
NSSE 2023 Topical Module Report

Development of Transferable Skills

California State Polytechnic University-Pomona

Adapted from a pilot survey that was developed by the American Association of State Colleges and Universities, this module examines activities that develop useful and transferable skills for the workplace and beyond (such as verbal and written fluency, critical thinking, creative thinking, problem solving, project management, and time management). The module complements questions on the core survey about higher-order learning, reflective and integrative learning, and students' perceptions of their development in a variety of areas.

Comparison group details are in the online Selected Comparison Groups report, linked in the Data & Reports table on the Institution Interface. A PDF copy is also saved in your report download folder.

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First-Year Students

Item wording or description	Variable name	Values ^c	Response options	Frequency Distributions ^a				Statistical Comparisons ^b		
				Cal Poly Pomona		Transferable Skills		Cal Poly Pomona	Transferable Skills	Effect size ^d
				Count	%	Count	%	Mean	Mean	
1. During the current school year, whether course-related or not, about how often have you done the following?										
a. Discussed or debated an issue of social, political, or philosophical importance	TRNdebate	1	Never	61	23	1,994	18	2.3	2.4	-.12
		2	Sometimes	99	38	4,794	41			
		3	Often	70	28	3,385	28			
		4	Very often	29	11	1,688	14			
		Total		259	100	11,861	100			
b. Made a speech to a group	TRNspeech	1	Never	56	21	3,252	31	2.3	2.1 ***	.27 △
		2	Sometimes	100	40	4,880	41			
		3	Often	68	27	2,604	20			
		4	Very often	34	13	1,107	9			
		Total		258	100	11,843	100			
c. Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.	TRNgroup	1	Never	25	9	666	7	2.7	2.7	.04
		2	Sometimes	83	32	4,225	37			
		3	Often	95	37	4,710	39			
		4	Very often	56	22	2,240	18			
		Total		259	100	11,841	100			
d. Discussed the ethical consequences of a course of action	TRNethical	1	Never	44	16	1,655	16	2.4	2.4	.00
		2	Sometimes	102	40	4,827	41			
		3	Often	82	33	3,839	31			
		4	Very often	31	11	1,516	12			
		Total		259	100	11,837	100			
e. Evaluated the credibility of information sources	TRNcred	1	Never	20	7	652	6	2.8	2.8	.01
		2	Sometimes	70	28	3,701	32			
		3	Often	112	44	4,925	41			
		4	Very often	56	20	2,547	20			
		Total		258	100	11,825	100			
f. Discussed complex problems with others to develop a better solution	TRNcomplex	1	Never	31	12	808	8	2.6	2.6	-.06
		2	Sometimes	87	34	4,269	37			
		3	Often	99	39	4,744	39			
		4	Very often	41	15	2,001	16			
		Total		258	100	11,822	100			
g. Generated multiple solutions to a problem or task	TRNsolution	1	Never	24	9	597	6	2.6	2.7	-.07
		2	Sometimes	89	35	4,155	36			
		3	Often	101	39	4,969	41			
		4	Very often	45	16	2,092	17			
		Total		259	100	11,813	100			
h. Combined dissimilar concepts to create a novel idea	TRNcreate	1	Never	60	23	2,287	21	2.2	2.2	.01
		2	Sometimes	101	39	5,145	44			
		3	Often	69	27	3,193	26			
		4	Very often	28	10	1,173	9			
		Total		258	100	11,798	100			
i. Adapted a previously used solution to a new situation	TRNadapt	1	Never	31	11	1,069	10	2.5	2.5	.02
		2	Sometimes	101	39	4,761	41			
		3	Often	89	36	4,410	36			
		4	Very often	38	14	1,550	12			
		Total		259	100	11,790	100			

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to the endnotes page for the key to triangle symbols.

First-Year Students

Item wording or description	Variable name	Values ^c	Response options	Frequency Distributions ^a				Statistical Comparisons ^b		
				Cal Poly Pomona		Transferable Skills		Cal Poly Pomona	Transferable Skills	Effect size ^d
				Count	%	Count	%	Mean	Mean	
j. Referred to online content (tutorial, forum, webpage, etc.) to solve a problem	TRNnonsolve	1	Never	14	6	437	4	2.9	2.9	-.05
		2	Sometimes	70	28	3,166	27			
		3	Often	94	37	4,734	40			
		4	Very often	81	30	3,455	29			
		Total		259	100	11,792	100			
k. Referred to online content (tutorial, forum, webpage, etc.) to learn a new skill or procedure	TRNnonskill	1	Never	16	6	478	5	2.9	2.9	-.05
		2	Sometimes	75	30	3,413	29			
		3	Often	93	36	4,596	38			
		4	Very often	74	27	3,298	28			
		Total		258	100	11,785	100			
l. Used project management tools to plan, organize, or schedule tasks	TRNproject	1	Never	34	13	1,147	12	2.5	2.6	-.09
		2	Sometimes	101	41	4,224	37			
		3	Often	81	31	4,273	35			
		4	Very often	41	15	2,124	17			
		Total		257	100	11,768	100			
m. Used a daily or weekly "to do" list	TRNtodo	1	Never	36	14	938	10	2.7	2.9 **	-.19
		2	Sometimes	76	30	2,925	26			
		3	Often	65	25	3,074	25			
		4	Very often	81	30	4,855	39			
		Total		258	100	11,792	100			
n. Prioritized what tasks need to be accomplished	TRNtasks	1	Never	7	3	179	2	3.1	3.2 *	-.15
		2	Sometimes	51	20	1,998	18			
		3	Often	106	42	4,216	36			
		4	Very often	92	36	5,374	45			
		Total		256	100	11,767	100			
o. Worked longer hours than usual to meet deadlines (i.e., after midnight, before dawn)	TRNhours	1	Never	21	8	750	7	2.8	2.9	-.11
		2	Sometimes	71	29	3,197	27			
		3	Often	89	33	3,589	30			
		4	Very often	77	30	4,253	35			
		Total		258	100	11,789	100			
p. Written something (paper, report, article, etc.) that used information from a variety of sources (books, journals, Internet, databases, etc.)	TRNwrsources	1	Never	5	2	325	3	3.0	3.0	-.04
		2	Sometimes	75	30	2,900	26			
		3	Often	98	39	4,487	38			
		4	Very often	78	30	4,062	32			
		Total		256	100	11,774	100			
q. Written something (paper, report, article, etc.) that assessed the conclusions of a published work	TRNwrassess	1	Never	21	8	1,140	11	2.7	2.6	.06
		2	Sometimes	96	38	3,909	35			
		3	Often	83	32	3,949	33			
		4	Very often	59	22	2,770	21			
		Total		259	100	11,768	100			

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to the endnotes page for the key to triangle symbols.

First-Year Students

Item wording or description	Variable name	Values ^c	Response options	Frequency Distributions ^a				Statistical Comparisons ^b		
				Cal Poly Pomona		Transferable Skills		Cal Poly Pomona	Transferable Skills	Effect size ^d
				Count	%	Count	%	Mean	Mean	
r. Written something (paper, report, article, etc.) that included ideas from more than one academic discipline	TRNwrideas	1	Never	22	8	1,288	13	2.6	2.6	.07
		2	Sometimes	104	41	4,178	37			
		3	Often	79	32	3,861	31			
		4	Very often	49	19	2,422	19			
		Total		254	100	11,749	100			
s. Written something (paper, report, article, etc.) that presented multiple viewpoints or perspectives	TRNwrviews	1	Never	11	4	817	9	2.7	2.7	.02
		2	Sometimes	110	43	4,227	37			
		3	Often	88	35	4,222	34			
		4	Very often	48	18	2,512	20			
		Total		257	100	11,778	100			

Seniors

Item wording or description	Variable name	Values ^c	Response options	Frequency Distributions ^a				Statistical Comparisons ^b		
				Cal Poly Pomona		Transferable Skills		Cal Poly Pomona	Transferable Skills	
				Count	%	Count	%	Mean	Mean	Effect size ^d
1. During the current school year, whether course-related or not, about how often have you done the following?										
a. Discussed or debated an issue of social, political, or philosophical importance	TRNdebate	1	Never	171	26	2,287	19	2.3	2.4 ***	-0.19
		2	Sometimes	230	36	4,593	37			
		3	Often	154	24	3,389	27			
		4	Very often	94	14	2,249	18			
		Total		649	100	12,518	100			
b. Made a speech to a group	TRNspeech	1	Never	155	23	3,179	25	2.4	2.2 ***	.15
		2	Sometimes	228	35	5,042	41			
		3	Often	159	25	2,678	21			
		4	Very often	108	17	1,622	13			
		Total		650	100	12,521	100			
c. Worked in a group with people who differed from you in terms of background, political orientation, points of view, etc.	TRNgroup	1	Never	40	6	903	8	2.9	2.8 ***	.15
		2	Sometimes	182	28	3,858	31			
		3	Often	213	33	4,736	38			
		4	Very often	212	32	3,015	24			
		Total		647	100	12,512	100			
d. Discussed the ethical consequences of a course of action	TRNethical	1	Never	116	18	1,583	13	2.5	2.5 *	-0.10
		2	Sometimes	243	38	4,496	36			
		3	Often	167	26	4,212	33			
		4	Very often	124	19	2,211	17			
		Total		650	100	12,502	100			
e. Evaluated the credibility of information sources	TRNcred	1	Never	49	8	773	6	2.8	2.9 **	-0.11
		2	Sometimes	203	31	3,349	27			
		3	Often	219	35	4,827	39			
		4	Very often	178	26	3,545	28			
		Total		649	100	12,494	100			
f. Discussed complex problems with others to develop a better solution	TRNcomplex	1	Never	46	8	880	7	2.8	2.8	.03
		2	Sometimes	186	29	3,586	29			
		3	Often	238	36	4,939	39			
		4	Very often	179	27	3,100	24			
		Total		649	100	12,505	100			
g. Generated multiple solutions to a problem or task	TRNsolution	1	Never	37	6	677	6	2.8	2.8	.01
		2	Sometimes	199	31	3,609	29			
		3	Often	233	36	5,120	41			
		4	Very often	181	27	3,085	24			
		Total		650	100	12,491	100			
h. Combined dissimilar concepts to create a novel idea	TRNcreate	1	Never	123	19	2,194	18	2.4	2.4	.03
		2	Sometimes	248	38	5,125	41			
		3	Often	178	28	3,430	27			
		4	Very often	100	15	1,716	14			
		Total		649	100	12,465	100			
i. Adapted a previously used solution to a new situation	TRNadapt	1	Never	64	10	1,094	9	2.7	2.7	.02
		2	Sometimes	224	34	4,353	34			
		3	Often	228	36	4,712	38			
		4	Very often	132	21	2,295	18			
		Total		648	100	12,454	100			

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to the endnotes page for the key to triangle symbols.

Seniors

Item wording or description	Variable name	Values ^c	Response options	Frequency Distributions ^a				Statistical Comparisons ^b		
				Cal Poly Pomona		Transferable Skills		Cal Poly Pomona	Transferable Skills	Effect size ^d
				Count	%	Count	%	Mean	Mean	
j. Referred to online content (tutorial, forum, webpage, etc.) to solve a problem	TRNnonsolve	1	Never	49	7	474	4	3.0	3.1 **	-.14
		2	Sometimes	161	26	2,799	22			
		3	Often	205	31	4,561	36			
		4	Very often	235	36	4,627	38			
		Total		650	100	12,461	100			
k. Referred to online content (tutorial, forum, webpage, etc.) to learn a new skill or procedure	TRNnonskill	1	Never	45	7	522	4	2.9	3.0 *	-.10
		2	Sometimes	166	26	3,010	24			
		3	Often	211	33	4,580	37			
		4	Very often	228	34	4,341	35			
		Total		650	100	12,453	100			
l. Used project management tools to plan, organize, or schedule tasks	TRNnproject	1	Never	77	12	1,242	11	2.7	2.7	-.05
		2	Sometimes	209	33	3,881	32			
		3	Often	209	32	4,312	34			
		4	Very often	154	23	3,005	24			
		Total		649	100	12,440	100			
m. Used a daily or weekly "to do" list	TRNtodo	1	Never	64	11	966	9	2.8	3.1 ***	-.22
		2	Sometimes	173	28	2,562	21			
		3	Often	182	28	3,058	25			
		4	Very often	231	33	5,876	45			
		Total		650	100	12,462	100			
n. Prioritized what tasks need to be accomplished	TRNtasks	1	Never	11	2	187	2	3.2	3.4 ***	-.18
		2	Sometimes	110	18	1,441	12			
		3	Often	219	34	4,029	33			
		4	Very often	311	46	6,796	53			
		Total		651	100	12,453	100			
o. Worked longer hours than usual to meet deadlines (i.e., after midnight, before dawn)	TRNhours	1	Never	39	6	748	6	3.1	3.1	.00
		2	Sometimes	150	24	3,060	24			
		3	Often	180	27	3,412	27			
		4	Very often	282	42	5,232	42			
		Total		651	100	12,452	100			
p. Written something (paper, report, article, etc.) that used information from a variety of sources (books, journals, Internet, databases, etc.)	TRNwrsources	1	Never	23	4	425	4	3.1	3.1 *	-.10
		2	Sometimes	154	25	2,504	21			
		3	Often	207	32	4,074	33			
		4	Very often	267	39	5,446	43			
		Total		651	100	12,449	100			
q. Written something (paper, report, article, etc.) that assessed the conclusions of a published work	TRNwrassess	1	Never	54	9	1,290	11	2.8	2.8	.03
		2	Sometimes	206	32	3,664	30			
		3	Often	193	30	3,713	29			
		4	Very often	196	29	3,766	29			
		Total		649	100	12,433	100			

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to the endnotes page for the key to triangle symbols.

Seniors

Item wording or description	Variable name	Values ^c	Response options	Frequency Distributions ^a				Statistical Comparisons ^b		
				Cal Poly Pomona		Transferable Skills		Cal Poly Pomona	Transferable Skills	Effect size ^d
				Count	%	Count	%	Mean	Mean	
r. Written something (paper, report, article, etc.) that included ideas from more than one academic discipline	TRNwrideas	1	Never	75	12	1,235	11	2.7	2.7	-.03
		2	Sometimes	199	32	3,862	32			
		3	Often	200	30	3,855	30			
		4	Very often	178	26	3,494	27			
		Total		652	100	12,446	100			
s. Written something (paper, report, article, etc.) that presented multiple viewpoints or perspectives	TRNwrviews	1	Never	56	10	1,117	10	2.8	2.7	.06
		2	Sometimes	211	33	4,193	35			
		3	Often	194	29	3,913	30			
		4	Very often	187	28	3,220	25			
		Total		648	100	12,443	100			

NSSE 2023 Development of Transferable Skills

Detailed Statistics^e

California State Polytechnic University-Pomona

First-Year Students

Variable name	N	Mean		Standard error ^f		Standard deviation ^g		DF ^h	Sig. ⁱ	Effect size ^d
	Cal Poly Pomona	Cal Poly Pomona	Transferable Skills	Cal Poly Pomona	Transferable Skills	Cal Poly Pomona	Transferable Skills			
TRNdebate	258	2.27	2.38	.058	.011	0.93	0.93	7,872	.064	-.12
TRNspeech	257	2.32	2.07	.059	.011	0.95	0.92	272	.000	.27
TRNgroup	258	2.72	2.68	.056	.010	0.90	0.84	7,866	.503	.04
TRNethical	258	2.39	2.39	.055	.010	0.88	0.89	7,869	.945	.00
TRNcred	257	2.77	2.76	.054	.010	0.86	0.84	7,856	.817	.01
TRNcomplex	257	2.57	2.62	.055	.010	0.89	0.84	7,855	.328	-.06
TRNsolution	258	2.63	2.69	.054	.009	0.86	0.82	7,848	.247	-.07
TRNcreate	257	2.24	2.23	.058	.010	0.93	0.89	7,832	.832	.01
TRNadapt	258	2.53	2.51	.054	.010	0.87	0.84	7,833	.705	.02
TRNnonsolve	258	2.90	2.94	.056	.010	0.89	0.85	7,830	.453	-.05
TRNnonskill	257	2.85	2.90	.056	.010	0.89	0.86	7,825	.436	-.05
TRNproject	257	2.48	2.56	.057	.010	0.91	0.90	7,816	.154	-.09
TRNtodo	257	2.72	2.92	.065	.012	1.05	1.03	7,830	.002	-.19
TRNtasks	255	3.11	3.23	.051	.009	0.81	0.80	7,813	.017	-.15
TRNhours	257	2.85	2.95	.059	.011	0.94	0.95	7,827	.092	-.11
TRNwresource	256	2.96	3.00	.051	.010	0.82	0.85	7,813	.510	-.04
TRNwrsassess	258	2.69	2.64	.056	.011	0.90	0.94	7,815	.356	.06
TRNwrideas	252	2.62	2.55	.056	.011	0.89	0.94	7,802	.262	.07
TRNwrviews	257	2.67	2.65	.051	.010	0.82	0.89	277	.767	.02

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to the endnotes page for the key to triangle symbols.

NSSE 2023 Development of Transferable Skills

Detailed Statistics^e

California State Polytechnic University-Pomona

Seniors

Variable name	N	Mean		Standard error ^f		Standard deviation ^g		DF ^h	Sig. ⁱ	Effect size ^d
	Cal Poly Pomona	Cal Poly Pomona	Transferable Skills	Cal Poly Pomona	Transferable Skills	Cal Poly Pomona	Transferable Skills			
TRNdebate	639	2.25	2.43	.039	.009	0.99	0.99	13,132	.000	-.19
TRNspeech	640	2.36	2.22	.040	.009	1.01	0.97	701	.000	.15
TRNgroup	637	2.91	2.78	.037	.008	0.92	0.90	13,127	.000	.15
TRNethical	641	2.45	2.54	.039	.008	0.99	0.93	699	.027	-.10
TRNcred	640	2.79	2.89	.036	.008	0.92	0.89	701	.008	-.11
TRNcomplex	640	2.83	2.81	.036	.008	0.91	0.89	13,120	.449	.03
TRNsolution	641	2.84	2.84	.035	.008	0.89	0.86	702	.839	.01
TRNcreate	639	2.39	2.36	.038	.008	0.97	0.93	13,079	.468	.03
TRNadapt	637	2.67	2.66	.036	.008	0.91	0.88	13,065	.642	.02
TRNnonsolve	640	2.95	3.08	.038	.008	0.95	0.87	695	.001	-.14
TRNnonskill	640	2.94	3.03	.037	.008	0.94	0.87	698	.024	-.10
TRNproject	640	2.66	2.71	.038	.008	0.97	0.95	13,051	.202	-.05
TRNtodo	641	2.84	3.06	.040	.009	1.01	1.01	13,080	.000	-.22
TRNtasks	642	3.24	3.38	.032	.007	0.82	0.76	700	.000	-.18
TRNhours	641	3.05	3.05	.038	.009	0.96	0.95	13,069	.975	.00
TRNwresource	642	3.06	3.14	.035	.008	0.90	0.87	13,056	.016	-.10
TRNwrsassess	640	2.79	2.76	.038	.009	0.96	0.99	13,049	.447	.03
TRNwrideas	643	2.70	2.74	.039	.009	0.99	0.98	13,064	.412	-.03
TRNwrviews	638	2.75	2.70	.038	.009	0.97	0.95	13,055	.164	.06

*p<.05, **p<.01, ***p<.001 (2-tailed); Refer to the endnotes page for the key to triangle symbols.

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. Comparison group details are in the Selected Comparison Groups report, linked in the Data & Reports table on the Institution Interface.
- b. All statistics are weighted by institution-reported sex and enrollment status (and institution size for comparison groups). Unless otherwise noted, statistical comparisons are two-tailed independent t-tests. Items with categorical response sets are left blank.
- c. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook.
- d. Effect size for independent t-tests uses Cohen's d; z-tests use Cohen's h.
- e. Statistics are weighted by institution-reported sex and enrollment status (and institution size for comparison groups). Categorical items are not listed.
- f. The 95% confidence interval for the population mean is equal to the sample mean plus or minus 1.96 times the standard error of the mean.
- g. A measure of the amount individual scores deviate from the mean of all the scores in the distribution.
- h. Degrees of freedom used to compute the t-tests. Values differ from Ns due to weighting and whether equal variances were assumed.
- i. 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 students in the comparison group is due to chance.
- j. Statistical comparison uses z-test to compare the proportion who responded (depending on the item) "Done or in progress" or "Yes" with all who responded otherwise.
- k. Mean represents the proportion who responded (depending on the item) "Done or in progress" or "Yes."

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.