feel like part of the community at this institution.	sbcommunity	1	Strongly disagree	11	2	1,401	4	138	4	3,076	4	**3.1**	2.9 *** △	.24	2.9 *** △	.23	3.0 *** △	.19
		2	Disagree	65	14	6,603	19	714	19	14,318	18							
		3	Agree	247	53	20,441	56	2,077	55	45,737	54							
		4	Strongly agree	143	31	7,866	21	763	21	20,215	24							
			Total	466	100	36,311	100	3,692	100	83,346	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 *(Recoded version of tmprep created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	0	0	149	0	20	1	368	1	**18.3**	15.7 *** ▲	.32	16.2 *** △	.27	14.7 *** ▲	.44
		3	1-5 hrs	21	5	3,197	9	309	8	9,427	12							
		8	6-10 hrs	60	13	7,180	20	698	18	17,891	22							
		13	11-15 hrs	101	22	8,276	23	859	22	18,992	23							
		18	16-20 hrs	102	23	7,836	22	820	23	17,013	20							
		23	21-25 hrs	81	18	4,796	13	512	15	10,058	12							
		28	26-30 hrs	47	10	2,419	7	240	7	4,794	6							
		33	More than 30 hrs	49	11	2,364	7	229	7	4,564	5							
			Total	461	100	36,217	100	3,687	100	83,107	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 16

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

				Frequency Distributions[a]								Statistical Comparisons[b]						
													Your first-year students compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs (Recoded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	95	21	10,185	30	912	24	27,101	36							
		3	1-5 hrs	166	35	12,719	34	1,424	39	26,804	30							
		8	6-10 hrs	95	20	6,329	17	672	19	12,630	15							
		13	11-15 hrs	56	13	3,544	9	368	10	7,597	9							
		18	16-20 hrs	30	6	1,827	5	169	5	4,489	5	6.7	5.6 *** △	.17	5.9 * △	.13	5.4 *** △	.18
		23	21-25 hrs	12	3	897	2	85	3	2,335	3							
		28	26-30 hrs	4	1	314	1	28	1	852	1							
		33	More than 30 hrs	3	1	356	1	26	1	1,091	1							
			Total	461	100	36,171	100	3,684	100	82,899	100							
c. Working for pay **on campus**	tmworkonhrs (Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	382	83	28,397	79	2,770	74	63,565	79							
		3	1-5 hrs	13	3	1,170	3	119	3	3,841	4							
		8	6-10 hrs	22	4	2,332	6	287	8	5,995	6							
		13	11-15 hrs	25	6	2,208	6	281	8	4,559	5							
		18	16-20 hrs	12	2	1,282	4	161	5	3,108	4	2.1	2.6 * ▽	-.09	3.1 *** ▽	-.17	2.6 * ▽	-.08
		23	21-25 hrs	5	1	535	1	43	1	1,104	1							
		28	26-30 hrs	1	0	123	0	11	0	300	0							
		33	More than 30 hrs	1	0	149	0	11	0	470	1							
			Total	461	100	36,196	100	3,683	100	82,942	100							
d. Working for pay **off campus**	tmworkoffhrs (Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	382	83	25,827	71	2,579	71	53,875	63							
		3	1-5 hrs	12	2	1,689	5	181	5	4,103	5							
		8	6-10 hrs	18	4	1,831	5	210	5	4,601	5							
		13	11-15 hrs	13	3	2,110	6	230	6	5,041	6							
		18	16-20 hrs	14	3	1,945	5	229	6	5,104	6	2.5	4.6 *** ▽	-.24	4.1 *** ▽	-.21	6.8 *** ▼	-.40
		23	21-25 hrs	13	3	1,352	4	119	3	3,553	4							
		28	26-30 hrs	4	1	674	2	75	2	2,027	3							
		33	More than 30 hrs	3	1	767	2	59	2	4,671	8							
			Total	459	100	36,195	100	3,682	100	82,975	100							
Estimated number of hours working for pay	tmworkhrs (Continuous variable created by NSSE)											4.5	7.1 *** ▽	-.24	7.2 *** ▽	-.26	9.3 *** ▼	-.40

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 17

First-Year Students

Frequency Distributions[a] · Statistical Comparisons[b]

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
e. Doing community service or volunteer work	tmservicehrs *(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	265	58	22,978	64	2,392	66	52,527	64							
		3	1-5 hrs	149	32	9,227	25	935	24	21,181	25							
		8	6-10 hrs	26	6	1,811	5	164	4	4,366	5							
		13	11-15 hrs	10	2	1,079	3	87	3	2,395	3							
		18	16-20 hrs	3	1	500	1	55	2	1,217	2	2.2	2.2	.01	2.1	.02	2.3	-.01
		23	21-25 hrs	6	1	382	1	31	1	720	1							
		28	26-30 hrs	0	0	72	0	10	0	201	0							
		33	More than 30 hrs	1	0	114	0	9	0	331	0							
			Total	460	100	36,163	100	3,683	100	82,938	100							
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs *(Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	7	1	559	2	54	2	1,713	2							
		3	1-5 hrs	90	19	6,093	17	613	16	16,882	21							
		8	6-10 hrs	115	24	9,772	27	994	26	22,549	27							
		13	11-15 hrs	97	21	8,400	23	871	24	17,664	21							
		18	16-20 hrs	71	16	5,637	16	611	17	11,707	14	13.2	13.0	.03	12.9	.04	12.3 * △	.11
		23	21-25 hrs	37	8	2,544	7	250	7	5,440	7							
		28	26-30 hrs	18	4	1,133	3	104	3	2,422	3							
		33	More than 30 hrs	28	6	2,012	6	184	5	4,542	6							
			Total	463	100	36,150	100	3,681	100	82,919	100							
g. Providing care for dependents (children, parents, etc.)	tmcarehrs *(Recoded version of tmcare created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	427	92	29,591	81	3,105	84	62,619	73							
		3	1-5 hrs	12	2	2,813	8	265	7	7,956	10							
		8	6-10 hrs	8	2	1,253	4	104	3	3,688	5							
		13	11-15 hrs	4	1	1,073	3	82	2	2,674	4							
		18	16-20 hrs	4	1	567	2	54	2	1,565	2	1.0	1.8 *** ▽	-.16	1.6 * ▽	-.12	3.5 *** ▼	-.31
		23	21-25 hrs	3	1	404	1	29	1	999	1							
		28	26-30 hrs	1	0	94	0	12	0	430	1							
		33	More than 30 hrs	3	1	288	1	22	1	2,813	4							
			Total	462	100	36,083	100	3,673	100	82,744	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 18

First-Year Students

| Frequency Distributions[a] | | | | | | | | | Statistical Comparisons[b] | | | | | | | |

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs *(Recoded version of tmcommute created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	182	39	13,351	35	1,221	33	37,622	44	3.9	4.2	-.06	4.0	-.03	3.9	-.01
		3	1-5 hrs	185	41	14,486	41	1,672	45	28,152	34							
		8	6-10 hrs	58	12	4,557	13	453	13	8,870	11							
		13	11-15 hrs	14	3	1,958	5	172	5	3,932	5							
		18	16-20 hrs	12	3	871	2	72	2	1,925	2							
		23	21-25 hrs	4	1	497	1	48	1	1,089	1							
		28	26-30 hrs	3	1	156	1	17	1	438	1							
		33	More than 30 hrs	5	1	297	1	21	1	914	1							
			Total	463	100	36,173	100	3,676	100	82,942	100							

17. Of the time you spend preparing for class in a typical 7-day week, about how much is on *assigned reading?*

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
	reading	1	Very little	105	23	6,366	19	634	16	11,723	15	2.2	2.5 ***	-.22	2.5 ***	-.27	2.6 ***	-.38
		2	Some	211	47	13,909	39	1,442	39	29,181	35		▽		▽		▼	
		3	About half	89	19	9,222	25	956	27	22,657	27							
		4	Most	37	8	4,822	13	448	13	13,735	16							
		5	Almost all	18	4	1,725	5	181	5	5,345	6							
			Total	460	100	36,044	100	3,661	100	82,641	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)*												5.9	6.1	-.03	6.4	-.09	6.4 * ▽	-.09
	tmreadinghrscol *(Collapsed version of tmreadinghrs created by NSSE.)*	1	0 hrs	0	0	147	0	20	1	359	1							
		2	More than zero, up to 5 hrs	254	56	19,360	55	1,969	52	42,753	53							
		3	More than 5, up to 10 hrs	136	30	10,410	28	1,051	29	23,521	28							
		4	More than 10, up to 15 hrs	42	8	3,172	9	327	10	8,065	10							
		5	More than 15, up to 20 hrs	15	3	1,607	4	156	5	4,052	5							
		6	More than 20, up to 25 hrs	7	1	857	2	94	3	2,451	3							
		7	More than 25 hrs	5	1	354	1	32	1	1,107	1							
			Total	459	100	35,907	100	3,649	100	82,308	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

				Frequency Distributions[a]									Statistical Comparisons[b]						
														Your first-year students compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023			Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%		Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
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	58	13	3,096	9	372	11	5,402	7								
		2	Some	145	31	10,620	30	1,203	33	22,159	27								
		3	Quite a bit	184	41	15,167	41	1,465	39	35,849	43		2.6	2.7 **	-.14	2.6	-.05	2.8 ***	-.28
		4	Very much	74	15	7,192	20	635	17	19,232	24			▽				▽	
			Total	461	100	36,075	100	3,675	100	82,642	100								
b. Speaking clearly and effectively	pgspeak	1	Very little	71	16	4,580	14	570	17	8,443	11								
		2	Some	154	34	11,726	33	1,241	34	25,113	30								
		3	Quite a bit	156	34	13,145	36	1,310	35	31,553	38		2.5	2.6	-.07	2.5	.05	2.7 ***	-.20
		4	Very much	78	17	6,573	18	549	15	17,385	21							▽	
			Total	459	100	36,024	100	3,670	100	82,494	100								
c. Thinking critically and analytically	pgthink	1	Very little	14	3	1,039	3	111	3	2,240	3								
		2	Some	84	18	7,063	20	742	20	15,698	19								
		3	Quite a bit	195	42	16,448	45	1,720	46	36,995	44		3.1	3.1	.07	3.0	.09	3.1	.05
		4	Very much	168	36	11,465	32	1,094	31	27,573	34								
			Total	461	100	36,015	100	3,667	100	82,506	100								
d. Analyzing numerical and statistical information	pganalyze	1	Very little	36	8	3,619	10	352	9	9,630	11								
		2	Some	115	25	10,022	28	1,081	29	24,773	30								
		3	Quite a bit	179	39	13,806	38	1,394	38	29,818	36		2.9	2.8 **	.14	2.8 *	.12	2.7 ***	.19
		4	Very much	129	28	8,551	24	845	24	18,260	23			△		△		△	
			Total	459	100	35,998	100	3,672	100	82,481	100								
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	58	13	4,918	14	447	13	10,068	13								
		2	Some	130	28	11,822	33	1,182	32	25,883	31								
		3	Quite a bit	165	36	12,433	33	1,343	36	28,830	34		2.7	2.6 **	.13	2.6	.10	2.7	.04
		4	Very much	107	23	6,852	19	703	19	17,717	22			△					
			Total	460	100	36,025	100	3,675	100	82,498	100								
f. Working effectively with others	pgothers	1	Very little	23	5	2,454	8	246	7	5,317	7								
		2	Some	133	29	10,289	29	1,064	30	22,284	28								
		3	Quite a bit	184	41	14,915	41	1,505	41	34,110	40		2.9	2.8	.09	2.8	.09	2.8	.05
		4	Very much	117	25	8,358	23	857	23	20,762	25								
			Total	457	100	36,016	100	3,672	100	82,473	100								

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]

Your first-year students compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	56	12	4,175	13	419	12	7,989	11							
		2	Some	141	31	10,848	30	1,188	33	23,536	29							
		3	Quite a bit	165	36	13,667	37	1,358	37	31,776	38	2.6	2.6	.00	2.6	.03	2.7	-.08
		4	Very much	95	20	7,299	20	696	19	19,125	23							
			Total	457	100	35,989	100	3,661	100	82,426	100							
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	43	10	2,903	9	319	9	6,287	8							
		2	Some	143	31	9,864	28	1,052	28	21,860	27							
		3	Quite a bit	179	40	14,177	38	1,428	40	32,243	38	2.7	2.8 **	-.12	2.8 *	-.11	2.8 ***	-.16
		4	Very much	92	19	9,059	25	865	24	22,083	27		▽		▽		▽	
			Total	457	100	36,003	100	3,664	100	82,473	100							
i. Solving complex real-world problems	pgprobsolve	1	Very little	40	9	3,661	11	375	11	8,184	11							
		2	Some	153	33	11,596	32	1,215	33	26,363	32							
		3	Quite a bit	162	36	13,483	37	1,364	37	30,432	36	2.7	2.7	.07	2.7	.07	2.7	.04
		4	Very much	105	22	7,292	20	716	19	17,584	21							
			Total	460	100	36,032	100	3,670	100	82,563	100							
j. Being an informed and active citizen	pgcitizen	1	Very little	64	14	4,200	13	439	12	9,045	12							
		2	Some	167	37	11,891	33	1,263	34	26,407	32							
		3	Quite a bit	146	32	12,952	35	1,275	35	29,623	35	2.5	2.6	-.09	2.6	-.09	2.7 **	-.14
		4	Very much	83	17	7,035	19	688	19	17,664	21						▽	
			Total	460	100	36,078	100	3,665	100	82,739	100							

19. How would you evaluate your entire educational experience at this institution?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
	evalexp	1	Poor	11	2	758	2	72	2	1,746	2							
		2	Fair	41	9	5,861	17	594	16	12,941	16							
		3	Good	229	49	19,663	53	2,027	54	42,995	51	3.3	3.1 ***	.26	3.1 ***	.24	3.1 ***	.21
		4	Excellent	182	39	9,910	28	987	28	25,400	30		△		△		△	
			Total	463	100	36,192	100	3,680	100	83,082	100							

20. If you could start over again, would you go to the *same institution* you are now attending?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
	sameinst	1	Definitely no	7	1	1,112	3	104	3	3,069	4							
		2	Probably no	37	8	4,776	13	481	13	11,317	14							
		3	Probably yes	182	39	17,502	48	1,799	48	37,662	45	3.4	3.2 ***	.33	3.2 ***	.32	3.2 ***	.31
		4	Definitely yes	242	52	12,934	36	1,311	36	31,490	38		▲		▲		▲	
			Total	468	100	36,324	100	3,695	100	83,538	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

First-Year Students

				Frequency Distributions[a]								Statistical Comparisons[b]							
													Your first-year students compared with						
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023		
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]	
21. Do you intend to return to this institution next year?[f]																			
	returnexp		No	11	2	1,286	4	95	3	3,531	4								
(Means indicate the percentage who responded "Yes.")			Yes	449	96	32,877	90	3,387	92	74,279	88	**96%**	90% ***	.23	92% **	.17	88% ***	.29	
			Not sure	8	2	2,175	6	202	6	5,891	7		△		△		△		
			Total	468	100	36,338	100	3,684	100	83,701	100								

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NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 22

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

Frequency Distributions[a]

Statistical Comparisons[b] — Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
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	46	6	1,846	4	155	4	3,892	4	2.8	2.9 *** ▽	-.17	2.9 *** ▽	-.15	3.0 *** ▽	-.29
		2	Sometimes	267	37	16,072	32	1,357	32	32,030	27							
		3	Often	229	30	16,770	32	1,430	32	39,128	32							
		4	Very often	202	27	17,368	33	1,340	32	47,745	38							
			Total	744	100	52,056	100	4,282	100	122,795	100							
b. Asked another student to help you understand course material	CLaskhelp	1	Never	83	12	7,317	14	460	12	20,121	18	2.5	2.5	.02	2.6	-.05	2.4 *** △	.12
		2	Sometimes	311	42	20,864	41	1,684	39	49,564	40							
		3	Often	221	30	14,072	27	1,257	28	31,613	25							
		4	Very often	122	17	9,584	18	869	20	21,332	17							
			Total	737	100	51,837	100	4,270	100	122,630	100							
c. Explained course material to one or more students	CLexplain	1	Never	37	5	4,244	8	224	5	12,778	12	2.7	2.7	.05	2.7	-.01	2.6 *** △	.13
		2	Sometimes	273	37	19,175	37	1,582	38	43,971	36							
		3	Often	271	37	17,418	34	1,491	34	39,758	32							
		4	Very often	152	21	10,883	21	978	23	25,891	20							
			Total	733	100	51,720	100	4,275	100	122,398	100							
d. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	156	21	10,873	21	762	19	28,465	25	2.3	2.4	-.05	2.5 * ▽	-.10	2.3	.03
		2	Sometimes	265	36	18,216	36	1,530	36	41,803	34							
		3	Often	204	28	13,061	25	1,160	26	29,987	24							
		4	Very often	101	14	9,303	18	803	19	21,500	17							
			Total	726	100	51,453	100	4,255	100	121,755	100							
e. Worked with other students on course projects or assignments	CLproject	1	Never	35	5	4,060	7	218	6	13,157	12	3.0	2.9 *** △	.15	2.9 * △	.09	2.7 *** △	.27
		2	Sometimes	178	24	14,476	29	1,108	27	34,035	28							
		3	Often	264	37	17,599	34	1,560	36	40,545	32							
		4	Very often	245	34	15,099	30	1,354	31	33,544	27							
			Total	722	100	51,234	100	4,240	100	121,281	100							
f. Given a course presentation	present	1	Never	59	8	6,907	14	511	13	15,403	14	2.7	2.5 *** △	.15	2.5 *** △	.21	2.6 ** △	.11
		2	Sometimes	260	36	19,340	38	1,735	43	42,353	36							
		3	Often	249	35	14,735	29	1,190	27	36,541	29							
		4	Very often	153	21	10,172	20	797	17	26,816	21							
			Total	721	100	51,154	100	4,233	100	121,113	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]							
													Your seniors compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]

2. During the current school year, about how often have you done the following?

Item wording or description	Variable name	Values	Response options	VT Count	VT %	CC Count	CC %	SCHEV Count	SCHEV %	NSSE Count	NSSE %	VT Mean	CC Mean	CC Effect	SCHEV Mean	SCHEV Effect	NSSE Mean	NSSE Effect
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	27	4	2,138	4	142	4	4,901	5							
		2	Sometimes	189	27	13,665	27	1,103	27	31,203	27							
		3	Often	312	44	20,136	39	1,726	40	47,399	39	2.9	2.9	-.04	2.9	-.06	2.9	-.05
		4	Very often	177	25	14,712	29	1,233	29	36,466	30							
			Total	705	100	50,651	100	4,204	100	119,969	100							
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	73	11	3,859	9	305	8	7,956	8							
		2	Sometimes	243	36	15,828	32	1,436	34	34,665	30							
		3	Often	231	32	17,607	34	1,472	34	42,710	35	2.6	2.8 *** ▽	-.14	2.7 ** ▽	-.12	2.8 *** ▽	-.22
		4	Very often	148	20	13,039	25	976	24	33,941	27							
			Total	695	100	50,333	100	4,189	100	119,272	100							
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	121	19	6,486	15	505	13	13,063	13							
		2	Sometimes	266	39	15,944	32	1,509	35	36,344	31							
		3	Often	192	27	15,551	30	1,226	29	38,257	31	2.4	2.6 *** ▽	-.24	2.6 *** ▽	-.23	2.7 *** ▼	-.32
		4	Very often	109	15	12,033	23	925	22	30,918	25							
			Total	688	100	50,014	100	4,165	100	118,582	100							
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	59	9	2,523	6	226	6	5,287	5							
		2	Sometimes	226	34	14,221	29	1,270	31	31,568	27							
		3	Often	274	40	21,132	42	1,790	43	50,674	43	2.7	2.8 *** ▽	-.21	2.8 ** ▽	-.15	2.9 *** ▽	-.27
		4	Very often	118	17	11,714	23	858	20	30,061	25							
			Total	677	100	49,590	100	4,144	100	117,590	100							
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIperspect	1	Never	37	6	1,722	4	136	4	3,538	4							
		2	Sometimes	194	30	11,743	25	1,072	26	26,331	23							
		3	Often	276	41	21,573	43	1,869	45	51,507	44	2.8	3.0 *** ▽	-.19	2.9 ** ▽	-.13	3.0 *** ▽	-.24
		4	Very often	150	22	13,873	28	1,025	25	34,762	29							
			Total	657	100	48,911	100	4,102	100	116,138	100							
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	23	4	1,126	3	93	3	2,485	2							
		2	Sometimes	176	28	12,053	26	1,090	27	28,030	25							
		3	Often	282	44	21,247	43	1,827	45	49,962	43	2.9	3.0 ** ▽	-.12	2.9	-.08	3.0 *** ▽	-.14
		4	Very often	154	24	13,852	28	1,042	26	34,206	29							
			Total	635	100	48,278	100	4,052	100	114,683	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 24

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

Frequency Distributions[a]

Statistical Comparisons[b]

Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	12	2	559	1	40	1	1,244	1	3.1	3.2 ** ▽	-.11	3.2 * ▽	-.11	3.2 *** ▽	-.16
		2	Sometimes	103	17	7,377	16	599	15	15,916	15							
		3	Often	302	48	21,669	45	1,900	47	50,666	44							
		4	Very often	210	33	18,190	38	1,477	37	45,836	40							
			Total	627	100	47,795	100	4,016	100	113,662	100							

3. During the current school year, about how often have you done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Talked about career plans with a faculty member	SFcareer	1	Never	125	20	9,100	20	692	19	17,890	18	2.3	2.4	-.05	2.4	-.06	2.5 *** ▽	-.16
		2	Sometimes	283	45	19,451	41	1,647	43	43,283	39							
		3	Often	114	18	10,820	22	930	22	28,272	24							
		4	Very often	104	16	8,374	17	744	17	24,122	20							
			Total	626	100	47,745	100	4,013	100	113,567	100							
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	242	39	19,849	43	1,481	39	44,332	42	2.0	2.0	.06	2.0	.00	2.0	.02
		2	Sometimes	194	31	14,459	30	1,298	32	34,420	30							
		3	Often	116	18	7,696	16	728	18	19,033	16							
		4	Very often	70	11	5,538	11	492	11	15,277	13							
			Total	622	100	47,542	100	3,999	100	113,062	100							
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	183	28	13,646	29	1,002	26	29,511	28	2.1	2.1	.02	2.1	.01	2.2	-.03
		2	Sometimes	244	40	19,005	40	1,710	44	43,796	39							
		3	Often	122	20	9,217	19	821	20	23,914	20							
		4	Very often	71	11	5,310	11	440	10	14,992	13							
			Total	620	100	47,178	100	3,973	100	112,213	100							
d. Discussed your academic performance with a faculty member	SFperform	1	Never	208	34	12,783	28	1,129	31	24,932	24	2.0	2.1 *** ▽	-.14	2.0	-.06	2.2 *** ▽	-.26
		2	Sometimes	254	42	20,423	43	1,702	42	47,608	42							
		3	Often	111	18	9,102	19	756	17	24,935	22							
		4	Very often	44	7	4,891	10	383	9	14,729	13							
			Total	617	100	47,199	100	3,970	100	112,204	100							

4. During the current school year, how much has your coursework emphasized the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Memorizing course material	memorize	1	Very little	65	11	3,593	8	282	8	8,896	8	2.7	2.8 ** ▽	-.14	2.8 * ▽	-.10	2.8 * ▽	-.10
		2	Some	194	31	13,871	30	1,212	31	34,168	31							
		3	Quite a bit	226	37	18,121	39	1,506	37	42,962	38							
		4	Very much	125	20	11,350	24	946	24	25,483	23							
			Total	610	100	46,935	100	3,946	100	111,509	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

<div align="center">Frequency Distributions[a]</div>

<div align="center">Statistical Comparisons[b]</div>

<div align="center">Your seniors compared with</div>

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	25	4	1,343	3	99	3	3,073	3							
		2	Some	108	18	9,089	20	809	19	20,939	19							
		3	Quite a bit	272	45	20,689	44	1,767	45	49,036	44	3.1	3.1	-.01	3.1	-.04	3.1	-.03
		4	Very much	200	33	15,569	33	1,257	33	37,931	34							
			Total	605	100	46,690	100	3,932	100	110,979	100							
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	30	5	1,521	4	139	3	3,476	3							
		2	Some	133	23	9,719	21	892	22	22,278	20							
		3	Quite a bit	256	43	19,937	43	1,710	44	47,117	43	3.0	3.0 * ▽	-.10	3.0	-.07	3.1 ** ▽	-.13
		4	Very much	176	29	15,149	33	1,154	31	37,139	34							
			Total	595	100	46,326	100	3,895	100	110,010	100							
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	63	11	2,715	7	269	8	4,874	5							
		2	Some	167	29	11,122	25	1,098	28	24,233	23							
		3	Quite a bit	226	38	18,793	40	1,531	38	45,960	42	2.7	2.9 *** ▽	-.23	2.8 ** ▽	-.12	3.0 *** ▼	-.33
		4	Very much	132	22	13,503	29	988	26	34,396	31							
			Total	588	100	46,133	100	3,886	100	109,463	100							
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	39	7	1,858	5	166	5	3,659	4							
		2	Some	159	28	10,423	23	977	26	23,125	22							
		3	Quite a bit	250	42	19,985	43	1,712	44	48,243	44	2.8	3.0 *** ▽	-.20	2.9 ** ▽	-.13	3.0 *** ▽	-.27
		4	Very much	132	22	13,623	29	1,015	26	33,906	31							
			Total	580	100	45,889	100	3,870	100	108,933	100							

5. During the current school year, to what extent have your instructors done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. Clearly explained course goals and requirements	ETgoals	1	Very little	16	3	950	2	85	2	2,327	2							
		2	Some	100	17	8,356	18	741	18	18,645	17							
		3	Quite a bit	276	47	20,213	44	1,799	48	46,321	42	3.1	3.1	-.05	3.1	-.01	3.2 * ▽	-.09
		4	Very much	186	32	16,086	35	1,217	32	41,003	38							
			Total	578	100	45,605	100	3,842	100	108,296	100							
b. Taught course sessions in an organized way	ETorganize	1	Very little	19	3	1,719	4	136	3	4,325	4							
		2	Some	99	17	9,165	20	806	21	20,415	19							
		3	Quite a bit	287	50	20,101	44	1,810	47	46,057	42	3.1	3.0	.02	3.0	.06	3.1	-.01
		4	Very much	171	30	14,498	32	1,075	29	37,189	34							
			Total	576	100	45,483	100	3,827	100	107,986	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 26

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

Frequency Distributions[a]

Statistical Comparisons[b]

Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	22	4	1,410	3	87	2	3,750	4							
		2	Some	86	15	8,976	20	731	19	20,488	19							
		3	Quite a bit	262	46	18,846	41	1,707	45	43,235	40	3.1	3.1	.04	3.1	.02	3.1	.03
		4	Very much	206	36	16,166	36	1,299	34	40,323	37							
			Total	576	100	45,398	100	3,824	100	107,796	100							
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	60	11	4,537	11	409	12	9,074	9							
		2	Some	173	31	13,263	29	1,220	33	28,250	27							
		3	Quite a bit	211	37	15,479	34	1,324	34	37,344	34	2.7	2.8	-.06	2.7	.06	2.8 *** ▽	-.15
		4	Very much	128	22	12,043	26	860	21	32,918	30							
			Total	572	100	45,322	100	3,813	100	107,586	100							
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	57	10	3,832	9	330	9	7,725	8							
		2	Some	200	35	13,839	31	1,290	34	29,001	27							
		3	Quite a bit	217	38	16,667	36	1,419	38	40,276	37	2.6	2.8 *** ▽	-.16	2.7	-.08	2.9 *** ▽	-.27
		4	Very much	92	16	10,779	24	756	19	30,168	28							
			Total	566	100	45,117	100	3,795	100	107,170	100							
f. Explained in advance the criteria for successfully completing your assignments	etcriteria	1	Very little	20	4	1,637	4	144	4	3,644	4							
		2	Some	145	26	9,990	22	936	24	21,098	20							
		3	Quite a bit	246	44	19,058	42	1,696	45	43,887	41	2.9	3.0 * ▽	-.10	2.9	-.02	3.1 *** ▽	-.19
		4	Very much	147	26	14,254	32	1,013	27	38,028	36							
			Total	558	100	44,939	100	3,789	100	106,657	100							
g. Reviewed and summarized key ideas or concepts	etreview	1	Very little	19	3	1,342	3	96	3	3,297	3							
		2	Some	122	22	9,466	21	887	24	20,725	20							
		3	Quite a bit	270	49	19,846	44	1,750	46	45,924	43	3.0	3.0 * ▽	-.09	3.0	-.02	3.1 ** ▽	-.13
		4	Very much	145	26	14,144	32	1,043	28	36,433	34							
			Total	556	100	44,798	100	3,776	100	106,379	100							
h. Taught in a way that aligns with how you prefer to learn	etprefer	1	Very little	54	10	3,433	8	302	8	7,464	8							
		2	Some	179	33	14,415	32	1,267	34	30,959	29							
		3	Quite a bit	237	42	17,448	39	1,519	40	41,942	39	2.6	2.7 ** ▽	-.11	2.7	-.07	2.8 *** ▽	-.19
		4	Very much	85	16	9,442	21	695	18	25,837	24							
			Total	555	100	44,738	100	3,783	100	106,202	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]							
													Your seniors compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
i. Enabled you to demonstrate your learning through quizzes, assignments, and other activities	etdemonstrate	1	Very little	17	3	1,248	3	95	3	3,090	3							
		2	Some	87	16	8,002	18	687	18	17,570	17							
		3	Quite a bit	273	50	19,255	43	1,727	46	44,631	42	3.1	3.1	-.04	3.1	-.01	3.1	-.08
		4	Very much	177	31	16,170	36	1,260	33	40,800	38							
			Total	554	100	44,675	100	3,769	100	106,091	100							

6. During the current school year, about how often have you done the following?

				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size	Mean	Effect size	Mean	Effect size
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	43	8	4,121	9	366	9	10,515	10							
		2	Sometimes	178	33	14,337	32	1,303	34	34,943	33							
		3	Often	203	38	16,047	37	1,373	37	36,903	36	2.7	2.7	.01	2.7	.08	2.7	.05
		4	Very often	117	22	9,561	23	702	20	22,358	22							
			Total	541	100	44,066	100	3,744	100	104,719	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	82	16	6,928	16	620	17	16,154	16							
		2	Sometimes	208	39	15,277	34	1,355	35	37,106	35							
		3	Often	159	30	13,501	30	1,136	30	31,667	30	2.5	2.5	-.07	2.5	-.04	2.5	-.07
		4	Very often	85	16	8,189	19	616	18	19,396	19							
			Total	534	100	43,895	100	3,727	100	104,323	100							
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	69	13	5,920	14	519	13	15,255	15							
		2	Sometimes	194	36	15,796	36	1,398	36	38,046	36							
		3	Often	194	36	14,406	33	1,242	35	32,890	32	2.5	2.5	-.04	2.5	-.02	2.5	.00
		4	Very often	74	14	7,586	18	564	16	17,643	17							
			Total	531	100	43,708	100	3,723	100	103,834	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.)

				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size	Mean	Effect size	Mean	Effect size
a. Up to 5 pages	wrshortnum	0	None	47	9	3,302	8	335	9	6,805	7							
(Recoded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)		1.5	1-2	115	21	8,753	20	793	20	18,605	18							
		4	3-5	154	29	12,449	28	1,061	28	29,754	29							
		8	6-10	108	21	9,086	21	726	20	22,615	22	6.6	7.1	-.07	7.0	-.06	7.5 ** ▽	-.13
		13	11-15	40	8	4,612	10	359	10	11,224	11							
		18	16-20	29	5	2,207	5	178	5	5,773	5							
		23	More than 20	35	7	3,213	8	270	8	8,846	8							
			Total	528	100	43,622	100	3,722	100	103,622	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 28

Seniors

Frequency Distributions[a]

Statistical Comparisons[b]

Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
b. Between 6 and 10 pages	wrmednum *(Recoded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)*	0	None	170	33	12,801	30	1,192	31	26,160	26	2.8	3.2 * ▽	-.09	2.8	.01	3.6 *** ▽	-.16
		1.5	1-2	169	32	14,120	32	1,275	35	33,351	32							
		4	3-5	110	21	9,197	21	770	22	23,928	23							
		8	6-10	54	10	4,323	10	277	8	11,867	11							
		13	11-15	12	2	1,751	4	112	3	4,376	4							
		18	16-20	3	0	558	1	27	1	1,574	2							
		23	More than 20	7	1	706	2	49	1	1,963	2							
			Total	525	100	43,456	100	3,702	100	103,219	100							
c. 11 pages or more	wrlongnum *(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)*	0	None	268	50	23,179	53	2,120	55	50,898	50	1.7	1.9	-.05	1.6	.05	2.0 * ▽	-.08
		1.5	1-2	169	32	12,703	29	1,070	31	32,633	31							
		4	3-5	56	11	4,016	9	294	8	10,562	10							
		8	6-10	18	3	1,708	4	102	3	4,349	4							
		13	11-15	7	1	1,028	2	63	1	2,634	3							
		18	16-20	3	1	338	1	24	1	840	1							
		23	More than 20	6	1	570	1	37	1	1,535	2							
			Total	527	100	43,542	100	3,710	100	103,451	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.)*											67.8	75.5 * ▽	-.08	66.8	.01	81.3 *** ▽	-.13

8. During the current school year, about how often have you had discussions with people from the following groups?

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
a. People of races or ethnicities other than your own	DDrace	1	Never	13	3	1,803	4	135	3	5,403	6	3.1	3.1	-.01	3.0	.09	3.0	.06
		2	Sometimes	132	26	9,793	23	1,046	28	25,140	24							
		3	Often	166	31	13,861	32	1,243	34	32,506	31							
		4	Very often	217	40	18,046	42	1,286	35	40,276	39							
			Total	528	100	43,503	100	3,710	100	103,325	100							
b. People from economic backgrounds other than your own	DDeconomic	1	Never	17	4	1,702	4	115	3	4,880	5	3.0	3.1	-.08	3.0	-.04	3.0	-.03
		2	Sometimes	132	26	9,765	23	940	25	23,989	23							
		3	Often	202	38	15,611	36	1,409	38	36,712	35							
		4	Very often	174	32	16,344	37	1,236	34	37,554	36							
			Total	525	100	43,422	100	3,700	100	103,135	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]						
													Your seniors compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
c. People with religious beliefs other than your own	DDreligion	1	Never	24	5	2,344	6	165	4	7,770	8	3.0	3.0	.03	3.0	.06	2.9 ** △	.12
		2	Sometimes	130	25	11,153	26	1,053	29	28,801	28							
		3	Often	172	33	14,290	32	1,258	33	32,513	31							
		4	Very often	195	37	15,599	36	1,222	34	34,006	33							
			Total	521	100	43,386	100	3,698	100	103,090	100							
d. People with political views other than your own	DDpolitical	1	Never	22	4	3,040	7	210	6	8,129	8	2.9	2.8	.04	2.8	.07	2.8	.06
		2	Sometimes	183	35	13,863	32	1,191	35	32,284	31							
		3	Often	152	29	13,259	30	1,220	31	31,655	30							
		4	Very often	163	31	13,228	31	1,078	28	30,997	30							
			Total	520	100	43,390	100	3,699	100	103,065	100							
e. People with sexual orientations other than your own	ddsexorient	1	Never	44	9	2,997	8	255	7	9,112	9	2.8	2.9 ** ▽	-.13	2.9	-.09	2.8	-.07
		2	Sometimes	172	34	12,027	29	1,188	32	29,674	29							
		3	Often	141	27	13,561	30	1,120	30	30,757	29							
		4	Very often	164	30	14,781	33	1,136	31	33,403	32							
			Total	521	100	43,366	100	3,699	100	102,946	100							
f. People from countries other than your own	ddcountry	1	Never	32	6	3,310	8	260	6	10,594	11	2.8	2.8	-.02	2.7	.04	2.7 * △	.10
		2	Sometimes	199	38	15,311	34	1,534	39	38,622	37							
		3	Often	144	27	12,167	28	1,013	28	27,304	26							
		4	Very often	147	29	12,607	30	892	27	26,544	26							
			Total	522	100	43,395	100	3,699	100	103,064	100							

9. During the current school year, about how often have you done the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
a. Identified key information from reading assignments	LSreading	1	Never	30	6	1,466	4	135	4	2,825	3	2.9	3.0 *** ▽	-.20	3.0 ** ▽	-.14	3.1 *** ▽	-.29
		2	Sometimes	135	28	9,382	22	917	25	20,123	20							
		3	Often	218	42	18,250	42	1,548	42	43,449	42							
		4	Very often	132	25	14,042	32	1,086	30	36,095	35							
			Total	515	100	43,140	100	3,686	100	102,492	100							
b. Reviewed your notes after class	LSnotes	1	Never	53	11	2,936	7	284	8	6,659	7	2.6	2.9 *** ▽	-.30	2.8 *** ▽	-.21	2.9 *** ▼	-.34
		2	Sometimes	201	39	12,646	30	1,188	33	29,263	28							
		3	Often	164	32	14,579	34	1,205	32	34,617	34							
		4	Very often	98	18	12,961	30	1,007	27	31,892	31							
			Total	516	100	43,122	100	3,684	100	102,431	100							

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]							
													Your seniors compared with						
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023		
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]	
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	58	11	2,488	6	270	8	5,317	5	2.6	2.9 *** ▽	-.30	2.8 *** ▽	-.19	2.9 *** ▼	-.36	
		2	Sometimes	172	34	12,122	29	1,169	32	27,533	27								
		3	Often	201	38	16,471	38	1,336	36	39,173	38								
		4	Very often	86	17	12,017	27	907	24	30,359	29								
			Total	517	100	43,098	100	3,682	100	102,382	100								

10. During the current school year, to what extent have your courses challenged you to do your best work?

				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size	Mean	Effect size	Mean	Effect size
	challenge	1	Not at all	11	3	430	1	29	1	1,079	1	5.1	5.4 *** ▽	-.22	5.3 *** ▽	-.18	5.5 *** ▽	-.30
		2		12	3	687	2	50	1	1,418	2							
		3		33	7	2,181	5	159	4	4,662	5							
		4		62	12	5,134	12	453	13	11,097	11							
		5		177	35	13,203	31	1,296	36	29,519	29							
		6		138	26	10,659	25	957	26	25,833	25							
		7	Very much	76	15	10,533	24	714	19	28,134	28							
			Total	509	100	42,827	100	3,658	100	101,742	100							

11. Which of the following have you done while in college or do you plan to do before you graduate?[f]

			Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
			Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size	Mean	Effect size	Mean	Effect size
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	26	6	3,786	9	208	6	9,636	10	64%	51% *** △	.25	60%	.08	49% *** △	.29
		Do not plan to do	70	14	6,451	15	465	14	17,109	18							
		Plan to do	88	17	10,233	24	721	21	22,119	23							
		Done or in progress	328	64	22,369	51	2,265	60	52,843	49							
		Total	512	100	42,839	100	3,659	100	101,707	100							
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	24	5	4,649	11	295	8	11,941	12	51%	36% *** ▲	.32	46% * △	.12	33% *** ▲	.38
		Do not plan to do	197	40	18,441	44	1,415	40	45,158	46							
		Plan to do	18	3	3,977	9	242	7	8,872	9							
		Done or in progress	270	51	15,679	36	1,701	46	35,542	33							
		Total	509	100	42,746	100	3,653	100	101,513	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	30	6	5,372	13	310	8	13,952	14	27%	23%	.07	30%	-.09	23% * △	.09
		Do not plan to do	328	65	22,610	54	1,879	54	52,269	53							
		Plan to do	12	2	4,347	10	261	7	10,311	10							
		Done or in progress	141	27	10,311	23	1,202	30	24,583	23							
		Total	511	100	42,640	100	3,652	100	101,115	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

Seniors

Frequency Distributions[a] — Statistical Comparisons[b]

Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
d. Participate in a study abroad program *(Means indicate the percentage who responded "Done or in progress.")*	abroad		Have not decided	25	5	4,939	12	308	8	12,250	13	17%	10% *** △	.20	13% * △	.12	10% *** △	.22
			Do not plan to do	365	72	29,400	69	2,564	72	70,418	70							
			Plan to do	30	5	3,668	9	261	7	7,624	8							
			Done or in progress	92	17	4,651	10	515	13	10,895	10							
			Total	512	100	42,658	100	3,648	100	101,187	100							
e. Work with a faculty member on a research project *(Means indicate the percentage who responded "Done or in progress.")*	research		Have not decided	42	9	6,139	15	412	12	15,003	16	35%	25% *** △	.24	31%	.09	23% *** △	.27
			Do not plan to do	239	46	20,435	48	1,806	48	50,109	50							
			Plan to do	50	10	5,451	13	342	9	11,276	12							
			Done or in progress	180	35	10,624	25	1,087	31	24,755	23							
			Total	511	100	42,649	100	3,647	100	101,143	100							
f. Complete a culminating senior experience (capstone course, senior project or thesis, portfolio, recital, comprehensive exam, etc.) *(Means indicate the percentage who responded "Done or in progress.")*	capstone		Have not decided	20	4	3,845	9	267	7	8,927	9	56%	42% *** △	.28	45% *** △	.22	46% *** △	.20
			Do not plan to do	97	19	10,047	24	968	26	20,257	21							
			Plan to do	106	21	10,371	24	779	22	22,751	24							
			Done or in progress	289	56	18,351	42	1,628	45	49,197	46							
			Total	512	100	42,614	100	3,642	100	101,132	100							

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

	Variable name	Values	Response options	VT Count	VT %	Carnegie Count	Carnegie %	SCHEV Count	SCHEV %	NSSE Count	NSSE %	VT Mean	Carnegie Mean	Carnegie Effect	SCHEV Mean	SCHEV Effect	NSSE Mean	NSSE Effect
	servcourse	1	None	257	51	19,066	47	1,692	49	39,038	41	1.5	1.6 *** ▽	-.18	1.6 ** ▽	-.12	1.7 *** ▽	-.29
		2	Some	235	46	19,065	44	1,627	43	48,737	47							
		3	Most	16	3	3,411	8	252	6	10,012	9							
		4	All	0	0	849	2	56	1	2,778	3							
			Total	508	100	42,391	100	3,627	100	100,565	100							

13. Indicate the quality of your interactions with the following people at your institution.

	Variable name	Values	Response options	VT Count	VT %	Carnegie Count	Carnegie %	SCHEV Count	SCHEV %	NSSE Count	NSSE %	VT Mean	Carnegie Mean	Carnegie Effect	SCHEV Mean	SCHEV Effect	NSSE Mean	NSSE Effect
a. Students	QIstudent	1	Poor	8	2	593	1	31	1	1,423	2	5.6	5.6	.05	5.6	.05	5.6	.03
		2		6	1	664	2	41	1	1,612	2							
		3		14	3	1,710	4	119	4	3,867	4							
		4		48	9	4,162	10	337	9	9,662	10							
		5		115	22	10,651	25	1,011	28	23,608	23							
		6		182	35	12,446	29	1,194	32	28,031	27							
		7	Excellent	136	27	11,696	28	888	25	29,590	29							
		—	Not applicable	2	0	580	1	18	0	3,025	3							
			Total	511	100	42,502	100	3,639	100	100,818	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

Frequency Distributions[a]

Statistical Comparisons[b]
Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
b. Academic advisors	QIadvisor	1	Poor	19	4	2,171	6	142	4	4,542	5							
		2		19	4	2,228	5	190	5	4,563	5							
		3		44	8	3,598	8	263	7	7,243	7							
		4		50	9	5,752	13	453	13	11,810	12							
		5		102	20	8,077	19	683	21	18,016	18	5.3	5.1 ***	.15	5.1 *	.12	5.3	.04
		6		110	22	8,083	19	772	21	19,592	19		△		△			
		7	Excellent	161	32	12,078	28	1,085	26	33,429	33							
		—	Not applicable	4	1	464	1	44	2	1,485	2							
			Total	509	100	42,451	100	3,632	100	100,680	100							
c. Faculty	QIfaculty	1	Poor	6	1	644	2	30	1	1,557	2							
		2		7	1	941	2	81	2	1,965	2							
		3		22	5	2,149	5	177	5	4,312	4							
		4		69	14	5,366	13	470	13	10,694	11							
		5		131	25	10,854	25	1,065	29	23,073	23	5.4	5.4	.02	5.3	.06	5.6 *	-.10
		6		175	35	12,102	28	1,114	31	28,647	28						▽	
		7	Excellent	99	19	10,001	24	681	18	29,408	30							
		—	Not applicable	1	0	402	1	15	0	1,041	1							
			Total	510	100	42,459	100	3,633	100	100,697	100							
d. Student services staff (career services, student activities, housing, etc.)	QIstaff	1	Poor	15	3	1,675	4	113	3	3,991	4							
		2		22	4	1,781	4	141	4	3,940	4							
		3		30	6	3,040	7	231	7	6,623	6							
		4		68	13	5,760	13	545	15	12,532	12							
		5		104	20	8,303	19	783	22	18,502	18	5.1	4.9	.08	5.0	.05	5.1	.01
		6		119	23	7,375	17	756	21	17,513	17							
		7	Excellent	81	16	7,316	17	611	16	20,416	20							
		—	Not applicable	71	14	7,173	17	453	12	17,105	18							
			Total	510	100	42,423	100	3,633	100	100,622	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 33

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]						
													Your seniors compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
e. Other administrative staff and offices (registrar, financial aid, etc.)	QIadmin	1	Poor	22	4	2,059	5	115	3	4,536	5							
		2		27	6	2,153	5	147	4	4,557	5							
		3		43	8	3,511	8	267	8	7,312	7							
		4		78	15	6,674	16	595	17	14,201	14							
		5		104	20	8,825	21	831	23	20,173	20	4.8	4.8	-.02	4.9	-.07	5.0 ** ▽	-.14
		6		101	20	7,674	18	734	19	19,428	19							
		7	Excellent	68	14	7,449	18	581	15	22,561	23							
		—	Not applicable	66	13	4,088	10	361	11	7,933	9							
			Total	509	100	42,433	100	3,631	100	100,701	100							

14. How much does your institution emphasize the following?

				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size	Mean	Effect size	Mean	Effect size
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	14	3	725	2	58	2	1,905	2							
		2	Some	95	19	7,947	19	717	18	19,310	20							
		3	Quite a bit	242	48	18,767	44	1,655	45	44,981	45	3.1	3.1 * ▽	-.10	3.1 * ▽	-.11	3.1	-.05
		4	Very much	157	30	14,866	35	1,194	35	34,147	34							
			Total	508	100	42,305	100	3,624	100	100,343	100							
b. Providing support to help students succeed academically	SEacademic	1	Very little	31	7	2,567	6	169	4	5,591	6							
		2	Some	151	30	12,152	29	1,027	30	25,459	26							
		3	Quite a bit	219	43	17,860	42	1,642	45	41,738	41	2.8	2.8	-.05	2.8	-.06	2.9 ** ▽	-.14
		4	Very much	108	20	9,670	23	783	20	27,377	27							
			Total	509	100	42,249	100	3,621	100	100,165	100							
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	50	11	4,213	11	276	7	9,416	10							
		2	Some	153	30	11,782	28	957	27	24,670	25							
		3	Quite a bit	202	41	16,136	38	1,519	43	37,672	37	2.7	2.7	-.08	2.8 ** ▽	-.16	2.8 *** ▽	-.18
		4	Very much	101	18	10,047	23	860	23	28,288	28							
			Total	506	100	42,178	100	3,612	100	100,046	100							
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	65	13	5,718	14	555	15	13,930	15							
		2	Some	189	38	13,472	32	1,301	37	30,731	30							
		3	Quite a bit	163	32	13,909	32	1,136	31	32,667	32	2.5	2.6 * ▽	-.11	2.5	.02	2.6 ** ▽	-.12
		4	Very much	89	16	9,040	22	621	17	22,570	23							
			Total	506	100	42,139	100	3,613	100	99,898	100							

Seniors

Frequency Distributions[a] **Statistical Comparisons[b]**

Your seniors compared with

Item wording or description	Variable name [c]	Values [d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size [e]	SCHEV Peers Mean	Effect size [e]	NSSE 2023 Mean	Effect size [e]
e. Providing opportunities to be involved socially	SEsocial	1	Very little	27	6	3,415	8	232	7	8,816	10							
		2	Some	116	24	11,451	28	984	29	26,143	27							
		3	Quite a bit	222	43	16,740	39	1,515	41	38,571	38	2.9	2.8 **	.11	2.8 *	.13	2.8 **	.12
		4	Very much	141	27	10,510	25	882	23	26,290	25		△		△		△	
			Total	506	100	42,116	100	3,613	100	99,820	100							
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	47	10	5,013	12	338	10	11,340	12							
		2	Some	134	27	12,921	31	1,117	32	29,664	30							
		3	Quite a bit	212	41	15,193	36	1,408	38	35,523	35	2.8	2.7 *	.09	2.7	.08	2.7	.06
		4	Very much	113	22	8,940	21	750	20	23,259	23		△					
			Total	506	100	42,067	100	3,613	100	99,786	100							
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	181	36	14,559	35	1,290	37	31,775	32							
		2	Some	199	39	14,948	35	1,373	38	34,739	35							
		3	Quite a bit	95	19	8,268	19	653	18	21,159	21	1.9	2.0 **	-.11	2.0	-.02	2.1 ***	-.19
		4	Very much	30	6	4,253	10	293	8	11,972	12		▽				▽	
			Total	505	100	42,028	100	3,609	100	99,645	100							
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	29	6	5,214	12	281	7	15,697	17							
		2	Some	121	25	12,280	29	1,081	31	28,149	28							
		3	Quite a bit	213	42	15,257	36	1,439	39	34,051	33	2.9	2.7 ***	.22	2.8 **	.14	2.6 ***	.31
		4	Very much	143	27	9,244	22	806	23	21,613	21		△		△		▲	
			Total	506	100	41,995	100	3,607	100	99,510	100							
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	115	24	9,204	22	723	19	22,229	23							
		2	Some	204	41	16,245	39	1,577	44	36,087	36							
		3	Quite a bit	137	27	11,334	27	924	26	27,309	27	2.2	2.3	-.08	2.3	-.09	2.3 *	-.10
		4	Very much	49	9	5,220	12	386	11	13,918	14						▽	
			Total	505	100	42,003	100	3,610	100	99,543	100							

15. To what extent do you agree or disagree with the following statements?

Item wording or description	Variable name [c]	Values [d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size [e]	SCHEV Peers Mean	Effect size [e]	NSSE 2023 Mean	Effect size [e]
a. I feel comfortable being myself at this institution.	sbmyself	1	Strongly disagree	18	4	1,108	3	77	3	2,744	3							
		2	Disagree	35	8	3,342	8	276	8	7,534	8							
		3	Agree	235	45	21,394	50	1,898	52	48,868	48	3.3	3.2	.05	3.2	.07	3.3	.01
		4	Strongly agree	219	43	16,152	39	1,359	37	40,422	41							
			Total	507	100	41,996	100	3,610	100	99,568	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]							
														Your seniors compared with				
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
b. I feel valued by this institution.	sbvalued	1	Strongly disagree	53	12	3,416	9	245	8	6,721	7							
		2	Disagree	99	19	9,066	22	819	23	18,205	18							
		3	Agree	245	48	20,727	48	1,842	50	49,157	49	2.8	2.8	-.03	2.8	-.02	2.9 ***	-.16
		4	Strongly agree	110	21	8,781	21	702	19	25,426	26						▽	
			Total	507	100	41,990	100	3,608	100	99,509	100							
c. I feel like part of the community at this institution.	sbcommunity	1	Strongly disagree	35	8	2,608	7	187	6	5,821	6							
		2	Disagree	56	12	7,999	19	631	18	17,941	18							
		3	Agree	262	52	21,427	50	1,922	53	49,291	49	3.0	2.9 **	.13	2.9 *	.11	2.9	.08
		4	Strongly agree	152	29	9,985	24	870	23	26,567	26		△		△			
			Total	505	100	42,019	100	3,610	100	99,620	100							

16. About how many hours do you spend in a typical 7-day week doing the following?

Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs (Recoded version of tmprep created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	5	1	174	0	12	0	446	0							
		3	1-5 hrs	47	9	4,402	11	384	9	11,117	11							
		8	6-10 hrs	93	18	8,718	21	719	19	21,380	21							
		13	11-15 hrs	103	21	8,688	20	748	21	20,454	20							
		18	16-20 hrs	115	23	8,123	19	742	21	19,137	19	16.2	16.0	.02	16.6	-.04	15.6	.08
		23	21-25 hrs	60	12	4,892	12	419	12	11,721	12							
		28	26-30 hrs	29	6	2,920	7	245	7	6,564	7							
		33	More than 30 hrs	52	10	3,999	10	335	11	8,505	9							
			Total	504	100	41,916	100	3,604	100	99,324	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]							
													Your seniors compared with						
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023		
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]	
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs *(Recoded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	107	23	15,865	38	1,024	28	41,421	44	6.3	5.3 ** △	.14	5.8	.08	5.0 *** △	.18	
		3	1-5 hrs	191	38	12,117	29	1,311	36	26,637	26								
		8	6-10 hrs	102	20	6,116	15	607	17	12,698	12								
		13	11-15 hrs	59	11	3,636	9	323	9	7,922	8								
		18	16-20 hrs	17	3	2,102	5	183	5	4,985	5								
		23	21-25 hrs	8	2	1,053	3	74	2	2,624	3								
		28	26-30 hrs	8	2	372	1	35	1	1,165	1								
		33	More than 30 hrs	11	2	572	1	44	1	1,698	2								
			Total	503	100	41,833	100	3,601	100	99,150	100								
c. Working for pay **on campus**	tmworkonhrs *(Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	315	64	29,362	71	2,233	61	69,769	73	4.2	3.8	.06	4.7	-.06	3.4 * △	.12	
		3	1-5 hrs	40	7	1,920	4	241	6	5,487	5								
		8	6-10 hrs	59	12	3,424	8	386	11	8,178	7								
		13	11-15 hrs	37	7	2,914	7	349	10	6,376	6								
		18	16-20 hrs	31	6	2,589	6	274	7	5,928	6								
		23	21-25 hrs	10	2	870	2	71	2	1,781	2								
		28	26-30 hrs	6	1	293	1	28	1	644	1								
		33	More than 30 hrs	5	1	485	1	23	1	1,058	1								
			Total	503	100	41,857	100	3,605	100	99,221	100								
d. Working for pay **off campus**	tmworkoffhrs *(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)*	0	0 hrs	338	68	18,934	46	1,677	51	41,009	41	4.3	10.6 *** ▼	-.52	8.1 *** ▼	-.38	12.8 *** ▼	-.65	
		3	1-5 hrs	35	7	2,232	5	217	7	5,012	5								
		8	6-10 hrs	36	7	3,014	7	319	8	6,731	6								
		13	11-15 hrs	31	6	3,429	8	364	10	7,430	7								
		18	16-20 hrs	28	5	3,985	10	385	10	9,212	9								
		23	21-25 hrs	17	4	2,895	7	259	6	7,051	7								
		28	26-30 hrs	9	2	1,903	5	153	3	5,218	5								
		33	More than 30 hrs	7	2	5,471	13	229	5	17,575	20								
			Total	501	100	41,863	100	3,603	100	99,238	100								
Estimated number of hours working for pay	tmworkhrs *(Continuous variable created by NSSE)*											8.5	14.4 *** ▼	-.46	12.8 *** ▼	-.39	16.2 *** ▼	-.57	

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 37

Seniors

Frequency Distributions[a]

Statistical Comparisons[b]

Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
e. Doing community service or volunteer work	tmservicehrs (Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	281	58	23,814	58	2,130	60	55,129	57							
		3	1-5 hrs	179	34	11,993	28	1,075	29	28,999	28							
		8	6-10 hrs	29	6	2,880	7	200	6	7,097	7							
		13	11-15 hrs	6	1	1,485	4	97	3	3,647	4							
		18	16-20 hrs	4	1	802	2	51	1	2,103	2	1.9	2.8 *** ▽	-.17	2.3 * ▽	-.09	2.9 *** ▽	-.18
		23	21-25 hrs	1	0	411	1	22	0	968	1							
		28	26-30 hrs	1	0	161	0	7	0	436	0							
		33	More than 30 hrs	1	0	294	1	22	1	813	1							
			Total	502	100	41,840	100	3,604	100	99,192	100							
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs (Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	9	2	1,055	3	64	2	2,972	3							
		3	1-5 hrs	80	16	9,027	21	634	16	24,532	25							
		8	6-10 hrs	137	27	11,637	27	1,039	28	28,113	28							
		13	11-15 hrs	119	24	8,755	21	813	23	19,505	19							
		18	16-20 hrs	82	16	5,797	14	529	16	12,275	12	13.0	12.0 * △	.12	12.8	.02	11.2 *** △	.22
		23	21-25 hrs	26	5	2,411	6	206	6	5,058	5							
		28	26-30 hrs	15	3	1,091	3	121	3	2,307	2							
		33	More than 30 hrs	30	7	2,082	6	192	6	4,449	5							
			Total	498	100	41,855	100	3,598	100	99,211	100							
g. Providing care for dependents (children, parents, etc.)	tmcarehrs (Recoded version of tmcare created by NSSE. Values are estimated number of hours per week.)	0	0 hrs	463	93	30,336	73	2,975	83	65,818	65							
		3	1-5 hrs	20	4	3,772	9	267	7	9,685	10							
		8	6-10 hrs	6	1	1,797	4	100	3	4,900	5							
		13	11-15 hrs	3	1	1,364	3	73	2	3,594	4							
		18	16-20 hrs	1	0	946	2	36	1	2,654	3	.7	4.0 *** ▼	-.37	2.0 *** ▽	-.22	5.9 *** ▼	-.49
		23	21-25 hrs	3	1	519	1	26	1	1,458	2							
		28	26-30 hrs	0	0	311	1	12	0	1,089	1							
		33	More than 30 hrs	3	1	2,753	6	102	2	9,892	11							
			Total	499	100	41,798	100	3,591	100	99,090	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 FREQUENCIES AND STATISTICAL COMPARISONS • 38

NSSE 2023 Frequencies and Statistical Comparisons
Virginia Polytechnic Institute and State University

Seniors

Frequency Distributions[a] — **Statistical Comparisons[b]**

Your seniors compared with

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
h. Commuting to campus (driving, walking, etc.) *(Recoded version of tmcommute created by NSSE. Values are estimated number of hours per week.)*	tmcommutehrs	0	0 hrs	25	5	7,530	16	448	14	27,624	28	4.5	5.0 ** ▽	-.09	4.5	.01	4.6	-.01
		3	1-5 hrs	371	74	22,936	55	2,325	63	46,852	46							
		8	6-10 hrs	72	14	6,861	17	539	16	14,202	15							
		13	11-15 hrs	23	5	2,427	6	171	5	5,238	5							
		18	16-20 hrs	3	1	1,024	3	51	1	2,358	2							
		23	21-25 hrs	3	1	504	1	25	1	1,143	1							
		28	26-30 hrs	0	0	181	0	12	0	557	1							
		33	More than 30 hrs	3	1	387	1	22	1	1,252	1							
			Total	500	100	41,850	100	3,593	100	99,226	100							

17. Of the time you spend preparing for class in a typical 7-day week, about how much is on *assigned reading*?

	Variable name[c]	Values[d]	Response options	Virginia Tech Count	Virginia Tech %	Carnegie Class Count	Carnegie Class %	SCHEV Peers Count	SCHEV Peers %	NSSE 2023 Count	NSSE 2023 %	Virginia Tech Mean	Carnegie Class Mean	Carnegie Class Effect size[e]	SCHEV Peers Mean	SCHEV Peers Effect size[e]	NSSE 2023 Mean	NSSE 2023 Effect size[e]
	reading	1	Very little	163	34	7,698	20	763	21	14,877	15	2.2	2.6 *** ▼	-.37	2.5 *** ▼	-.32	2.8 *** ▼	-.51
		2	Some	174	35	13,550	33	1,245	33	29,799	30							
		3	About half	82	16	10,421	24	811	23	26,652	27							
		4	Most	54	10	6,921	16	557	16	19,167	19							
		5	Almost all	25	5	3,102	7	210	6	8,363	8							
			Total	498	100	41,692	100	3,586	100	98,858	100							
(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)	tmreadinghrs											4.8	6.6 *** ▽	-.30	6.5 *** ▼	-.31	7.2 *** ▼	-.37
(Collapsed version of tmreadinghrs created by NSSE.)	tmreadinghrscol	1	0 hrs	5	1	168	0	12	0	435	0							
		2	More than zero, up to 5 hrs	308	64	21,391	52	1,970	52	47,513	49							
		3	More than 5, up to 10 hrs	136	26	11,718	28	963	29	28,022	28							
		4	More than 10, up to 15 hrs	25	5	3,858	9	327	10	10,233	10							
		5	More than 15, up to 20 hrs	13	2	2,230	5	166	5	6,124	6							
		6	More than 20, up to 25 hrs	7	1	1,474	3	103	3	4,201	4							
		7	More than 25 hrs	3	1	735	2	37	1	1,985	2							
			Total	497	100	41,574	100	3,578	100	98,513	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

Seniors

				Frequency Distributions[a]								Statistical Comparisons[b]						
													Your seniors compared with					
				Virginia Tech		Carnegie Class		SCHEV Peers		NSSE 2023		Virginia Tech	Carnegie Class		SCHEV Peers		NSSE 2023	
Item wording or description	Variable name[c]	Values[d]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size[e]	Mean	Effect size[e]	Mean	Effect size[e]
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	41	9	2,461	6	229	6	4,881	5							
		2	Some	124	25	9,564	24	954	27	20,387	21							
		3	Quite a bit	203	41	16,359	39	1,419	38	38,482	38	2.8	3.0 ***	-.15	2.9	-.07	3.0 ***	-.24
		4	Very much	129	25	13,368	32	991	28	35,235	35		▽				▽	
			Total	497	100	41,752	100	3,593	100	98,985	100							
b. Speaking clearly and effectively	pgspeak	1	Very little	58	12	3,267	8	324	10	6,779	8							
		2	Some	129	26	10,484	26	969	29	22,826	24							
		3	Quite a bit	166	32	15,609	36	1,368	37	37,107	37	2.8	2.9 *	-.10	2.8	.01	2.9 **	-.16
		4	Very much	142	29	12,361	29	931	25	32,170	32		▽				▽	
			Total	495	100	41,721	100	3,592	100	98,882	100							
c. Thinking critically and analytically	pgthink	1	Very little	18	4	937	3	72	2	2,215	3							
		2	Some	57	12	5,370	13	447	12	12,065	13							
		3	Quite a bit	200	40	15,887	37	1,402	38	36,753	37	3.2	3.3	-.06	3.3	-.10	3.3	-.08
		4	Very much	222	44	19,510	47	1,671	48	47,854	48							
			Total	497	100	41,704	100	3,592	100	98,887	100							
d. Analyzing numerical and statistical information	pganalyze	1	Very little	40	8	3,152	7	282	7	8,802	9							
		2	Some	88	17	9,561	22	820	21	24,285	24							
		3	Quite a bit	187	37	14,439	34	1,267	34	33,054	33	3.0	3.0	.05	3.0	.03	2.9 **	.12
		4	Very much	179	37	14,552	36	1,222	37	32,757	34						△	
			Total	494	100	41,704	100	3,591	100	98,898	100							
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	49	10	3,539	9	253	8	7,240	8							
		2	Some	99	20	10,086	24	878	25	22,132	23							
		3	Quite a bit	182	36	14,443	34	1,270	34	34,051	34	2.9	2.9	.04	2.9	.04	3.0	-.03
		4	Very much	165	34	13,646	33	1,190	32	35,478	35							
			Total	495	100	41,714	100	3,591	100	98,901	100							
f. Working effectively with others	pgothers	1	Very little	20	5	1,939	5	139	4	4,848	6							
		2	Some	89	18	8,757	22	717	22	19,411	21							
		3	Quite a bit	199	40	16,253	38	1,498	41	37,703	38	3.1	3.0	.08	3.0	.09	3.0	.07
		4	Very much	187	38	14,759	35	1,239	33	36,904	36							
			Total	495	100	41,708	100	3,593	100	98,866	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

Seniors

Item wording or description	Variable name[c]	Values[d]	Response options	Virginia Tech Count	%	Carnegie Class Count	%	SCHEV Peers Count	%	NSSE 2023 Count	%	Virginia Tech Mean	Carnegie Class Mean	Effect size[e]	SCHEV Peers Mean	Effect size[e]	NSSE 2023 Mean	Effect size[e]
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	68	15	4,771	13	423	13	9,244	11							
		2	Some	146	29	10,775	26	983	29	23,216	24							
		3	Quite a bit	168	34	14,383	33	1,258	33	34,494	34	2.6	2.8 * ▽	-.11	2.7	-.05	2.9 *** ▽	-.22
		4	Very much	114	23	11,736	28	923	25	31,877	31							
			Total	496	100	41,665	100	3,587	100	98,831	100							
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	53	11	3,584	9	313	9	8,104	9							
		2	Some	148	30	10,477	25	1,003	28	23,677	24							
		3	Quite a bit	172	35	14,653	34	1,284	35	34,591	34	2.7	2.9 *** ▽	-.16	2.8 * ▽	-.11	2.9 *** ▽	-.20
		4	Very much	123	24	12,977	31	983	27	32,484	32							
			Total	496	100	41,691	100	3,583	100	98,856	100							
i. Solving complex real-world problems	pgprobsolve	1	Very little	37	8	3,458	9	289	8	7,741	8							
		2	Some	116	23	10,711	26	955	26	24,724	25							
		3	Quite a bit	185	37	14,901	35	1,323	36	35,434	35	2.9	2.9	.05	2.9	.05	2.9	.03
		4	Very much	158	32	12,635	30	1,025	30	31,011	31							
			Total	496	100	41,705	100	3,592	100	98,910	100							
j. Being an informed and active citizen	pgcitizen	1	Very little	89	19	5,326	14	483	13	11,283	12							
		2	Some	164	33	12,349	30	1,115	31	27,764	28							
		3	Quite a bit	151	30	13,478	31	1,196	33	32,398	32	2.5	2.7 *** ▽	-.20	2.7 *** ▽	-.19	2.7 *** ▽	-.27
		4	Very much	92	19	10,624	25	798	23	27,583	28							
			Total	496	100	41,777	100	3,592	100	99,028	100							
19. How would you evaluate your entire educational experience at this institution?																		
	evalexp	1	Poor	21	5	1,229	3	79	2	2,849	3							
		2	Fair	59	13	5,902	15	484	14	13,377	14							
		3	Good	208	41	19,635	46	1,758	49	44,220	44	3.2	3.1	.06	3.2	.03	3.2	.01
		4	Excellent	210	41	15,089	36	1,268	35	38,927	39							
			Total	498	100	41,855	100	3,589	100	99,373	100							
20. If you could start over again, would you go to the *same institution* you are now attending?																		
	sameinst	1	Definitely no	29	6	1,898	5	139	4	5,042	5							
		2	Probably no	47	9	5,481	13	420	11	13,123	13							
		3	Probably yes	185	37	17,782	42	1,570	44	40,211	40	3.3	3.2 * △	.09	3.2	.03	3.2	.08
		4	Definitely yes	241	47	16,899	40	1,476	41	41,443	42							
			Total	502	100	42,060	100	3,605	100	99,819	100							

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]
Virginia Polytechnic Institute and State University

First-Year Students

Variable Name	N (Virginia Tech)	Mean Virginia Tech	Mean Carnegie Class	Mean SCHEV Peers	Mean NSSE 2023	SE[h] Virginia Tech	SE Carnegie Class	SE SCHEV Peers	SE NSSE 2023	SD[i] Virginia Tech	SD Carnegie Class	SD SCHEV Peers	SD NSSE 2023	DF[j] Carnegie Class	DF SCHEV Peers	DF NSSE 2023	Sig[k] Carnegie Class	Sig SCHEV Peers	Sig NSSE 2023	ES[e] Carnegie Class	ES SCHEV Peers	ES NSSE 2023
1 a. askquest	755	2.72	2.70	2.69	2.79	.031	.006	.019	.004	.84	.84	.83	.86	21,155	2,755	46,725	.551	.496	.031	.02	.03	-.08
b. CLaskhelp	746	2.52	2.57	2.58	2.44	.032	.006	.020	.004	.87	.90	.88	.93	21,064	2,740	773	.137	.144	.009	-.06	-.06	.09
c. CLexplain	743	2.66	2.63	2.64	2.51	.031	.006	.019	.004	.85	.85	.83	.90	21,002	2,731	769	.342	.523	.000	.04	.03	.16
d. CLstudy	736	2.41	2.46	2.47	2.33	.035	.007	.022	.005	.94	.97	.97	.99	20,872	2,719	762	.150	.136	.022	-.05	-.06	.08
e. CLproject	726	2.71	2.63	2.61	2.53	.032	.006	.019	.004	.85	.87	.85	.92	20,734	2,695	753	.025	.011	.000	.08	.11	.19
f. present	726	2.21	2.13	2.02	2.21	.031	.006	.019	.004	.83	.87	.83	.91	20,693	1,295	753	.013	.000	.892	.09	.23	.00
2 a. RIintegrate	711	2.61	2.62	2.61	2.61	.031	.006	.019	.004	.83	.85	.83	.87	20,314	2,640	735	.680	.899	.984	-.02	.01	.00
b. RIsocietal	701	2.53	2.59	2.57	2.61	.031	.006	.020	.004	.81	.88	.88	.89	761	1,339	728	.031	.232	.004	-.08	-.05	-.10
c. RIdiverse	690	2.45	2.63	2.61	2.64	.033	.007	.021	.004	.88	.90	.89	.91	19,851	2,587	43,849	.000	.000	.000	-.20	-.18	-.21
d. RIownview	672	2.71	2.79	2.76	2.81	.030	.006	.018	.004	.79	.80	.80	.81	19,536	2,545	43,172	.006	.105	.001	-.11	-.07	-.13
e. RIperspect	647	2.81	2.92	2.90	2.93	.031	.006	.018	.004	.79	.78	.78	.79	690	1,108	666	.001	.017	.000	-.13	-.11	-.15
f. RInewview	617	2.81	2.87	2.89	2.88	.032	.006	.018	.004	.80	.79	.78	.80	18,738	2,417	41,445	.080	.029	.031	-.07	-.10	-.09
g. RIconnect	600	3.08	3.06	3.09	3.07	.029	.006	.017	.004	.72	.74	.73	.75	18,470	2,382	40,835	.684	.699	.880	.02	-.02	.01
3 a. SFcareer	601	2.26	2.27	2.26	2.34	.036	.007	.022	.005	.89	.93	.92	.95	644	2,380	620	.753	.917	.020	-.01	.00	-.09
b. SFotherwork	597	1.86	1.82	1.84	1.86	.037	.007	.022	.005	.90	.93	.92	.96	639	2,373	616	.348	.689	.995	.04	.02	.00
c. SFdiscuss	582	2.07	2.01	1.97	2.06	.037	.007	.021	.005	.88	.91	.89	.93	18,083	2,333	601	.146	.027	.842	.06	.11	.01
d. SFperform	575	2.07	2.07	2.01	2.20	.035	.007	.021	.005	.85	.90	.88	.91	617	2,332	593	.953	.124	.001	.00	.07	-.13
4 a. memorize	567	2.87	2.95	2.96	2.90	.034	.006	.019	.004	.80	.81	.80	.82	17,900	2,306	39,561	.019	.020	.341	-.10	-.11	-.04
b. HOapply	565	3.02	2.96	2.99	2.92	.033	.006	.019	.004	.79	.80	.79	.80	17,786	2,289	39,258	.071	.361	.003	.08	.04	.13
c. HOanalyze	550	2.92	2.93	2.94	2.92	.032	.006	.019	.004	.75	.81	.81	.81	17,572	2,259	568	.667	.643	.896	-.02	-.02	-.01
d. HOevaluate	548	2.80	2.87	2.84	2.93	.036	.006	.020	.004	.83	.82	.83	.81	17,479	2,248	562	.037	.280	.000	-.09	-.05	-.16
e. HOform	540	2.89	2.90	2.87	2.93	.035	.006	.020	.004	.82	.81	.81	.80	17,387	2,232	38,138	.602	.729	.167	-.02	.02	-.06
5 a. ETgoals	531	3.10	3.03	3.04	3.07	.031	.006	.018	.004	.71	.77	.76	.78	17,242	2,215	549	.044	.080	.254	.09	.09	.05
b. ETorganize	531	3.09	2.96	2.98	2.97	.033	.006	.019	.004	.77	.81	.79	.84	17,161	2,213	548	.000	.008	.001	.16	.13	.14
c. ETexample	524	3.06	3.00	3.03	3.01	.034	.006	.019	.004	.78	.81	.79	.83	17,107	2,198	37,545	.108	.403	.175	.07	.04	.06
d. ETdraftfb	525	2.70	2.73	2.65	2.84	.037	.007	.022	.005	.85	.91	.90	.91	563	917	37,439	.474	.222	.001	-.03	.06	-.15
e. ETfeedback	525	2.66	2.63	2.59	2.76	.037	.007	.021	.005	.85	.90	.87	.90	562	2,183	37,190	.532	.142	.010	.03	.07	-.11
f. etcriteria	519	2.99	2.94	2.95	3.01	.033	.006	.020	.004	.75	.81	.80	.82	557	916	536	.188	.376	.564	.05	.04	-.02
g. etreview	517	3.01	2.95	2.95	2.99	.032	.006	.019	.004	.74	.79	.78	.80	555	907	534	.074	.138	.701	.07	.07	.02
h. etprefer	517	2.68	2.61	2.59	2.68	.036	.007	.020	.005	.82	.85	.83	.87	552	2,157	533	.043	.029	.878	.09	.11	.01
i. etdemonstrate	514	3.09	3.07	3.09	3.09	.034	.006	.019	.004	.76	.79	.76	.80	16,739	2,155	36,587	.532	.891	.924	.03	-.01	.00

See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]
Virginia Polytechnic Institute and State University

First-Year Students

Variable Name	N	Mean				Standard error[h]				Standard deviation[i]				Degrees of freedom[j]			Significance[k]			Effect size[e]		
														Comparisons with:			Comparisons with:			Comparisons with:		
	Virginia Tech	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023
6 a. QRconclude	498	2.73	2.66	2.67	2.63	.035	.007	.021	.005	.78	.86	.86	.88	535	893	515	.078	.165	.006	.07	.07	.11
b. QRproblem	497	2.50	2.42	2.41	2.42	.039	.007	.023	.005	.87	.92	.91	.92	532	2,102	513	.043	.041	.041	.09	.10	.09
c. QRevaluate	492	2.55	2.43	2.43	2.40	.037	.007	.021	.005	.82	.88	.86	.90	527	2,091	507	.001	.004	.000	.14	.15	.17
7 a. wrshortnum	487	6.55	6.14	5.47	6.53	.268	.044	.130	.031	5.92	5.54	5.21	5.78	16,187	729	35,344	.111	.000	.932	.07	.20	.00
b. wrmednum	485	2.31	2.30	1.92	2.49	.149	.028	.084	.020	3.28	3.53	3.34	3.76	16,130	2,080	35,167	.955	.024	.294	.00	.12	-.05
c. wrlongnum	487	1.03	1.08	.91	1.19	.128	.025	.072	.018	2.84	3.10	2.88	3.37	16,133	2,081	506	.735	.439	.215	-.02	.04	-.05
— wrpages	485	53.43	52.52	45.36	56.78	3.289	.623	1.839	.452	72.40	77.66	73.27	83.87	16,043	2,070	34,957	.800	.034	.381	.01	.11	-.04
8 a. DDrace	485	3.18	3.09	3.05	2.99	.037	.007	.022	.005	.83	.87	.86	.92	16,124	2,078	35,162	.039	.005	.000	.10	.15	.20
b. DDeconomic	484	3.09	3.06	3.04	2.98	.038	.007	.021	.005	.84	.85	.83	.89	16,071	2,071	35,079	.361	.241	.006	.04	.06	.13
c. DDreligion	486	3.14	3.00	2.99	2.87	.038	.007	.022	.005	.83	.90	.87	.95	16,065	2,078	503	.001	.001	.000	.15	.17	.28
d. DDpolitical	485	2.97	2.82	2.87	2.76	.040	.007	.023	.005	.89	.93	.91	.96	518	818	500	.000	.022	.000	.16	.12	.22
e. ddsexorient	486	2.88	2.92	2.89	2.82	.041	.008	.023	.005	.91	.94	.93	.98	16,060	2,072	501	.433	.932	.137	-.04	.00	.06
f. ddcountry	485	2.82	2.74	2.74	2.66	.040	.008	.023	.005	.89	.94	.93	.97	518	834	500	.058	.073	.000	.08	.09	.16
9 a. LSreading	483	2.95	2.94	2.93	2.99	.033	.006	.020	.004	.73	.78	.78	.78	15,937	2,057	34,752	.775	.699	.307	.01	.02	-.05
b. LSnotes	481	2.87	2.89	2.86	2.91	.039	.007	.022	.005	.86	.87	.87	.88	15,933	2,057	34,727	.545	.806	.299	-.03	.01	-.05
c. LSsummary	480	2.79	2.84	2.81	2.87	.038	.007	.021	.005	.84	.85	.84	.85	15,928	2,052	34,706	.158	.534	.036	-.07	-.03	-.10
10 challenge	477	5.40	5.31	5.33	5.35	.055	.010	.030	.007	1.20	1.22	1.19	1.26	15,834	2,041	490	.124	.307	.423	.07	.05	.04
11 a. intern[l]	476	12%	8%	9%	8%	.015	.002	.007	.001	--	--	--	--	--	--	--	.000	.034	.001	.15	.11	.14
b. leader[l]	476	15%	11%	13%	11%	.017	.003	.008	.002	--	--	--	--	--	--	--	.002	.105	.000	.13	.08	.15
c. learncom[l]	478	20%	15%	18%	12%	.018	.003	.010	.002	--	--	--	--	--	--	--	.001	.397	.000	.14	.04	.22
d. abroad[l]	476	5%	3%	2%	3%	.010	.001	.004	.001	--	--	--	--	--	--	--	.019	.000	.004	.10	.17	.11
e. research[l]	476	7%	6%	8%	6%	.012	.002	.007	.001	--	--	--	--	--	--	--	.294	.491	.244	.05	-.04	.05
f. capstone[l]	476	2%	2%	2%	2%	.007	.001	.004	.001	--	--	--	--	--	--	--	.904	.894	.929	.01	.01	.00
12 servcourse	472	1.59	1.58	1.54	1.65	.030	.006	.018	.004	.64	.70	.70	.73	507	848	489	.845	.208	.030	.01	.06	-.09
13 a. QIstudent	471	5.60	5.39	5.39	5.37	.056	.011	.033	.008	1.22	1.32	1.31	1.37	505	2,007	488	.000	.001	.000	.16	.17	.17
b. QIadvisor	461	5.56	5.30	5.36	5.44	.069	.013	.039	.009	1.49	1.57	1.52	1.56	15,359	1,974	33,113	.001	.014	.120	.16	.13	.07
c. QIfaculty	470	5.54	5.30	5.29	5.46	.055	.011	.032	.007	1.18	1.30	1.27	1.33	15,379	1,988	486	.000	.000	.136	.18	.20	.06
d. QIstaff	401	5.33	5.08	5.17	5.20	.072	.013	.040	.009	1.44	1.53	1.49	1.56	14,186	1,815	29,888	.001	.045	.096	.16	.11	.08
e. QIadmin	393	5.07	4.97	5.08	5.18	.075	.013	.040	.009	1.49	1.55	1.48	1.57	13,942	1,759	30,786	.224	.907	.171	.06	-.01	-.07

See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]

Virginia Polytechnic Institute and State University

First-Year Students

Variable Name	N Virginia Tech	Mean Virginia Tech	Mean Carnegie Class	Mean SCHEV Peers	Mean NSSE 2023	SE[h] Virginia Tech	SE Carnegie Class	SE SCHEV Peers	SE NSSE 2023	SD[i] Virginia Tech	SD Carnegie Class	SD SCHEV Peers	SD NSSE 2023	DF[j] Carnegie Class	DF SCHEV Peers	DF NSSE 2023	Sig[k] Carnegie Class	Sig SCHEV Peers	Sig NSSE 2023	ES[e] Carnegie Class	ES SCHEV Peers	ES NSSE 2023
14 a. empstudy	468	3.11	3.07	3.10	3.05	.035	.006	.019	.004	.75	.75	.74	.76	15,538	2,004	33,670	.360	.985	.094	.04	.00	.08
b. SEacademic	466	3.01	2.90	2.93	2.97	.036	.007	.020	.005	.78	.81	.79	.84	497	1,999	480	.005	.090	.288	.13	.09	.05
c. SElearnsup	469	2.94	2.96	2.98	3.02	.040	.007	.022	.005	.87	.88	.87	.90	15,478	2,000	33,534	.760	.453	.062	-.01	-.04	-.09
d. SEdiverse	467	2.79	2.74	2.72	2.74	.040	.008	.023	.005	.86	.92	.92	.94	501	820	483	.183	.141	.190	.06	.08	.06
e. SEsocial	467	3.10	2.92	2.98	2.91	.037	.007	.021	.005	.80	.85	.82	.89	500	1,995	483	.000	.007	.000	.20	.14	.21
f. SEwellness	467	3.02	2.82	2.86	2.85	.039	.007	.022	.005	.84	.89	.86	.90	500	792	482	.000	.001	.000	.23	.18	.19
g. SEnonacad	466	2.32	2.23	2.21	2.31	.044	.008	.024	.005	.96	.95	.93	.97	15,386	1,989	33,339	.053	.032	.955	.09	.11	.00
h. SEactivities	466	3.01	2.85	2.90	2.76	.039	.007	.022	.005	.83	.88	.85	.95	498	782	483	.000	.014	.000	.18	.13	.26
i. SEevents	467	2.40	2.42	2.44	2.43	.043	.008	.023	.005	.92	.92	.91	.96	15,380	1,993	33,298	.651	.383	.591	-.02	-.05	-.03
15 a. sbmyself	467	3.29	3.19	3.19	3.21	.030	.006	.017	.004	.65	.68	.67	.69	15,382	1,992	33,298	.001	.004	.010	.15	.15	.12
b. sbvalued	467	3.00	2.88	2.87	2.98	.035	.006	.019	.004	.75	.76	.75	.74	496	773	33,253	.000	.001	.452	.17	.18	.04
c. sbcommunity	467	3.12	2.94	2.94	2.98	.034	.006	.019	.004	.73	.76	.75	.76	15,365	1,987	33,274	.000	.000	.000	.24	.23	.19
16 a. tmprephrs	462	18.34	15.72	16.16	14.75	.380	.067	.208	.045	8.16	8.18	8.11	8.14	15,318	1,981	33,168	.000	.000	.000	.32	.27	.44
b. tmcocurrhrs	461	6.74	5.62	5.87	5.45	.315	.055	.166	.039	6.76	6.65	6.48	7.05	15,295	1,979	33,079	.000	.012	.000	.17	.13	.18
c. tmworkonhrs	462	2.06	2.58	3.09	2.56	.246	.048	.156	.033	5.29	5.88	6.07	5.94	497	860	477	.040	.000	.046	-.09	-.17	-.08
d. tmworkoffhrs	460	2.50	4.57	4.13	6.78	.306	.070	.203	.060	6.56	8.59	7.91	10.78	508	897	494	.000	.000	.000	-.24	-.21	-.40
— tmworkhrs	458	4.48	7.12	7.19	9.32	.438	.090	.272	.068	9.38	10.91	10.61	12.29	496	840	479	.000	.000	.000	-.24	-.26	-.40
e. tmservicehrs	460	2.22	2.19	2.13	2.27	.196	.038	.118	.026	4.20	4.59	4.62	4.76	15,291	1,979	33,077	.893	.711	.818	.01	.02	-.01
f. tmrelaxhrs	464	13.22	12.98	12.89	12.27	.401	.068	.205	.047	8.64	8.29	8.01	8.43	15,287	722	33,081	.546	.466	.016	.03	.04	.11
g. tmcarehrs	463	1.00	1.84	1.56	3.48	.204	.043	.125	.045	4.38	5.26	4.86	8.08	504	838	508	.000	.018	.000	-.16	-.12	-.31
h. tmcommutehrs	464	3.86	4.18	4.02	3.89	.268	.047	.136	.033	5.77	5.69	5.30	6.02	15,301	1,980	33,096	.230	.575	.904	-.06	-.03	-.01
17 reading	461	2.22	2.46	2.51	2.65	.047	.009	.027	.006	1.00	1.07	1.07	1.11	493	801	476	.000	.000	.000	-.22	-.27	-.38
— tmreadinghrs	460	5.92	6.07	6.41	6.43	.234	.044	.142	.032	5.01	5.39	5.52	5.75	492	826	476	.525	.073	.033	-.03	-.09	-.09

See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]

Virginia Polytechnic Institute and State University

First-Year Students

Variable Name	N Virginia Tech	Mean Virginia Tech	Mean Carnegie Class	Mean SCHEV Peers	Mean NSSE 2023	Standard error[h] Virginia Tech	Standard error Carnegie Class	Standard error SCHEV Peers	Standard error NSSE 2023	Standard deviation[i] Virginia Tech	Standard deviation Carnegie Class	Standard deviation SCHEV Peers	Standard deviation NSSE 2023	Degrees of freedom[j] Carnegie Class	Degrees of freedom SCHEV Peers	Degrees of freedom NSSE 2023	Significance[k] Carnegie Class	Significance SCHEV Peers	Significance NSSE 2023	Effect size[e] Carnegie Class	Effect size SCHEV Peers	Effect size NSSE 2023
18 a. pgwrite	461	2.59	2.71	2.63	2.83	.042	.007	.023	.005	.90	.89	.89	.87	15,248	1,977	473	.003	.345	.000	-.14	-.05	-.28
b. pgspeak	460	2.52	2.58	2.47	2.70	.044	.008	.024	.005	.95	.94	.93	.92	15,224	1,974	32,882	.151	.394	.000	-.07	.05	-.20
c. pgthink	462	3.12	3.06	3.05	3.08	.038	.007	.020	.004	.81	.80	.79	.80	15,230	745	32,904	.113	.085	.329	.07	.09	.05
d. pganalyze	460	2.89	2.76	2.78	2.71	.042	.008	.023	.005	.91	.93	.91	.94	489	1,975	473	.004	.030	.000	.14	.12	.19
e. pgwork	460	2.69	2.57	2.60	2.65	.045	.008	.024	.005	.96	.96	.93	.96	15,230	1,977	32,898	.007	.063	.339	.13	.10	.04
f. pgothers	457	2.87	2.79	2.79	2.82	.040	.007	.022	.005	.85	.88	.87	.89	15,225	1,972	32,890	.051	.085	.293	.09	.09	.05
g. pgvalues	458	2.65	2.65	2.62	2.73	.044	.008	.024	.005	.94	.94	.92	.93	15,216	1,969	32,865	.988	.589	.076	.00	.03	-.08
h. pgdiverse	457	2.69	2.80	2.78	2.83	.042	.008	.023	.005	.90	.92	.90	.92	15,214	1,970	32,880	.010	.048	.001	-.12	-.11	-.16
i. pgprobsolve	461	2.72	2.66	2.66	2.68	.042	.008	.023	.005	.91	.92	.91	.92	15,238	1,976	32,930	.164	.203	.444	.07	.07	.04
j. pgcitizen	461	2.53	2.61	2.61	2.66	.044	.008	.024	.005	.94	.93	.92	.94	15,253	1,973	33,018	.052	.075	.002	-.09	-.09	-.14
19 evalexp	463	3.25	3.06	3.07	3.10	.034	.006	.019	.004	.73	.74	.73	.74	492	766	33,162	.000	.000	.000	.26	.24	.21
20 sameinst	468	3.41	3.16	3.17	3.17	.032	.006	.020	.004	.69	.77	.76	.80	15,377	1,992	33,376	.000	.000	.000	.33	.32	.31
21 returnexp[l]	468	96%	90%	92%	88%	.0093	.0025	.0071	.0018	--	--	--	--	--	--	--	.000	.003	.000	.23	.17	.29

IPEDS: 233921

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]

Virginia Polytechnic Institute and State University

Seniors

Variable Name	N	Mean				Standard error[h]				Standard deviation[i]				Degrees of freedom[j]			Significance[k]			Effect size[e]		
														Comparisons with:			Comparisons with:			Comparisons with:		
	Virginia Tech	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023
1 a. askquest	744	2.78	2.93	2.91	3.04	.034	.006	.019	.004	.92	.89	.89	.89	785	1,264	763	.000	.001	.000	-.17	-.15	-.29
b. CLaskhelp	737	2.51	2.49	2.56	2.40	.033	.006	.020	.004	.90	.95	.94	.97	785	1,329	760	.522	.199	.001	.02	-.05	.12
c. CLexplain	734	2.73	2.68	2.74	2.61	.031	.006	.019	.004	.84	.89	.87	.94	782	2,874	759	.131	.776	.000	.05	-.01	.13
d. CLstudy	726	2.35	2.40	2.45	2.32	.036	.006	.022	.005	.97	1.01	1.00	1.03	772	1,294	749	.187	.015	.422	-.05	-.10	.03
e. CLproject	722	3.00	2.86	2.92	2.74	.033	.006	.019	.004	.89	.93	.90	.99	767	2,843	746	.000	.034	.000	.15	.09	.27
f. present	721	2.68	2.54	2.48	2.57	.033	.006	.020	.004	.89	.96	.93	.98	769	2,840	745	.000	.000	.002	.15	.21	.11
2 a. RIintegrate	705	2.89	2.93	2.95	2.94	.031	.005	.018	.004	.82	.86	.84	.86	25,070	2,809	50,964	.318	.149	.147	-.04	-.06	-.05
b. RIsocietal	696	2.62	2.75	2.73	2.82	.035	.006	.020	.004	.93	.93	.91	.92	24,889	2,791	714	.000	.005	.000	-.14	-.12	-.22
c. RIdiverse	689	2.37	2.61	2.60	2.69	.036	.006	.021	.004	.95	1.00	.98	.98	732	2,769	708	.000	.000	.000	-.24	-.23	-.32
d. RIownview	678	2.65	2.83	2.78	2.88	.033	.006	.018	.004	.87	.85	.83	.84	714	1,114	695	.000	.001	.000	-.21	-.15	-.27
e. RIperspect	659	2.80	2.95	2.91	2.99	.033	.005	.018	.004	.86	.83	.81	.82	693	1,063	675	.000	.004	.000	-.19	-.13	-.24
f. RInewview	636	2.88	2.97	2.94	2.99	.032	.005	.018	.004	.81	.80	.79	.80	23,666	2,651	651	.003	.074	.000	-.12	-.08	-.14
g. RIconnect	627	3.11	3.19	3.19	3.23	.030	.005	.016	.003	.76	.74	.72	.74	23,392	2,624	642	.009	.014	.000	-.11	-.11	-.16
3 a. SFcareer	626	2.30	2.35	2.36	2.46	.039	.007	.022	.005	.97	.98	.97	1.00	23,357	2,617	642	.181	.159	.000	-.05	-.06	-.16
b. SFotherwork	621	2.02	1.96	2.01	2.00	.041	.007	.023	.005	1.01	1.02	1.01	1.04	23,247	2,607	47,652	.147	.925	.648	.06	.00	.02
c. SFdiscuss	620	2.14	2.13	2.14	2.18	.039	.006	.021	.005	.96	.96	.92	.98	23,054	2,593	47,269	.623	.899	.411	.02	.01	-.03
d. SFperform	617	1.98	2.11	2.04	2.23	.036	.006	.021	.004	.89	.93	.92	.95	654	2,589	635	.000	.185	.000	-.14	-.06	-.26
4 a. memorize	609	2.67	2.79	2.76	2.76	.037	.006	.020	.004	.92	.90	.90	.89	640	2,569	46,947	.001	.031	.017	-.14	-.10	-.10
b. HOapply	604	3.06	3.07	3.10	3.09	.033	.005	.018	.004	.82	.81	.78	.80	22,768	2,557	46,691	.762	.394	.505	-.01	-.04	-.03
c. HOanalyze	593	2.96	3.04	3.02	3.06	.035	.006	.019	.004	.85	.82	.81	.82	22,560	2,526	46,244	.019	.115	.002	-.10	-.07	-.13
d. HOevaluate	585	2.70	2.91	2.81	2.99	.039	.006	.021	.004	.93	.89	.91	.86	613	2,513	597	.000	.009	.000	-.23	-.12	-.33
e. HOform	577	2.80	2.97	2.91	3.02	.036	.006	.019	.004	.87	.84	.83	.82	605	918	589	.000	.006	.000	-.20	-.13	-.27
5 a. ETgoals	576	3.09	3.12	3.09	3.16	.033	.005	.017	.004	.78	.78	.76	.79	22,154	2,480	590	.243	.823	.023	-.05	-.01	-.09
b. ETorganize	573	3.06	3.04	3.01	3.07	.032	.006	.018	.004	.78	.83	.79	.84	607	2,471	589	.546	.199	.773	.02	.06	-.01
c. ETexample	573	3.13	3.10	3.11	3.10	.034	.006	.018	.004	.80	.82	.77	.84	22,047	2,466	588	.355	.655	.446	.04	.02	.03
d. ETdraftfb	570	2.70	2.76	2.65	2.85	.039	.007	.022	.005	.93	.96	.95	.95	22,005	2,457	45,106	.189	.249	.000	-.06	.06	-.15
e. ETfeedback	563	2.60	2.75	2.67	2.85	.037	.006	.020	.004	.88	.92	.89	.92	21,890	2,439	44,901	.000	.101	.000	-.16	-.08	-.27
f. etcriteria	554	2.93	3.02	2.95	3.09	.035	.006	.019	.004	.82	.83	.81	.84	21,782	2,427	44,668	.015	.637	.000	-.10	-.02	-.19
g. etreview	552	2.97	3.04	2.99	3.08	.033	.006	.018	.004	.78	.81	.79	.82	582	2,414	566	.040	.634	.001	-.09	-.02	-.13
h. etprefer	552	2.63	2.73	2.69	2.80	.037	.006	.020	.004	.87	.88	.85	.89	21,678	2,419	44,451	.008	.156	.000	-.11	-.07	-.19
i. etdemonstrate	550	3.08	3.12	3.09	3.15	.033	.006	.018	.004	.77	.81	.78	.81	581	2,409	564	.295	.903	.058	-.04	-.01	-.08

See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]

Virginia Polytechnic Institute and State University

Seniors

Variable Name	N (Virginia Tech)	Mean Virginia Tech	Mean Carnegie Class	Mean SCHEV Peers	Mean NSSE 2023	SE Virginia Tech	SE Carnegie Class	SE SCHEV Peers	SE NSSE 2023	SD Virginia Tech	SD Carnegie Class	SD SCHEV Peers	SD NSSE 2023	DF Carnegie Class	DF SCHEV Peers	DF NSSE 2023	Sig Carnegie Class	Sig SCHEV Peers	Sig NSSE 2023	ES Carnegie Class	ES SCHEV Peers	ES NSSE 2023
6 a. QRconclude	536	2.74	2.72	2.67	2.69	.038	.006	.021	.004	.89	.91	.90	.92	21,299	2,381	43,778	.735	.100	.278	.01	.08	.05
b. QRproblem	528	2.45	2.52	2.49	2.52	.041	.007	.023	.005	.94	.98	.97	.97	557	2,363	43,592	.095	.404	.105	-.07	-.04	-.07
c. QRevaluate	525	2.51	2.55	2.53	2.51	.039	.007	.021	.005	.89	.94	.91	.94	554	2,355	539	.391	.741	.937	-.04	-.02	.00
7 a. wrshortnum	522	6.63	7.09	7.02	7.46	.275	.045	.152	.032	6.29	6.49	6.53	6.60	21,045	2,355	43,256	.113	.234	.005	-.07	-.06	-.13
b. wrmednum	519	2.84	3.25	2.80	3.59	.172	.031	.091	.022	3.91	4.43	3.88	4.62	552	2,343	536	.018	.871	.000	-.09	.01	-.16
c. wrlongnum	520	1.72	1.91	1.56	2.05	.149	.027	.079	.019	3.40	3.92	3.37	4.02	555	2,346	537	.200	.351	.028	-.05	.05	-.08
— wrpages	516	67.80	75.51	66.78	81.34	3.778	.692	2.023	.494	85.81	98.71	86.31	101.71	550	2,334	533	.045	.814	.000	-.08	.01	-.13
8 a. DDrace	522	3.09	3.10	3.02	3.04	.038	.006	.020	.004	.87	.90	.87	.93	20,992	2,348	43,126	.774	.079	.190	-.01	.09	.06
b. DDeconomic	518	2.99	3.06	3.03	3.02	.037	.006	.020	.004	.85	.88	.84	.90	545	2,340	531	.063	.375	.414	-.08	-.04	-.03
c. DDreligion	514	3.02	2.99	2.96	2.90	.040	.006	.021	.005	.90	.92	.89	.95	20,926	2,331	527	.487	.197	.005	.03	.06	.12
d. DDpolitical	513	2.88	2.84	2.81	2.82	.040	.007	.021	.005	.91	.94	.91	.96	20,917	2,331	42,989	.430	.148	.195	.04	.07	.06
e. ddsexorient	514	2.77	2.89	2.85	2.84	.043	.007	.022	.005	.98	.95	.94	.98	538	799	42,937	.004	.079	.092	-.13	-.09	-.07
f. ddcountry	515	2.79	2.80	2.75	2.68	.041	.007	.022	.005	.93	.95	.92	.98	20,930	2,338	528	.692	.424	.014	-.02	.04	.10
9 a. LSreading	508	2.85	3.02	2.97	3.09	.038	.006	.020	.004	.86	.83	.84	.81	531	795	518	.000	.005	.000	-.20	-.14	-.29
b. LSnotes	509	2.58	2.85	2.77	2.89	.040	.007	.022	.004	.91	.93	.93	.92	20,777	2,323	42,713	.000	.000	.000	-.30	-.21	-.34
c. LSsummary	510	2.60	2.87	2.77	2.92	.040	.006	.021	.004	.90	.89	.90	.88	534	2,323	521	.000	.000	.000	-.30	-.19	-.36
10 challenge	502	5.12	5.41	5.34	5.51	.061	.009	.029	.006	1.38	1.31	1.22	1.31	20,631	2,302	42,406	.000	.001	.000	-.22	-.18	-.30
11 a. intern[l]	505	64%	51%	60%	49%	.0214	.0035	.0116	.0024	--	--	--	--	--	--	--	.000	.105	.000	.25	.08	.29
b. leader[l]	503	51%	36%	46%	33%	.0223	.0034	.0117	.0023	--	--	--	--	--	--	--	.000	.022	.000	.32	.12	.38
c. learncom[l]	504	27%	23%	30%	23%	.0197	.0030	.0108	.0021	--	--	--	--	--	--	--	.093	.095	.047	.07	-.09	.09
d. abroad[l]	505	17%	10%	13%	10%	.0168	.0021	.0079	.0015	--	--	--	--	--	--	--	.000	.015	.000	.20	.12	.22
e. research[l]	504	35%	25%	31%	23%	.0213	.0030	.0109	.0021	--	--	--	--	--	--	--	.000	.082	.000	.24	.09	.27
f. capstone[l]	505	56%	42%	45%	46%	.0221	.0035	.0117	.0024	--	--	--	--	--	--	--	.000	.000	.000	.28	.22	.20
12 servcourse	501	1.52	1.65	1.60	1.74	.025	.005	.016	.004	.56	.71	.67	.74	541	937	521	.000	.009	.000	-.18	-.12	-.29
13 a. QIstudent	502	5.63	5.56	5.57	5.59	.058	.009	.029	.007	1.29	1.33	1.23	1.36	20,210	2,284	515	.261	.351	.518	.05	.05	.03
b. QIadvisor	498	5.34	5.07	5.14	5.26	.075	.013	.040	.009	1.67	1.78	1.70	1.76	20,191	2,257	510	.001	.022	.302	.15	.12	.04
c. QIfaculty	502	5.42	5.40	5.34	5.55	.056	.010	.030	.007	1.25	1.38	1.27	1.39	532	2,283	516	.689	.255	.018	.02	.06	-.10
d. QIstaff	431	5.07	4.93	4.99	5.05	.076	.013	.040	.009	1.58	1.68	1.57	1.71	456	1,995	443	.078	.352	.844	.08	.05	.01
e. QIadmin	438	4.80	4.83	4.91	5.04	.079	.013	.039	.009	1.66	1.71	1.56	1.72	18,431	663	38,337	.656	.191	.004	-.02	-.07	-.14

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]

Virginia Polytechnic Institute and State University

Seniors

Variable Name	N Virginia Tech	Mean Virginia Tech	Mean Carnegie Class	Mean SCHEV Peers	Mean NSSE 2023	SE[h] Virginia Tech	SE Carnegie Class	SE SCHEV Peers	SE NSSE 2023	SD[i] Virginia Tech	SD Carnegie Class	SD SCHEV Peers	SD NSSE 2023	DF[j] Carnegie Class	DF SCHEV Peers	DF NSSE 2023	Sig[k] Carnegie Class	Sig SCHEV Peers	Sig NSSE 2023	ES[e] Carnegie Class	ES SCHEV Peers	ES NSSE 2023
14 a. empstudy	501	3.06	3.13	3.14	3.10	.035	.005	.018	.004	.78	.77	.76	.78	525	2,285	41,773	.036	.032	.238	-.10	-.11	-.05
b. SEacademic	502	2.77	2.81	2.82	2.89	.038	.006	.019	.004	.84	.86	.80	.87	20,348	2,284	41,709	.307	.244	.001	-.05	-.06	-.14
c. SElearnsup	498	2.67	2.74	2.81	2.83	.040	.007	.021	.005	.90	.93	.87	.95	20,307	779	41,643	.088	.002	.000	-.08	-.16	-.18
d. SEdiverse	499	2.51	2.62	2.50	2.63	.041	.007	.022	.005	.92	.97	.95	.99	526	2,277	512	.014	.700	.004	-.11	.02	-.12
e. SEsocial	499	2.91	2.80	2.80	2.79	.038	.006	.021	.005	.86	.91	.87	.93	526	2,276	512	.009	.014	.003	.11	.13	.12
f. SEwellness	499	2.75	2.66	2.68	2.69	.041	.007	.021	.005	.91	.95	.91	.95	526	2,277	512	.035	.138	.165	.09	.08	.06
g. SEnonacad	498	1.94	2.04	1.96	2.13	.039	.007	.022	.005	.88	.97	.92	1.00	528	2,272	513	.009	.634	.000	-.11	-.02	-.19
h. SEactivities	498	2.89	2.69	2.77	2.58	.039	.007	.021	.005	.87	.95	.88	1.00	528	805	514	.000	.006	.000	.22	.14	.31
i. SEevents	498	2.21	2.29	2.30	2.31	.041	.007	.021	.005	.91	.95	.90	.98	524	2,272	511	.062	.076	.023	-.08	-.09	-.10
15 a. sbmyself	500	3.28	3.24	3.23	3.27	.034	.005	.017	.004	.76	.73	.71	.73	522	760	41,437	.298	.202	.862	.05	.07	.01
b. sbvalued	500	2.79	2.81	2.80	2.93	.041	.006	.020	.004	.91	.87	.83	.85	20,207	748	509	.549	.746	.001	-.03	-.02	-.16
c. sbcommunity	498	3.02	2.90	2.93	2.95	.038	.006	.019	.004	.85	.84	.80	.84	20,219	2,270	41,456	.003	.037	.074	.13	.11	.08
16 a. tmprephrs	497	16.23	16.04	16.61	15.58	.394	.064	.211	.043	8.78	8.91	8.89	8.78	20,167	2,268	41,336	.627	.400	.097	.02	-.04	.08
b. tmcocurrhrs	496	6.33	5.33	5.77	5.04	.321	.050	.161	.036	7.16	7.04	6.79	7.26	20,126	2,266	41,259	.002	.109	.000	.14	.08	.18
c. tmworkonhrs	496	4.24	3.82	4.70	3.44	.322	.051	.172	.034	7.17	7.22	7.24	6.89	20,140	2,266	506	.209	.210	.014	.06	-.06	.12
d. tmworkoffhrs	494	4.29	10.63	8.06	12.81	.359	.087	.247	.065	7.97	12.25	10.39	13.23	553	1,007	526	.000	.000	.000	-.52	-.38	-.65
— tmworkhrs	494	8.49	14.43	12.75	16.23	.461	.093	.267	.067	10.24	12.98	11.24	13.48	534	853	514	.000	.000	.000	-.46	-.39	-.57
e. tmservicehrs	495	1.91	2.77	2.32	2.91	.154	.038	.110	.027	3.44	5.26	4.62	5.44	554	1,045	524	.000	.031	.000	-.17	-.09	-.18
f. tmrelaxhrs	490	12.95	11.99	12.79	11.19	.377	.059	.196	.040	8.36	8.30	8.23	8.17	20,125	2,258	41,261	.012	.702	.000	.12	.02	.22
g. tmcarehrs	492	.69	4.01	1.96	5.95	.162	.064	.149	.054	3.60	8.96	6.24	10.88	655	1,389	605	.000	.000	.000	-.37	-.22	-.49
h. tmcommutehrs	493	4.50	5.01	4.45	4.59	.186	.039	.109	.029	4.13	5.47	4.56	5.87	537	857	517	.007	.812	.644	-.09	.01	-.01
17 reading	491	2.15	2.58	2.52	2.75	.051	.008	.028	.006	1.14	1.17	1.17	1.18	517	801	503	.000	.000	.000	-.37	-.32	-.51
— tmreadinghrs	490	4.82	6.61	6.52	7.17	.204	.043	.137	.032	4.52	6.04	5.72	6.37	534	969	513	.000	.000	.000	-.30	-.31	-.37

Note: Degrees of freedom, Significance, and Effect size columns show Comparisons with: Carnegie Class, SCHEV Peers, NSSE 2023.

See the endnotes on the last page of this report.

NSSE 2023 Frequencies and Statistical Comparisons

Detailed Statistics[g]
Virginia Polytechnic Institute and State University

Seniors

Variable Name	N	Mean				Standard error[h]				Standard deviation[i]				Degrees of freedom[j] Comparisons with:			Significance[k] Comparisons with:			Effect size[e] Comparisons with:		
	Virginia Tech	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Virginia Tech	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023	Carnegie Class	SCHEV Peers	NSSE 2023
18 a. pgwrite	489	2.82	2.95	2.88	3.03	.041	.006	.021	.004	.91	.90	.89	.88	20,077	2,256	499	.001	.166	.000	-.15	-.07	-.24
b. pgspeak	488	2.78	2.87	2.77	2.93	.045	.007	.022	.005	1.00	.93	.93	.92	508	737	497	.050	.910	.001	-.10	.01	-.16
c. pgthink	489	3.24	3.29	3.32	3.30	.037	.006	.018	.004	.82	.79	.77	.79	20,056	2,255	41,127	.173	.054	.092	-.06	-.10	-.08
d. pganalyze	487	3.04	2.99	3.01	2.92	.042	.007	.022	.005	.94	.94	.94	.96	20,053	2,250	498	.314	.606	.008	.05	.03	.12
e. pgwork	488	2.94	2.90	2.90	2.97	.044	.007	.023	.005	.96	.96	.95	.95	20,058	2,251	41,130	.359	.452	.512	.04	.04	-.03
f. pgothers	487	3.11	3.03	3.03	3.04	.039	.006	.020	.004	.85	.88	.85	.89	20,053	2,253	41,117	.066	.074	.121	.08	.09	.07
g. pgvalues	489	2.65	2.76	2.70	2.86	.045	.007	.024	.005	.99	.99	.99	.98	20,044	2,253	41,113	.012	.286	.000	-.11	-.05	-.22
h. pgdiverse	489	2.71	2.87	2.81	2.90	.043	.007	.022	.005	.95	.96	.94	.96	20,048	2,247	41,111	.000	.031	.000	-.16	-.11	-.20
i. pgprobsolve	489	2.92	2.87	2.87	2.89	.042	.007	.022	.005	.93	.95	.93	.94	20,058	2,255	41,140	.238	.338	.478	.05	.05	.03
j. pgcitizen	489	2.48	2.68	2.67	2.75	.045	.007	.023	.005	1.00	1.00	.98	.99	20,090	2,254	41,195	.000	.000	.000	-.20	-.19	-.27
19 evalexp	490	3.19	3.15	3.17	3.19	.037	.006	.018	.004	.83	.79	.75	.79	512	723	41,356	.235	.562	.871	.06	.03	.01
20 sameinst	496	3.25	3.18	3.23	3.18	.039	.006	.019	.004	.87	.84	.79	.85	20,251	742	41,568	.047	.542	.081	.09	.03	.08

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Endnotes

a. Column percentages are weighted by institution-reported sex and enrollment status (and institution size for comparison groups). Percentages may not sum to 100 due to rounding. Counts are unweighted; column percentages cannot be replicated from counts.

b. All statistics are weighted by institution-reported sex and enrollment status (and institution size for comparison groups). 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.

c. Items which 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 & Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.

d. 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.

e. Effect size for independent t-tests uses Cohen's d; z-tests use Cohen's h. See page 2 for more details.

f. Statistical comparison uses z-test to compare the percentage who responded "Done or in progress" or "Yes."

g. Statistics are weighted by institution-reported sex and enrollment status (and institution size for comparison groups).

h. Standard error of the mean for ordered and continuous variables; standard error of the proportion for items indicating "Done or in progress" (High-Impact Practices). The 95% confidence interval is equal to the sample mean plus or minus 1.96 times the standard error of the mean.

i. A measure of the amount individual scores deviate from the mean of all the scores in the distribution.

j. Degrees of freedom used to compute the t-tests. Values differ from Ns due to weighting and whether equal variances were assumed.

k. Statistical comparisons are two-tailed independent t-tests or z-tests. Statistical significance represents the probability that the difference between your students' mean and that of the comparison group is due to chance.

l. Mean represents the proportion who responded "Done or in progress" or "Yes."