University of Minnesota Duluth NSSE 2014 Major Field Report, Part II Comparisons to Other Institutions Engineering

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

The Major Field Report category 'Engineering' includes the following majors: Engineering (general); Aero-, astronautical engineering; Bioengineering; Biomedical engineering; Chemical engineering; Civil engineering; Computer engineering and technology; Electrical or electronic engineering; Industrial engineering; Materials engineering; Mechanical engineering; Petroleum engineering; Software engineering; Other engineering.



Note:

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



NSSE 2014 Major Field Report, Part II

About This Report

About Your Major Field Report, Part II

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

NSSE results included in MFR, Part II

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

Majors

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

Sample

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

Class

Results are presented separately by institution-reported class level. First-year students' majors may include undeclared but intended majors and much of the first-year experience may take place outside of the major field. As a result, first-year results should be interpreted with caution.

Technical Requirements

Major categories with fewer than 20 respondents in a given class are not reported (columns are blank). Comparison groups must also contain at least 20 respondents in the major category, or they remain blank. Although 20 is a minimum requirement, keep in mind that any statistical result requires a sufficient number of respondents per category to produce a reliable estimate. Due to the disaggregation of results by student-reported major, the Major Field Report results are unweighted.

Report Sections

Engagement Indicators (pp. 3-7)	Results on NSSE's ten Engagement Indicators (EIs) organized into four themes adapted from the former Benchmarks of Effective Educational Practice. See your <i>Engagement Indicators</i> report for more details.
High-Impact Practices (p. 8)	Results on student participation in six High-Impact Practices (HIPs). See your High-Impact Practices report for more details.
Frequencies and Statistical Comparisons (pp. 9-44)	Response frequencies and statistical comparisons (including tests of significance and effect sizes) for all survey items except the demographics for your institution and your three core comparison groups.
Respondent Profile (pp. 45-51)	Response frequencies for all demographic questions for your institution and your three core comparison groups.



Overview of Engagement Indicators: Engineering University of Minnesota Duluth

Engagement Indicators: Overview

Engagement Indicators are summary measures based on sets of NSSE questions examining key dimensions of student engagement. The ten indicators are organized within four themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores^a for your students in this related-major category with students in your comparison groups within the same category.

Use the following key:

- **Your students' average** was significantly higher (p<.05) with an effect size at least .3 in magnitude.
- \triangle Your students' average was significantly higher (p<.05) with an effect size less than .3 in magnitude.
- -- No significant difference.
- ∇ Your students' average was significantly lower (p<.05) with an effect size less than .3 in magnitude.
- **Vour students' average** was significantly lower (p<.05) with an effect size at least .3 in magnitude.

		First-Y	ear Students in Engir	eering		Seniors in Engineeri	ng
		Your first-year students compared with	Your first-year students compared with	Your first-year students compared with	Your seniors compared with	Your seniors compared with	Your seniors compared with
Theme	Engagement Indicator	UMD Peers	Competitors	National Comparison	UMD Peers	Competitors	National Comparison
	Higher-Order Learning						
Academic	Reflective & Integrative Learning		∇				
Challenge	Learning Strategies			V		∇	
	Quantitative Reasoning						
Learning with	Collaborative Learning						
Peers	Discussions with Diverse Others	∇			∇		∇
Experiences	Student-Faculty Interaction	∇				Δ	
with Faculty	Effective Teaching Practices						\blacksquare
Campus	Quality of Interactions						
Environment	Supportive Environment						∇



Engagement Indicators: Engineering University of Minnesota Duluth

First-year students^a in

Engineering	Mea	in statistics			Perce	ntile ^d scores			c	Comparison re	sults	
		SD ^b	SEM ^c		254	501	75.4	051		Mean	Sig. ^f	Effect size ^g
Academic Challenge	Mean	SD	SEIVI	5th	25th	50th	75th	95th	Deg. of freedom ^e	diff.	Sig.*	size-
Higher-Order Learning												
UMD (N = 106)	36.5	13.1	1.27	15	25	35	45	60				
UMD Peers	30.3	13.1	.65	20	23 30	40	43 50	60	513	-2.7		208
Competitors	39.2	12.7	.65	20	30 30	40 40	45	60	489	-2.7		087
National Comparison	37.3	13.6	1.23	15	30	40	45	60	226	-1.1		067
* 	57.5	15.0	1.25		50	40	45	00)		005
Reflective & Integrative Learning	20.4	10.1	00		20	20	24	12				
UMD (N = 107)	28.4	10.1	.98	14	20	29	34	43	522	5.0	***	140
UMD Peers	33.3	11.6	.57	17	26	31	40	54	523	-5.0	*	440
Competitors	31.2	11.4	.58	14	23	31	40	51	496	-2.8	*	254
National Comparison	31.8	12.2	1.09	13	23	31	37	54	230	-3.5	*	305
Learning Strategies												
UMD (N = 107)	32.0	14.1	1.37	7	20	33	40	53				
UMD Peers	36.6	13.4	.66	13	27	40	47	60	520	-4.5	**	335
Competitors	34.6	13.9	.70	13	27	33	47	60	495	-2.5		182
National Comparison	38.6	13.1	1.20	13	27	40	47	60	225	-6.6	***	484
Quantitative Reasoning												
UMD (N = 106)	32.5	15.2	1.48	7	20	33	40	60				
UMD Peers	32.0	14.9	.73	10	20	33	40	60	524	.5		.032
Competitors	31.0	14.8	.75	7	20	33	40	60	496	1.5		.100
National Comparison	29.9	16.1	1.44	0	20	30	40	60	228	2.6		.164
Learning with Peers												
Collaborative Learning												
UMD (N = 106)	37.1	14.7	1.43	15	25	35	50	60				
UMD Peers	36.7	13.0	.64	15	30	40	45	60	150	.4		.027
Competitors	35.9	13.5	.69	15	25	35	45	60	492	1.2		.086
National Comparison	31.2	13.5	1.22	10	20	30	40	55	227	5.9	**	.415
Discussions with Diverse Others												
UMD (N = 108)	37.2	13.5	1.30	20	30	40	45	60				
UMD Peers	41.6	15.5	.76	15	30	40	60	60	188	-4.4	**	289
Competitors	38.3	14.7	.74	15	30	40	50	60	497	-1.1		074
National Comparison	38.6	16.9	1.52	10	20	40	55	60	227	-1.4		091



Engagement Indicators: Engineering University of Minnesota Duluth

First-year students^a in

Engineering	Mea	in statistics			Percei	ntile ^d scores			(Comparison re	sults	
										Mean		Effect
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	diff.	Sig. ^f	size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UMD (N = 107)	15.1	12.5	1.21	0	5	15	20	40				
UMD Peers	18.8	13.4	.66	0	10	15	25	45	518	-3.7	*	276
Competitors	16.1	12.1	.61	0	5	15	20	40	496	-1.0		085
National Comparison	15.9	13.1	1.18	0	5	15	25	40	229	8		065
Effective Teaching Practices												
UMD (N = 107)	38.0	12.1	1.17	16	28	40	44	60				
UMD Peers	38.0	11.9	.58	20	32	40	44	60	526	.0		.003
Competitors	36.5	11.6	.58	20	28	36	44	60	499	1.5		.131
National Comparison	39.5	13.1	1.17	20	30	40	48	60	230	-1.4		113
Campus Environment												
Quality of Interactions												
UMD (N = 102)	41.2	13.0	1.29	16	34	43	50	60				
UMD Peers	42.3	11.4	.57	20	36	43	50	60	493	-1.1		098
Competitors	40.5	11.2	.58	20	34	42	48	56	470	.6		.054
National Comparison	40.7	12.2	1.11	16	36	42	48	60	222	.5		.036
Supportive Environment												-
UMD (N = 107)	34.2	12.1	1.17	15	25	35	40	55				
UMD Peers	36.1	13.5	.66	15	26	35	45	60	524	-1.8		139
Competitors	35.9	12.6	.64	18	28	35	45	60	496	-1.7		134
National Comparison	36.1	14.1	1.28	10	25	38	45	58	226	-1.9		143



Engagement Indicators: Engineering University of Minnesota Duluth

Seniors^a in

Engineering	Mea	in statistics			Percei	ntile ^d scores			C	Comparison re	sults	
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge	Weun	30	SEIVI	501	2501	5011	7501	3501	Deg. of freedom	uŋj.	Sig.	5/20
Higher-Order Learning												
UMD (N = 105)	40.0	12.0	1.17	20	30	40	50	60				
UMD Peers	39.8	13.2	.58	20	30	40	50	60	629	.2		.012
Competitors	38.9	12.6	.51	20	30	40	50	60	707	1.0		.083
National Comparison	40.9	13.7	.83	15	30	40	50	60	378	-1.0		072
Reflective & Integrative Learning								<u>.</u>				
UMD (N = 110)	31.1	9.6	.91	17	23	31	37	46				
UMD Peers	32.6	11.5	.50	14	25	31	40	53	179	-1.6		139
Competitors	32.1	11.4	.46	14	26	31	40	54	169	-1.1		096
National Comparison	34.7	12.3	.73	17	26	34	43	60	254	-3.6	**	313
Learning Strategies												
UMD (N = 108)	31.3	14.3	1.37	7	20	33	40	60				
UMD Peers	35.7	14.7	.64	13	27	33	47	60	637	-4.4	**	300
Competitors	35.2	14.1	.57	13	27	33	47	60	714	-3.9	**	276
National Comparison	40.8	13.5	.81	20	33	40	53	60	387	-9.5	***	695
Quantitative Reasoning												
UMD (N = 109)	40.5	14.0	1.35	20	33	40	53	60				
UMD Peers	38.1	15.9	.69	7	27	40	53	60	642	2.4		.155
Competitors	37.8	14.6	.59	13	27	40	47	60	718	2.7		.187
National Comparison	39.5	16.5	.98	7	27	40	53	60	391	1.0		.061
Learning with Peers												
Collaborative Learning												
UMD (N = 108)	39.4	14.5	1.39	15	30	40	50	60				
UMD Peers	39.9	13.5	.58	15	30	40	50	60	637	5		039
Competitors	39.6	14.8	.60	15	30	40	50	60	714	2		013
National Comparison	36.9	14.6	.88	15	25	35	50	60	383	2.5		.171
Discussions with Diverse Others												
UMD (N = 109)	37.2	14.8	1.42	15	25	40	50	60				
UMD Peers	40.7	15.5	.67	15	30	40	55	60	640	-3.5	*	225
Competitors	38.0	15.9	.64	15	25	40	50	60	723	7		046
National Comparison	42.0	16.3	.97	20	30	40	60	60	391	-4.7	**	298



Engagement Indicators: Engineering University of Minnesota Duluth

Seniors^a in

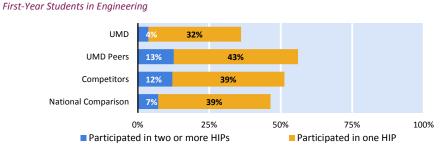
Engineering	Mea	n statistics			Percei	ntile ^d scores			(Comparison re	sults	
										Mean		Effect
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	diff.	Sig. ^f	size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UMD (N = 109)	24.5	14.2	1.36	5	15	20	35	50				
UMD Peers	22.9	15.2	.67	0	10	20	35	50	632	1.6		.104
Competitors	21.0	14.2	.58	0	10	20	30	45	714	3.5	*	.250
National Comparison	24.1	16.4	.98	0	10	20	35	55	386	.4		.028
Effective Teaching Practices												
UMD (N = 109)	39.0	11.8	1.13	16	32	40	48	60				
UMD Peers	39.6	13.5	.58	16	32	40	48	60	646	6		042
Competitors	36.7	12.5	.50	16	28	36	44	60	724	2.3		.187
National Comparison	43.1	13.1	.78	20	36	44	56	60	215	-4.1	**	322
Campus Environment												
Quality of Interactions												
UMD (N = 105)	42.6	11.4	1.11	18	38	44	50	58				
UMD Peers	41.4	11.4	.50	20	34	43	50	60	623	1.1		.100
Competitors	40.7	10.2	.42	22	34	42	48	55	696	1.9		.180
National Comparison	43.3	12.9	.79	20	35	46	54	60	213	8		063
Supportive Environment												
UMD (N = 110)	29.9	12.4	1.18	8	23	30	40	50				
UMD Peers	30.6	13.8	.60	8	20	30	40	55	644	8		056
Competitors	31.0	13.1	.53	10	23	33	40	55	721	-1.1		088
National Comparison	33.2	14.2	.85	10	23	33	43	60	228	-3.3	*	240

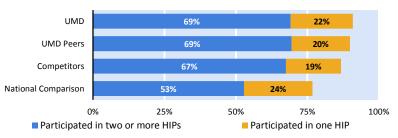


High-Impact Practices: Engineering University of Minnesota Duluth

Overall HIP Participation^a

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





Seniors in Engineering

Statistical Comparisons^a

The table below compares the percentage^h of your students who participated in a High-Impact Practice, including the percentage who participated overall (at least one, two or more), with those at institutions in your comparison groups.

	UMD	UMD Peer	S	Comp	petitors	National Cor	nparison
First-Year Students in Engineering	%	% ⁱ	Effect size ^j	% ⁱ	Effect size ^j	% ⁱ	Effect size ^j
11c. Learning community	6	20 ***	42	14 *	25	11	17
12. Service-learning	33	47 *	27	44 *	22	42	18
11e. Research with faculty	1	4	23	7 *	36	2	12
Participated in at least one	36	56 ***	40	51 **	31	46	21
Participated in two or more	4	13 **	34	12 *	32	7	16
Seniors in Engineering	33	28	.12	22 *	.25	24	.21
11c. Learning community 12. Service-learning	44	49	09	43	.25	46	04
11e. Research with faculty	29	28	.03	32	06	22	.17
11a. Internship or field exp.	66	60	.13	61	.10	43 ***	.46
11d. Study abroad	8	6	.08	14	19	8	.00
11f. Culminating senior exp.	50	66 **	33	55	09	42	.16
Participated in at least one	91	90	.04	87	.13	77 **	.39
Participated in two or more	69	69	01	67	.03	53 **	.34



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	dents ^a in					Frequer	ncy Di	istributior	IS				Sta	tistical	Comparis	ons ^k		
Engineering														Your fii	rst-year stude	nts compar	ed with	
Lingineering										National	I						Natio	nal
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD I	Peers	Compet	itors	Compar	
Item wording	Variable			a 1					Effect		Effect		Effect
or description	name'		Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size "	Mean	size "
1. During the current so	•	t how o	•		0		_											
 Asked questions or contributed to course 	askquest	1	Never	8	7	23	5	21	5	2	2							
discussions in other		2	Sometimes	50	46	170	40	161	41	48	38	• •						
ways		3	Often	32	30	142	34	137	35	47	38	2.6	2.7	16	2.7	15	2.8 *	31
		4	Very often	18	17	86	20	76	19	28	22						▼	
			Total	108	100	421	100	395	100	125	100							
b. Prepared two or more	drafts	1	Never	25	23	78	19	66	17	15	12							
drafts of a paper or assignment before		2	Sometimes	52	48	164	39	152	39	48	38							
turning it in		3	Often	23	21	120	29	118	30	39	31	2.1	2.4 **	27	2.4 **	32	2.6 ***	48
Ū.		4	Very often	8	7	58	14	58	15	23	18		∇		\bullet		▼	
			Total	108	100	420	100	394	100	125	100							
c. Come to class without	unpreparedr	1	Very often	5	5	27	6	17	4	3	2							
completing readings or assignments	(Reverse-coded	2	Often	13	12	59	14	47	12	18	15							
assignments	version of	3	Sometimes	61	57	233	56	233	59	66	53	3.0	3.0	.10	3.0	.00	3.1	08
	unprepared created by NSSE.)	4	Never	28	26	100	24	98	25	37	30							
	created by NSSE.)		Total	107	100	419	100	395	100	124	100							
d. Attended an art exhibit,	attendart	1	Never	67	63	156	37	160	41	52	42							
play or other arts performance (dance,		2	Sometimes	29	27	175	42	172	44	52	42							
music, etc.)		3	Often	10	9	68	16	47	12	15	12	1.5	1.9 ***	49	1.8 ***	39	1.8 **	39
		4	Very often	1	1	22	5	15	4	5	4		▼		▼		▼	
			Total	107	100	421	100	394	100	124	100							
e. Asked another student	CLaskhelp	1	Never	1	1	20	5	14	4	9	7							
to help you understand course material		2	Sometimes	42	39	128	30	133	34	58	46							
course material		3	Often	37	34	178	42	155	39	46	37	2.9	2.8	.03	2.8	.03	2.5 ***	.46
		4	Very often	28	26	94	22	92	23	12	10							
			Total	108	100	420	100	394	100	125	100							
f. Explained course	CLexplain	1	Never	2	2	11	3	12	3	4	3							
material to one or more		2	Sometimes	31	29	111	26	118	30	47	38							
students		3	Often	35	33	206	49	158	40	45	37	3.0	2.9	.18	2.9	.16	2.8 *	.31
		4	Very often	39	36	91	22	105	27	27	22							
			Total	107	100	419	100	393	100	123	100							



Frequencies and Statistical Comparisons: Engineering

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	First-Year Stud	ents ^a in					Frequer	ncy Di	stribution	IS				Sta	tistical C	Compariso	ons ^k		
$ \begin{array}{ c c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Engineering														Your fir:	st-year studer	nts compai		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$																		Natior	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UND	UMD P		Competi		Compar	rison Effect
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	5		Values	^m Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean		Mean		Mean	size ⁿ
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	g. Prepared for exams by	CLstudy	1	Never	12	11	33	8	43	11	28	22							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	0 0		2	Sometimes	35	33	142	34	144	37	38	30							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			3	Often	29	27	148	35	120	31	39	31	2.7	2.7	.01	2.6	.11	2.4 *	.33
h. Worked with other students on course projects or assignments CLproject 1 Never 7 6 14 3 13 3 14 11 b. Worked with other students on course projects or assignments CLproject 1 1 Never 42 39 112 27 139 35 48 38 a. Construction Offen 31 29 188 45 154 39 40 32 2.9 21 2.8 08 2.6 i. Gave a course presentation present 1 Never 54 50 72 17 98 25 27 22 7.0 2.0 21 2.8 08 2.6 i. Gave a course presentation present 1 Never 54 50 72 17 98 25 27 22 70 2.0 9.0 2.1 90 100 125 100 i. Gave a course presentation present 1 Never 54 50 72 17 98 25 27 22 2. During the current school yea	with other students		4	Very often	31	29	95	23	86	22	20	16							
students on course projects or assignments 2 Sometimes 42 39 112 27 139 35 48 38 3 Often 31 29 188 45 154 39 40 32 2.7 2.9 21 2.8 08 2.6 4 Very often 28 26 104 25 90 23 23 18 100 106 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 125 100 145 18 28 73 19 27 22 6 5 4 17 16 118 28 73 19 27 100 100 125 100 100 100 125 100 100 125 100 100 125 100 100 125 100 <td></td> <td></td> <td></td> <td>Total</td> <td>107</td> <td>100</td> <td>418</td> <td>100</td> <td>393</td> <td>100</td> <td>125</td> <td>100</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				Total	107	100	418	100	393	100	125	100							
projects or assignments 1 2 Sometimes 42 30 112 27 133 33 40 32 4 Very often 31 22 104 25 90 23 18 16 32 26 16 32 23 18 16 16 32 29 -21 2.8 -08 2.6 16 16 32 18 16 18 10 396 100 125 100 16 10 10 396 100 125 100 16 17 16 118 28 73 19 27 22 17 2.9 -21 2.0 *** -44 2.1 ** 10 10 390 100 125 100 17 16 118 28 73 19 27 22 17 2.3 *** -70 2.0 *** -44 2.1 ** 10 390 100 125 100 17 2.3 *** -70 2.0 *** -44 2.1	h. Worked with other	CLproject	1	Never	7	6	14	3	13	3	14	11							
1 1			2	Sometimes	42	39	112	27	139	35	48	38							
$ \frac{1}{100} + 1$	projects or assignments		3	Often	31	29	188	45	154	39	40	32	2.7	2.9	21	2.8	08	2.6	.18
i. Gave a course present 1 Never 54 50 72 17 98 25 27 22 2 Sometimes 35 32 194 46 197 51 66 53 3 Often 17 16 118 28 73 19 27 22 4 Very often 2 2 36 9 22 6 5 4 70tal 108 100 420 100 390 100 125 100 125 100 2. During the current school year, about how often have you done the following: 3 0ften 4 4 21 5 21 5 15 12 a. Combined ideas from completing assignments Rlintegrate 1 Never 4 21 5 21 5 15 12 4 Very often 16 15 76 18 48 12 13 10 b. Connected your Risocietal 1 Never 25 23 51 12 <th< td=""><td></td><td></td><td>4</td><td>Very often</td><td>28</td><td>26</td><td>104</td><td>25</td><td>90</td><td>23</td><td>23</td><td>18</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			4	Very often	28	26	104	25	90	23	23	18							
presentation 2 Sometimes 35 32 194 46 197 51 66 53 3 Often 17 16 118 28 73 19 22 25 17 2.3 *** -70 2.0 *** -44 2.1 ** 4 Very often 2 2 36 9 22 6 5 4 70al 108 100 420 100 390 100 125 100 2. During the current school year, about how often have you done the following: 3 Often 4 4 21 5 21 5 15 12 a. Combined ideas from completing assignments Rlintegrate 1 Never 4 4 21 5 21 5 15 12 3 Often 45 42 175 42 159 40 51 46 37 4 Very often 16 15 76 18 48 12 13 10 b. Connected your Risocietal <th< td=""><td></td><td></td><td></td><td>Total</td><td>108</td><td>100</td><td>418</td><td>100</td><td>396</td><td>100</td><td>125</td><td>100</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>				Total	108	100	418	100	396	100	125	100							
1 1	i. Gave a course	present	1	Never	54	50	72	17	98	25	27	22							
4 Very often 2 2 36 9 22 6 5 4 Total 108 100 420 100 390 100 125 100	presentation		2	Sometimes	35	32	194	46	197	51	66	53							
Total 108 100 420 100 390 100 125 100 2. During the current school year, about how otter have you done the following: a. Combined ideas from different courses when completing assignments R lintegrate 1 Never 4 4 21 5 21 5 15 12 3. Combined ideas from courses when completing assignments R lintegrate 1 Never 4 4 23 5 21 5 15 12 4 Very often 16 15 76 18 48 12 13 10 b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15			3	Often	17	16	118	28	73	19	27	22	1.7	2.3 ***	70	2.0 ***	44	2.1 ***	49
2. During the current school year, about how often have you done the following: a. Combined ideas from different courses when completing assignments 1 Never 4 4 21 5 21 5 15 12 3 Often 45 42 39 148 35 166 42 46 37 4 Very often 16 15 76 18 48 12 13 10 b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15			4	Very often	2	2	36	9	22	6	5	4		▼		▼		▼	
a. Combined ideas from different courses when completing assignments R lintegrate 1 Never 4 4 21 5 21 5 15 12 3 Often 42 39 148 35 166 42 46 37 4 Very often 16 15 76 18 48 12 13 10 5 Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15				Total	108	100	420	100	390	100	125	100							
a. Combined ideas from different courses when completing assignments R lintegrate 1 Never 4 4 21 5 21 5 15 12 3 Often 42 39 148 35 166 42 46 37 4 Very often 16 15 76 18 48 12 13 10 0 Total 107 100 420 100 394 100 125 100 b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15	2. During the current sch	ool vear, abo	ut how	often have vou don	e the followin	g?													
completing assignments 2 Sometimes 42 39 148 53 100 42 40 57 3 Often 45 42 175 42 159 40 51 41 4 Very often 16 15 76 18 48 12 13 10 b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15	0	•	1	•		0	21	5	21	5	15	12							
A Very often 16 15 76 18 48 12 13 10 b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15	different courses when	-	2	Sometimes	42	39	148	35	166	42	46	37							
4 Very often 16 15 76 18 48 12 13 10 Total 107 100 420 100 394 100 125 100 b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15	completing assignments		3	Often	45	42	175	42	159	40	51	41	2.7	2.7	06	2.6	.11	2.5	.23
b. Connected your RIsocietal 1 Never 25 23 51 12 52 13 18 15			4	Very often	16	15	76	18	48	12	13	10							
				Total	107	100	420	100	394	100	125	100							
loarning to conjuted	b. Connected your	RIsocietal	1	Never	25	23	51	12	52	13	18	15							
	learning to societal		2	Sometimes	58	54	196	47	207	53	59	48							
problems or issues 3 Often 16 15 132 32 91 23 31 25 2.1 2.4 ***39 2.3 **29 2.4 **	problems or issues		3	Often	16	15	132	32	91	23	31	25	2.1	2.4 ***	39	2.3 **	29	2.4 **	35
4 Very often 8 7 40 10 40 10 16 13			4	Very often	8	7	40	10	40	10	16	13		V		∇		V	
Total 107 100 419 100 390 100 124 100				Total	107	100	419	100	390	100	124	100							
c. Included diverse RIdiverse 1 Never 43 40 75 18 74 19 17 14	c. Included diverse	RIdiverse	1	Never	43	40	75	18	74	19	17	14							
perspectives (political, 2 Sometimes 46 43 202 48 194 50 61 49			2	Sometimes	46	43	202	48	194	50	61	49							
religious, racial/ethnic, gender, etc.) in course 3 Often 16 15 101 24 93 24 31 25 1.8 2.3 ***56 2.2 ***51 2.4 **	e		3	Often	16	15	101	24	93	24	31	25	1.8	2.3 ***	56	2.2 ***	51	2.4 ***	69
discussions or 4 Very often 2 2 42 10 29 7 15 12			4	Very often	2	2	42	10	29	7	15	12		▼		▼		▼	
assignments Total 107 100 420 100 390 100 124 100				Total	107	100	420	100	390	100	124	100							



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

First-Year Stud	dents ^a in					Froquor		stributior	-			tu Buluti	Sta	tictical	Comparis	onc ^k		
	dents in					Frequer	ICY DI	stribution	15				Sla					
Engineering								Compatibu		National		UMD			rst-year stude		Natio	
	Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UND	UMD P	Effect	Compet	Effect	Compa	Effect
Item wording or description	name'	Values'		Count	%	Count	%	Count	%	Count	%	Mean	Mean	size"	Mean	size"	Mean	size"
 Examined the strengths and weaknesses of 	RIownview	1	Never	9	9	33	8	34	9	12	10							
your own views on a		2	Sometimes	51	49	146	35	162	41	42	34							
topic or issue		3	Often	38	36	172	41	154	39	54	44	2.4	2.7 **	30	2.5	15	2.6	24
		4	5	7	7	67	16	43	11	16	13		∇					
			Total	105	100	418	100	393	100	124	100							
e. Tried to better	RIperspect	1	Never	9	8	17	4	23	6	6	5							
understand someone else's views by		2	Sometimes	49	46	138	33	144	37	45	36							
imagining how an issue		3	Often	41	38	179	43	160	41	52	42	2.4	2.8 ***	42	2.7 **	29	2.7 *	33
looks from his or her		4	Very often	8	7	83	20	64	16	21	17		▼		∇		▼	
perspective			Total	107	100	417	100	391	100	124	100							
f. Learned something that	RInewview	1	Never	3	3	12	3	20	5	4	3							
changed the way you		2	Sometimes	46	43	145	35	152	39	51	41							
understand an issue or concept		3	Often	41	39	181	43	160	41	48	39	2.7	2.8	17	2.7	.00	2.7	03
concept		4	Very often	16	15	81	19	60	15	20	16							
			Total	106	100	419	100	392	100	123	100							
g. Connected ideas from	RIconnect	1	Never	2	2	7	2	7	2	2	2							
your courses to your		2	Sometimes	32	30	90	22	109	28	36	29							
prior experiences and knowledge		3	Often	47	45	188	45	180	46	54	44	2.9	3.1 *	23	2.9	06	2.9	06
knowledge		4	Very often	24	23	132	32	96	24	32	26		∇					
			Total	105	100	417	100	392	100	124	100							
3. During the current sc	hool year, abo	ut how	often have you don	e the followir	ıg?													
a. Talked about career	SFcareer	1	Never	40	37	121	29	114	29	48	39							
plans with a faculty		2	Sometimes	48	45	198	48	193	49	49	40							
member		3	Often	15	14	72	17	73	19	22	18	1.8	2.0	19	2.0	15	1.9	04
		4	Very often	4	4	25	6	13	3	5	4							
			Total	107	100	416	100	393	100	124	100							
b. Worked with a faculty	SFotherwork	1	Never	66	62	224	54	204	52	71	57							
member on activities		2	Sometimes	26	24	124	30	133	34	38	30							
other than coursework (committees, student		3	Often	11	10	46	11	45	11	15	12	1.6	1.7	13	1.6	11	1.6	01
groups, etc.)		4	Very often	4	4	21	5	10	3	1	1							
0 · · · · · · · · · · · · · · · · · · ·			Total	107	100	415	100	392	100	125	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	dents ^a in					Frequer	ncy Di	stributior	IS				Sta	tistical	Comparis	sons ^k		
Engineering														Your fii	rst-year stud	ents compai		
0 0								C		National		UMD			6		Natio	
Item wording	Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UND	UMD	eers Effect	Compe	Effect	Compa	Effect
or description	name'	Values'	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size "	Mean	size ⁿ
c. Discussed course	SFdiscuss	1	Never	35	33	119	29	143	36	52	42							
topics, ideas, or		2	Sometimes	53	50	198	48	183	47	45	36							
concepts with a faculty member outside of		3	Often	15	14	79	19	56	14	21	17	1.9	2.0	13	1.8	.08	1.9	.03
class		4	Very often	4	4	19	5	10	3	7	6							
			Total	107	100	415	100	392	100	125	100							
d. Discussed your	SFperform	1	Never	45	42	108	26	147	38	45	36							
academic performance		2	Sometimes	49	46	189	46	190	48	55	44							
with a faculty member		3	Often	10	9	94	23	45	11	19	15	1.7	2.1 ***	42	1.8	08	1.9	20
		4	Very often	3	3	23	6	10	3	6	5		▼					
			Total	107	100	414	100	392	100	125	100							
4. During the current sc	hool year, how	much l	nas your coursewor	·k emphasize	d the f	ollowing?												
a. Memorizing course	memorize	1	Very little	3	3	16	4	18	5	4	3							
material		2	Some	37	35	130	31	142	36	31	25							
		3	Quite a bit	43	40	183	43	173	44	63	50	2.8	2.8	01	2.7	.16	2.9	10
		4	Very much	24	22	92	22	60	15	27	22							
			Total	107	100	421	100	393	100	125	100							
b. Applying facts,	HOapply	1	Very little	1	1	6	1	6	2	6	5							
theories, or methods to		2	Some	15	14	65	16	48	12	18	14							
practical problems or new situations		3	Quite a bit	50	47	181	43	180	46	67	54	3.2	3.2	.02	3.3	04	3.0	.26
new situations		4	Very much	41	38	165	40	159	40	34	27							
			Total	107	100	417	100	393	100	125	100							
c. Analyzing an idea,	HOanalyze	1	Very little	8	7	15	4	22	6	5	4							
experience, or line of		2	Some	20	19	90	22	92	24	27	22							
reasoning in depth by examining its parts		3	Quite a bit	50	47	179	43	167	43	64	51	2.9	3.0	12	2.9	.00	2.9	.00
examining its parts		4	Very much	29	27	134	32	110	28	29	23							
			Total	107	100	418	100	391	100	125	100							
d. Evaluating a point of	HOevaluate	1	Very little	17	16	30	7	41	11	4	3							
view, decision, or		2	Some	37	35	140	34	150	38	50	40							
information source		3	Quite a bit	38	36	159	38	140	36	45	36	2.5	2.7 **	30	2.6	11	2.7 *	31
		4	Very much	14	13	86	21	59	15	25	20		∇				▼	
			Total	106	100	415	100	390	100	124	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stud	dents ^a in					Frequer	ncy Di	stribution	IS				Sta	atistical	Comparis	sons ^k		
Engineering														Your fir	st-year stude	ents compai		
										National							Natio	
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD		Compe		Compa	
Item wording or description	Variable name ^I	Values'	ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
e. Forming a new idea or	HOform	1	Very little	15	14	23	6	28	7	9	7	Wiedn	wear	5/20	Wear	3/20	Weam	3120
understanding from		2	Some	26	24	115	28	121	31	37	30							
various pieces of		3	Quite a bit	46	43	181	43	164	42	50	41	2.7	2.8	21	2.7	09	2.8	12
information		4	Very much	20	19	98	24	77	20	27	22							
			Total	107	100	417	100	390	100	123	100							
5. During the current scl	hool year, to v	vhat exte	ent have your instru	ictors done t	he foll	owing?												
a. Clearly explained	ETgoals	1	Very little	1	1	5	1	3	1	3	2							
course goals and		2	Some	21	20	90	21	93	24	18	14							
requirements		3	Quite a bit	51	48	207	49	200	51	60	48	3.1	3.0	.08	3.0	.15	3.2	08
		4	Very much	34	32	120	28	97	25	44	35							
			Total	107	100	422	100	393	100	125	100							
b. Taught course sessions	ETorganize	1	Very little	2	2	8	2	4	1	3	2							
in an organized way		2	Some	21	20	85	20	89	23	30	24							
		3	Quite a bit	54	51	222	53	196	50	54	43	3.0	3.0	.04	3.0	.02	3.0	.03
		4	Very much	29	27	104	25	105	27	38	30							
			Total	106	100	419	100	394	100	125	100							
c. Used examples or	ETexample	1	Very little	1	1	6	1	6	2	0	0							
illustrations to explain difficult points		2	Some	19	18	89	21	88	22	33	27							
unicuit points		3	Quite a bit	53	50	194	46	175	45	46	37	3.1	3.1	.05	3.1	.07	3.1	.03
		4	Very much	33	31	132	31	124	32	44	36							
			Total	106	100	421	100	393	100	123	100							
d. Provided feedback on a	ETdraftfb	1	Very little	17	16	40	10	48	12	9	7							
draft or work in progress		2	Some	38	36	140	33	172	44	43	35							
progress		3	Quite a bit	34	32	164	39	122	31	36	29	2.5	2.7	18	2.5	.04	2.8 *	32
		4	Very much	18	17	77	18	53	13	36	29						▼	
			Total	107	100	421	100	395	100	124	100							
e. Provided prompt and	ETfeedback	1	Very little	11	10	28	7	34	9	7	6							
detailed feedback on tests or completed		2	Some	27	26	148	35	147	37	41	33							
assignments		3	Quite a bit	44	42	161	39	160	41	46	37	2.8	2.7	.05	2.6	.19	2.8	06
		4	Very much	23	22	81	19	53	13	31	25							
			Total	105	100	418	100	394	100	125	100							



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First-Year Stu	udents ^a in					Frequer	ncy D	istribution	IS				St	atistical	Comparis	ons ^k		
Engineering														Your fii	rst-year stude	nts compar	ed with	
Lingineering										Nationa	I						Natior	nal
				UMD		UMD Pee	rs	Competito	ors	Comparise	on	UMD	UMD	Peers	Compet		Compar	
Item wording or description	Variable name ^I	Values ⁿ	^a Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
6. During the current			· ·			count	70	count	70	count	70	mean	Mean	5/20	Wiedin	5120	mean	5120
a. Reached conclusions	QRconclude	1	Never	6	6	21	5	24	6	11	9							
based on your own		2	Sometimes	21	20	117	28	106	27	40	32							
analysis of numerical		3	Often	43	41	172	41	160	41	48	39	3.0	2.9	.17	2.9	.17	2.7 **	.37
information (numbers,		4	Very often	36	34	111	26	105	27	25	20							
graphs, statistics, etc.)			Total	106	100	421	100	395	100	124	100							
b. Used numerical	QRproblem	1	Never	21	20	61	14	76	19	21	17							
information to examine		2	Sometimes	41	38	167	40	148	38	42	34							
a real-world problem of	or	3	Often	27	25	129	31	117	30	42	34	2.4	2.5	08	2.4	.02	2.5	09
issue (unemployment, climate change, public		4	Very often	18	17	64	15	53	13	19	15							
health, etc.)			Total	107	100	421	100	394	100	124	100							
c. Evaluated what others	QRevaluate	1	Never	14	13	51	12	56	14	28	23							
have concluded from		2	Sometimes	46	43	189	45	170	43	45	36							
numerical information		3	Often	31	29	125	30	119	30	35	28	2.5	2.4	.01	2.4	.06	2.3	.15
		4	Very often	16	15	57	14	48	12	16	13							
			Total	107	100	422	100	393	100	124	100							
7. During the current	school year, about	how 1	nany papers, reports	, or other v	vriting	g tasks of the	e follo	wing length	have y	ou been as	signed	? (Include those n	ot yet cor	npleted.)				
a. Up to 5 pages	wrshortnum	0	None	6	6	15	4	17	4	10	8							
	(Recoded version	1.5	1-2	26	24	88	21	92	23	28	23							
	of wrshort created	4	3-5	24	22	129	31	141	36	36	29							
	by NSSE. Values	8	6-10	21	19	115	28	96	24	28	23	8.1	6.6 *	.26	5.7 **	.42	6.3	.26
	are estimated number of papers,	13	11-15	10	9	33	8	26	7	11	9		Δ					
	reports, etc.)	18	16-20	9	8	22	5	11	3	4	3							
	1	23	More than 20	12	11	15	4	11	3	7	6							
			Total	108	100	417	100	394	100	124	100							
b. Between 6 and 10	wrmednum	0	None	45	42	141	35	135	36	55	47							
pages	(Recoded version	1.5	1-2	43	40	169	42	176	47	46	39							
	of wrmed created	4	3-5	12	11	61	15	46	12	11	9							
	by NSSE. Values	8	6-10	1	1	21	5	14	4	3	3	1.9	2.0	01	1.7	.11	1.5	.15
	are estimated number of papers,	13	11-15	4	4	4	1	3	1	1	1							
	reports, etc.)	18	16-20	2	2	0	0	0	0	0	0							
	• · · ·	23	More than 20	0	0	3	1	1	0	1	1							
			Total	107	100	399	100	375	100	117	100							



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First-Year Stu	udents ^a in					Frequer	ncy Di	istribution	S				Sta	itistical	Compari	sons ^k		
Engineering														Your fi	rst-year stud	ents compar	ed with	
Lingineering										Nationa	I						Natio	onal
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD F	Peers	Compe	etitors	Compa	arison
Item wording	Variable		n		- /		- /		- /					Effect		Effect		Effect
or description c. 11 pages or more	name ¹ wrlongnum	Values' 0	ⁿ Response options None	Count 88	% 85	Count 272	% 70	Count 281	% 77	Count 89	% 79	Mean	Mean	size "	Mean	size ⁿ	Mean	size ⁿ
e. 11 pages of more	-	1.5	1-2	14	13	87	22	66	18	19	17							
	(Recoded version of wrlong created	4	3-5	14	15	21	5	11	3	19	1							
	by NSSE. Values	8	6-10	0	0	6	2	4	1	3	3	.4	0 **	22	6	14	6	15
	are estimated	13	11-15	1	1	0	0	4	1	1	1	.+	.8 **	22	.6	14	.6	15
	number of papers,			1	0	-	0		0	-	-		∇					
	reports, etc.)	18	16-20	0	0	1	1	0		0	0 0							
		23	More than 20 Total			2		1	0	0								
			I otal	104	100	389	100	365	100	113	100							
Estimated number of assigned pages of	wrpages																	
student writing.	(Continuous variab	la raca	dad and summad by									44.6	47.1	04	39.5	.10	39.7	.09
0			l, and wrlong. Values															
	are estimated page																	
8. During the current	school year, abou	t how a	often have vou had	discussions y	with p	eople from t	he foll	owing grou	ns?									
a. People of a race or	DDrace	1		9	8	19	5	23	6	8	6							
ethnicity other than		2	Sometimes	40	37	96	23	147	37	36	29							
your own		3	Often	38	35	127	30	110	28	37	30	2.7	3.1 ***	49	2.8	16	2.9 *	29
		4	Very often	21	19	178	42	115	29	43	35		V	,	2.0		V	/
			Total	108	100	420	100	395	100	124	100		•				•	
b. People from an	DDeconomic	1	Never	4	4	18	4	20	5	8	7							
economic background		2	Sometimes	27	25	86	21	105	27	33	27							
other than your own		3	Often	55	51	152	36	160	41	42	34	2.9	3.1 *	25	2.9	03	2.9	06
		4	Very often	22	20	161	39	109	28	40	33		V	.20		100	2.7	100
			Total	108	100	417	100	394	100	123	100		•					
c. People with religious	DDreligion	1	Never	4	4	20	5	22	6	10	8	<u>.</u>						
beliefs other than your	-	2	Sometimes	32	30	89	21	100	26	30	24							
own		3	Often	40	37	137	33	140	36	41	33	2.9	3.1	20	3.0	04	2.9	01
		4	Very often	32	30	174	41	130	33	42	34		5.1	20	5.0	04	2.9	01
			Total	108	100	420	100	392	100	123	100							
d. People with political	DDpolitical	1	Never	5	5	22	5	21	5	125	100							
views other than your	DDpontical	2	Sometimes	24	22	104	25	107	27	28	23							
own		3	Often	47	44	104	34	107	32	28 40	33	3.0	3.0	02	3.0	.01	2.9	.06
		4	Very often	47	30	143	35	120	35	40	35	5.0	5.0	02	5.0	.01	2.9	.00
		+	Total	108	100	417	100	393	100	123	100							
			TOTAL	108	100	41/	100	393	100	125	100				SE 2014 M			



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	dents ^a in					Frequer	ncy D	istribution	IS				Sta	atistical	Comparis	ons ^k		
Engineering														Your fii	rst-year stude	ents compai	red with	
Lingineering										Nationa	ıl						Natio	
				UMD		UMD Pee	rs	Competito	ors	Comparis	on	UMD	UMD		Compe		Compa	
Item wording or description	Variable name ^I	Values ^{**}	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
9. During the current so			· ·			count	70	count	70	count	<i>,,,</i>		mean	5120	mean	5120	mean	
a. Identified key	LSreading	1	Never	5	5	11	3	12	3	0	0							
information from	U	2	Sometimes	36	33	98	23	108	27	31	25							
reading assignments		3	Often	51	47	202	48	172	44	58	47	2.7	3.0 **	33	2.9 *	25	3.0 **	41
		4	Very often	16	15	110	26	102	26	35	28		▼		V			
			Total	108	100	421	100	394	100	124	100		•		•		•	
b. Reviewed your notes	LSnotes	1	Never	14	13	20	5	25	6	6	5							
after class		2	Sometimes	36	34	142	34	166	42	29	24							
		3	Often	34	32	149	35	124	32	48	39	2.6	2.8 *	23	2.6	04	3.0 **	41
		4	Very often	23	21	109	26	78	20	40	33		∇				•	
			Total	107	100	420	100	393	100	123	100							
c. Summarized what you	LSsummary	1	Never	13	12	33	8	38	10	8	7							
learned in class or from		2	Sometimes	44	41	138	33	149	38	41	34							
course materials		3	Often	37	35	172	41	130	33	45	37	2.5	2.7 *	25	2.6	17	2.8 *	33
		4	Very often	13	12	73	18	75	19	27	22		∇				▼	
			Total	107	100	416	100	392	100	121	100							
10. During the current s	school year, to	what ex	tent have your cou	rses challenge	ed you	1 to do your	best w	ork?										
-	challenge	1	Not at all	1	1	1	0	0	0	2	2							
		2		1	1	6	1	7	2	1	1							
		3		4	4	18	4	10	3	2	2							
		4		7	6	33	8	42	11	12	10	5.4	5.6	15	5.6	15	5.4	.00
		5		47	44	130	31	107	27	49	40							
		6		31	29	135	32	152	38	39	31							
		7	Very much	17	16	97	23	78	20	19	15							
			Total	108	100	420	100	396	100	124	100							
11. Which of the follow	ing have you do	one or d	o you plan to do be	fore you grad	luate	? °												
a. Participate in an	intern		Have not decided	6	6	34	8	31	8	13	10							
internship, co-op, field	(Means indicate		Do not plan to do	3	3	5	1	7	2	8	6							
experience, student teaching, or clinical	the percentage		Plan to do	93	86	341	81	332	84	98	78	6%	9%	14	6%	01	5%	.03
placement	who responded		Done or in progress	6	6	39	9	23	6	6	5							
•	"Done or in progress.")		Total	108	100	419	100	393	100	125	100							



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

First-Year Stu	dents ^a in					Frequer	ncy Di	stributior	IS				Sta	tistical	Comparis	sons ^k		
Engineering														Your fi	rst-year stude	ents compar	ed with	
Lingineering										Nationa	I						Natio	onal
				UMD		UMD Pee	rs	Competito	ors	Comparise	on	UMD	UMD		Compe		Compa	
Item wording or description	Variable name ^I	Values	^m Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
b. Hold a formal	leader	vulues	Have not decided	40	37	115	27	109	28	29	23	Mean	Weun	SIZE	wean	5120	Weun	5120
leadership role in a	(Means indicate		Do not plan to do	32	30	105	25	68	17	46	37							
student organization or	the percentage		Plan to do	29	27	142	34	173	44	32	26	6%	14% *	24	10%	13	14%	24
group	who responded		Done or in progress	7	6	57	14	39	10	17	14		∇					
	"Done or in progress.")		Total	108	100	419	100	389	100	124	100		•					
c. Participate in a learning	learncom		Have not decided	42	39	118	28	93	24	35	28							
community or some	(Means indicate		Do not plan to do	40	37	130	31	184	47	43	34							
other formal program where groups of	the percentage		Plan to do	19	18	84	20	61	16	33	26	6%	20% ***	42	14% *	25	11%	17
students take two or	who responded		Done or in progress	7	6	84	20	54	14	14	11		▼		∇			
more classes together	"Done or in progress.")		Total	108	100	416	100	392	100	125	100							
d. Participate in a study	abroad		Have not decided	35	33	128	31	102	26	36	29							
abroad program	(Means indicate		Do not plan to do	44	41	151	36	115	29	52	42							
	the percentage		Plan to do	27	25	127	30	161	41	30	24	1%	3%	16	4%	19	5%	25
	who responded		Done or in progress	1	1	13	3	14	4	6	5							
	"Done or in progress.")		Total	107	100	419	100	392	100	124	100							
e. Work with a faculty	research		Have not decided	50	47	175	42	146	37	45	36							
member on a research	(Means indicate		Do not plan to do	16	15	62	15	51	13	22	18							
project	the percentage		Plan to do	40	37	161	39	166	42	55	44	1%	4%	23	7% *	36	2%	12
	who responded "Done or in		Done or in progress	1	1	18	4	29	7	3	2				▼			
	progress.")		Total	107	100	416	100	392	100	125	100							
f. Complete a culminating	capstone		Have not decided	33	31	68	16	112	28	28	22							
senior experience	(Means indicate		Do not plan to do	9	8	21	5	19	5	11	9							
(capstone course, senior project or thesis,	the percentage		Plan to do	63	59	315	76	256	65	83	66	1%	3%	16	2%	05	2%	12
comprehensive exam,	who responded "Done or in		Done or in progress	1	1	13	3	6	2	3	2							
portfolio, etc.)	progress.")		Total	106	100	417	100	393	100	125	100							
12. About how many of	YOUR COURSES of	this in	stitution have inclu	ded a comm	mitv.k	ased projec	t (serv	ice-learnin	σ)?									
12. 1100ut now many of	servcourse	1 uns m		ueu a comm 72	67	222	53	218	g). 56	71	58							
	ser reourse	2	Some	31	29	163	39	154	39	46	38							
		3	Most	3	3	26	6	17	4	5	4	1.4	1.5 *	23	1.5	15	1.5	10
		4	All	2	2	4	1	1	0	0	0		∇					
			Total	108	100	415	100	390	100	122	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	dents ^a in					Freque	ncy Di	stributior	IS				St	atistical	Comparis	sons ^k		
Engineering														Your fii	rst-year stud	ents compar		
								C		National		UMD		Deserve	C		Natio	
	Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UIVID	UMD	Peers Effect	Compe	Effect	Compa	Effect
Item wording or description	name ¹	Values	^m Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size ⁿ	Mean	size ⁿ
13. Indicate the quality	of your interac	ctions w	ith the following pe	eople at your	institu	ition.												
a. Students	QIstudent	1	Poor	1	1	5	1	2	1	3	2							
		2		1	1	8	2	10	3	4	3							
		3		1	1	17	4	15	4	10	8							
		4		15	14	21	5	27	7	15	12							
		5		29	27	99	23	76	19	22	18	5.6	5.7	08	5.7	10	5.3	.21
		6		31	29	141	33	138	35	39	31							
		7	Excellent	30	28	130	31	124	31	30	24							
		—	Not applicable	0	0	1	0	3	1	2	2							
			Total	108	100	422	100	395	100	125	100							
b. Academic advisors	QIadvisor	1	Poor	5	5	10	2	15	4	5	4							
		2		5	5	20	5	29	7	8	6							
		3		8	7	42	10	45	11	6	5							
		4		16	15	68	16	54	14	19	15							
		5		22	20	74	18	83	21	23	18	5.0	5.0	01	4.8	.12	5.1	07
		6		22	20	88	21	88	22	31	25							
		7	Excellent	24	22	90	21	68	17	31	25							
		—	Not applicable	6	6	30	7	13	3	2	2							
			Total	108	100	422	100	395	100	125	100							
c. Faculty	QIfaculty	1	Poor	3	3	2	0	8	2	5	4							
		2		8	7	11	3	13	3	4	3							
		3		6	6	27	7	34	9	5	4							
		4		19	18	60	14	62	16	19	15	4.0						
		5		28	26	114	27	117	30	32	26	4.9	5.3 *	24	5.0	04	5.2	16
		6		25	23	126	30	113	29	34	27		V					
		7	Excellent	18	17	70	17	43	11	25	20							
		_	Not applicable	0	0	5	1	2	1	1	1							
			Total	107	100	415	100	392	100	125	100							



Frequencies and Statistical Comparisons: Engineering

Frequency Distributions Statistical Comparison 5" Statistical Comparison 5" Non-prince 10000 Non-prince 10000 Statistical Comparison 5" Non-prince 10000 Non-prince 10000 Statistical Comparison 5" Non-prince 10000 Non-prince 10000 Non-prince 10000 Statistical Comparison 5" Non-prince 10000 Non-prince 100000 Non-prince 1000000 Statistical Comparison 5" Non-prince 1000000000000000000000000000000000000								-											
Interval Variant	First-Year Stud	dents ^a in					Frequer	ncy Di	stributior	IS				Sta	atistical	Compari	sons ^k		
	Engineering														Your fi	irst-year stud	lents compar	ed with	
ideal weaks i	Lingineering										Nationa	I						Natio	nal
or derivation nem" Netwit ^a Megname grade Genum 8 Court 8 Court 8 Netwit Mem use" Mem Mem </th <th></th> <th></th> <th></th> <th></th> <th>UMD</th> <th></th> <th>UMD Pee</th> <th>rs</th> <th>Competito</th> <th>ors</th> <th>Compariso</th> <th>on</th> <th>UMD</th> <th>UMD</th> <th>Peers</th> <th>Compe</th> <th>etitors</th> <th>Compa</th> <th>rison</th>					UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD	Peers	Compe	etitors	Compa	rison
d. Shadhmir services, staff Qlstaff 1 Poor 6 6 15 4 14 4 5 4 4 5 4 4 5 4 4 5 4 9 7 5 17 4 9 7 5 19 96 21 20 78 19 96 24 30 24 4 9 7 30 24 6 9 2 107 27 30 24 4 9 7 15 10 7 18 14 10 100	Item wording	Variable													Effect		Effect		Effect
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			Values										Mean	Mean	size "	Mean	size "	Mean	size "
stadem activities, busing, etc.) a a a b a b a b a b a b a b a b a b a b a b a b a b a		QIstaff	1	Poor	6														
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$,																		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$																			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	8,,		4		19														
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			5				78		96			24	4.9	5.1	10	5.0	01	4.9	.01
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			6		22	21	94	22	107		30	24							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			7	Excellent	20	19	81	19	46	12	18	14							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			—	Not applicable	9	8	43	10	29	7	13	10							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				Total	107		418	100	394	100	125								
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		QIadmin	1	Poor	5	5	17	4	17	4	5	4							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			2		4	4	16	4	20	5	8	6							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	-		3		9	8	19	5	25	6	9	7							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	cic.)		4		13	12	69	17	67	17	26	21							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			5		18	17	107	26	85	22	26	21	5.0	5.0	.04	4.8	.14	4.8	.13
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			6		21	20	81	19	81	21	30	24							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			7	Excellent	22	21	63	15	46	12	17	14							
14. How much does your institution emphasize the following? a. Spending significant empstudy 1 Very little 2 2 1 0 1 0 1 1 amounts of time studying and on academic work 3 Quite a bit 54 50 158 38 182 46 61 50 b. Providing support to help students succeed acemic 1 Very much 38 36 220 52 158 40 45 37 b. Providing support to help students succeed acemic 1 Very little 5 5 12 3 13 3 2 2 c. Very little 5 5 12 3 13 3 2 2 b. Providing support to help students succeed acemically 3 Quite a bit 46 43 183 44 170 43 59 48 2.99 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2			_	Not applicable	15	14	46	11	53	13	4	3							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				Total	107	100	418	100	394	100	125	100							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	14. How much does you	r institution en	nphasiz	e the following?															
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			-	-	2	2	1	0	1	0	1	1							
studying and on academic work 3 Quire a bit 54 50 158 38 182 46 61 50 3.2 3.4 ** 32 3.3 10 3.2 academic work 4 Very much 38 36 220 52 158 40 45 37 ✓		1 5	2	•	13		42	10	52	13	16	13							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													3.2	3.4 **	32	3.3	10	3.2	03
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	academic work		4	Very much	38	36	220	52	158	40	45	37							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				•		100		100	393	100				•					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	b. Providing support to	SEacademic	1																
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			2	•	26						19								
4 Very much Total 30 28 155 37 124 32 43 35 ▼ ▼ ▼ c. Using learning support SElearnsup 1 Very little 6 6 20 5 15 4 6 5	academically												2.9	32*	- 26	3.0	- 11	32*	28
Total 107 100 417 100 391 100 123 100 c. Using learning support SElearnsup 1 Very little 6 6 20 5 15 4 6 5 services (tutoring 2 Some 14 13 66 16 78 20 20 16 services, writing center, etc.) 3 Quite a bit 48 45 178 42 165 42 48 39 3.1 3.1 01 3.1 .06 3.1				•											.20	5.0			.20
c. Using learning support SElearnsup 1 Very little 6 6 20 5 15 4 6 5 services (tutoring 2 Some 14 13 66 16 78 20 16 services, writing center, etc.) 3 Quite a bit 48 45 178 42 165 42 48 39 3.1 3.1 01 3.1 .06 3.1			•											· ·				•	
services (tutoring 2 Some 14 13 66 16 78 20 20 16 services, writing center, etc.) 3 Quite a bit 48 45 178 42 165 42 48 39 3.1 3.1 01 3.1 .06 3.1	c. Using learning support	SElearnsup	1																
services, writing center, etc.) 3 Quite a bit 48 45 178 42 165 42 48 39 3.1 3.101 3.1 .06 3.1				•															
center, etc.)													3.1	3.1	- 01	3.1	06	3.1	02
	center, etc.)			-									011	5.1	01	5.1	.00	5.1	02
Total 106 100 421 100 389 100 122 100			+	=															



Frequencies and Statistical Comparisons: Engineering

First-Year Stuc	dents ^a in					Frequer	icy Di	stributior	IS				St	atistical	Comparis	sons ^k		
Engineering														Your fii	rst-year stud	ents compar	ed with	
Lingineering										Nationa	I						Natio	nal
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD	Peers	Compe		Compai	
Item wording or description	Variable name ^I	Values'	ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
d. Encouraging contact	SEdiverse	1	Very little	19	18	56	13	46	12	13	11	Wiedn	Weath	3120	Mean	3120	Weam	5120
among students from		2	Some	36	34	126	30	146	37	35	28							
different backgrounds		3	Quite a bit	35	33	132	32	127	32	45	37	2.5	2.7	21	2.6	12	2.7 *	29
(social, racial/ethnic, religious, etc.)		4	Very much	17	16	102	25	73	19	30	24						∇	
Teligious, etc.)			Total	107	100	416	100	392	100	123	100						•	
e. Providing opportunities	SEsocial	1	Very little	6	6	22	5	13	3	9	7							
to be involved socially		2	Some	24	23	103	25	87	22	31	25							
		3	Quite a bit	53	50	162	39	175	45	47	38	2.9	3.0	10	3.0	16	2.9	02
		4	Very much	23	22	132	32	116	30	36	29							
			Total	106	100	419	100	391	100	123	100							
f. Providing support for	SEwellness	1	Very little	2	2	22	5	19	5	11	9							
your overall well-being		2	Some	28	26	87	21	90	23	32	26							
(recreation, health care, counseling, etc.)		3	Quite a bit	48	45	161	38	159	41	41	34	3.0	3.0	10	3.0	03	2.9	.11
counsening, etc.)		4	Very much	28	26	151	36	124	32	38	31							
			Total	106	100	421	100	392	100	122	100							
g. Helping you manage	SEnonacad	1	Very little	25	24	83	20	76	20	26	22							
your non-academic		2	Some	44	42	164	39	171	44	40	33							
responsibilities (work, family, etc.)		3	Quite a bit	26	25	115	27	97	25	35	29	2.2	2.4	14	2.3	07	2.4	18
ranniy, etc.)		4	Very much	11	10	58	14	45	12	19	16							
			Total	106	100	420	100	389	100	120	100							
h. Attending campus	SEactivities	1	Very little	4	4	29	7	20	5	13	11							
activities and events		2	Some	33	31	145	35	99	25	32	26							
(performing arts, athletic events, etc.)		3	Quite a bit	49	46	153	37	167	43	50	41	2.8	2.7	.09	2.9	12	2.7	.08
unione events, etc.)		4	Very much	21	20	92	22	105	27	27	22							
			Total	107	100	419	100	391	100	122	100							
i. Attending events that	SEevents	1	Very little	19	18	87	21	56	14	20	16							
address important		2	Some	46	43	154	37	151	38	36	30							
social, economic, or political issues		3	Quite a bit	33	31	107	26	128	33	46	38	2.3	2.4	08	2.5	20	2.5 *	27
Politica Issues		4	Very much	9	8	69	17	58	15	20	16						∇	
			Total	107	100	417	100	393	100	122	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	dents ^a in					Frequer	ncy Di	stributior	IS				Sta	atistical	Comparis	sons ^k		
Engineering														Your fii	rst-year stud	ents compar		
										Nationa							Natio	
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD		Compe		Compar	
Item wording or description	Variable name ¹	Values	ⁿ Response options	Count	%	Count	0/	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
15. About how many h			1 1			Count	%	Count	70	Count	70	weun	weun	5120	weun	5120	Wean	5120
a. Preparing for class	tmprephrs	0		1	1	2	0	1	0	0	0							
(studying, reading,	(Recoded version	3	1-5 hrs	7	6	30	7	20	5	12	10							
writing, doing	of tmprep created	8	6-10 hrs	16	15	80	19	60	15	31	25							
homework or lab work,	by NSSE. Values	13	11-15 hrs	28	26	80	19	95	24	34	28							
analyzing data, rehearsing, and other	are estimated	18	16-20 hrs	17	16	77	18	86	22	20	16	17.4	17.3	.01	17.7	03	14.7 *	.32
academic activities)	number of hours	23	21-25 hrs	18	17	64	15	56	14	9	7							
·····,	per week.)	28	26-30 hrs	10	9	49	12	32	8	9	7							
		33	More than 30 hrs	11	10	39	9	44	11	8	7							
			Total	108	100	421	100	394	100	123	100							
b. Participating in co-	tmcocurrhrs	0	0 hrs	21	20	144	34	90	23	48	40							
curricular activities	(Recoded version	3	1-5 hrs	48	45	136	32	163	41	45	37							
(organizations, campus publications, student	of tmcocurr	8	6-10 hrs	24	23	84	20	88	22	15	12							
government, fraternity	created by NSSE.	13	11-15 hrs	2	2	33	8	26	7	8	7							
or sorority,	Values are	18	16-20 hrs	7	7	13	3	15	4	3	2	5.8	4.8	.17	5.4	.06	3.9 *	.30
intercollegiate or	estimated number of hours per	23	21-25 hrs	0	0	5	1	5	1	0	0							
intramural sports, etc.)	week.)	28	26-30 hrs	1	1	3	1	3	1	1	1							
		33	More than 30 hrs	3	3	2	0	4	1	1	1							
			Total	106	100	420	100	394	100	121	100							
c. Working for pay	tmworkonhrs	0		86	80	332	79	288	73	108	88							
on campus	(Recoded version	3	1-5 hrs	11	10	16	4	16	4	5	4							
	of tmworkon	8	6-10 hrs	3	3	25	6	46	12	1	1							
	created by NSSE.	13	11-15 hrs	3	3	32	8	23	6	4	3							
	Values are	18	16-20 hrs	2	2	11	3	16	4	3	2	2.0	2.2	05	2.8	16	1.5	.09
	estimated number of hours per	23	21-25 hrs	2	2	1	0	2	1	0	0							
	week.)	28	26-30 hrs	0	0	1	0	1	0	2	2							
		33	More than 30 hrs	1	1	0	0	1	0	0	0							
			Total	108	100	418	100	393	100	123	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	idents ^a in					Frequer	ncy Di	stributior	IS				St	atistical	Comparis	sons ^k		
Engineering														Your fi	rst-year stud	ents compar	ed with	
Linginieering				UMD		UMD Pee	rs	Competito	ors	National Compariso		UMD	UMD	Peers	Compe	titors	Natio Compar	
Item wording	Variable													Effect		Effect		Effect
d. Working for pay	name' tmworkoffhrs	Values [*] 0	ⁿ Response options 0 hrs	Count 85	% 79	Count 328	% 79	Count 317	% 81	Count 80	65	Mean	Mean	size "	Mean	size "	Mean	size ⁿ
 working for pay off campus 	unworkonnrs																	
on campus	(Recoded version	3	1-5 hrs	6	6	20	5	22	6	8 7	7							
	of tmworkoff created by NSSE.	8	6-10 hrs	2 5	2 5	24	6	15	4		6							
	Values are	13	11-15 hrs			18	4	17	4	6	5 2	3.0	26	06	2.2	10	() **	25
	estimated number	18 23	16-20 hrs 21-25 hrs	4	4	14 6	3	7	2	3 5	4	5.0	2.6	.06	2.3	.10	6.3 **	35
	of hours per	23 28	21-25 nrs 26-30 hrs	1	1	0 2	0	4	1	3	4							
	week.)	28 33	More than 30 hrs	2	2	4	1	2	2	5 11	2 9							
		55	Total	107	100	4 416	100	391	100	11	9 100							
Estimated number of	tmworkhrs		Total	107	100	410	100	391	100	123	100							
hours working for pay	(Continuous variable created by NSSE)											4.9	4.6	.04	5.1	03	7.8	25
e. Doing community	tmservicehrs	0	0 hrs	74	72	267	65	247	64	85	69							
service or volunteer		3	1-5 hrs	20	19	105	26	117	30	32	26							
work	(Recoded version of tmservice	8	6-10 hrs	4	4	25	6	12	3	1	1							
	created by NSSE.	13	11-15 hrs	2	2	7	2	7	2	4	3							
	Values are	18	16-20 hrs	0	0	1	0	3	1	0	0	2.0	1.8	.04	1.6	.10	1.5	.11
	estimated number	23	21-25 hrs	1	1	1	0	0	0	0	0							
	of hours per	28	26-30 hrs	1	1	2	0	1	0	1	1							
	week.)	33	More than 30 hrs	1	1	1	0	0	0	0	0							
			Total	103	100	409	100	387	100	123	100							
f. Relaxing and	tmrelaxhrs	0	0 hrs	0	0	2	0	3	1	4	3							-
socializing (time with	(Recoded version	3	1-5 hrs	13	12	68	16	56	14	20	17							
friends, video games,	of tmrelax created	8	6-10 hrs	28	26	96	23	94	24	34	28							
TV or videos, keeping	by NSSE. Values	13	11-15 hrs	21	20	102	25	87	22	24	20							
up with friends online, etc.)	are estimated	18	16-20 hrs	20	19	60	15	73	19	10	8	14.6	13.8	.09	14.0	.08	13.8	.08
	number of hours	23	21-25 hrs	12	11	39	9	36	9	6	5							
	per week.)	28	26-30 hrs	8	7	17	4	20	5	10	8							
		33	More than 30 hrs	5	5	29	7	21	5	13	11							
			Total	107	100	413	100	390	100	121	100							



NSSE 2014 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

First-Year Stu	udents ^a in					Frequer		stributior	-				St	atistical	Comparis	sons ^k		
						riequei	10, 21	Stribution							rst-year stud		ed with	
Engineering				UMD		UMD Pee	rs	Competito	ors	Nationa Comparise		UMD	UMD	Peers	Compe		Natior Compar	
Item wording	Variable													Effect		Effect		Effect
or description g. Providing care for	name ¹ tmcarehrs	Values [*] 0	⁷ Response options 0 hrs	Count 96	% 89	Count 350	% 84	Count 350	% 90	Count 91	<u>%</u> 75	Mean	Mean	size "	Mean	size ⁿ	Mean	size "
dependents (children,		3	1-5 hrs	90 7	6	25	6	16	90 4	12	10							
parents, etc.)	(Recoded version of tmcare created	8	6-10 hrs	2	2	23	5	8	2	7	6							
	by NSSE. Values	13	11-15 hrs	- 1	- 1	12	3	5	- 1	3	2							
	are estimated	18	16-20 hrs	0	0	4	1	4	1	2	2	1.0	1.5	11	1.1	03	3.2 **	34
	number of hours	23	21-25 hrs	1	1	1	0	1	0	0	0						▼	
	per week.)	28	26-30 hrs	0	0	1	0	2	1	2	2						•	
		33	More than 30 hrs	1	1	3	1	3	1	5	4							
			Total	108	100	417	100	389	100	122	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	65	60	164	39	158	40	51	42							
(driving, walking, etc.)	(Recoded version	3	1-5 hrs	31	29	185	44	171	44	47	39							
	of tmcommute	8	6-10 hrs	6	6	50	12	43	11	15	12							
	created by NSSE.	13	11-15 hrs	2	2	15	4	12	3	6	5							
	Values are estimated number	18	16-20 hrs	2	2	2	0	6	2	1	1	2.4	3.0	14	3.0	13	3.3	18
	of hours per	23	21-25 hrs	0	0	1	0	1	0	2	2							
	week.)	28	26-30 hrs	1	1	2	0	1	0	0	0							
		33	More than 30 hrs	1	1	0	0	0	0	0	0							
			Total	108	100	419	100	392	100	122	100							
16. Of the time you sp	end preparing for	class i	n a typical 7-day y	veek, about h	ow mu	ich is on ass	igned	reading?										
j pp	reading	1		34	31	65	20	59	25	12	12							
	-	2	Some	44	41	161	50	91	39	40	40							
	(Revised for 2014. Comparison data	3	About half	22	20	60	19	52	22	34	34	2.0	2.2	20	2.3 *	23	2.5 ***	52
	are limited to	4	Most		-0	27	8	23	10	13	13	2.0	2.2	20	2.5	23	2.5	52
	NSSE 2014	5	Almost all	0	0	_; 7	2	8	3	1	1				v		•	
	participating	5	Total	108	100	320	100	233	100	100	100							
	institutions.)		Total	100	100	520	100	200	100	100	100							
	tmreadinghrs																	
of tmprephrs based	ble created by NSSE. (d on reading, where V half=.50; Most=.75; A	'ery littl	e=.10; Some=.25;									5.2	5.9	15	6.6 * ▼	26	5.7	11



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

First-Year Stu	udents ^a in					Frequer	icy Di	stribution	IS				Sta	atistical	Compari	sons ^k		
Engineering														Your fir	st-year stud	ents compar	ed with	
Linginicering										National							Natio	
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD		Compe		Compa	
Item wording or description	Variable name ¹	Values	<i>m</i> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
	tmreadinghrscol	1	0 hrs	1	1	1	0	0	0	0	0	incun	mean	5/20	mean	5,20	mean	5,20
	(Collapsed version of tmreadinghrs	2	More than zero, up to 5 hrs	67	62	168	53	126	54	58	58							
	created by NSSE.)	3	More than 5, up to 10 hrs	28	26	107	33	56	24	29	29							
		4	More than 10, up to 15 hrs	7	6	23	7	25	11	7	7							
		5	More than 15, up to 20 hrs	2	2	11	3	14	6	3	3							
		6	More than 20, up to 25 hrs	3	3	7	2	10	4	3	3							
		7	More than 25 hrs	0	0	3	1	1	0	0	0							
			Total	108	100	320	100	232	100	100	100							
17. How much has you	ur experience at tl	nis inst	titution contributed	to your know	vledge	, skills, and	persor	nal developi	nent ii	1 the follow	ing ar	eas?						
a. Writing clearly and	pgwrite	1	Very little	24	22	51	12	61	16	13	11							
effectively		2	Some	35	32	143	34	135	34	33	27							
		3	Quite a bit	38	35	163	39	140	36	55	45	2.3	2.6 *	27	2.5	17	2.7 **	40
		4	Very much	11	10	65	15	56	14	22	18		∇				\bullet	
			Total	108	100	422	100	392	100	123	100							
b. Speaking clearly and	pgspeak	1	Very little	26	24	60	14	81	21	24	20							
effectively		2		43	40	142	34	142	37	31	25							
		3	Quite a bit	26	24	142	34	121	31	50	41	2.2	2.5 **	34	2.3	12	2.5 *	29
		4	Very much	12	11	73	18	45	12	18	15		▼				∇	
			Total	107	100	417	100	389	100	123	100							
 c. Thinking critically and analytically 	l pgthink	1	Very little	3	3	14	3	7	2	10	8							
unurytically		2		17	16	89	21	74	19	23	19	2.1	• •				• •	
		3	Quite a bit	49 39	45 36	182 137	43 32	160 149	41 38	54 36	44 29	3.1	3.0	.12	3.2	01	2.9	.24
		4	Very much Total		100	422	52 100	149 390	38 100	123	100							
d. Analyzing numerical	pganalyze	1		5	5	422	5	13	3	123	9							
and statistical	pganaryze	2	Some	13	12	22 98	23	100	26	32	26							
information		3	Quite a bit	49	46	167	40	138	35	44	36	3.2	3.0	.21	3.0	.15	2.9 **	.34
		4	Very much	40	37	132	32	130	36	36	29	012	5.0	.21	5.0	.15	2.9	
			Total	107	100	419	100	390	100	123	100							
				107	100	.17	100	270	100	125	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stu	dents ^a in					Frequer	icy Di	stributior	าร				Sta	atistical	Comparis	ons ^k		
Engineering														Your fii	rst-year stude	nts compar	ed with	
Lingineering										Nationa	I						Natic	onal
				UMD		UMD Pee	rs	Competito	ors	Comparise	on	UMD	UMD		Compet		Compa	
Item wording or description	Variable name ¹	Values'	ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
e. Acquiring job- or work-	pgwork	1	Very little	13	12	43	10	34	9	20	16	Wiedn	mean	3120	Weun	3120	Weam	3120
related knowledge and		2	Some	42	39	121	29	135	35	35	28							
skills		3	Quite a bit	38	35	159	38	131	34	45	37	2.5	2.7 *	25	2.7 *	21	2.6	07
		4	Very much	15	14	98	23	88	23	23	19		V		∇			
			Total	108	100	421	100	388	100	123	100		•		•			
f. Working effectively	pgothers	1	Very little	6	6	19	5	22	6	16	13							
with others		2	Some	40	37	104	25	113	29	26	21							
		3	Quite a bit	43	40	178	42	165	42	56	46	2.7	3.0 **	30	2.8	16	2.7	04
		4	Very much	19	18	121	29	91	23	25	20		•					
			Total	108	100	422	100	391	100	123	100							
g. Developing or	pgvalues	1	Very little	18	17	61	14	76	19	26	21							
clarifying a personal		2	Some	40	37	142	34	140	36	32	26							
code of values and ethics		3	Quite a bit	33	31	132	31	118	30	44	36	2.4	2.6	14	2.4	.05	2.5	04
ennes		4	Very much	16	15	86	20	56	14	20	16							
			Total	107	100	421	100	390	100	122	100							
h. Understanding people	pgdiverse	1	Very little	25	24	72	17	58	15	19	16							
of other backgrounds		2	Some	47	44	141	33	164	42	34	28							
(economic, racial/ethnic, political,		3	Quite a bit	20	19	132	31	121	31	55	45	2.2	2.5 **	30	2.4	20	2.5 *	32
religious, nationality,		4	Very much	14	13	77	18	46	12	13	11		∇				▼	
etc.)			Total	106	100	422	100	389	100	121	100							
i. Solving complex real-	pgprobsolve	1	Very little	14	13	41	10	24	6	12	10							
world problems		2	Some	35	33	130	31	142	36	34	28							
		3	Quite a bit	41	38	167	40	143	37	57	46	2.6	2.7	14	2.7	18	2.7	14
		4	Very much	17	16	83	20	82	21	20	16							
			Total	107	100	421	100	391	100	123	100							
j. Being an informed and	pgcitizen	1	Very little	21	20	71	17	68	18	23	19							
active citizen		2	Some	48	45	159	38	151	39	33	27							
		3	Quite a bit	28	26	133	32	129	33	49	40	2.3	2.4	17	2.4	12	2.5	26
		4	Very much	10	9	55	13	39	10	17	14							
			Total	107	100	418	100	387	100	122	100							



Frequencies and Statistical Comparisons: Engineering

First-Year Stud	dents ^a in	1				Frequer	ncy Di	stributior	ıs				Sta	atistical	Comparis	ons ^k		
Engineering														Your fi	rst-year stude	ents compar	ed with	
Lingineering										Nationa	I						Natio	onal
				UMD		UMD Pee	rs	Competito	ors	Comparise	on	UMD	UMD	Peers	Compe	titors	Compa	irison
Item wording	Variable													Effect		Effect		Effect
or description	name	Values'	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
18. How would you eval	uate your ent	ire educa	tional experience a	t this institut	ion?													
	evalexp	1	Poor	2	2	6	1	5	1	2	2							
		2	Fair	13	12	40	10	37	9	15	12							
		3	Good	61	56	209	50	187	48	63	50	3.1	3.3	19	3.3 *	23	3.2	10
		4	Excellent	32	30	166	39	163	42	45	36				∇			
			Total	108	100	421	100	392	100	125	100							
19. If you could start ov	er again, wou	ld you go	o to the same institu	tion you are	now a	attending?												
	sameinst	1	Definitely no	4	4	10	2	5	1	5	4							
		2	Probably no	6	6	45	11	29	7	15	12							
		3	Probably yes	56	52	178	42	159	40	47	38	3.3	3.3	04	3.4 *	22	3.3	.00
		4	Definitely yes	42	39	188	45	200	51	57	46				∇			
			Total	108	100	421	100	393	100	124	100							



NSSE 2014 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	istribution	IS				Sta	atistical	Comparis	ons ^k		
Engineering														Y	our seniors co	ompared wi		
								.		National							Natior	
	Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD	Peers Effect	Compe	titors Effect	Compar	ISON Effect
Item wording or description	name ¹	Values [#]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size"	Mean	size ⁿ
1. During the current scho	ool year, abou			e the followin	g?													
a. Asked questions or	askquest	1	Never	4	4	18	3	17	3	9	3							
contributed to course		2	Sometimes	42	38	192	36	223	36	66	23							
discussions in other ways		3	Often	43	39	170	31	206	33	95	33	2.7	2.9	16	2.9	15	3.1 ***	43
ways		4	Very often	21	19	160	30	172	28	114	40						•	
			Total	110	100	540	100	618	100	284	100							
b. Prepared two or more	drafts	1	Never	31	28	122	23	137	22	57	20							
drafts of a paper or		2	Sometimes	45	41	209	39	253	41	96	34							
assignment before turning it in		3	Often	23	21	139	26	151	24	74	26	2.1	2.3	17	2.3	15	2.5 **	33
turning it in		4	Very often	11	10	68	13	77	12	57	20						\mathbf{V}	
			Total	110	100	538	100	618	100	284	100							
c. Come to class without	unpreparedr	1	Very often	5	5	39	7	40	6	12	4							
completing readings or assignments	Reverse-coded	2	Often	13	12	88	16	105	17	43	15							
assignments	version of	3	Sometimes	61	55	308	57	336	55	157	56	3.1	2.9 *	.24	2.9	.19	3.0	.09
ar an	unprepared eated by NSSE.)	4	Never	31	28	103	19	135	22	68	24		Δ					
	euleu by 1455E.)		Total	110	100	538	100	616	100	280	100							
d. Attended an art exhibit,	attendart	1	Never	64	60	258	48	315	51	138	49							
play or other arts performance (dance,		2	Sometimes	37	35	219	41	227	37	105	37							
music, etc.)		3	Often	5	5	48	9	56	9	30	11	1.5	1.7 *	26	1.6 *	22	1.7 **	29
		4	Very often	1	1	12	2	16	3	10	4		∇		∇		∇	
			Total	107	100	537	100	614	100	283	100							
e. Asked another student	CLaskhelp	1	Never	7	6	27	5	46	8	25	9							
to help you understand course material		2	Sometimes	46	42	187	35	167	27	122	43							
eouise material		3	Often	28	25	189	35	226	37	80	28	2.7	2.8	09	2.9	16	2.6	.13
		4	Very often	29	26	133	25	174	28	58	20							
			Total	110	100	536	100	613	100	285	100							
f. Explained course	CLexplain	1	Never	3	3	9	2	21	3	7	2							
material to one or more students		2	Sometimes	26	24	139	26	150	24	84	30	2.1						
		3	Often	43	39	216	40	257	42	116	41	3.1	3.0	.02	3.0	.07	2.9	.17
		4	Very often	38	35	176	33	189	31	74	26							
			Total	110	100	540	100	617	100	281	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	stributior	ıs				St		Compari			
Engineering										Nationa				Y	our seniors c	ompared wit	th Natio	
				UMD		UMD Pee	rc	Competito	arc	Compariso		UMD		Peers	Compe	titors	Compa	
Item wording	Variable			ONID		ONDIE	13	competite	513	companis			ONID	Effect	compe	Effect	compa	Effect
or description	name'	Values	^m Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size ⁿ
g. Prepared for exams by	CLstudy	1	Never	12	11	46	9	74	12	33	12							
discussing or working		2	Sometimes	32	29	168	31	173	28	102	36							
through course material with other students		3	Often	27	25	147	27	191	31	71	25	2.8	2.8	01	2.8	.06	2.7	.16
with other students		4	Very often	38	35	177	33	180	29	77	27							
			Total	109	100	538	100	618	100	283	100							
h. Worked with other	CLproject	1	Never	1	1	8	1	23	4	8	3							
students on course		2	Sometimes	19	17	78	14	91	15	54	19							
projects or assignments		3	Often	37	34	191	35	196	32	101	36	3.3	3.3	04	3.3	.01	3.2	.13
		4	Very often	52	48	263	49	307	50	120	42							
			Total	109	100	540	100	617	100	283	100							
i. Gave a course	present	1	Never	9	8	47	9	76	12	42	15							
presentation	1	2	Sometimes	37	34	180	33	236	38	106	37							
		3	Often	42	38	185	34	175	28	75	27	2.7	2.7	03	2.6	.13	2.5	.17
		4	Very often	22	20	126	23	128	21	60	21		2.7	100	2.0		2.0	,
			Total	110	100	538	100	615	100	283	100							
2 Dooring the surround call																		
2. During the current scl a. Combined ideas from	•	out now	-		-	12	2	0	1	2	1							
different courses when	RIintegrate	1	Never	2	2	13		9		3	-							
completing assignments		2	Sometimes	24	22	119	22	160	26	68	24	2.1						
		3	Often	46	42	239	44	258	42	111	39	3.1	3.0	.05	3.0	.08	3.1	01
		4	Very often	37	34	170	31	189	31	100	35							
			Total	109	100	541	100	616	100	282	100							
 b. Connected your learning to societal 	RIsocietal	1	Never	14	13	65	12	76	12	33	12							
problems or issues		2	Sometimes	49	45	251	47	270	44	121	43							
F		3	Often	38	35	164	30	190	31	76	27	2.4	2.4	02	2.4	07	2.5	15
		4	Very often	9	8	58	11	79	13	51	18							
			Total	110	100	538	100	615	100	281	100							
c. Included diverse	RIdiverse	1	Never	33	30	175	33	194	32	70	25							
perspectives (political, religious, racial/ethnic,		2	Sometimes	60	55	235	44	291	47	139	49							
gender, etc.) in course		3	Often	12	11	98	18	91	15	50	18	1.9	2.0	08	2.0	07	2.1 *	24
discussions or		4	Very often	5	5	30	6	38	6	24	8						∇	
assignments			Total	110	100	538	100	614	100	283	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	stribution	IS				Sta		Comparis			
Engineering										National				Y	our seniors co	ompared wi	th Nation	al
				UMD		UMD Pee	rs	Competito	ors	Compariso		UMD	UMD	Peers	Compet	itors	Compari	
Item wording	Variable							·						Effect		Effect		Effect
or description	name'	Values'		Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
 d. Examined the strengths and weaknesses of 	RIownview	1	Never	12	11	46	9	56	9	26	9							
your own views on a		2	Sometimes	57	52	237	44	273	45	108	38							
topic or issue		3	Often	37	34	180	33	213	35	101	36	2.3	2.5 **	28	2.5 *	23	2.6 ***	36
		4	Very often	4	4	75	14	70	11	46	16		∇		∇		▼	
			Total	110	100	538	100	612	100	281	100							
e. Tried to better understand someone	RIperspect	1		9	8	38	7	55	9	16	6							
else's views by		2	Sometimes	50	46	213	40	245	40	99	35	2.5						
imagining how an issue		3	Often	40	37	197	37	233	38	105	37	2.5	2.6 *	22	2.5	11	2.8 **	36
looks from his or her		4	Very often	9	8	91	17	78	13	62	22		∇				V	
perspective			Total	108	100	539	100	611	100	282	100							
f. Learned something that	RInewview	1	Never	6	5	19	4	24	4	5	2							
changed the way you		2	Sometimes	43	39	188	35	229	37	100	35							
understand an issue or concept		3	Often	44	40	233	43	255	42	104	37	2.7	2.8	13	2.7	08	2.9 *	27
concept		4	Very often	17	15	97	18	105	17	74	26						∇	
			Total	110	100	537	100	613	100	283	100							
g. Connected ideas from	RIconnect	1	Never	1	1	5	1	7	1	2	1							
your courses to your		2	Sometimes	18	16	116	22	123	20	46	16							
prior experiences and knowledge		3	Often	59	54	247	46	294	48	122	43	3.1	3.1	.04	3.1	.05	3.2	15
kilowiedge		4	Very often	32	29	168	31	183	30	112	40							
			Total	110	100	536	100	607	100	282	100							
3. During the current sc	hool year, abo	ut how	often have you don	e the followin	ıg?													
a. Talked about career	SFcareer	1	Never	17	15	103	19	146	24	53	19							
plans with a faculty		2	Sometimes	48	44	261	49	279	46	117	41							
member		3	Often	32	29	109	20	126	21	73	26	2.4	2.2	.15	2.2 *	.23	2.4	.02
		4	Very often	13	12	60	11	61	10	40	14				Δ			
			Total	110	100	533	100	612	100	283	100							
b. Worked with a faculty	SFotherwork	1	Never	42	38	216	41	280	46	123	44							
member on activities		2	Sometimes	29	26	165	31	183	30	84	30							
other than coursework (committees, student		3	Often	24	22	90	17	95	16	42	15	2.1	2.0	.12	1.9 *	.25	1.9	.16
groups, etc.)		4	Very often	15	14	59	11	52	9	32	11				Δ			
5			Total	110	100	530	100	610	100	281	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	stributior	ıs				St		Comparis			
Engineering										Nationa				Ŷ	our seniors co	mpared wit	th Natior	
				UMD		UMD Pee	rc	Competito	ars	Comparise		UMD	шмр	Peers	Compet	itors	Compar	
Item wording	Variable			01110		011101100	15	competite	515	company			OND	Effect	compet	Effect	compa	Effect
or description	name'	Values'	ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
c. Discussed course	SFdiscuss	1	Never	12	11	94	18	139	23	67	24							
topics, ideas, or concepts with a faculty		2	Sometimes	48	44	237	45	263	43	104	37							
member outside of		3	Often	37	34	127	24	147	24	73	26	2.5	2.3	.14	2.2 **	.28	2.3	.18
class		4	Very often	13	12	73	14	61	10	39	14				Δ			
			Total	110	100	531	100	610	100	283	100							
d. Discussed your	SFperform	1	Never	30	28	151	28	178	29	67	24							
academic performance		2	Sometimes	57	52	243	46	308	50	121	43							
with a faculty member		3	Often	19	17	92	17	98	16	60	21	2.0	2.1	12	2.0	.00	2.2 **	29
		4	Very often	3	3	44	8	26	4	34	12						∇	
			Total	109	100	530	100	610	100	282	100							
4. During the current sc	hool year, how	much l	as your coursewor	·k emphasize	d the f	ollowing?												
a. Memorizing course	memorize	1	Very little	10	9	63	12	82	13	30	11							
material		2	Some	47	43	247	46	259	42	117	41							
		3	Quite a bit	37	34	154	29	204	33	104	37	2.5	2.4	.09	2.4	.12	2.5	.04
		4	Very much	15	14	73	14	67	11	33	12							
			Total	109	100	537	100	612	100	284	100							
b. Applying facts,	HOapply	1	Very little	1	1	10	2	7	1	5	2							
theories, or methods to		2	Some	10	9	54	10	63	10	34	12							
practical problems or new situations		3	Quite a bit	34	31	179	33	223	36	105	37	3.5	3.4	.10	3.4	.12	3.3	.19
new situations		4	Very much	65	59	294	55	323	52	140	49							
			Total	110	100	537	100	616	100	284	100							
c. Analyzing an idea,	HOanalyze	1	Very little	0	0	20	4	17	3	8	3							
experience, or line of		2	Some	26	24	92	17	108	18	53	19							
reasoning in depth by examining its parts		3	Quite a bit	33	31	187	35	244	40	102	37	3.2	3.2	.03	3.2	.06	3.2	.05
examining its parts		4	Very much	49	45	234	44	245	40	116	42							
			Total	108	100	533	100	614	100	279	100							
d. Evaluating a point of	HOevaluate	1	Very little	18	17	77	14	90	15	30	11							
view, decision, or		2	Some	46	42	203	38	255	42	91	32							
information source		3	Quite a bit	29	27	167	31	178	29	88	31	2.4	2.5	11	2.4	04	2.7 **	35
		4	Very much	16	15	89	17	87	14	74	26						•	
			Total	109	100	536	100	610	100	283	100						•	



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	istributior	าร				St	atistical	Comparis	ons ^k		
Engineering										Nationa	I			Ŷ	our seniors co	mpared wi	th Natio	mal
				UMD		UMD Pee	rs	Competito	ors	Compariso		UMD	UMD	Peers	Compet	itors	Compa	
Item wording	Variable						-						-	Effect		Effect		Effect
or description	name'	Values'	1 1	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
e. Forming a new idea or	HOform	1	Very little	5	5		6	48	8	21	7							
understanding from various pieces of		2	Some	30	28	152	28	183	30	60	21							
information		3	Quite a bit	44	41	214	40	245	40	118	42	2.9	2.9	.05	2.8	.14	2.9	05
		4	Very much	29	27	138	26	139	23	85	30							
			Total	108	100	536	100	615	100	284	100							
5. During the current scl	hool year, to v	what exte	ent have your instr	uctors done t	he fol	lowing?												
a. Clearly explained	ETgoals	1	Very little	1	1	12	2	12	2	5	2							
course goals and		2	Some	17	16	86	16	146	24	35	12							
requirements		3	Quite a bit	59	54	241	45	295	48	111	39	3.1	3.2	07	3.0	.17	3.3 *	26
		4	Very much	32	29	201	37	165	27	134	47						∇	
			Total	109	100	540	100	618	100	285	100						•	
b. Taught course sessions	ETorganize	1	Very little	2	2	17	3	12	2	4	1							
in an organized way	0	2	Some	23	21	78	14	121	20	33	12							
		3	Quite a bit	54	50	270	50	327	53	135	48	3.0	3.1	11	3.0	.01	3.2 **	30
		4	Very much	30	28		32	157	25	111	39						▼	
			Total	109	100	538	100	617	100	283	100						•	
c. Used examples or	ETexample	1	Very little	1	1	16	3	14	2	3	1							
illustrations to explain	1	2	Some	22	21	65	12	113	18	35	12							
difficult points		3	Quite a bit	46	43	233	43	288	47	113	40	3.1	3.2	14	3.1	.04	3.3 *	26
		4	Very much	38	36	225	42	203	33	134	47	012	0.2		0.1		V	.20
			Total	107	100	539	100	618	100	285	100						•	
d. Provided feedback on a	ETdraftfb	1	Very little	15	14		14	94	15	29	10							
draft or work in		2	Some	32	29		35	249	40	67	24							
progress		3	Quite a bit	44	40	158	29	180	29	92	33	2.6	2.6	.02	2.4	.17	2.9 **	31
		4	Very much	18	17	116	22	92	15	95	34							
			Total	109	100	538	100	615	100	283	100						•	
e. Provided prompt and	ETfeedback	1	Very little	3	3		8	58	9	15	5							
detailed feedback on		2	Some	28	26		28	207	34	69	24							
tests or completed		- 3	Quite a bit	20 57	52		40	256	42	100	35	2.9	2.8	.10	2.6 **	.30	3.0	14
assignments		4	Very much	21	19		24	230 93	15	100	35	20 0 J	2.0	.10	2.0	.50	5.0	17
		1	Total	109	100	534	100	614	100	284	100							
			10101	109	100	554	100	014	100	204	100							



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

Seniors ^a in						Frequer	ncy Di	istributior	ıs				Sta		Comparis			
Engineering				UMD		UMD Pee	rs	Competito	ors	Nationa Comparise		UMD	UMD		our seniors c Compe	,	th Natic Compa	
Item wording or description	Variable name ^I	Values [*]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
6. During the current	school year, about	how o	often have you done		g?													
a. Reached conclusions	QRconclude	1	Never	0	0	15	3	9	1	11	4							
based on your own		2	Sometimes	16	15	82	15	85	14	44	15							
analysis of numerical		3	Often	39	35	191	36	243	39	99	35	3.4	3.3	.13	3.3	.09	3.2	.16
information (numbers,		4	Very often	55	50	248	46	280	45	130	46							
graphs, statistics, etc.)			Total	110	100	536	100	617	100	284	100							
b. Used numerical	QRproblem	1	Never	11	10	80	15	87	14	30	11							-
information to examine		2	Sometimes	27	25	155	29	177	29	68	24							
a real-world problem of	or	3	Often	38	35	140	26	179	29	83	29	2.9	2.7	.14	2.7	.15	2.9	05
issue (unemployment, climate change, public		4	Very often	34	31	164	30	171	28	103	36							
health, etc.)			Total	110	100	539	100	614	100	284	100							
c. Evaluated what others	QRevaluate	1	Never	4	4	52	10	61	10	28	10							
have concluded from		2	Sometimes	36	33	171	32	205	33	80	28							
numerical information		3	Often	42	39	182	34	221	36	99	35	2.8	2.7	.12	2.7	.19	2.8	.06
		4	Very often	27	25	133	25	126	21	77	27							
			Total	109	100	538	100	613	100	284	100							
7. During the current	school year, about	how 1	nany papers, report	ts, or other w	vritin	g tasks of the	e follo	wing length	have y	ou been as	signed	? (Include those n	ot yet con	npleted.)				
a. Up to 5 pages	wrshortnum	0	None	6	6	37	7	44	7	33	12							
	(Recoded version	1.5	1-2	27	25	128	25	155	26	55	20							
	of wrshort created	4	3-5	22	21	131	25	174	29	88	32							
	by NSSE. Values	8	6-10	22	21	116	22	119	20	49	18	7.5	6.9	.08	6.2	.20	5.9 *	.26
	are estimated number of papers,	13	11-15	15	14	43	8	48	8	24	9						Δ	
	reports, etc.)	18	16-20	6	6	24	5	29	5	12	4							
		23	More than 20	8	8	42	8	31	5	11	4							
			Total	106	100	521	100	600	100	272	100							
b. Between 6 and 10	wrmednum	0	None	32	31	119	23	148	25	86	32							
pages	(Recoded version	1.5	1-2	32	31	168	32	212	36	88	33							
	of wrmed created	4	3-5	30	29	104	20	129	22	49	18							
	by NSSE. Values	8	6-10	5	5	83	16	66	11	23	9	2.7	3.9 **	28	3.3	16	3.1	10
	are estimated	13	11-15	2	2	28	5	22	4	11	4		∇					
	number of papers, reports, etc.)	18	16-20	1	1	5	1	10	2	4	2							
	100113, 010.)	23	More than 20	1	1	11	2	6	1	4	2							
			Total	103	100	518	100	593	100	265	100							



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

Seniors ^a in						Frequer	icy Di	stribution	IS				Sta		Comparis			
Engineering				UMD		UMD Pee	rs	Competito	ors	National Comparise		UMD	UMD	Peers	our seniors c Compe	titors	th Natio Compa	rison
Item wording or description	Variable name ¹	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
c. 11 pages or more	wrlongnum	0	None	39	37	148	28	213	36	114	43	Wean	wiedn	3120	Wedn	5/20	Weath	3120
	(Recoded version	1.5	1-2	37	35	206	40	234	39	104	39							
	of wrlong created	4	3-5	16	15	81	16	79	13	30	11							
	by NSSE. Values	8	6-10	10	10	49	9	43	7	10	4	2.6	3.1	12	2.4	.05	1.8	.21
	are estimated number of papers,	13	11-15	0	0	23	4	19	3	3	1							
	reports, etc.)	18	16-20	0	0	4	1	4	1	2	1							
	•	23	More than 20	3	3	9	2	4	1	2	1							
			Total	105	100	520	100	596	100	265	100							
Estimated number of assigned pages of	wrpages											75.2	94.8 *	21	79.9	06	67.8	.09
student writing.	(Continuous variab NSSE from wrshort are estimated pages	, wrmed	, and wrlong. Values										V					
8. During the current	school year, abou	t how a	often have you had d	liscussions v	vith pe	ople from tl	ne follo	owing grou	ps?									
a. People of a race or	DDrace		NY .		,	· · · ·	~		· .									
a. Teople of a face of	DDrace	1	Never	6	5	25	5	52	8	13	5							
ethnicity other than	DDiace	1	Sometimes	6 42	5 38	25 141	5 26	52 199	8 32	13 60	5 21							
•	DDrace			-								2.7	3.1 ***	37	2.8	12	3.1 ***	48
ethnicity other than	DDrace	2	Sometimes	42	38	141	26	199	32	60	21	2.7	3.1 *** ▼	37	2.8	12	3.1 *** •	48
ethnicity other than	Dhace	2 3	Sometimes Often	42 39	38 35	141 152	26 28	199 166	32 27	60 84	21 29	2.7		37	2.8	12		48
ethnicity other than your own b. People from an	DDeconomic	2 3	Sometimes Often Very often	42 39 23	38 35 21	141 152 223	26 28 41	199 166 201	32 27 33	60 84 128	21 29 45	2.7		37	2.8	12		48
ethnicity other than your own b. People from an economic background	DDeconomic	2 3 4	Sometimes Often Very often Total	42 39 23 110	38 35 21 100	141 152 223 541	26 28 41 100	199 166 201 618	32 27 33 100	60 84 128 285	21 29 45 100	2.7		37	2.8	12		48
ethnicity other than your own b. People from an	DDeconomic	2 3 4	Sometimes Often Very often Total Never	42 39 23 110 6	38 35 21 100 5	141 152 223 541 21	26 28 41 100 4	199 166 201 618 39	32 27 33 100 6	60 84 128 285 15	21 29 45 100 5	2.7		37	2.8	12		48
 ethnicity other than your own b. People from an economic background 	DDeconomic	2 3 4 1 2	Sometimes Often Very often Total Never Sometimes	42 39 23 110 6 30	38 35 21 100 5 27	141 152 223 541 21 123	26 28 41 100 4 23	199 166 201 618 39 168	32 27 33 100 6 27	60 84 128 285 15 50	21 29 45 100 5 18		•				•	
ethnicity other than your own b. People from an economic background	DDeconomic	2 3 4 1 2 3	Sometimes Often Very often Total Never Sometimes Often Very often Total	42 39 23 110 6 30 46 28 110	38 35 21 100 5 27 42 25 100	141 152 223 541 21 123 201 194 539	26 28 41 100 4 23 37	199 166 201 618 39 168 230 181 618	32 27 33 100 6 27 37	60 84 128 285 15 50 101 119 285	21 29 45 100 5 18 35 42 100		3.1 *				▼ 3.1 **	
 ethnicity other than your own b. People from an economic background other than your own c. People with religious 	DDeconomic	2 3 4 1 2 3	Sometimes Often Very often Total Never Sometimes Often Very often	42 39 23 110 6 30 46 28	38 35 21 100 5 27 42 25	141 152 223 541 21 123 201 194	26 28 41 100 4 23 37 36	199 166 201 618 39 168 230 181	32 27 33 100 6 27 37 29	60 84 128 285 15 50 101 119	21 29 45 100 5 18 35 42		3.1 *				▼ 3.1 **	
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your 	DDeconomic	2 3 4 1 2 3 4	Sometimes Often Very often Total Never Sometimes Often Very often Total	42 39 23 110 6 30 46 28 110	38 35 21 100 5 27 42 25 100	141 152 223 541 21 123 201 194 539	26 28 41 100 4 23 37 36 100	199 166 201 618 39 168 230 181 618	32 27 33 100 6 27 37 29 100	60 84 128 285 15 50 101 119 285	21 29 45 100 5 18 35 42 100	2.9	3.1 *				▼ 3.1 **	
 ethnicity other than your own b. People from an economic background other than your own c. People with religious 	DDeconomic	2 3 4 1 2 3 4	Sometimes Often Very often Total Never Sometimes Often Very often Total Never	42 39 23 110 6 30 46 28 110 5	38 35 21 100 5 27 42 25 100 5	141 152 223 541 21 123 201 194 539 28	26 28 41 100 4 23 37 36 100 5	199 166 201 618 39 168 230 181 618 39	32 27 33 100 6 27 37 29 100 6	60 84 128 285 15 50 101 119 285 15	21 29 45 100 5 18 35 42 100 5		3.1 *				▼ 3.1 **	
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your 	DDeconomic	2 3 4 1 2 3 4 1 2	Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often	42 39 23 110 6 30 46 28 110 5 31	38 35 21 100 5 27 42 25 100 5 28 36 31	141 152 223 541 21 123 201 194 539 28 125 182 202	26 28 41 100 4 23 37 36 100 5 23 34 38	199 166 201 618 39 168 230 181 618 39 177	32 27 33 100 6 27 37 29 100 6 29 33 32	60 84 128 285 15 50 101 119 285 15 63 96 111	21 29 45 100 5 18 35 42 100 5 22 34 39	2.9	▼ 3.1 * ▽	21	2.9	02	▼ 3.1 ** ▼	30
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your own 	DDeconomic DDreligion	2 3 4 1 2 3 4 1 2 3	Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often Total	42 39 23 110 6 30 46 28 110 5 31 40 34 110	38 35 21 100 5 27 42 25 100 5 28 36 31 100	141 152 223 541 123 201 194 539 28 125 182 202 537	26 28 41 100 4 23 37 36 100 5 23 34 38 100	199 166 201 618 39 168 230 181 618 39 177 205 197 618	32 27 33 100 6 27 37 29 100 6 29 33 32 100	60 84 128 285 15 50 101 119 285 15 63 96 111 285	21 29 45 100 5 18 35 42 100 5 22 34 39 100	2.9	▼ 3.1 * ▽	21	2.9	02	▼ 3.1 ** ▼	30
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your own d. People with political 	DDeconomic	2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often Total Never	42 39 23 110 6 30 46 28 110 5 31 40 34 110 7	38 35 21 100 5 27 42 25 100 5 28 36 31 100 6	141 152 223 541 123 201 194 539 28 125 182 202 537 26	26 28 41 100 4 23 37 36 100 5 23 34 38 100 5	199 166 201 618 39 168 230 181 618 39 177 205 197 618 34	32 27 33 100 6 27 37 29 100 6 29 33 32 100 6	60 84 128 285 15 50 101 119 285 15 63 96 111 285 16	21 29 45 100 5 18 35 42 100 5 22 34 39 100 6	2.9	▼ 3.1 * ▽	21	2.9	02	▼ 3.1 ** ▼	30
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your own d. People with political views other than your 	DDeconomic DDreligion	2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2	Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes	42 39 23 110 6 30 46 28 110 5 31 40 34 110 7 29	38 35 21 100 5 27 42 25 100 5 28 36 31 100 6 27	141 152 223 541 123 201 194 539 28 125 182 202 537 26 130	26 28 41 100 4 23 37 36 100 5 23 34 38 100 5 24	199 166 201 618 39 168 230 181 618 39 177 205 197 618 34 158	32 27 33 100 6 27 37 29 100 6 29 33 32 100 6 26	60 84 128 285 50 101 119 285 15 63 96 111 285 16 63	21 29 45 100 5 18 35 42 100 5 22 34 39 100 6 22	2.9	▼ 3.1 * ▽	21	2.9	02	▼ 3.1 ** ▼	30
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your own d. People with political 	DDeconomic DDreligion	2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often Total Never	42 39 23 110 6 30 46 28 110 5 31 40 34 110 7	38 35 21 100 5 7 42 25 100 5 28 36 31 100 6 27 36	141 152 223 541 123 201 194 539 28 125 182 202 537 26	26 28 41 100 4 23 37 36 100 5 23 34 38 100 5 24 38	199 166 201 618 39 168 230 181 618 39 177 205 197 618 34 158 226	32 27 33 100 6 27 37 29 100 6 29 33 32 100 6 26 37	60 84 128 285 15 50 101 119 285 15 63 96 111 285 16 63 99	21 29 45 100 5 18 35 42 100 5 22 34 39 100 6 22 35	2.9	▼ 3.1 * ▽	21	2.9	02	▼ 3.1 ** ▼	30
 ethnicity other than your own b. People from an economic background other than your own c. People with religious beliefs other than your own d. People with political views other than your 	DDeconomic DDreligion	2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2	Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes	42 39 23 110 6 30 46 28 110 5 31 40 34 110 7 29	38 35 21 100 5 27 42 25 100 5 28 36 31 100 6 27	141 152 223 541 123 201 194 539 28 125 182 202 537 26 130	26 28 41 100 4 23 37 36 100 5 23 34 38 100 5 24	199 166 201 618 39 168 230 181 618 39 177 205 197 618 34 158	32 27 33 100 6 27 37 29 100 6 29 33 32 100 6 26	60 84 128 285 50 101 119 285 15 63 96 111 285 16 63	21 29 45 100 5 18 35 42 100 5 22 34 39 100 6 22	2.9	▼ 3.1 * ▼ 3.0	21	2.9	.02	▼ 3.1 ** ▼ 3.1	30



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	icy Di	stribution	IS				Sta	atistical	Comparis	ons ^k		
Engineering														Y	our seniors co	ompared wi		
								.		Nationa							Natior	
	Variable			UMD		UMD Pee	rs	Competito	ors	Comparise	on	UMD	UMD		Compe	Effect	Compar	rison Effect
Item wording or description	name ¹	Values [*]	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	size ⁿ	Mean	size ⁿ
9. During the current sc	hool year, abo	ut how o	often have you don	e the followin	g?													
a. Identified key	LSreading	1	Never	7	6	25	5	24	4	6	2							
information from		2	Sometimes	40	36	149	28	183	30	47	16							
reading assignments		3	Often	41	37	200	37	249	40	121	42	2.7	2.9 *	26	2.9 *	21	3.2 ***	59
		4	Very often	22	20	164	30	160	26	111	39		∇		∇		▼	
			Total	110	100	538	100	616	100	285	100							
b. Reviewed your notes	LSnotes	1	Never	10	9	34	6	53	9	13	5							
after class		2	Sometimes	54	49	183	34	205	33	67	24							
		3	Often	26	24	181	34	199	32	110	39	2.5	2.8 **	31	2.8 *	26	3.0 ***	56
		4	Very often	20	18	138	26	159	26	92	33		V		∇		▼	
			Total	110	100	536	100	616	100	282	100							
c. Summarized what you	LSsummary	1	Never	16	15	59	11	49	8	9	3							
learned in class or from		2	Sometimes	41	38	190	36	237	39	78	27							
course materials		3	Often	36	33	170	32	210	34	114	40	2.5	2.6	19	2.6	20	3.0 ***	57
		4	Very often	15	14	115	22	114	19	83	29						▼	
			Total	108	100	534	100	610	100	284	100							
10. During the current s	chool year, to	what ex	tent have your cou	rses challenge	ed you	to do your	best w	ork?										
	challenge	1	Not at all	0	0	3	1	3	0	1	0							
		2		1	1	10	2	9	1	2	1							
		3		4	4	13	2	22	4	10	4							
		4		4	4	46	9	42	7	20	7	5.8	5.7	.02	5.6	.13	5.8	06
		5		29	26	127	24	175	28	61	21							
		6		46	42	169	31	233	38	97	34							
		7	Very much	26	24	170	32	132	21	94	33							
			Total	110	100	538	100	616	100	285	100							
11. Which of the followi	ng have you do	one or d	o you plan to do be	fore you grad	luate?	0												
a. Participate in an	intern		Have not decided	5	5	26	5	25	4	20	7							
internship, co-op, field	(Means indicate		Do not plan to do	9	8	58	11	70	11	42	15							
experience, student teaching, or clinical	the percentage		Plan to do	23	21	135	25	144	23	98	35	66%	60%	.13	61%	.10	43% ***	.46
placement	who responded		Done or in progress	72	66	324	60	378	61	123	43							
• • • • •	"Done or in progress.")		Total	109	100	543	100	617	100	283	100							



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

Seniors ^a in						Frequer	ncy Di	stributior	ıs				St		Comparis			
Engineering				UMD		UMD Pee	rc	Competito		Nationa Comparise		UMD		۲ Peers	our seniors co Compe		th Natio Compa	
Item wording	Variable			UND		UNID Pee	15	competito	515	Companso		ONID	UND	Effect	compe	Effect	Compa	Effect
or description	name'	Values	^m Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size ⁿ	Mean	size ⁿ
b. Hold a formal	leader		Have not decided	14	13	42	8	53	9	40	14							
leadership role in a	(Means indicate		Do not plan to do	42	39	224	41	258	42	116	41							
student organization or group	the percentage		Plan to do	6	6	39	7	41	7	25	9	43%	44%	01	43%	.01	36%	.14
group	who responded		Done or in progress	47	43	236	44	264	43	102	36							
	"Done or in progress.")		Total	109	100	541	100	616	100	283	100							
c. Participate in a learning	learncom		Have not decided	13	12	39	7	45	7	41	15							
community or some	(Means indicate		Do not plan to do	56	52	322	60	400	65	145	51							
other formal program	the percentage		Plan to do	3	3	30	6	35	6	29	10	33%	28%	.12	22% *	.25	24%	.21
where groups of students take two or	who responded		Done or in progress	36	33	149	28	137	22	67	24				Δ			
more classes together	"Done or in progress.")		Total	108	100	540	100	617	100	282	100							
d. Participate in a study	abroad		Have not decided	10	9	45	8	44	7	40	14							
abroad program	(Means indicate		Do not plan to do	88	81	440	81	451	74	198	70							
	the percentage		Plan to do	1	1	21	4	30	5	22	8	8%	6%	.08	14%	19	8%	.00
	who responded		Done or in progress	9	8	34	6	88	14	24	8							
	"Done or in		Total	108	100	540	100	613	100	284	100							
	progress.")																	
e. Work with a faculty member on a research	research		Have not decided	24	23	79	15	82	13	56	20							
project	(Means indicate		Do not plan to do	44	42	219	41	248	41	88	31							
1 5	the percentage who responded		Plan to do	7	7	88	16	86	14	77	27	29%	28%	.03	32%	06	22%	.17
	"Done or in		Done or in progress	31	29	150	28	195	32	62	22							
	progress.")		Total	106	100	536	100	611	100	283	100							
f. Complete a culminating	capstone		Have not decided	3	3	14	3	11	2	14	5							
senior experience	(Means indicate		Do not plan to do	5	5	21	4	34	6	21	7							
(capstone course,	the percentage		Plan to do	46	43	146	27	234	38	130	46	50%	66% **	33	55%	09	42%	.16
senior project or thesis, comprehensive exam,	who responded		Done or in progress	54	50	356	66	336	55	119	42		V					
portfolio, etc.)	"Done or in progress.")		Total	108	100	537	100	615	100	284	100		· ·					
12. About how many of	your courses at	t this in	stitution have inclu	ded a comm	unity-l	based projec	t (serv	vice-learnin	g)?									
	servcourse	1	None	61	56	278	51	350	57	151	54							
		2	Some	42	39	238	44	236	38	117	42							
		3	Most	5	5	21	4	23	4	11	4	1.5	1.5	06	1.5	.03	1.5	02
		4	All	1	1	4	1	6	1	2	1							
			Total	109	100	541	100	615	100	281	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Freque	ncy Di	stributior	IS				St	atistical	Comparis	ons ^k		
Engineering										Nationa	I			Ŷ	'our seniors co	mpared wi	th Natio	onal
				UMD		UMD Pee	rs	Competite	ors	Comparis	on	UMD	UMD	Peers	Compet	itors	Compa	arison
Item wording or description	Variable name ¹	Values	^m Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
13. Indicate the quality	y of your interac	ctions w	ith the following pe	ople at your	institu	ition.												
a. Students	QIstudent	1	Poor	1	1	8	1	6	1	2	1							
		2		2	2	4	1	10	2	4	1							
		3		5	5	10	2	14	2	6	2							
		4		7	6	38	7	34	6	27	10							
		5		19	17	117	22	126	20	41	14	5.8	5.8	.00	5.8	.00	5.9	07
		6		34	31	176	33	213	35	84	30							
		7	Excellent	42	38	185	34	203	33	117	41							
			Not applicable	0	0	3	1	11	2	2	1							
			Total	110	100	541	100	617	100	283	100							
b. Academic advisors	QIadvisor	1	Poor	6	5	31	6	28	5	15	5							
		2		5	5	23	4	38	6	13	5							
		3		12	11	50	9	57	9	17	6							
		4		10	9	69	13	99	16	23	8							
		5		27	25	103	19	135	22	44	16	5.0	5.0	04	4.9	.05	5.4 *	24
		6		24	22	113	21	136	22	63	22						∇	
		7	Excellent	23	21	136	25	115	19	102	36							
		_	Not applicable	3	3	15	3	7	1	6	2							
			Total	110	100	540	100	615	100	283	100							
c. Faculty	QIfaculty	1	Poor	2	2	12	2	8	1	5	2							
		2		1	1	14	3	25	4	6	2							
		3		4	4	21	4	35	6	13	5							
		4		9	8	41	8	87	14	26	9							
		5		31	28	159	29	185	30	48	17	5.5	5.5	.06	5.2 **	.27	5.7	12
		6	F	39	35	165	31	177	29	79	28				Δ			
		7	Excellent	24	22	126	23	98	16	105	37							
		_	Not applicable	0	0	1	0	0	0	0	0							
			Total	110	100	539	100	615	100	282	100							



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

Seniors ^a in						Frequer	ncy Di	stribution	IS				St	atistical	Comparis	sons ^k		
Engineering										Nationa	I			Ŷ	our seniors c	ompared wi	th Natio	onal
				UMD		UMD Pee	rs	Competito	ors	Comparis	on	UMD	UMD	Peers	Compe	titors	Compa	arison
Item wording	Variable													Effect		Effect		Effect
or description	name ¹		ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
 d. Student services staff (career services, 	QIstaff	1	Poor	3	3	26	5	22	4	20	7							
student activities,		2		5	5	33	6	31	5	14	5							
housing, etc.)		3		6	5	56	10	59	10	18	6							
		4		18	16	68	13	103	17	38	13	5.1						
		5		20	18	126	23	143	23	47	17	5.1	4.7 *	.22	4.7 *	.23	4.9	.11
		6		30	27	90	17	129	21	54	19		Δ		Δ			
		7	Excellent	16	15	72	13	55	9	53	19							
		_	Not applicable	12	11	68	13	76	12	38	13							
			Total	110	100	539	100	618	100	282	100							
 e. Other administrative staff and offices 	QIadmin	1	Poor	6	5	37	7	31	5	18	6							
(registrar, financial aid,		2		3	3	39	7	37	6	25	9							
etc.)		3		10	9	44	8	47	8	22	8							
		4		16	15	83	15	108	18	43	15	1.0						
		5		26	24	125	23	141	23	56	20	4.9	4.6	.15	4.7	.12	4.7	.10
		6		26	24	108	20	142	23	45	16							
		7	Excellent	16	15	73	14	61	10	57	20							
		_	Not applicable	7	6	29	5	49	8	13	5							
			Total	110	100	538	100	616	100	279	100							
14. How much does you	r institution en	nphasize	e the following?															
a. Spending significant	empstudy	1	Very little	1	1	3	1	7	1	4	1							
amounts of time		2	Some	10	9	52	10	63	10	31	11							
studying and on academic work		3	Quite a bit	55	50	210	39	255	41	131	47	3.3	3.4	16	3.3	08	3.3	.03
academic work		4	Very much	44	40	276	51	292	47	115	41							
			Total	110	100	541	100	617	100	281	100							
b. Providing support to	SEacademic	1	Very little	6	6	30	6	31	5	15	5							
help students succeed		2	Some	25	23	121	22	162	26	54	19							
academically		3	Quite a bit	56	51	235	44	279	45	119	43	2.9	2.9	10	2.9	01	3.0	19
		4	Very much	22	20	152	28	143	23	91	33							
			Total	109	100	538	100	615	100	279	100							
c. Using learning support	SElearnsup	1	Very little	15	14	54	10	65	11	23	8							
services (tutoring		2	Some	30	27	156	29	186	30	74	27							
services, writing center, etc.)		3	Quite a bit	44	40	195	36	232	38	109	39	2.6	2.8	11	2.7	06	2.8	19
		4	Very much	21	19	131	24	130	21	71	26							
			Total	110	100	536	100	613	100	277	100							

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Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	stributior	IS				St		Comparis			
Engineering												Ŷ	our seniors c	ompared wit				
0 0							Commentitu		National		UMD		Deere	C	+:+	Nation		
Item wording	Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on		UND	Peers Effect	Compe	Effect	Compari	Effect
or description	name'	Values'	ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size ⁿ	Mean	size ⁿ
d. Encouraging contact	SEdiverse	1	Very little	19	17	114	21	138	22	38	14							
among students from		2	Some	47	43	189	35	233	38	81	29							
different backgrounds (social, racial/ethnic,		3	Quite a bit	34	31	155	29	164	27	96	34	2.3	2.4	06	2.3	.02	2.7 ***	38
religious, etc.)		4	Very much	10	9	81	15	80	13	66	23						▼	
			Total	110	100	539	100	615	100	281	100							
e. Providing opportunities	SEsocial	1	Very little	6	5	52	10	46	7	24	9							
to be involved socially		2	Some	28	25	149	28	176	29	76	27							
		3	Quite a bit	54	49	214	40	253	41	104	37	2.8	2.8	.08	2.8	.05	2.8	.01
		4	Very much	22	20	125	23	139	23	75	27							
			Total	110	100	540	100	614	100	279	100							
f. Providing support for	SEwellness	1	Very little	10	9	60	11	61	10	25	9							
your overall well-being		2	Some	33	30	158	29	161	26	85	30							
(recreation, health care, counseling, etc.)		3	Quite a bit	51	46	190	35	249	41	107	38	2.7	2.7	07	2.8	12	2.7	09
counsening, etc.)		4	Very much	16	15	132	24	142	23	63	23							
			Total	110	100	540	100	613	100	280	100							
g. Helping you manage	SEnonacad	1	Very little	41	37	195	36	216	35	86	31							
your non-academic		2	Some	41	37	207	38	236	39	92	33							
responsibilities (work, family, etc.)		3	Quite a bit	24	22	104	19	133	22	71	26	1.9	1.9	04	1.9	04	2.2 *	25
ranniy, etc.)		4	Very much	4	4	32	6	26	4	29	10						∇	
			Total	110	100	538	100	611	100	278	100							
h. Attending campus	SEactivities	1	Very little	13	12	74	14	71	12	44	16							
activities and events		2	Some	42	38	181	34	174	29	85	31							
(performing arts, athletic events, etc.)		3	Quite a bit	44	40	204	38	223	37	102	37	2.5	2.5	05	2.7 *	25	2.5	07
atmetic events, etc.)		4	Very much	11	10	76	14	142	23	47	17				∇			
			Total	110	100	535	100	610	100	278	100							
i. Attending events that	SEevents	1	Very little	20	19	126	24	117	19	49	18							
address important		2	Some	50	46	229	43	247	40	99	36							
social, economic, or		3	Quite a bit	33	31	132	25	185	30	83	31	2.2	2.2	.03	2.3	12	2.4 *	23
political issues		4	Very much	5	5	48	9	63	10	41	15						∇	
			Total	108	100	535	100	612	100	272	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Freque	ncy Di	stributior	าร				St	atistical	Comparis	sons ^k		
Engineering										Nationa	I			Ŷ	'our seniors c	ompared wit	th Nation	al
				UMD		UMD Pee	rs	Competito	ors	Comparis		UMD	UMD	Peers	Compe	titors	Compari	
Item wording	Variable													Effect		Effect		Effect
or description			Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
15. About how many h																		
a. Preparing for class	tmprephrs	0	0 hrs	0	0	2	0	3	0	1	0							
(studying, reading, writing, doing	(Recoded version	3	1-5 hrs	7	6	37	7	49	8	32	11							
homework or lab work,	of tmprep created	8	6-10 hrs	11	10	73	14	78	13	73	26							
analyzing data,	by NSSE. Values	13	11-15 hrs	13	12	83	15	79	13	50	18							
rehearsing, and other	are estimated number of hours	18	16-20 hrs	27	25	110	20	107	17	40	14	20.1	19.4	.07	20.0	.01	16.0 ***	.43
academic activities)	per week.)	23	21-25 hrs	19	17	71	13	94	15	28	10							
	per meena)	28	26-30 hrs	16	15	62	12	68	11	24	8							
		33	More than 30 hrs	17	15	101	19	135	22	36	13							
			Total	110	100	539	100	613	100	284	100							
b. Participating in co-	tmcocurrhrs	0	0 hrs	31	28	208	39	180	30	129	46							
curricular activities	(Recoded version	3	1-5 hrs	46	42	165	31	258	42	85	30							
(organizations, campus publications, student	of tmcocurr	8	6-10 hrs	16	15	73	14	85	14	30	11							
government, fraternity	created by NSSE.	13	11-15 hrs	5	5	39	7	41	7	17	6							
or sorority,	Values are	18	16-20 hrs	7	6	23	4	25	4	8	3	5.1	5.0	.01	4.9	.03	4.4	.11
intercollegiate or	estimated number	23	21-25 hrs	3	3	17	3	8	1	6	2							
intramural sports, etc.)	of hours per week.)	28	26-30 hrs	0	0	6	1	5	1	3	1							
	week.)	33	More than 30 hrs	1	1	4	1	7	1	5	2							
			Total	109	100	535	100	609	100	283	100							
c. Working for pay	tmworkonhrs	0	0 hrs	78	72	376	70	419	69	221	79							
on campus	(Recoded version	3	1-5 hrs	4	4	19	4	29	5	10	4							
	of tmworkon	8	6-10 hrs	7	6	50	9	62	10	17	6							
	created by NSSE.	13	11-15 hrs	8	7	52	10	58	10	13	5							
	Values are	18	16-20 hrs	7	6	31	6	29	5	11	4	3.7	3.5	.03	3.5	.03	2.8	.14
	estimated number	23	21-25 hrs	3	3	2	0	6	1	4	1							
	of hours per	28	26-30 hrs	0	0	1	0	3	0	2	1							
	week.)	33	More than 30 hrs	1	1	3	1	2	0	3	1							
			Total	108	100	534	100	608	100	281	100							
				100	100	234	100	000	100	201	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	icy Di	stributior	IS				Sta	atistical	Comparis	sons ^k		
Engineering														Y	our seniors c	ompared wi		
										National				_	_		Natior	
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD		Compe		Compar	
Item wording or description	Variable name ¹	Values'	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
d. Working for pay	tmworkoffhrs	0	0 hrs	57	53	301	56	343	57	98	35	mean	mean	5,20	mean	5120	mean	
off campus	(Recoded version	3	1-5 hrs	1	1	21	4	26	4	12	4							
	of tmworkoff	8	6-10 hrs	11	10	30	6	40	7	16	6							
	created by NSSE.	13	11-15 hrs	9	8	40	8	50	8	18	6							
	Values are	18	16-20 hrs	21	19	58	11	49	8	17	6	7.9	8.0	01	8.1	02	15.4 ***	58
	estimated number	23	21-25 hrs	1	1	27	5	19	3	23	8						▼	
	of hours per week.)	28	26-30 hrs	4	4	11	2	20	3	18	6							
		33	More than 30 hrs	4	4	45	8	60	10	78	28							
			Total	108	100	533	100	607	100	280	100							
Estimated number of	tmworkhrs																	
hours working for pay	(Continuous variable created by NSSE)											11.4	11.3	.01	11.4	.00	17.9 *** ▼	48
e. Doing community	tmservicehrs	0	0 hrs	73	67	352	66	386	64	165	59							
service or volunteer	(Recoded version	3	1-5 hrs	30	28	149	28	184	30	88	31							
work	of tmservice	8	6-10 hrs	2	2	11	2	19	3	15	5							
	created by NSSE.	13	11-15 hrs	3	3	15	3	8	1	5	2							
	Values are	18	16-20 hrs	1	1	3	1	4	1	3	1	1.5	1.6	02	1.7	06	2.1	17
	estimated number of hours per	23	21-25 hrs	0	0	2	0	3	0	4	1							
	week.)	28	26-30 hrs	0	0	0	0	3	0	0	0							
	weeka)	33	More than 30 hrs	0	0	0	0	0	0	0	0							
			Total	109	100	532	100	607	100	280	100							
f. Relaxing and	tmrelaxhrs	0	0 hrs	4	4	14	3	12	2	13	5							
socializing (time with	(Recoded version	3	1-5 hrs	15	14	115	22	109	18	88	31							
friends, video games, TV or videos, keeping	of tmrelax created	8	6-10 hrs	29	27	152	28	182	30	79	28							
up with friends online,	by NSSE. Values	13	11-15 hrs	25	23	109	20	129	21	52	18							
etc.)	are estimated	18	16-20 hrs	22	20	70	13	107	18	29	10	12.8	11.8	.12	11.9	.11	9.6 ***	.40
	number of hours per week.)	23	21-25 hrs	5	5	28	5	33	5	8	3							
	per week.)	28	26-30 hrs	4	4	20	4	13	2	3	1							
		33	More than 30 hrs	5	5	26	5	22	4	11	4							
			Total	109	100	534	100	607	100	283	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	stributior	IS				Sta	atistical	Comparis	sons ^k		
Engineering														Ŷ	our seniors c	ompared wit		
0 0								a		Nationa		UMD		_			Nation	
	Variable			UMD		UMD Pee	rs	Competito	ors	Comparise	on	UMD	UMD	Peers Effect	Compe	Effect	Compar	ISON Effect
Item wording or description	name ¹	Values'	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size"	Mean	size ⁿ
g. Providing care for	tmcarehrs	0	0 hrs	94	86	420	79	491	81	173	61							
dependents (children,	(Recoded version	3	1-5 hrs	4	4	36	7	41	7	33	12							
parents, etc.)	of tmcare created	8	6-10 hrs	5	5	16	3	17	3	13	5							
	by NSSE. Values	13	11-15 hrs	1	1	16	3	12	2	13	5							
	are estimated	18	16-20 hrs	2	2	13	2	13	2	15	5	1.7	3.0 *	18	2.8	15	6.4 ***	49
	number of hours	23	21-25 hrs	2	2	9	2	6	1	2	1		∇				▼	
	per week.)	28	26-30 hrs	0	0	6	1	6	1	3	1							
		33	More than 30 hrs	1	1	16	3	22	4	32	11							
			Total	109	100	532	100	608	100	284	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	3	3	38	7	104	17	21	7							
(driving, walking, etc.)	(Recoded version	3	1-5 hrs	82	75	347	65	396	65	163	57							
	of tmcommute	8	6-10 hrs	21	19	115	21	85	14	69	24							
	created by NSSE.	13	11-15 hrs	1	1	24	4	17	3	18	6							
	Values are	18	16-20 hrs	2	2	8	1	6	1	7	2	4.2	4.7	12	3.8	.12	5.5 **	28
	estimated number of hours per	23	21-25 hrs	0	0	0	0	0	0	4	1						V	
	week.)	28	26-30 hrs	0	0	4	1	2	0	0	0						•	
		33	More than 30 hrs	0	0	0	0	2	0	2	1							
			Total	109	100	536	100	612	100	284	100							
16. Of the time you spo	end preparing for	· class i	in a typical 7-day y	veek, about h	ow mi	uch is on <i>assi</i>	gned	reading?										
for of the third jou sp	reading	1	Very little	45	41	135	36	94	32	49	21							
	0	2	Some	48	44	155	41	128	44	92	40							
	(Revised for 2014. Comparison data	3	About half	-10	10	55	15	45	15	52	23	1.8	2.0	17	2.0 *	25	2.4 ***	57
	are limited to	4		3	3	26	7	43 23	8	32	14	1.0	2.0	17		25		57
	NSSE 2014	5			2	20 4	1				2				∇		•	
	participating	5	Almost all	2		-	-	4	1	5								
	institutions.)		Total	109	100	375	100	294	100	230	100							
	tmreadinghrs																	
(Continuour	Ū	Calaul	tad as a proportion									10						
	le created by NSSE. l on reading, where											4.9	5.3	08	5.9	21	5.4	10
	alf=.50; Most=.75; A	-																



Frequencies and Statistical Comparisons: Engineering

University of Minnesota Duluth

Seniors ^a in						Frequer	ncy Di	istributior	IS				St		Compari			
Engineering				UMD		UMD Pee	**	Competito		Nationa Comparise		UMD		۲ Peers	our seniors o		th Natio Compa	
Item wording	Variable							•		•				Effect		Effect		Effect
or description	name ¹ tmreadinghrscol	Values' 1	n Response options 0 hrs	Count	%	Count 0	%	Count 2	%	Count 1	<u>%</u> 0	Mean	Mean	size "	Mean	size ⁿ	Mean	size ⁿ
	(Collapsed version of tmreadinghrs	2	More than zero, up to 5 hrs	69	63	228	61	153	52	140	61							
	created by NSSE.)	3	More than 5, up to 10 hrs	31	28	106	28	102	35	55	24							
		4	More than 10, up to 15 hrs	6	6	19	5	16	5	14	6							
		5	More than 15, up to 20 hrs	1	1	12	3	13	4	15	7							
		6	More than 20, up to 25 hrs	1	1	8	2	6	2	4	2							
		7	More than 25 hrs	1	1	0	0	2	1	0	0							
			Total	109	100	373	100	294	100	229	100							
17. How much has you	ur experience at tl	nis inst	itution contributed to	o your knov	vledge	, skills, and		nal develop		n the follow	ing ar	eas?						
a. Writing clearly and	pgwrite	1	Very little	8	7	55	10	48	8	17	6							
effectively		2	Some	27	25	152	28	171	28	70	25	• •						
		3	Quite a bit	51	46	194	36	236	39	98	35	2.8	2.8	.06	2.8	.01	3.0	17
		4	Very much	24	22	140	26	156	26	98	35							
			Total	110	100	541	100	611	100	283	100							
 b. Speaking clearly and effectively 	pgspeak	1	Very little	13	12	63	12	69	11	27	10							
encentery		2 3	Some	36 45	33 41	138 200	26 37	156	26 41	64	23 35	2.6	2.0	20	2.7	10	20 **	26
		3 4	Quite a bit	45 15	41 14	136	37 25	247 137	41 22	98 92	33	2.0	2.8	20	2.7	19	2.9 **	36
		4	Very much Total	109	14	537	100	609	100	92 281	100						•	
c. Thinking critically and	l pgthink	1	Very little	105	100	16	3	9	100	5	2							
analytically	pguillik	2	Some	17	15	67	12	53	9	27	10							
		- 3	Quite a bit	30	27	147	27	191	31	2, 74	26	3.4	3.4	.00	3.5	11	3.5	14
		4	Very much	62	56	309	57	359	59	176	62	011	5.4	.00	5.5		5.5	.14
			Total	110	100	539	100	612	100	282	100							
d. Analyzing numerical	pganalyze	1	Very little	2	2	10	2	11	2	2	1							
and statistical		2	Some	12	11	59	11	52	9	34	12							
information		3	Quite a bit	25	23	156	29	175	29	73	26	3.5	3.4	.08	3.5	.01	3.5	.03
		4	Very much	70	64	315	58	372	61	172	61							
			Total	109	100	540	100	610	100	281	100							

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Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	icy Di	stributior	IS				St	atistical	Comparis	sons ^k		
Engineering														Y	our seniors c	ompared wit		
										Nationa				_	-		Natio	
	Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD	Peers Effect	Compe	titors Effect	Compa	rison Effect
Item wording or description	name ¹	Values	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size ⁿ	Mean	size"	Mean	size ⁿ
e. Acquiring job- or work-	pgwork	1	Very little	3	3	44	8	39	6	12	4							
related knowledge and		2	Some	20	18	89	16	106	17	56	20							
skills		3	Quite a bit	50	45	179	33	216	35	73	26	3.1	3.1	.00	3.1	01	3.2	14
		4	Very much	37	34	229	42	249	41	143	50							
			Total	110	100	541	100	610	100	284	100							
f. Working effectively	pgothers	1	Very little	3	3	23	4	33	5	17	6							
with others		2	Some	18	17	92	17	122	20	47	17							
		3	Quite a bit	53	49	202	37	235	39	88	31	3.1	3.2	08	3.1	.05	3.2	09
		4	Very much	34	31	224	41	219	36	130	46							
			Total	108	100	541	100	609	100	282	100							
g. Developing or	pgvalues	1	Very little	13	12	83	15	98	16	37	13							
clarifying a personal code of values and		2	Some	40	36	154	29	217	36	76	27							
ethics		3	Quite a bit	34	31	154	29	176	29	86	30	2.6	2.7	07	2.5	.10	2.8	16
		4	Very much	23	21	148	27	118	19	85	30							
			Total	110	100	539	100	609	100	284	100							
h. Understanding people	pgdiverse	1	Very little	24	22	118	22	122	20	42	15							
of other backgrounds (economic,		2	Some	51	46	195	36	247	40	101	36							
racial/ethnic, political,		3	Quite a bit	21	19	134	25	167	27	72	26	2.2	2.4	14	2.3	10	2.6 **	35
religious, nationality,		4	Very much	14	13	92	17	74	12	65	23						▼	
etc.)			Total	110	100	539	100	610	100	280	100							
i. Solving complex real-	pgprobsolve	1	Very little	5	5	41	8	44	7	15	5							
world problems		2	Some	26	24	98	18	119	19	43	15							
		3	Quite a bit	38	35	170	32	206	34	86	30	3.0	3.1	05	3.1	01	3.2	21
		4	Very much	41	37	229	43	242	40	140	49							
			Total	110	100	538	100	611	100	284	100							
j. Being an informed and	pgcitizen	1	Very little	18	17	128	24	121	20	46	16							
active citizen		2	Some	47	44	187	35	228	37	77	27							
		3	Quite a bit	29	27	129	24	163	27	100	35	2.4	2.3	.02	2.4	03	2.6 *	26
		4	Very much	14	13	92	17	98	16	60	21						∇	
			Total	108	100	536	100	610	100	283	100							



Frequencies and Statistical Comparisons: Engineering

Seniors ^a in						Frequer	ncy Di	stributior	IS				Sta	atistical	Comparis	sons ^k		
Engineering														Ŷ	our seniors c	ompared wi	th	
Lingineering										Nationa	I						Natio	nal
				UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD	UMD	Peers	Compe	titors	Compa	rison
Item wording	Variable													Effect		Effect		Effect
or description	name ¹	Values'	ⁿ Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
18. How would you eval	luate your enti	re educa	tional experience a	t this institut	ion?													
	evalexp	1	Poor	1	1	23	4	16	3	3	1							
		2	Fair	11	10	65	12	57	9	18	6							
		3	Good	64	58	230	42	267	43	116	41	3.2	3.2	03	3.3	15	3.4 **	37
		4	Excellent	34	31	226	42	275	45	147	52						▼	
			Total	110	100	544	100	615	100	284	100							
19. If you could start ov	er again, wou	ld you go	o to the same institu	tion you are	now a	attending?												
	sameinst	1	Definitely no	2	2	29	5	18	3	7	2							
		2	Probably no	18	16	64	12	55	9	28	10							
		3	Probably yes	59	54	209	38	236	38	98	35	3.1	3.2	16	3.4 ***	*36	3.4 ***	40
		4	Definitely yes	31	28	241	44	309	50	151	53				•		▼	
			Total	110	100	543	100	618	100	284	100							



Enginee	ering					First-Y	ear S	Students	3					9	Senic	ors ^a			
-	-									National								Nationa	al
				UMD		UMD Peer	rs	Competito	rs	Compariso	n	UMD		UMD Pee	rs	Competito	ors	Comparis	son
Item word or descript	5	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
	iny majors do	MAJnum	One	99	92	390	92	341	86	113	90	105	95	510	94	539	87	260	91
	to complete?		More than one	9	8	33	8	55	14	12	10	5	5	34	6	81	13	25	9
(Do not c	count minors.)		Total	108	100	423	100	396	100	125	100	110	100	544	100	620	100	285	100
First maj	jor or expected	MAJfirstcol	Arts & Humanities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	or, in NSSE's related-major	(Recoded from MAJfirst)	Biological Sci., Agriculture, & Natural Resources	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
categorie	es. ot reflect any	Wir Gill St)	Physical Sci., Mathematics, & Computer Science	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	zation made		Social Sciences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Major Field		Business	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Report)			Communications, Media, & Public Relations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Engineering	108	100	423	100	396	100	125	100	110	100	544	100	620	100	285	100
			Health Professions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Social Service Professions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			All Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Undecided, Undeclared	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Total	108	100	423	100	396	100	125	100	110	100	544	100	620	100	285	100
Second n	5	MAJsecondcol	Arts & Humanities	1	11	1	3	10	18	1	8	0	0	1	3	8	10	1	4
expected in NSSE	l second major, E's default	(Recoded from	Biological Sci., Agriculture, & Natural Resources	0	0	1	3	2	4	1	8	0	0	0	0	5	6	0	0
related-n categorie	5	MAJsecond)	Physical Sci., Mathematics, & Computer Science	3	33	8	25	32	58	0	0	4	80	6	18	52	64	5	20
(D	ot reflect any		Social Sciences	0	0	0	0	4	7	0	0	1	20	1	3	2	2	0	0
	zation made		Business	0	0	1	3	3	5	1	8	0	0	5	15	4	5	3	12
	Major Field		Communications, Media, & Public Relations	0	0	0	0	0	0	1	8	0	0	2	6	0	0	0	0
Report)			Education	0	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0
			Engineering	5	56	19	59	4	7	3	25	0	0	17	50	7	9	11	44
			Health Professions	0	0	0	0	0	0	1	8	0	0	0	0	0	0	1	4
			Social Service Professions	0	0	0	0	0	0	2	17	0	0	0	0	0	0	2	8
			All Other	0	0	1	3	0	0	0	0	0	0	1	3	0	0	2	8
			Undecided, Undeclared	0	0	1	3	0	0	1	8	0	0	1	3	3	4	0	0
			Total	9	100	32	100	55	100	12	100	5	100	34	100	81	100	25	100



En	gineering					First-Y	ear S	Students	1						Seni	ors ^a			
										National								Nationa	d
				UMD		UMD Peer	s	Competito	rs	Compariso	on	UMD		UMD Pee	rs	Competito	ors	Comparis	on
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
21.	What is your class	class	Freshman/First-year	103	95	383	92	364	93	90	73	1	1	4	1	4	1	1	0
	level?		Sophomore	4	4	25	6	19	5	27	22	1	1	6	1	10	2	3	1
			Junior	1	1	6	1	5	1	1	1	20	18	53	10	120	19	39	14
			Senior	0	0	4	1	3	1	4	3	85	77	462	86	467	76	226	80
			Unclassified	0	0	0	0	2	1	1	1	3	3	15	3	15	2	13	5
			Total	108	100	418	100	393	100	123	100	110	100	540	100	616	100	282	100
22.	Thinking about this	fulltime	No	1	1	4	1	7	2	12	10	7	6	107	20	87	14	83	30
	current academic term,		Yes	107	99	414	99	384	98	111	90	103	94	428	80	529	86	197	70
	are you a full-time student?		Total	108	100	418	100	391	100	123	100	110	100	535	100	616	100	280	100
23a.	How many courses are	coursenum	0	0	0	1	0	0	0	1	1	0	0	21	4	4	1	21	7
	you taking for credit		1	0	0	0	0	0	0	0	0	1	1	8	1	16	3	8	3
	this current academic		2	0	0	2	0	4	1	2	2	4	4	37	7	32	5	30	11
	term?		3	7	6	31	7	28	7	14	11	4	4	70	13	38	6	32	11
			4	40	37	169	40	163	41	46	38	33	30	171	32	160	26	69	25
			5	47	44	138	33	128	32	37	30	45	41	132	24	221	36	69	25
			6	9	8	55	13	47	12	12	10	17	15	53	10	94	15	25	9
			7 or more	5	5	25	6	26	7	10	8	6	5	49	9	53	9	27	10
			Total	108	100	421	100	396	100	122	100	110	100	541	100	618	100	281	100
b.	Of these, how many are	onlinenum	0	105	98	405	96	362	91	104	85	97	88	505	94	475	77	235	83
	entirely online ?		1	2	2	9	2	23	6	10	8	10	9	27	5	91	15	27	10
			2	0	0	2	0	6	2	4	3	1	1	4	1	24	4	7	2
			3	0	0	3	1	3	1	2	2	2	2	2	0	14	2	4	1
			4	0	0	1	0	1	0	0	0	0	0	1	0	6	1	5	2
			5	0	0	0	0	1	0	1	1	0	0	1	0	2	0	3	1
			6	0	0	0	0	0	0	0	0	0	0	0	0	4	1	1	0
			7 or more	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
			Total	107	100	421	100	396	100	122	100	110	100	540	100	617	100	282	100
	Collapsed recode of	onlinecrscol	No courses taken online	105	98	405	96	362	91	103	85	97	88	505	94	474	77	234	83
	courses taken online		Some courses taken online	2	2	15	4	30	8	15	12	13	12	32	6	89	14	39	14
	(Based on responses to		All courses taken online	0	0	1	0	4	1	3	2	0	0	3	1	53	9	8	3
	coursenum and onlinenum)		Total	107	100	421	100	396	100	121	100	110	100	540	100	616	100	281	100



En	ngineering					First-Y	'ear S	Students	а					:	Senio	ors ^a			
				UMD		UMD Pee		Competito		Nationa Comparise		UMD		UMD Pee	rs	Competito	ors	Nationa Comparis	
	Item wording	Variable	-															•	
24.	or description What have most of your	name grades	Response options C- or lower	Count 3	%	Count 5	%	Count 5	%	Count 2	2	Count	%	Count 3	%	Count	%	Count	<u>%</u> 0
24.	grades been up to now	grades	C- or lower C	5	5	5 14	3	8	2	2	2	0	1	13	2	9	1	1	2
	at this institution?		C C+	9	<i></i>	14 30	5 7	8 17	4	5	4	1	3	13 45	2	9 19	3	26	2 9
			C+ B-	<i>c</i>	0 9	30 39	9		4	9	4	-	-	43 89			3 9		
			в-	10 23	21	39 87	21	27 88	22	9 26	21	14 27	13 25	89 116	16 21	56 158	9 26	28 75	10 27
			в В+	23 22	21	87 85	21	88 67	17	26 26	21	27	23 24	96	18	138	20	46	16
									17					96 80		132		46 37	
			A-	22	20 13	86 74	20	68	29	28	23 20	21 18	19	80 98	15	106	17 22	57 63	13
			A Total	14		74	18	115		24			16		18				22
25.	Did you begin college	begincol	Started here	108 94	100 88	420	100 94	395 369	100 94	123	100	110 66	100 60	540 320	100 59	618 407	100	282	100
23.	at this institution or	begincoi								105		00 44		320 219		209	00 34	88 194	
	elsewhere?		Started elsewhere	13	12	24	6	25	6		14		40		41				69
26.	Since graduating from	attend_voc	Total	107	100	418	100	394 7	100	122	100	110	100	539	100	616	100	282	100
20.	high school, which of	attend_voc	Vocational or technical school	2	2	5	1		2	11	9	8	7	30	6	54	9	51	
	the following types of	attend_com	Community or junior college 4-year college or university	6	6	37	9	17	4	5	4	32	29	249	47	136	22	115	41
	schools have you attended <i>other than</i> the	-	other than this one	4	4	31	7	25	6	13	11	24	22	109	20	145	24	125	44
	one you are now	attend_none	None	97	90	337	81	343	87	92	75	58	53	223	42	347	57	68	24
	attending? (Select all	attend_other	Other	1	1	11	3	14	4	11	9	3	3	15	3	25	4	16	6
	that apply.)																		
27.	What is the highest level of education you	edaspire	Some college but less than a bachelor's degree	4	4	13	3	12	3	1	1	1	1	17	3	15	2	13	5
	ever expect to		Bachelor's degree (B.A., B.S., etc.)	50	47	125	30	165	42	48	40	53	49	190	35	266	43	102	36
	complete?		Master's degree (M.A., M.S., etc.)	40	38	230	55	155	39	55	45	47	43	276	51	256	42	127	45
			Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	12	11	51	12	63	16	17	14	8	7	53	10	77	13	39	14
			Total	106	100	419	100	395	100	121	100	109	100	536	100	614	100	281	100



Eng	gineering					First-Y	'ear s	Students	Ð					9	Senio	ors ^a			
-				UMD		UMD Pee		Competito		National Compariso		UMD		UMD Pee	rs	Competito	ors	Nationa Comparis	
	Item wording	Variable	Deserves antises	Count	0/	Count	0/	Count		Count		Count	0/	Count	%	Count	%	Count	
_	or description What is the highest	name parented	Response options Did not finish high school	Count	%	Count 19	% 5	Count 4	%	Count 6	<u>%</u> 5	Count 2	%	Count 31	6	Count 7	% 1	Count 15	<u>%</u> 5
	level of education	purchicu	High school diploma or G.E.D.	9	8	52	12	47	12	18	15	15	14	51 77	14	67	11	61	22
	completed by either of your parents (or those		Attended college, but did not complete degree	9	8	46	11	31	8	13	11	10	9	53	10	42	7	29	10
	who raised you)?		Associate's degree (A.A., A.S., etc.)	17	16	32	8	31	8	10	8	18	17	54	10	89	14	29	10
			Bachelor's degree (B.A., B.S., etc.)	46	43	135	32	147	37	45	37	43	39	188	35	228	37	85	30
			Master's degree (M.A., M.S., etc.)	22	20	103	25	104	26	25	20	19	17	98	18	120	20	51	18
			Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	5	5	32	8	31	8	5	4	2	2	36	7	62	10	12	4
			Total	108	100	419	100	395	100	122	100	109	100	537	100	615	100	282	100
	First-generation status	firstgen	Not first-generation	73	68	270	64	282	71	75	61	64	59	322	60	410	67	148	52
	(No parent holds a	(Recoded from	First-generation	35	32	149	36	113	29	47	39	45	41	215	40	205	33	134	48
	bachelor's degree)	parented)	Total	108	100	419	100	395	100	122	100	109	100	537	100	615	100	282	100
29.	What is your gender	genderid	Man	92	85	248	78	157	67	86	85	88	80	301	80	207	70	187	82
	identity?		Woman	16	15	68	21	74	32	14	14	20	18	71	19	83	28	40	18
	(Revised for 2014;		Another gender identity	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0
	limited to NSSE 2014		I prefer not to respond	0	0	3	1	1	0	1	1	2	2	4	1	5	2	1	0
	institutions)		Total	108	100	320	100	233	100	101	100	110	100	377	100	295	100	228	100
	Enter your year of birth	agecat	19 or younger	106	99	389	93	357	91	95	79	1	1	3	1	2	0	1	0
	(e.g., 1994):	(Recoded	20-23	0	0	21	5	23	6	15	12	91	83	367	69	459	75	119	43
		from the	24-29	1	1	8	2	5	1	3	2	13	12	102	19	81	13	80	29
		information	30-39	0	0	0	0	5	1	5	4	3	3	46	9	46	8	49	18
		entered in	40-55	0	0	1	0	2	1	3	2	1	1	16	3	24	4	22	8
		birthyear)	Over 55	0	0	0	0	0	0	0	0	0	0	1	0	1	0	9	3
			Total	107	100	419	100	392	100	121	100	109	100	535	100	613	100	280	100
	Are you an	internat	No	105	98	386	93	356	90	111	92	105	96	496	93	565	92	238	86
	international student or		Yes	2	2	31	7	38	10	10	8	4	4	39	7	46	8	39	14
	foreign national?		Total	107	100	417	100	394	100	121	100	109	100	535	100	611	100	277	100



Engineering					First-Y	ear S	Students [®]	1		Seniors ^a									
									National								Nationa	ıl	
				UMD		UMD Pee	rs	Competito	rs	Compariso	n	UMD		UMD Pee	rs	Competito	ors	Comparis	on
	-	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
32.	What is your racial or	re_amind	American Indian or Alaska Native	0	0	9	2	5	1	2	2	3	3	8	1	5	1	4	1
	ethnic identification?	re_asian	Asian	1	1	49	12	39	10	13	11	8	7	55	10	48	8	30	11
	(Select all that apply.)	re_black	Black or African American	1	1	25	6	14	4	14	11	1	1	16	3	11	2	51	18
		re_latino	Hispanic or Latino	1	1	36	9	10	3	15	12	0	0	47	9	14	2	14	5
		re_pacific	Native Hawaiian or Other Pacific Islander	0	0	3	1	4	1	0	0	0	0	5	1	3	0	3	1
Item wording or description v n 32. What is your racial or ethnic identification? n (Select all that apply.) n Racial or ethnic identification n Racial or ethnic identification n 33. Are you a member of a social fraternity or sorority? g 34. Which of the following best describes where you are living while attending college? li 35. Are you a student- athlete on a team sponsored by your institution's athletics a	re_white	White	100	93	297	71	317	80	80	66	98	90	406	75	520	84	176	63	
	re_other	Other	4	4	13	3	11	3	3	2	0	0	9	2	8	1	8	3	
		re_pnr	I prefer not to respond	3	3	21	5	18	5	5	4	3	3	28	5	34	6	12	4
		re_all	American Indian or Alaska Native	0	0	3	1	1	0	0	0	0	0	2	0	2	0	0	0
	identification	(Recoded from	Asian	1	1	40	10	33	8	12	10	7	6	45	8	41	7	28	10
		re_amind	Black or African American	0	0	18	4	7	2	11	9	1	1	15	3	8	1	48	17
		through	Hispanic or Latino	1	1	24	6	6	2	11	9	0	0	34	6	7	1	9	3
		re_pnr	Native Hawaiian/Other Pac. Islander	0	0	1	0	2	1	0	0	0	0	1	0	1	0	1	0
		where each student is	White	98	91	272	65	299	76	72	59	94	86	379	70	505	82	163	58
		represented	Other	3	3	10	2	5	1	2	2	0	0	6	1	2	0	5	2
		only once)	Multiracial	2	2	29	7	23	6	9	7	4	4	29	5	17	3	15	5
			I prefer not to respond	3	3	21	5	18	5	5	4	3	3	28	5	34	6	12	4
			Total	108	100	418	100	394	100	122	100	109	100	539	100	617	100	281	100
33.	•	greek	No	104	96	400	95	363	92	113	93	105	96	491	91	565	92	258	92
	•		Yes	4	4	19	5	32	8	9	7	4	4	46	9	52	8	23	8
-			Total	108	100	419	100	395	100	122	100	109	100	537	100	617	100	281	100
34.		living	Dormitory or other campus housing (not fraternity or sorority house)	92	85	317	76	314	79	65	53	10	9	64	12	38	6	18	6
			Fraternity or sorority house	0	0	1	0	0	0	2	2	0	0	7	1	10	2	1	0
	attending college?		Residence (house, apartment, etc.) within walking distance to the	7	6	22	5	44	11	13	11	34	31	172	32	369	60	63	22
			institution Residence (house, apartment, etc.)	8	7	69	17	31	8	41	34	65	60	283	53	184	30	185	66
			<i>farther than walking distance</i> to the institution		/							65	60						66
			None of the above	1	1	9	2	6	2	1	1	0	0	12	2	17	3	14	5
			Total	108	100	418	100	395	100	122	100	109	100	538	100	618	100	281	100
35.	•	athlete	No	96	89	394	94	368	94	116	96	106	98	526	98	597	97	269	97
			Yes	12	11	24	6	22	6	5	4	2	2	9	2	18	3	8	3
			Total	108	100	418	100	390	100	121	100	108	100	535	100	615	100	277	100



Engineering				First-Y	'ear S	Students	а		Seniors ^a										
					National												Nationa	ıl	
	Item wording Variable			UMD		UMD Pee	rs	Competito	ors	Compariso	on	UMD		UMD Pee	rs	Competito	ors	Comparis	on
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
36.	Are you a current or	veteran	No	107	100	409	98	382	98	116	95	101	94	516	96	574	94	249	90
	former member of the		Yes	0	0	9	2	8	2	6	5	6	6	22	4	37	6	29	10
	U.S. Armed Forces,		Total	107	100	418	100	390	100	122	100	107	100	538	100	611	100	278	100
37a		disability	No	99	92	375	89	366	93	108	89	99	91	491	91	561	91	254	91
57 a .		disability	Yes	55 7	92 6	373	8	18	5	8	89 7	5	5	491	6	37	6	18	6
U.S. Armed Forces, Reserves, or National <u>Guard?</u> 37a. Have you been diagnosed with any disability or impairment? b. <i>[If answered "yes"]</i> Which of the following has been diagnosed? (Select all that apply.) Disability or impairment		I prefer not to respond	2	2	34 10	2	10	3	8 5	4	5	5	16	3	37 17	3	18	3	
	impairment?		Total	108	100	419	100	394	100	121	100	109	100	538	100	615	100	279	100
h	[If answered "yes"]		A sensory impairment (vision	108						121		109						219	
		dis_sense	or hearing)	1	14	9	26	5	21	1	13	1	20	8	22	10	21	1	5
	0	dis_mobility	A mobility impairment	0	0	1	3	1	4	2	25	0	0	4	11	2	4	4	21
		dis_learning	A learning disability (e.g., ADHD, dyslexia)	4	57	14	40	9	38	6	75	1	20	14	39	15	31	8	42
		dis_mental	A mental health disorder	1	14	8	23	4	17	1	13	3	60	8	22	7	15	4	21
		dis_other	A disability or impairment not listed above	1	14	6	17	1	4	1	13	0	0	4	11	8	17	4	21
		disability_all	A sensory impairment	1	1	8	2	5	1	0	0	1	1	5	1	10	2	1	0
		(Recoded from	A mobility impairment	0	0	0	0	1	0	2	2	0	0	2	0	2	0	3	1
		disability and	A learning disability	4	4	12	3	7	2	4	3	1	1	9	2	11	2	6	2
		dis_sense	A mental health disorder	1	1	6	1	2	1	0	0	3	3	5	1	5	1	2	1
		through	A disability or impairment not listed	1	1	5	1	1	0	0	0	0	0	3	1	5	1	3	1
		dis_other where each	More than one disability or	0	0	3	1	2	1	2	2	0	0	7	1	4	1	3	1
		student is	impairment	-	-	-						, i i i i i i i i i i i i i i i i i i i						-	
		represented	No disability or impairment	99	92	375	89	366	93	108	89	99	91	491	91	561	91	254	91
		only once)	Prefer not to respond	2	2	10	2	10	3	5	4	5	5	16	3	17	3	7	3
			Total	108	100	419	100	394	100	121	100	109	100	538	100	615	100	279	100
38.	Which of the following	sexorient14	Heterosexual			227	92	243	95	38	88			284	90	317	92	73	91
	best describes your sexual orientation?		Gay			0	0	4	2	0	0			3	1	5	1	1	1
	sexual orientation?		Lesbian			4	2	2	1	1	2			0	0	0	0	0	0
	(Question		Bisexual			2	1	1	0	0	0			4	1	6	2	3	4
	administered per		Another sexual orientation			1	0	1	0	0	0			3	1	0	0	0	0
	institution request)		Questioning or unsure			1	0	0	0	0	0			0	0	0	0	0	0
			I prefer not to respond			11	4	6	2	4	9			20	6	16	5	3	4
			Total			246	100	257	100	43	100			314	100	344	100	80	100



Engineering				First-Year Students ^a									Seniors ^a									
			UMD		UMD Peers		Competitors		National Comparison		UMD		UMD Peers		Competitors		Nation: Comparis					
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%				
titution-reported info			count	70	count	70	count	70	count	70	count	70	count	70	count	70	count					
iables provided by your inst		SSE population file.)																				
Institution-reported sex	IRsex	Female	16	15	72	22	73	31	15	14	20	18	73	19	84	28	40	17				
		Male	92	85	253	78	161	69	89	86	90	82	309	81	213	72	191	8				
		Total	108	100	325	100	234	100	104	100	110	100	382	100	297	100	231	100				
Institution-reported	IRrace	American Indian or Alaska Native	0	0	1	0	4	1	0	0	2	2	0	0	3	0	0	(
race or ethnicity		Asian	1	1	11	4	24	6	8	7	5	5	9	3	17	3	21	8				
		Black or African American	1	1	19	8	9	2	10	9	1	1	7	2	6	1	51	19				
		Hispanic or Latino	1	1	13	5	9	2	17	15	0	0	11	3	10	2	12	4				
		Native Hawaiian/Other Pac. Islander	0	0	0	0	3	1	0	0	0	0	0	0	1	0	1					
		White	102	94	177	71	302	78	67	59	96	87	256	80	527	86	163	5				
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Foreign or nonresident alien	2	2	14	6	31	8	4	4	4	4	20	6	39	6	5	2				
		Two or more races/ethnicities	0	0	6	2	4	1	6	5	0	0	4	1	3	0	10	4				
		Unknown	1	1	7	3	2	1	2	2	2	2	12	4	10	2	11	4				
		Total	108	100	248	100	388	100	114	100	110	100	319	100	616	100	274	100				
Institution-reported	IRclass	Freshman/First-Year	108	100	423	100	396	100	125	100	0	0	0	0	0	0	0	(
class level		Sophomore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Junior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Senior	0	0	0	0	0	0	0	0	110	100	544	100	620	100	285	100				
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Total	108	100	423	100	396	100	125	100	110	100	544	100	620	100	285	100				
Institution-reported	IRftfy	No	2	2	25	6	24	6	35	28	110	100	541	99	620	100	285	100				
first-time first-year		Yes	106	98	398	94	372	94	90	72	0	0	3	1	0	0	0	(
(FTFY) status		Total	108	100	423	100	396	100	125	100	110	100	544	100	620	100	285	100				
Institution-reported	IRenrollment	Not full-time	0	0	5	1	5	1	14	11	10	9	64	12	115	19	78	2				
enrollment status		Full-time	108	100	418	99	391	99	111	89	100	91	480	88	505	81	207	73				
		Total	108	100	423	100	396	100	125	100	110	100	544	100	620	100	285	100				



Endnotes: Engineering University of Minnesota Duluth

Endnotes

- a. All results are unweighted.
- b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.
- c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean +/- 1.96 * SEM.
- d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.
- e. Degrees of freedom used to compute the t-tests. Values differ from Ns due to whether equal variances were assumed.
- f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance: *p<.05, **p<.01, ***p<.001 (2-tailed).
- g. Cohen's d: The mean difference divided by the pooled standard deviation. Effect size indicates the practical importance of an observed difference. An effect size of .2 is generally considered small, .5 medium, and .8 large.
- h. Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project.
- i. *p<.05, **p<.01, ***p<.001 (z-test comparing participation rates).
- j. Cohen's h: The standardized difference between two proportions. Effect size indicates the practical importance of an observed difference. An effect size of .2 is generally considered small, .5 medium, and .8 large.
- k. Means calculated from ordered response options (e.g., Very Often, Often, Sometimes, Never) assume equal intervals and should be interpreted with caution. Unless otherwise noted, statistical comparisons are two-tailed independent t-tests. Exceptions are the dichotomous high-impact practice items (11a to 11f) which are compared using a z-test.
- 1. Items that make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective and Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.
- m. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook. For items estimating number of papers and hours per week, the values represent actual units using the midpoints of response option ranges and an estimate for unbounded options.
- n. Effect size for independent t-tests uses Cohen's d; z-tests use Cohen's h.
- o. Statistical comparison uses z-test to compare the percentage who responded "Done or in progress."

Key to symbols:

- **Your students' average** was significantly higher (p < .05) with an effect size at least .3 in magnitude.
- Δ Your students' average was significantly higher (p < .05) with an effect size less than .3 in magnitude.
- Vour 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.