First-Year Students

Frequency Distributions[a]

Statistical Comparisons[b]

Your seniors compared with

Item wording or description	*Values*[d]	*Response options*	Cal State East Bay *Count*	Cal State East Bay *%*	Far West Region Publ *Count*	Far West Region Publ *%*	Carnegie Class *Count*	Carnegie Class *%*	NSSE 2016 & 2017 *Count*	NSSE 2016 & 2017 *%*	Cal State East Bay *Mean*	Far West Region Publ *Mean*	Far West Region Publ *Effect size*[e]	Carnegie Class *Mean*	Carnegie Class *Effect size*[e]	NSSE 2016 & 2017 *Mean*	NSSE 2016 & 2017 *Effect size*[e]
4. During the current school year, how much has your coursework emphasized the following?																	
b. Applying facts, theories, or methods to practical problems or new situations	1	Very little	14	6	556	4	2,349	4	7,950	4	**2.8**	2.9 *	-.15	2.9 *	-.16	2.9 **	-.21
	2	Some	68	29	4,208	27	16,905	26	58,360	25							
	3	Quite a bit	114	49	7,550	48	31,182	47	112,607	47							
	4	Very much	39	17	3,404	21	14,959	23	58,317	24							
		Total	235	100	15,718	100	65,395	100	237,234	100							
6. During the current school year, about how often have you done the following?																	
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	1	Never	34	14	1,776	11	7,742	12	27,260	11	**2.5**	2.5	-.03	2.5	-.03	2.6	-.06
	2	Sometimes	86	38	5,924	37	24,305	37	86,583	36							
	3	Often	72	32	5,759	38	23,612	37	86,202	37							
	4	Very often	37	16	2,037	14	8,908	15	34,279	15							
		Total	229	100	15,496	100	64,567	100	234,324	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	1	Never	55	24	3,131	20	13,561	21	49,245	21	**2.3**	2.3	.03	2.3	.03	2.3	.02
	2	Sometimes	81	34	6,500	42	26,792	41	96,137	41							
	3	Often	66	30	4,397	29	17,744	28	64,646	28							
	4	Very often	28	12	1,446	10	6,436	11	24,080	11							
		Total	230	100	15,474	100	64,533	100	234,108	100							
c. Evaluated what others have concluded from numerical information	1	Never	50	21	2,982	19	13,062	20	45,368	19	**2.3**	2.3	.03	2.3	.05	2.3	.02
	2	Sometimes	91	39	6,828	44	28,084	43	100,835	43							
	3	Often	65	29	4,398	29	17,867	28	66,825	29							
	4	Very often	23	11	1,277	9	5,551	9	21,159	9							
		Total	229	100	15,485	100	64,564	100	234,187	100							
17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?																	
c. Thinking critically and analytically	1	Very little	9	6	379	3	1,644	3	6,109	4	**3.1**	3.1	.01	3.1	-.01	3.1	-.01
	2	Some	26	15	2,577	20	10,243	19	37,117	19							
	3	Quite a bit	76	47	5,933	45	24,368	45	87,375	44							
	4	Very much	53	32	4,133	32	17,713	33	64,899	33							
		Total	164	100	13,022	100	53,968	100	195,500	100							
d. Analyzing numerical and statistical information	1	Very little	27	15	1,426	11	7,132	13	25,852	13	**2.7**	2.7	-.01	2.6	.03	2.6	.01
	2	Some	42	25	4,186	32	17,501	32	61,784	31							
	3	Quite a bit	62	39	4,893	37	19,060	35	69,015	35							
	4	Very much	34	21	2,512	20	10,246	20	38,744	21							
		Total	165	100	13,017	100	53,939	100	195,395	100							
i. Solving complex real-world problems	1	Very little	23	14	1,550	12	6,088	12	21,778	12	**2.6**	2.6	-.01	2.6	-.03	2.6	-.04
	2	Some	55	32	4,335	34	17,879	33	64,479	33							
	3	Quite a bit	54	34	4,678	36	19,462	36	70,200	35							
	4	Very much	33	20	2,436	19	10,419	20	38,638	20							
		Total	165	100	12,999	100	53,848	100	195,095	100							

-.04

Seniors

Frequency Distributions[a]

Statistical Comparisons[b]

Your seniors compared with

Item wording or description	*Values*[d]	*Response options*	Cal State East Bay *Count*	Cal State East Bay *%*	Far West Region Publ *Count*	Far West Region Publ *%*	Carnegie Class *Count*	Carnegie Class *%*	NSSE 2016 & 2017 *Count*	NSSE 2016 & 2017 *%*	Cal State East Bay *Mean*	Far West Region Publ *Mean*	Far West Region Publ *Effect size*[e]	Carnegie Class *Mean*	Carnegie Class *Effect size*[e]	NSSE 2016 & 2017 *Mean*	NSSE 2016 & 2017 *Effect size*[e]
4. During the current school year, how much has your coursework emphasized the following?																	
b. Applying facts, theories, or methods to practical problems or new situations	1	Very little	25	2	800	3	2,373	3	8,030	3	**3.1**	3.1	-.02	3.1	-.03	3.1	-.03
	2	Some	204	21	5,161	19	16,750	19	56,273	19							
	3	Quite a bit	434	44	12,006	44	41,089	45	135,123	45							
	4	Very much	333	33	9,167	34	30,944	33	101,585	33							
		Total	996	100	27,134	100	91,156	100	301,011	100							
6. During the current school year, about how often have you done the following?																	
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	1	Never	103	10	2,885	10	10,491	11	34,101	11	**2.6**	2.7	-.04	2.6	-.01	2.6	-.03
	2	Sometimes	345	35	9,238	34	31,361	34	101,208	33							
	3	Often	370	38	9,577	36	31,697	35	104,761	36							
	4	Very often	167	17	5,103	20	16,742	19	58,096	20							
		Total	985	100	26,803	100	90,291	100	298,166	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	1	Never	163	16	4,847	18	16,450	18	55,133	18	**2.4**	2.4	.02	2.4	.03	2.4	.03
	2	Sometimes	370	37	10,233	38	34,427	38	112,804	37							
	3	Often	323	34	7,620	29	25,924	29	84,883	29							
	4	Very often	126	13	4,067	16	13,383	15	45,047	16							
		Total	982	100	26,767	100	90,184	100	297,867	100							
c. Evaluated what others have concluded from numerical information	1	Never	159	15	4,206	15	15,644	17	49,199	16	**2.4**	2.4	-.03	2.4	.03	2.4	.00
	2	Sometimes	400	40	10,647	39	36,051	40	117,739	39							
	3	Often	310	32	8,339	32	26,971	30	90,718	31							
	4	Very often	113	12	3,631	14	11,669	13	40,587	14							
		Total	982	100	26,823	100	90,335	100	298,243	100							
17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?																	
c. Thinking critically and analytically	1	Very little	31	4	594	3	1,776	3	5,919	3	**3.2**	3.3	-.03	3.3	-.06	3.3	-.07
	2	Some	102	13	3,083	14	9,711	13	31,908	13							
	3	Quite a bit	302	39	8,855	38	29,580	38	96,164	37							
	4	Very much	353	45	10,511	45	37,435	47	124,465	47							
		Total	788	100	23,043	100	78,502	100	258,456	100							
d. Analyzing numerical and statistical information	1	Very little	69	9	2,190	9	8,132	10	26,637	10	**2.9**	2.9	-.02	2.8	.03	2.9	.00
	2	Some	208	26	5,982	25	21,373	27	68,287	26							
	3	Quite a bit	284	36	7,752	34	26,141	34	84,851	33							
	4	Very much	227	29	7,109	32	22,803	30	78,538	31							
		Total	788	100	23,033	100	78,449	100	258,313	100							
i. Solving complex real-world problems	1	Very little	84	11	2,128	10	6,999	10	23,317	10	**2.8**	2.8	-.05	2.8	-.06	2.8	-.06
	2	Some	211	28	6,358	28	21,023	27	69,463	27							
	3	Quite a bit	278	35	8,145	35	27,769	35	91,716	35							
	4	Very much	208	27	6,352	28	22,562	28	73,530	28							
		Total	781	100	22,983	100	78,353	100	258,026	100							

NSSE 2017 Frequencies and Statistical Comparisons

About This Report

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 survey facsimile included in your *Institutional Report* and 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: nsse.indiana.edu/html/weighting.cfm

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 tend to generate more statistically significant results even though the magnitude of mean differences may be 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

NSSE national survey of student engagement

NSSE 2017 Frequencies and Statistical Comparisons

NSSEville State University

Seniors

Item wording or description	Variable name[c]	Values[d]	Response options	Frequency Distributions[a]: NSSEville State Count	NSSEville State %	Private Doc-Granting Count	Private Doc-Granting %	Carnegie UG Program Count	Carnegie UG Program %	NSSE 2016 & 2017 Count	NSSE 2016 & 2017 %	Statistical Comparisons[b] (Your seniors compared with): NSSEville State Mean	Private Doc-Granting Mean	Private Doc-Granting Effect size[e]	Carnegie UG Program Mean	Carnegie UG Program Effect size[e]	NSSE 2016 & 2017 Mean	NSSE 2016 & 2017 Effect size[e]
6. During the current school year, about how often have you done the following?																		
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	3	0	244	2	54	2	6,952	3							
		2	Sometimes	135	20	4,397	27	845	29	75,222	33							
		3	Often	212	33	5,947	37	1,086	38	81,724	35	3.3	3.0 ***	.27	3.0 ***	.35	2.9 ***	.43
		4	Very often	280	46	5,440	34	889	31	66,983	29		▲		▲		▲	
			Total	630	100	16,028	100	2,874	100	230,881	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	82	13	2,369	14	401	14	35,490	16							
		2	Sometimes	267	42	5,959	37	978	34	79,495	34							
		3	Often	164	26	4,548	29	858	31	67,348	29	2.5	2.5	-.04	2.6 *	-.09	2.6	-.05
		4	Very often	113	19	3,072	20	621	21	47,208	21				▽			
			Total	626	100	15,948	100	2,858	100	229,541	100							
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	25	4	778	5	134	5	12,543	6							
		2	Sometimes	56	9	1,666	11	262	10	28,134	13							
		3	Often	384	63	9,147	57	1,586	57	128,802	56	3.1	3.1	.02	3.1	-.04	3.0	.06
		4	Very often	150	24	4,267	27	851	29	58,873	26							
			Total	615	100	15,858	100	2,833	100	228,352	100							

7. ***Effect size:*** Effect size indicates practical significance. An effect size of .2 is often considered small, .5 moderate, and .8 large. 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

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.