
University of Minnesota Duluth

NSSE 2016 Major Field Report, Part II

Comparisons to Other Institutions

Sciences Math

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

The Major Field Report group 'Sciences Math' includes the following majors: Biochemistry or biophysics; Biology (general); Biomedical science; Cell and molecular biology; Chemistry; Computer information systems; Computer science; Earth science (including geology); Environmental science/studies; Information technology; Marine science; Mathematics; Other agriculture and natural resources; Other biological sciences; Other computer science and technology; Pharmacy; Physics; Statistics.

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.

About Your Major Field Report, Part II

NSSE data serve to identify institutional strengths and weaknesses in reference to selected comparison institutions, yet institution-level 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: Sciences Math.

NSSE results included in MFR, Part II

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

Related-Major Groups

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 groups. Institutions choosing not to customize their related-major groups receive NSSE's ten default groups. 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. Keep in mind that majors are student-reported. First-year students may report *intended* majors that have not yet been *declared*. Also, much of the first-year experience may take place outside of the major field. For these reasons, first-year results should be interpreted with caution.

Technical Requirements

Related-major groups 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 group 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. 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 <i>High-Impact Practices</i> 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.

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Overview of Engagement Indicators: Sciences Math

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.
- △ **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.
- ▼ **Your students' average** was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

Theme	Engagement Indicator	First-Year Students in Sciences Math			Seniors in Sciences Math		
		Your first-year students compared with UMD Peers	Your first-year students compared with Competitors	Your first-year students compared with NSSE Carnegie	Your seniors compared with UMD Peers	Your seniors compared with Competitors	Your seniors compared with NSSE Carnegie
Academic Challenge	Higher-Order Learning	--	--	--	--	▽	--
	Reflective & Integrative Learning	--	--	▽	--	--	--
	Learning Strategies	▽	▼	▽	--	▼	▼
	Quantitative Reasoning	--	--	--	--	--	--
Learning with Peers	Collaborative Learning	△	--	▲	--	▽	--
	Discussions with Diverse Others	▽	▽	--	▽	▼	▽
Experiences with Faculty	Student-Faculty Interaction	▽	▼	▽	--	▼	▽
	Effective Teaching Practices	▽	--	▽	--	--	--
Campus Environment	Quality of Interactions	--	--	--	--	--	--
	Supportive Environment	▽	--	--	--	--	--

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Sciences Math

University of Minnesota Duluth

First-year students^a in Sciences Math

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
UMD (N = 153)	37.3	13.2	1.07	15	30	40	45	60				
UMD Peers	39.5	12.8	.68	20	30	40	50	60	505	-2.2		-.172
Competitors	38.3	13.7	1.11	15	28	40	50	60	303	-1.0		-.072
NSSE Carnegie	38.7	12.8	.53	20	30	40	45	60	733	-1.3		-.103
Reflective & Integrative Learning												
UMD (N = 155)	32.7	10.5	.85	17	26	31	40	51				
UMD Peers	34.4	12.3	.64	14	26	34	40	57	515	-1.7		-.144
Competitors	34.0	12.7	1.00	11	26	34	40	54	314	-1.3		-.113
NSSE Carnegie	34.6	12.7	.52	14	26	34	43	60	281	-2.0	*	-.159
Learning Strategies												
UMD (N = 148)	35.9	13.4	1.10	13	27	40	47	60				
UMD Peers	39.6	13.7	.73	20	27	40	53	60	502	-3.7	**	-.273
Competitors	40.1	14.1	1.13	20	27	40	53	60	302	-4.3	**	-.311
NSSE Carnegie	38.8	13.6	.56	20	27	40	47	60	730	-3.0	*	-.220
Quantitative Reasoning												
UMD (N = 156)	31.1	13.8	1.10	7	20	27	40	60				
UMD Peers	28.5	14.5	.76	7	20	27	40	53	516	2.7		.186
Competitors	30.3	15.3	1.21	3	20	27	40	60	314	.9		.059
NSSE Carnegie	29.0	15.2	.62	7	20	27	40	60	749	2.1		.144
Learning with Peers												
Collaborative Learning												
UMD (N = 154)	37.7	13.3	1.07	15	25	40	45	60				
UMD Peers	34.0	13.4	.71	15	25	35	45	60	510	3.7	**	.276
Competitors	34.7	14.7	1.17	10	25	35	45	60	309	3.0		.212
NSSE Carnegie	32.2	14.4	.60	10	20	30	40	60	738	5.5	***	.389
Discussions with Diverse Others												
UMD (N = 154)	37.8	13.9	1.12	15	30	40	50	60				
UMD Peers	41.8	14.1	.74	20	35	40	55	60	511	-4.0	**	-.284
Competitors	41.3	15.3	1.21	20	30	40	55	60	311	-3.5	*	-.239
NSSE Carnegie	39.2	15.3	.63	15	30	40	50	60	744	-1.4		-.092

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Sciences Math

University of Minnesota Duluth

First-year students^a in Sciences Math

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UMD (N = 153)	16.8	12.9	1.05	0	5	15	25	45				
UMD Peers	20.4	14.0	.73	0	10	20	30	45	513	-3.6	**	-.265
Competitors	21.5	15.2	1.22	0	10	20	30	45	299	-4.8	**	-.339
NSSE Carnegie	20.2	14.2	.58	0	10	20	30	45	744	-3.4	**	-.243
Effective Teaching Practices												
UMD (N = 155)	36.5	11.0	.88	20	28	36	44	56				
UMD Peers	38.7	12.6	.66	16	28	40	48	60	332	-2.2	*	-.179
Competitors	37.8	12.8	1.02	16	28	40	48	60	312	-1.3		-.106
NSSE Carnegie	39.2	12.6	.51	20	32	40	48	60	268	-2.6	**	-.216
Campus Environment												
Quality of Interactions												
UMD (N = 150)	41.2	9.8	.80	26	36	42	50	56				
UMD Peers	42.3	10.8	.57	22	36	43	50	60	504	-1.0		-.099
Competitors	40.7	12.5	1.01	18	34	42	48	60	287	.6		.049
NSSE Carnegie	43.0	11.3	.47	22	36	44	50	60	719	-1.7		-.157
Supportive Environment												
UMD (N = 154)	35.2	11.0	.89	18	28	35	43	55				
UMD Peers	38.1	12.1	.64	18	30	40	45	60	514	-2.9	*	-.246
Competitors	37.1	12.7	1.01	15	30	38	45	60	309	-2.0		-.166
NSSE Carnegie	36.7	13.1	.54	18	28	38	45	60	276	-1.5		-.118

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Academic Challenge												
Higher-Order Learning												
UMD (N = 147)	36.7	13.8	1.14	15	30	35	45	60				
UMD Peers	36.2	13.5	.71	15	25	35	45	60	505	.6		.041
Competitors	40.5	14.2	.94	20	30	40	55	60	372	-3.8	*	-.269
NSSE Carnegie	38.5	14.6	.49	15	30	40	50	60	1,018	-1.7		-.120
Reflective & Integrative Learning												
UMD (N = 148)	34.6	11.9	.98	17	26	34	43	54				
UMD Peers	34.3	12.3	.64	14	26	34	43	54	512	.3		.023
Competitors	36.1	12.4	.81	14	26	36	46	60	382	-1.6		-.128
NSSE Carnegie	35.0	12.7	.43	14	26	34	43	60	1,034	-.4		-.031
Learning Strategies												
UMD (N = 146)	34.6	14.2	1.17	13	27	33	47	60				
UMD Peers	36.9	13.7	.72	13	27	33	47	60	507	-2.3		-.169
Competitors	39.5	15.0	.99	20	27	40	53	60	375	-4.9	**	-.333
NSSE Carnegie	39.5	15.0	.51	13	27	40	53	60	1,026	-5.0	***	-.332
Quantitative Reasoning												
UMD (N = 149)	34.9	15.8	1.29	13	27	33	47	60				
UMD Peers	33.3	16.4	.85	7	20	33	47	60	514	1.6		.096
Competitors	36.8	16.9	1.10	13	20	33	53	60	384	-1.9		-.118
NSSE Carnegie	33.5	16.7	.56	7	20	33	47	60	1,038	1.4		.082
Learning with Peers												
Collaborative Learning												
UMD (N = 148)	33.7	13.9	1.15	10	25	35	40	60				
UMD Peers	32.9	14.2	.75	10	20	30	40	60	505	.8		.059
Competitors	37.6	14.5	.95	15	25	40	50	60	380	-3.9	*	-.272
NSSE Carnegie	32.8	15.2	.51	5	20	30	45	60	211	1.0		.064
Discussions with Diverse Others												
UMD (N = 149)	35.9	14.5	1.19	15	25	35	45	60				
UMD Peers	40.3	16.1	.84	10	30	40	55	60	511	-4.4	**	-.278
Competitors	40.7	15.1	.98	20	30	40	55	60	384	-4.8	**	-.324
NSSE Carnegie	39.9	16.9	.57	10	25	40	60	60	222	-3.9	**	-.238

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Engagement Indicators: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

	Mean statistics			Percentile ^d scores					Comparison results			
	Mean	SD ^b	SEM ^c	5th	25th	50th	75th	95th	Deg. of freedom ^e	Mean diff.	Sig. ^f	Effect size ^g
Experiences with Faculty												
Student-Faculty Interaction												
UMD (N = 146)	22.6	13.4	1.11	5	15	20	30	45				
UMD Peers	24.9	17.0	.90	5	10	20	35	60	338	-2.3		-.142
Competitors	28.6	17.4	1.15	5	15	25	40	60	361	-5.9	***	-.372
NSSE Carnegie	25.5	17.6	.59	0	10	25	40	60	237	-2.9	*	-.170
Effective Teaching Practices												
UMD (N = 149)	38.3	11.8	.97	16	32	40	48	56				
UMD Peers	39.4	12.4	.65	20	32	40	48	60	514	-1.1		-.087
Competitors	40.7	12.6	.82	20	32	40	48	60	385	-2.4		-.196
NSSE Carnegie	39.8	13.8	.46	16	32	40	52	60	221	-1.5		-.111
Campus Environment												
Quality of Interactions												
UMD (N = 146)	42.4	10.3	.85	26	38	42	50	60				
UMD Peers	40.9	10.4	.56	22	34	40	48	58	494	1.5		.144
Competitors	43.3	10.8	.70	24	38	45	51	60	380	-.9		-.089
NSSE Carnegie	42.8	11.2	.39	22	36	44	50	60	987	-.4		-.036
Supportive Environment												
UMD (N = 149)	33.3	12.4	1.02	13	25	33	40	58				
UMD Peers	31.5	13.0	.68	10	23	33	40	55	515	1.8		.138
Competitors	32.3	14.7	.96	8	21	33	41	60	352	1.0		.075
NSSE Carnegie	31.7	14.5	.49	8	23	31	40	60	222	1.6		.110

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

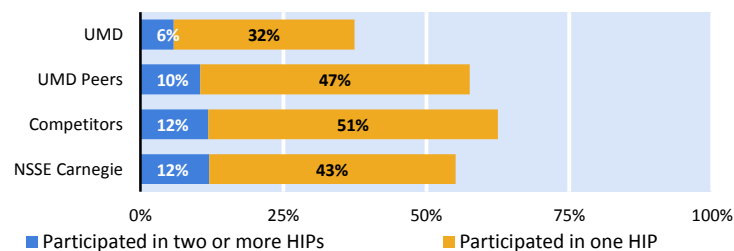
High-Impact Practices: Sciences Math

University of Minnesota Duluth

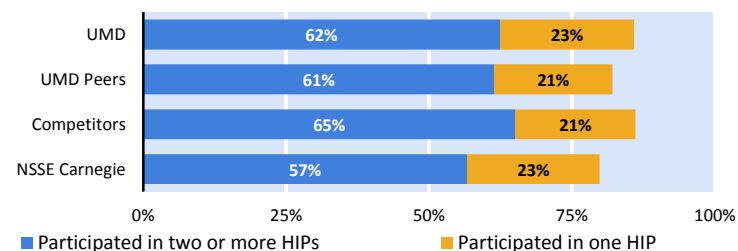
Overall HIP Participation^a

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.

First-Year Students in Sciences Math



Seniors in Sciences Math



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 Peers		Competitors		NSSE Carnegie	
<i>First-Year Students in Sciences Math</i>	%		% ⁱ	Effect size ^j	% ⁱ	Effect size ^j	% ⁱ	Effect size ^j
11c. Learning community	7		17 **	-.30	13	-.20	14 *	-.23
12. Service-learning	34		47 **	-.28	59 ***	-.51	48 **	-.28
11e. Research with faculty	3		5	-.14	6	-.16	8 *	-.24
Participated in at least one	37		58 ***	-.41	63 ***	-.51	55 ***	-.36
Participated in two or more	6		10	-.17	12	-.22	12 *	-.22
<i>Seniors in Sciences Math</i>	%		% ⁱ	Effect size ^j	% ⁱ	Effect size ^j	% ⁱ	Effect size ^j
11c. Learning community	14		20	-.16	19	-.13	18	-.09
12. Service-learning	56		46 *	.21	55	.01	45 *	.21
11e. Research with faculty	42		38	.08	49	-.14	35	.14
11a. Internship or field exp.	45		52	-.14	46	-.03	42	.07
11d. Study abroad	17		16	.01	13	.12	10 *	.21
11f. Culminating senior exp.	41		43	-.06	51 *	-.21	45	-.09
Participated in at least one	86		82	.10	86	-.01	80	.16
Participated in two or more	62		61	.02	65	-.06	57	.12

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD	Your first-year students compared with					
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
1. During the current school year, about how often have you done the following?																		
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	6	4	11	3	6	4	23	4	2.6	2.8 ** ▽	-.28	2.8 * ▽	-.29	2.8 ** ▽	-.24
		2	Sometimes	80	51	133	36	60	38	223	37							
		3	Often	44	28	138	38	51	32	218	36							
		4	Very often	26	17	83	23	43	27	135	23							
		Total	156	100	365	100	160	100	599	100								
b. Prepared two or more drafts of a paper or assignment before turning it in	drafts	1	Never	34	22	56	16	22	14	108	18	2.3	2.4	-.16	2.5	-.19	2.4	-.16
		2	Sometimes	58	37	147	41	60	38	209	35							
		3	Often	48	31	100	28	58	36	182	31							
		4	Very often	16	10	58	16	19	12	95	16							
		Total	156	100	361	100	159	100	594	100								
c. Come to class without completing readings or assignments	unpreparedr (Reverse-coded version of unprepared created by NSSE.)	1	Very often	7	5	13	4	9	6	20	3	3.1	3.1	-.03	3.0	.07	3.1	-.11
		2	Often	20	13	41	11	26	16	62	10							
		3	Sometimes	85	55	213	59	79	50	326	55							
		4	Never	43	28	97	27	44	28	187	31							
		Total	155	100	364	100	158	100	595	100								
d. Attended an art exhibit, play or other arts performance (dance, music, etc.)	attendart	1	Never	71	46	140	38	53	33	219	37	1.8	1.9	-.12	2.0 * ▽	-.28	1.9	-.18
		2	Sometimes	58	37	154	42	66	42	254	42							
		3	Often	19	12	56	15	26	16	86	14							
		4	Very often	7	5	15	4	14	9	39	7							
		Total	155	100	365	100	159	100	598	100								
e. Asked another student to help you understand course material	CLaskhelp	1	Never	2	1	18	5	16	10	53	9	2.9	2.7 *** ▲	.34	2.7 * ▲	.27	2.6 *** ▲	.39
		2	Sometimes	49	32	152	42	56	35	238	40							
		3	Often	60	39	128	35	48	30	194	33							
		4	Very often	44	28	65	18	40	25	108	18							
		Total	155	100	363	100	160	100	593	100								
f. Explained course material to one or more students	CLexplain	1	Never	1	1	8	2	6	4	23	4	3.0	2.8 ** ▲	.31	2.9	.22	2.8 *** ▲	.34
		2	Sometimes	37	24	132	36	45	28	225	38							
		3	Often	73	47	147	40	72	45	221	37							
		4	Very often	45	29	76	21	36	23	129	22							
		Total	156	100	363	100	159	100	598	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD	Your first-year students compared with					
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
g. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	17	11	36	10	21	13	99	17	2.8	2.6 *	.21	2.6 *	.25	2.5 ***	.34
		2	Sometimes	37	24	140	38	55	34	218	37							
		3	Often	57	37	112	31	53	33	166	28							
		4	Very often	44	28	76	21	31	19	114	19							
		Total	155	100	364	100	160	100	597	100								
h. Worked with other students on course projects or assignments	CLproject	1	Never	9	6	18	5	10	6	40	7	2.7	2.7	.04	2.8	-.06	2.6 *	.19
		2	Sometimes	57	37	137	38	48	30	261	44							
		3	Often	56	36	142	39	65	41	205	34							
		4	Very often	34	22	66	18	35	22	89	15							
		Total	156	100	363	100	158	100	595	100								
i. Given a course presentation	present	1	Never	50	32	79	22	23	14	147	25	2.0	2.1	-.16	2.3 **	-.34	2.1	-.13
		2	Sometimes	66	42	180	49	83	52	282	47							
		3	Often	30	19	84	23	37	23	125	21							
		4	Very often	10	6	22	6	16	10	44	7							
		Total	156	100	365	100	159	100	598	100								
2. During the current school year, about how often have you done the following?																		
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	12	8	33	9	9	6	39	7	2.6	2.6	-.02	2.7	-.10	2.7	-.09
		2	Sometimes	60	39	133	37	62	39	224	37							
		3	Often	61	39	137	38	61	38	228	38							
		4	Very often	22	14	60	17	29	18	107	18							
		Total	155	100	363	100	161	100	598	100								
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	17	11	38	10	17	11	60	10	2.4	2.5	-.17	2.5	-.16	2.5	-.16
		2	Sometimes	74	48	142	39	64	40	248	42							
		3	Often	49	32	134	37	57	36	201	34							
		4	Very often	14	9	48	13	22	14	86	14							
		Total	154	100	362	100	160	100	595	100								
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	26	17	46	13	19	12	87	15	2.3	2.5 **	-.28	2.6 **	-.36	2.5 **	-.23
		2	Sometimes	74	48	139	38	56	35	232	39							
		3	Often	45	29	129	36	62	39	197	33							
		4	Very often	10	6	48	13	23	14	81	14							
		Total	155	100	362	100	160	100	597	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with						
												UMD		UMD Peers		Competitors		NSSE Carnegie
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	8	5	18	5	18	11	36	6	2.6	2.7	-.07	2.6	.04	2.7	-.10
		2	Sometimes	58	37	128	35	55	34	199	33							
		3	Often	71	46	165	45	61	38	259	43							
		4	Very often	18	12	53	15	27	17	105	18							
		Total	155	100	364	100	161	100	599	100								
e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	RIperspect	1	Never	5	3	19	5	7	4	27	5	2.8	2.8	-.02	2.8	.07	2.8	-.04
		2	Sometimes	50	32	107	30	57	36	184	31							
		3	Often	69	45	152	42	63	40	239	40							
		4	Very often	31	20	84	23	32	20	146	24							
		Total	155	100	362	100	159	100	596	100								
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	6	4	11	3	8	5	26	4	2.7	2.8	-.14	2.8	-.06	2.8	-.11
		2	Sometimes	59	39	113	31	55	34	195	33							
		3	Often	61	40	165	46	66	41	248	42							
		4	Very often	27	18	71	20	32	20	127	21							
		Total	153	100	360	100	161	100	596	100								
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	1	1	8	2	1	1	10	2	3.1	3.0	.05	3.0	.05	3.1	-.06
		2	Sometimes	33	22	70	19	37	23	106	18							
		3	Often	74	49	189	53	80	50	297	50							
		4	Very often	43	28	93	26	42	26	182	31							
		Total	151	100	360	100	160	100	595	100								
3. During the current school year, about how often have you done the following?																		
a. Talked about career plans with a faculty member	SFcareer	1	Never	43	28	66	18	29	18	106	18	2.0	2.3 *** ▼	-.31	2.3 ** ▼	-.36	2.3 ** ▼	-.29
		2	Sometimes	77	50	169	46	67	42	284	48							
		3	Often	25	16	88	24	46	29	152	26							
		4	Very often	10	6	41	11	17	11	54	9							
		Total	155	100	364	100	159	100	596	100								
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	84	54	190	52	66	42	296	50	1.6	1.7	-.06	1.9 * ▼	-.27	1.7	-.12
		2	Sometimes	49	32	112	31	55	35	189	32							
		3	Often	16	10	46	13	28	18	77	13							
		4	Very often	6	4	16	4	9	6	33	6							
		Total	155	100	364	100	158	100	595	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your first-year students compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	60	38	123	34	50	32	202	34	1.9	2.0	-.12	2.0	-.21	2.0	-.13	
		2	Sometimes	64	41	152	42	60	38	250	42								
		3	Often	26	17	67	18	37	24	103	17								
		4	Very often	6	4	21	6	10	6	41	7								
		Total	156	100	363	100	157	100	596	100									
d. Discussed your academic performance with a faculty member	SFperform	1	Never	54	35	81	22	49	31	163	27	1.9	2.1 *** ▼	-.34	2.0 * ▼	-.22	2.1 ** ▼	-.24	
		2	Sometimes	79	51	178	49	65	41	278	47								
		3	Often	13	8	77	21	30	19	110	19								
		4	Very often	9	6	27	7	13	8	43	7								
		Total	155	100	363	100	157	100	594	100									
4. During the current school year, how much has your coursework emphasized the following?																			
a. Memorizing course material	memorize	1	Very little	1	1	8	2	5	3	15	3	2.9	3.0	-.09	2.9	.02	3.0	-.13	
		2	Some	41	26	77	21	37	23	117	20								
		3	Quite a bit	80	51	180	50	80	51	294	49								
		4	Very much	34	22	96	27	36	23	171	29								
		Total	156	100	361	100	158	100	597	100									
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	3	2	7	2	4	3	15	3	3.1	3.1	.06	3.0	.15	3.0	.16	
		2	Some	25	16	72	20	33	21	125	21								
		3	Quite a bit	75	48	165	45	77	49	293	49								
		4	Very much	52	34	119	33	44	28	163	27								
		Total	155	100	363	100	158	100	596	100									
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	4	3	7	2	7	4	14	2	3.0	3.0	-.07	2.9	.07	3.0	.00	
		2	Some	44	28	85	24	41	26	138	23								
		3	Quite a bit	60	38	159	44	69	43	290	49								
		4	Very much	48	31	110	30	42	26	151	25								
		Total	156	100	361	100	159	100	593	100									
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	13	8	12	3	9	6	24	4	2.6	2.9 *** ▼	-.39	2.9 *** ▼	-.39	2.8 *** ▼	-.32	
		2	Some	61	40	104	29	40	25	179	30								
		3	Quite a bit	59	38	158	44	66	42	266	45								
		4	Very much	21	14	88	24	42	27	127	21								
		Total	154	100	362	100	157	100	596	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your first-year students compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	6	4	11	3	6	4	23	4	2.8	2.9	-.16	2.9	-.11	2.9	-.14	
		2	Some	53	34	102	28	43	28	166	28								
		3	Quite a bit	67	43	156	44	72	46	255	43								
		4	Very much	30	19	89	25	34	22	146	25								
		Total	156	100	358	100	155	100	590	100									
5. During the current school year, to what extent have your instructors done the following?																			
a. Clearly explained course goals and requirements	ETgoals	1	Very little	0	0	3	1	3	2	5	1	3.0	3.1	-.13	3.1	-.15	3.1	-.16	
		2	Some	32	21	77	21	33	21	122	20								
		3	Quite a bit	90	58	166	45	66	42	268	45								
		4	Very much	33	21	119	33	57	36	205	34								
		Total	155	100	365	100	159	100	600	100									
b. Taught course sessions in an organized way	ETorganize	1	Very little	2	1	15	4	4	3	13	2	2.9	3.1 *	-.18	3.0	-.09	3.1 **	-.23	
		2	Some	38	25	68	19	34	22	105	18								
		3	Quite a bit	86	55	162	44	80	51	297	50								
		4	Very much	29	19	120	33	39	25	184	31								
		Total	155	100	365	100	157	100	599	100									
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	2	1	10	3	3	2	12	2	3.1	3.1	.09	3.1	.10	3.1	.05	
		2	Some	21	14	75	21	31	19	117	20								
		3	Quite a bit	84	55	156	43	77	48	264	44								
		4	Very much	47	31	121	33	48	30	203	34								
		Total	154	100	362	100	159	100	596	100									
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	20	13	21	6	16	10	41	7	2.5	2.8 **	-.27	2.6	-.13	2.8 **	-.28	
		2	Some	60	39	125	35	50	32	200	34								
		3	Quite a bit	48	31	130	36	66	42	206	35								
		4	Very much	27	17	84	23	26	16	150	25								
		Total	155	100	360	100	158	100	597	100									
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	21	14	26	7	17	11	45	8	2.5	2.7	-.15	2.6	-.11	2.7 *	-.18	
		2	Some	55	36	135	37	50	32	206	35								
		3	Quite a bit	51	33	133	37	62	39	221	37								
		4	Very much	27	18	70	19	28	18	122	21								
		Total	154	100	364	100	157	100	594	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with						
												UMD		UMD Peers		Competitors		NSSE Carnegie
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
6. During the current school year, about how often have you done the following?																		
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	5	3	25	7	12	8	40	7	2.9	2.7 *	.21	2.8	.13	2.7 *	.20
		2	Sometimes	46	29	122	33	48	30	211	35							
		3	Often	66	42	151	41	63	39	224	37							
		4	Very often	39	25	67	18	37	23	125	21							
		Total	156	100	365	100	160	100	600	100								
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	28	18	79	22	29	18	127	21	2.4	2.2	.17	2.3	.07	2.3	.12
		2	Sometimes	56	36	156	43	67	42	248	42							
		3	Often	54	35	90	25	45	28	148	25							
		4	Very often	18	12	39	11	19	12	74	12							
		Total	156	100	364	100	160	100	597	100								
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	19	12	60	17	21	13	100	17	2.4	2.3	.07	2.4	-.05	2.3	.04
		2	Sometimes	75	48	157	43	68	43	252	42							
		3	Often	46	29	115	32	54	34	184	31							
		4	Very often	16	10	31	9	17	11	62	10							
		Total	156	100	363	100	160	100	598	100								
7. During the current school year, about how many papers, reports, or other writing tasks of the following length have you been assigned? (Include those not yet completed.)																		
a. Up to 5 pages	wrshortnum (Recoded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	0	None	13	8	17	5	6	4	36	6	7.4	6.3	.18	6.6	.13	6.4	.17
		1.5	1-2	28	18	80	22	37	24	126	21							
		4	3-5	47	30	122	34	42	27	184	31							
		8	6-10	29	19	77	21	44	28	133	23							
		13	11-15	16	10	37	10	14	9	62	11							
		18	16-20	10	6	12	3	10	6	27	5							
		23	More than 20	13	8	15	4	4	3	21	4							
		Total	156	100	360	100	157	100	589	100								
b. Between 6 and 10 pages	wrmednum (Recoded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	0	None	64	42	134	38	54	35	222	38	2.5	1.8	.23	2.1	.12	2.0	.16
		1.5	1-2	48	31	144	41	66	43	231	40							
		4	3-5	28	18	54	15	22	14	82	14							
		8	6-10	3	2	17	5	7	5	25	4							
		13	11-15	3	2	5	1	3	2	10	2							
		18	16-20	4	3	0	0	2	1	4	1							
		23	More than 20	3	2	0	0	0	0	3	1							
		Total	153	100	354	100	154	100	577	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD	UMD Peers		Competitors		NSSE Carnegie		UMD	Your first-year students compared with						
												UMD Peers		Competitors		NSSE Carnegie		
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
c. 11 pages or more	wrlongnum	0	None	116	77	285	81	114	77	461	82	.8	.5	.18	.6	.11	.6	.08
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	22	15	50	14	29	19	77	14							
		4	3-5	7	5	10	3	3	2	11	2							
		8	6-10	3	2	5	1	2	1	9	2							
		13	11-15	1	1	1	0	1	1	3	1							
		18	16-20	0	0	0	0	0	0	2	0							
		23	More than 20	1	1	0	0	0	0	2	0							
	Total			150	100	351	100	149	100	565	100							
Estimated number of assigned pages of student writing.	wrpages										54.7	40.0 *	.28	43.9	.18	43.1	.19	
(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)																		
8. During the current school year, about how often have you had discussions with people from the following groups?																		
a. People of a race or ethnicity other than your own	DDrace	1	Never	13	8	11	3	8	5	32	5	2.7	3.2 ***	-.51	3.1 ***	-.38	2.9 *	-.21
		2	Sometimes	58	37	77	21	36	23	193	32							
		3	Often	47	30	121	33	55	34	178	30							
		4	Very often	38	24	155	43	61	38	195	33							
		Total	156	100	364	100	160	100	598	100								
b. People from an economic background other than your own	DDeconomic	1	Never	6	4	12	3	6	4	29	5	2.9	3.1 *	-.20	3.1 *	-.23	3.0	-.07
		2	Sometimes	42	27	73	20	35	22	148	25							
		3	Often	67	44	155	43	56	35	234	39							
		4	Very often	39	25	122	34	63	39	185	31							
		Total	154	100	362	100	160	100	596	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	6	4	15	4	4	3	31	5	3.0	3.1	-.09	3.1	-.13	3.0	-.03
		2	Sometimes	37	24	81	23	40	25	141	24							
		3	Often	64	41	126	35	51	32	211	35							
		4	Very often	48	31	138	38	65	41	213	36							
		Total	155	100	360	100	160	100	596	100								
d. People with political views other than your own	DDpolitical	1	Never	5	3	13	4	7	4	36	6	3.0	3.1	-.14	3.0	-.06	3.0	.00
		2	Sometimes	42	27	73	20	43	27	152	26							
		3	Often	61	39	145	40	49	31	204	34							
		4	Very often	47	30	129	36	60	38	203	34							
		Total	155	100	360	100	159	100	595	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with						
												UMD		UMD Peers		Competitors		NSSE Carnegie
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
9. During the current school year, about how often have you done the following?																		
a. Identified key information from reading assignments	LSreading	1	Never	1	1	8	2	0	0	9	2	3.0	3.1	-.12	3.2 *	-.26	3.0	-.04
		2	Sometimes	38	25	68	19	28	18	140	23							
		3	Often	78	50	175	48	76	48	283	47							
		4	Very often	38	25	112	31	55	35	166	28							
		Total	155	100	363	100	159	100	598	100								
b. Reviewed your notes after class	LSnotes	1	Never	10	6	13	4	6	4	20	3	2.7	3.0 **	-.31	3.0 **	-.32	3.0 ***	-.31
		2	Sometimes	54	35	106	29	42	27	167	28							
		3	Often	62	40	121	33	60	38	218	37							
		4	Very often	28	18	122	34	50	32	188	32							
		Total	154	100	362	100	158	100	593	100								
c. Summarized what you learned in class or from course materials	LSummary	1	Never	14	9	15	4	10	6	29	5	2.7	2.9 *	-.24	2.9 *	-.23	2.8 *	-.20
		2	Sometimes	51	34	106	30	42	27	184	31							
		3	Often	54	36	146	41	63	40	229	39							
		4	Very often	30	20	92	26	42	27	149	25							
		Total	149	100	359	100	157	100	591	100								
10. During the current school year, to what extent have your courses challenged you to do your best work?																		
challenge		1	Not at all	0	0	1	0	2	1	2	0	5.7	5.6	.07	5.4	.19	5.6	.08
		2	0	0	3	1	3	2	7	1								
		3	5	3	9	2	6	4	17	3								
		4	5	3	36	10	15	9	66	11								
		5	59	39	114	31	56	35	180	30								
		6	53	35	123	34	39	25	180	30								
		7	Very much	31	20	77	21	37	23	143	24							
		Total	153	100	363	100	158	100	595	100								
11. Which of the following have you done or do you plan to do before you graduate? ^o																		
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	Have not decided		18	12	39	11	16	10	70	12	6%	9%	-.08	8%	-.04	6%	.01
		Do not plan to do		7	5	10	3	4	3	28	5							
		Plan to do		119	77	282	78	127	80	463	77							
		Done or in progress		10	6	31	9	12	8	37	6							
		Total		154	100	362	100	159	100	598	100							
		(Means indicate the percentage who responded "Done or in progress.")																

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

			Frequency Distributions								Statistical Comparisons ^k					
											Your first-year students compared with					
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD	UMD Peers		Competitors	NSSE Carnegie	
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ
b. Hold a formal leadership role in a student organization or group	leader (Means indicate the percentage who responded "Done or in progress.")		Have not decided	39	25	87	24	50	32	156	26	10%	12%	-.04	13%	-.08
			Do not plan to do	34	22	92	25	31	20	154	26					
			Plan to do	66	43	141	39	55	35	212	35					
			Done or in progress	16	10	42	12	20	13	76	13					
			Total	155	100	362	100	156	100	598	100					
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom (Means indicate the percentage who responded "Done or in progress.")		Have not decided	48	31	117	33	41	26	210	35	7%	17% ** ▼	-.30	13%	-.20
			Do not plan to do	54	35	107	30	41	26	172	29					
			Plan to do	42	27	76	21	56	35	128	22					
			Done or in progress	11	7	60	17	21	13	84	14					
			Total	155	100	360	100	159	100	594	100					
d. Participate in a study abroad program	abroad (Means indicate the percentage who responded "Done or in progress.")		Have not decided	39	25	103	29	42	26	189	32	2%	2%	.00	5%	-.17
			Do not plan to do	46	30	97	27	46	29	204	34					
			Plan to do	66	43	153	43	63	40	191	32					
			Done or in progress	3	2	7	2	8	5	12	2					
			Total	154	100	360	100	159	100	596	100					
e. Work with a faculty member on a research project	research (Means indicate the percentage who responded "Done or in progress.")		Have not decided	50	32	111	31	44	28	198	34	3%	5%	-.14	6%	-.16
			Do not plan to do	18	12	51	14	23	15	91	15					
			Plan to do	82	53	177	49	82	52	257	43					
			Done or in progress	4	3	19	5	9	6	45	8					
			Total	154	100	358	100	158	100	591	100					
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone (Means indicate the percentage who responded "Done or in progress.")		Have not decided	66	43	117	33	46	29	195	33	2%	2%	.02	3%	-.04
			Do not plan to do	12	8	22	6	4	3	41	7					
			Plan to do	73	47	213	59	105	66	341	57					
			Done or in progress	3	2	6	2	4	3	18	3					
			Total	154	100	358	100	159	100	595	100					

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

	servcourse	1	None	102	66	191	53	65	41	311	52	1.4	1.5	-.15	1.7 ** ▼	-.34	1.5	-.17
		2	Some	40	26	151	42	82	52	245	41							
		3	Most	9	6	19	5	11	7	35	6							
		4	All	3	2	1	0	0	0	3	1							
		Total		154	100	362	100	158	100	594	100							

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with						
												UMD	UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
13. Indicate the quality of your interactions with the following people at your institution.																		
a. Students	QIstudent	1	Poor	2	1	1	0	4	3	10	2	5.6	5.5	.04	5.5	.06	5.5	.05
		2	3	2	6	2	2	1	9	2								
		3	5	3	18	5	7	4	25	4								
		4	10	6	42	12	18	11	66	11								
		5	41	26	96	26	40	25	155	26								
		6	63	41	110	30	45	28	174	29								
		7	Excellent	31	20	89	25	43	27	152	26							
		—	Not applicable	0	0	1	0	1	1	3	1							
		Total	155	100	363	100	160	100	594	100								
b. Academic advisors	QIadvisor	1	Poor	5	3	3	1	4	3	14	2	4.9	5.3 *	-.24	5.0	-.07	5.3 **	-.25
		2	9	6	20	5	11	7	26	4								
		3	12	8	31	9	12	8	36	6								
		4	27	17	54	15	28	18	93	16								
		5	41	26	65	18	31	19	102	17								
		6	38	25	96	26	33	21	160	27								
		7	Excellent	22	14	93	26	35	22	155	26							
		—	Not applicable	1	1	2	1	5	3	8	1							
		Total	155	100	364	100	159	100	594	100								
c. Faculty	QIfaculty	1	Poor	1	1	3	1	2	1	8	1	5.1	5.3	-.12	5.1	.00	5.4	-.17
		2	5	3	10	3	6	4	18	3								
		3	10	6	18	5	16	10	28	5								
		4	27	17	53	15	18	11	73	12								
		5	41	26	99	27	46	29	149	25								
		6	51	33	117	32	41	26	192	32								
		7	Excellent	19	12	61	17	29	18	123	21							
		—	Not applicable	1	1	1	0	2	1	3	1							
		Total	155	100	362	100	160	100	594	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your first-year students compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Student services staff (career services, student activities, housing, etc.)	Qlstaff	1	Poor	2	1	9	2	8	5	20	3	5.1	5.1	.04	4.9	.12	5.2	-.03	
		2		4	3	17	5	8	5	17	3								
		3		14	9	22	6	11	7	36	6								
		4		25	16	54	15	16	10	73	12								
		5		37	24	81	22	44	28	120	20								
		6		40	26	91	25	32	20	135	23								
		7	Excellent	26	17	58	16	27	17	116	20								
		—	Not applicable	8	5	29	8	12	8	76	13								
		Total		156	100	361	100	158	100	593	100								
e. Other administrative staff and offices (registrar, financial aid, etc.)	Qladmin	1	Poor	3	2	11	3	11	7	21	4	4.9	4.9	-.04	4.8	.05	5.2	-.18	
		2		6	4	18	5	7	4	18	3								
		3		10	6	31	9	12	8	41	7								
		4		34	22	47	13	25	16	78	13								
		5		37	24	89	25	35	22	122	20								
		6		35	22	74	20	33	21	145	24								
		7	Excellent	17	11	58	16	27	17	123	21								
		—	Not applicable	14	9	35	10	9	6	48	8								
		Total		156	100	363	100	159	100	596	100								
14. How much does your institution emphasize the following?																			
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	1	1	4	1	2	1	4	1	3.2	3.2	.00	3.2	.02	3.2	.02	
		2	Some	21	14	50	14	20	13	82	14								
		3	Quite a bit	71	46	161	44	75	48	279	47								
		4	Very much	61	40	147	41	60	38	228	38								
			Total	154	100	362	100	157	100	593	100								
b. Providing support to help students succeed academically	SEacademic	1	Very little	1	1	7	2	4	3	15	3	3.0	3.2 *	-.23	3.1	-.10	3.1	-.13	
		2	Some	33	22	53	15	28	18	101	17								
		3	Quite a bit	78	51	161	44	72	46	262	45								
		4	Very much	40	26	141	39	53	34	210	36								
			Total	152	100	362	100	157	100	588	100								
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	6	4	13	4	5	3	23	4	3.1	3.3 **	-.27	3.2	-.12	3.2 *	-.20	
		2	Some	34	22	40	11	23	15	79	13								
		3	Quite a bit	60	39	146	40	71	46	235	40								
		4	Very much	54	35	163	45	57	37	254	43								
			Total	154	100	362	100	156	100	591	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your first-year students compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	16	10	27	7	23	15	66	11	2.7	2.8 *	-0.19	2.7	.00	2.7	-0.02	
		2	Some	49	32	101	28	40	25	182	31								
		3	Quite a bit	59	38	135	37	60	38	214	36								
		4	Very much	30	19	99	27	34	22	131	22								
		Total	154	100	362	100	157	100	593	100									
e. Providing opportunities to be involved socially	SEsocial	1	Very little	2	1	18	5	7	4	25	4	3.0	3.0	.03	3.1	-0.03	3.0	.05	
		2	Some	32	21	85	23	33	21	143	24								
		3	Quite a bit	79	52	137	38	62	39	241	41								
		4	Very much	40	26	122	34	55	35	183	31								
		Total	153	100	362	100	157	100	592	100									
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	5	3	15	4	4	3	33	6	3.0	3.0	.00	3.0	-0.01	2.9	.09	
		2	Some	29	19	73	20	38	24	140	24								
		3	Quite a bit	80	52	169	47	66	42	248	42								
		4	Very much	40	26	104	29	48	31	167	28								
		Total	154	100	361	100	156	100	588	100									
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	30	20	69	19	31	20	131	22	2.2	2.3	-0.16	2.4	-0.20	2.3	-0.14	
		2	Some	76	50	145	40	57	36	224	38								
		3	Quite a bit	34	22	107	30	52	33	158	27								
		4	Very much	12	8	40	11	18	11	79	13								
		Total	152	100	361	100	158	100	592	100									
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	8	5	20	6	9	6	39	7	2.7	2.9 *	-0.24	2.9 *	-0.23	2.8	-0.14	
		2	Some	52	34	93	26	41	26	166	28								
		3	Quite a bit	70	45	143	40	62	39	241	41								
		4	Very much	24	16	105	29	45	29	145	25								
		Total	154	100	361	100	157	100	591	100									
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	16	11	28	8	19	12	74	13	2.4	2.6 ***	-0.32	2.6 *	-0.24	2.6 *	-0.21	
		2	Some	78	51	135	38	57	36	215	36								
		3	Quite a bit	43	28	133	37	53	34	198	34								
		4	Very much	15	10	64	18	29	18	104	18								
		Total	152	100	360	100	158	100	591	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD	UMD Peers		Competitors		NSSE Carnegie		UMD	Your first-year students compared with						
												UMD Peers		Competitors		NSSE Carnegie		
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
15. About how many hours do you spend in a typical 7-day week doing the following?																		
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmpprephrs	0	0 hrs	0	0	1	0	4	3	2	0	17.7	14.8 *** ▲	.38	15.0 ** ▲	.32	14.4 *** ▲	.40
	(Recoded version of tmpprep created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	8	5	34	9	15	9	73	12							
	8	6-10 hrs	25	16	79	22	35	22	149	25								
	13	11-15 hrs	32	21	95	26	38	24	126	21								
	18	16-20 hrs	34	22	79	22	28	18	117	20								
	23	21-25 hrs	28	18	41	11	18	11	61	10								
	28	26-30 hrs	15	10	21	6	12	8	41	7								
	33	More than 30 hrs	13	8	14	4	10	6	27	5								
	Total	155	100	364	100	160	100	596	100									
b. Participating in co- curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs	0	0 hrs	27	18	113	32	52	33	211	36	6.4	4.9 * △	.24	4.6 * △	.29	4.9 ** △	.24
	(Recoded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	64	42	136	38	59	37	198	34							
	8	6-10 hrs	35	23	60	17	30	19	90	15								
	13	11-15 hrs	13	8	21	6	9	6	43	7								
	18	16-20 hrs	5	3	17	5	5	3	30	5								
	23	21-25 hrs	7	5	6	2	5	3	10	2								
	28	26-30 hrs	2	1	1	0	0	0	3	1								
	33	More than 30 hrs	1	1	3	1	0	0	4	1								
	Total	154	100	357	100	160	100	589	100									
c. Working for pay on campus	tmworkonhrs	0	0 hrs	121	79	289	80	112	70	466	78	2.5	2.0	.09	3.0	- .10	2.3	.04
	(Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	4	3	18	5	6	4	30	5							
	8	6-10 hrs	16	10	27	7	24	15	45	8								
	13	11-15 hrs	7	5	14	4	10	6	27	5								
	18	16-20 hrs	1	1	10	3	8	5	22	4								
	23	21-25 hrs	2	1	2	1	0	0	2	0								
	28	26-30 hrs	2	1	1	0	0	0	3	1								
	33	More than 30 hrs	1	1	1	0	0	0	1	0								
	Total	154	100	362	100	160	100	596	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your first-year students compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	127	82	268	75	109	69	357	61	2.5	3.8	-.17	3.8	-.20	6.7 ***	-44	
	(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	5	3	13	4	11	7	34	6								
	8	6-10 hrs	8	5	14	4	6	4	26	4									
	13	11-15 hrs	1	1	20	6	14	9	46	8									
	18	16-20 hrs	9	6	19	5	12	8	46	8									
	23	21-25 hrs	2	1	9	3	3	2	32	5									
	28	26-30 hrs	2	1	7	2	2	1	17	3									
	33	More than 30 hrs	1	1	6	2	0	0	29	5									
	Total		155	100	356	100	157	100	587	100									
Estimated number of hours working for pay	tmworkhrs											5.0	5.7	-.07	6.8	-.20	8.8 ***	-36	
(Continuous variable created by NSSE)																			
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	92	60	199	56	86	54	342	58	2.6	2.2	.10	2.2	.09	2.2	.09	
	(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	41	27	117	33	56	35	187	32								
	8	6-10 hrs	11	7	26	7	8	5	33	6									
	13	11-15 hrs	5	3	10	3	6	4	16	3									
	18	16-20 hrs	2	1	5	1	2	1	9	2									
	23	21-25 hrs	0	0	0	0	0	0	5	1									
	28	26-30 hrs	2	1	0	0	0	0	0	0									
	33	More than 30 hrs	1	1	0	0	0	0	0	0									
	Total		154	100	357	100	158	100	592	100									
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	1	1	2	1	1	1	8	1	15.3	13.0 **	.27	13.2 *	.24	12.9 **	.28	
	(Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	18	12	64	18	31	20	121	20								
	8	6-10 hrs	27	18	98	27	41	26	150	25									
	13	11-15 hrs	46	30	81	23	28	18	123	21									
	18	16-20 hrs	25	16	52	14	28	18	87	15									
	23	21-25 hrs	11	7	28	8	10	6	42	7									
	28	26-30 hrs	14	9	14	4	7	4	22	4									
	33	More than 30 hrs	12	8	21	6	11	7	41	7									
	Total		154	100	360	100	157	100	594	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with							
												UMD	UMD Peers	Competitors	NSSE Carnegie	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ	Effect size ⁿ
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	135	88	302	83	121	76	450	76	1.2	1.4	-.03	2.0	-.16	2.5 **	▽	
	(Recoded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	9	6	33	9	19	12	69	12								
	8	6-10 hrs	4	3	12	3	7	4	30	5									
	13	11-15 hrs	1	1	6	2	6	4	14	2									
	18	16-20 hrs	2	1	5	1	4	3	9	2									
	23	21-25 hrs	1	1	2	1	0	0	7	1									
	28	26-30 hrs	1	1	1	0	1	1	3	1									
	33	More than 30 hrs	1	1	2	1	1	1	13	2									
	Total		154	100	363	100	159	100	595	100									
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	92	59	127	35	54	34	163	27	2.5	3.8 **	▽	-0.25	4.3 **	-0.34	4.2 ***	▽
	(Recoded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	43	28	164	45	68	43	295	49								
	8	6-10 hrs	14	9	41	11	19	12	85	14									
	13	11-15 hrs	1	1	18	5	8	5	34	6									
	18	16-20 hrs	2	1	8	2	7	4	9	2									
	23	21-25 hrs	0	0	0	0	2	1	2	0									
	28	26-30 hrs	1	1	2	1	1	1	5	1									
	33	More than 30 hrs	2	1	4	1	1	1	4	1									
	Total		155	100	364	100	160	100	597	100									
16. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?																			
reading	1	Very little	20	13	54	15	15	10	90	15	2.7	2.6	.08	2.9	-.13	2.5 *	△		
	(Revised for 2014. Comparison data are limited to NSSE 2014 participating institutions.)	2	Some	51	33	122	34	46	29	222								38	
	3	About half	44	28	107	30	53	34	179	30									
	4	Most	35	22	61	17	33	21	76	13									
	5	Almost all	6	4	18	5	10	6	25	4									
	Total		156	100	362	100	157	100	592	100									
tmreadinghrs												8.1	6.4 **	.30	7.3	.13	5.9 ***	△	
(Continuous variable created by NSSE. Calculated as a proportion of tmprphrs based on reading, where Very little=0.10; Some=0.25; About half=0.50; Most=0.75; Almost all=0.90)																			

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with						
												UMD	UMD Peers	Competitors	NSSE Carnegie			
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
	tmreadinghrscol	1	0 hrs	0	0	1	0	4	3	2	0							
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	64	41	187	52	67	43	334	57							
		3	More than 5, up to 10 hrs	45	29	108	30	53	34	147	25							
		4	More than 10, up to 15 hrs	20	13	36	10	13	8	71	12							
		5	More than 15, up to 20 hrs	14	9	17	5	12	8	20	3							
		6	More than 20, up to 25 hrs	11	7	8	2	5	3	9	2							
		7	More than 25 hrs	1	1	4	1	3	2	7	1							
		Total	155	100	361	100	157	100	590	100								
17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?																		
a. Writing clearly and effectively	pgwrite	1	Very little	22	14	38	10	18	11	59	10	2.5	2.7	-.18	2.7 *	-.23	2.7 **	-.24
		2	Some	50	32	99	27	47	29	169	28							
		3	Quite a bit	64	41	172	47	56	35	246	41							
		4	Very much	19	12	56	15	39	24	124	21							
		Total	155	100	365	100	160	100	598	100								
b. Speaking clearly and effectively	pgspeak	1	Very little	29	19	56	15	23	14	76	13	2.3	2.5 *	-.20	2.7 **	-.37	2.6 **	-.29
		2	Some	60	39	121	33	42	26	191	32							
		3	Quite a bit	50	32	130	36	58	36	222	37							
		4	Very much	15	10	56	15	37	23	106	18							
		Total	154	100	363	100	160	100	595	100								
c. Thinking critically and analytically	pgthink	1	Very little	11	7	9	2	9	6	23	4	3.0	3.1	-.11	3.0	-.04	3.0	-.06
		2	Some	29	19	67	18	34	22	120	20							
		3	Quite a bit	66	43	174	48	59	38	266	45							
		4	Very much	49	32	114	31	55	35	188	31							
		Total	155	100	364	100	157	100	597	100								
d. Analyzing numerical and statistical information	pganalyze	1	Very little	12	8	30	8	17	11	43	7	3.0	2.8 *	.19	2.7 *	.24	2.8 *	.19
		2	Some	33	21	106	29	48	30	180	30							
		3	Quite a bit	57	37	135	37	52	33	225	38							
		4	Very much	53	34	93	26	42	26	148	25							
		Total	155	100	364	100	159	100	596	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your first-year students compared with						
												UMD	UMD Peers	Competitors	NSSE Carnegie			
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
e. Acquiring job- or work- related knowledge and skills	pgwork	1	Very little	30	19	72	20	24	15	90	15	2.3	2.4	-.08	2.5	-.18	2.5 *	▽
		2	Some	69	44	131	36	60	38	225	38							
		3	Quite a bit	36	23	112	31	52	33	193	32							
		4	Very much	21	13	50	14	24	15	90	15							
		Total	156	100	365	100	160	100	598	100								
f. Working effectively with others	pgothers	1	Very little	15	10	25	7	9	6	51	9	2.6	2.8	-.17	2.8	-.20	2.7	-.12
		2	Some	48	31	103	28	54	34	169	28							
		3	Quite a bit	69	45	162	44	51	32	253	43							
		4	Very much	23	15	75	21	44	28	120	20							
		Total	155	100	365	100	158	100	593	100								
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	24	15	54	15	24	15	89	15	2.5	2.6	-.06	2.7	-.14	2.6	-.04
		2	Some	50	32	114	31	45	28	198	33							
		3	Quite a bit	59	38	131	36	52	33	197	33							
		4	Very much	23	15	66	18	38	24	113	19							
		Total	156	100	365	100	159	100	597	100								
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	22	14	38	10	23	14	75	13	2.5	2.7 *	-.24	2.7	-.16	2.6	-.13
		2	Some	60	39	114	31	47	29	201	34							
		3	Quite a bit	45	29	118	32	50	31	191	32							
		4	Very much	28	18	95	26	40	25	130	22							
		Total	155	100	365	100	160	100	597	100								
i. Solving complex real- world problems	pgprobsolve	1	Very little	21	14	50	14	25	16	81	14	2.5	2.5	.01	2.6	-.05	2.5	-.01
		2	Some	56	36	131	36	49	31	213	36							
		3	Quite a bit	54	35	130	36	55	35	208	35							
		4	Very much	24	15	53	15	30	19	96	16							
		Total	155	100	364	100	159	100	598	100								
j. Being an informed and active citizen	pgcitizen	1	Very little	29	19	60	16	29	18	97	16	2.4	2.5	-.09	2.5	-.15	2.5	-.11
		2	Some	58	37	136	37	53	33	209	35							
		3	Quite a bit	49	32	108	30	44	28	194	33							
		4	Very much	19	12	60	16	34	21	95	16							
		Total	155	100	364	100	160	100	595	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

First-Year Students^a in Sciences Math

First-Year Students ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
Item wording or description	Variable name ⁱ	Values ^m	Response options	UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your first-year students compared with				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
18. How would you evaluate your entire educational experience at this institution?																		
	evalexp	1	Poor	0	0	5	1	2	1	7	1	3.1	3.2	-.04	3.1	.10	3.2	-.04
		2	Fair	19	12	47	13	23	14	74	12							
		3	Good	98	63	199	55	98	61	336	56							
		4	Excellent	39	25	114	31	38	24	181	30							
		Total		156	100	365	100	161	100	598	100							
19. If you could start over again, would you go to the <i>same institution</i> you are now attending?																		
	sameinst	1	Definitely no	3	2	8	2	3	2	12	2	3.1	3.2	-.17	3.1	-.08	3.2 *	▽
		2	Probably no	25	16	41	11	26	16	67	11							
		3	Probably yes	86	55	193	53	80	50	304	51							
		4	Definitely yes	41	26	124	34	52	32	216	36							
		Total		155	100	366	100	161	100	599	100							

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
1. During the current school year, about how often have you done the following?																			
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	3	2	16	4	9	4	29	3	2.8	2.9	-.15	3.0 **	-.33	3.0 ***	▼	
		2	Sometimes	67	45	122	33	63	27	235	26								
		3	Often	42	28	115	31	72	31	307	34								
		4	Very often	37	25	115	31	92	39	322	36								
		Total	149	100	368	100	236	100	893	100									
b. Prepared two or more drafts of a paper or assignment before turning it in	drafts	1	Never	31	21	110	30	42	18	206	23	2.3	2.2	.09	2.5 *	-.23	2.4	-.08	
		2	Sometimes	59	40	130	35	81	34	315	35								
		3	Often	43	29	76	21	67	28	213	24								
		4	Very often	15	10	52	14	47	20	158	18								
		Total	148	100	368	100	237	100	892	100									
c. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1	Very often	18	12	18	5	11	5	49	6	2.8	2.9 *	▼	-.22	2.9 *	▼	3.0 ***	
		2	Often	29	19	63	17	39	17	120	13								
		3	Sometimes	74	50	212	58	137	59	471	53								
		4	Never	28	19	73	20	46	20	249	28								
		Total	149	100	366	100	233	100	889	100									
d. Attended an art exhibit, play or other arts performance (dance, music, etc.)	attendart	1	Never	63	43	165	45	116	49	480	54	1.8	1.7	.12	1.6	.20	1.6 *	▲	
		2	Sometimes	56	38	150	41	95	40	300	34								
		3	Often	24	16	45	12	18	8	74	8								
		4	Very often	5	3	7	2	7	3	38	4								
		Total	148	100	367	100	236	100	892	100									
e. Asked another student to help you understand course material	CLaskhelp	1	Never	17	11	47	13	15	6	130	15	2.6	2.5	.13	2.7	-.18	2.5	.13	
		2	Sometimes	56	38	161	44	93	39	374	42								
		3	Often	50	34	102	28	71	30	238	27								
		4	Very often	26	17	55	15	59	25	147	17								
		Total	149	100	365	100	238	100	889	100									
f. Explained course material to one or more students	CLexplain	1	Never	3	2	9	2	5	2	51	6	2.9	2.9	-.02	3.1 *	▼	2.8	.04	
		2	Sometimes	47	32	122	33	58	25	277	31								
		3	Often	63	43	134	37	91	39	324	36								
		4	Very often	35	24	102	28	82	35	239	27								
		Total	148	100	367	100	236	100	891	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your seniors compared with						
												UMD	UMD Peers	Competitors	NSSE Carnegie			
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
g. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	22	15	69	19	31	13	182	20	2.5	2.4	.12	2.6	-.11	2.5	.08
		2	Sometimes	52	35	138	38	84	35	295	33							
		3	Often	47	32	94	26	59	25	234	26							
		4	Very often	28	19	66	18	63	27	180	20							
		Total	149	100	367	100	237	100	891	100								
h. Worked with other students on course projects or assignments	CLproject	1	Never	9	6	19	5	8	3	63	7	2.8	2.8	-.05	3.1 *** ▼	-.37	2.8	-.04
		2	Sometimes	43	29	127	35	62	26	294	33							
		3	Often	73	49	131	36	73	31	301	34							
		4	Very often	24	16	89	24	94	40	231	26							
		Total	149	100	366	100	237	100	889	100								
i. Given a course presentation	present	1	Never	10	7	31	8	17	7	139	16	2.5	2.5	-.03	2.7	-.20	2.4	.06
		2	Sometimes	70	47	162	44	90	38	352	39							
		3	Often	51	34	123	34	83	35	263	29							
		4	Very often	17	11	51	14	47	20	138	15							
		Total	148	100	367	100	237	100	892	100								
2. During the current school year, about how often have you done the following?																		
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	3	2	14	4	2	1	28	3	3.0	2.9	.14	3.1	-.17	3.0	.02
		2	Sometimes	34	23	102	28	58	24	226	25							
		3	Often	72	49	162	44	86	36	370	42							
		4	Very often	39	26	88	24	92	39	263	30							
		Total	148	100	366	100	238	100	887	100								
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	19	13	37	10	18	8	104	12	2.5	2.6	-.09	2.6	-.10	2.5	-.02
		2	Sometimes	52	35	149	41	105	45	366	41							
		3	Often	62	42	112	31	68	29	263	30							
		4	Very often	16	11	69	19	44	19	153	17							
		Total	149	100	367	100	235	100	886	100								
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	30	20	84	23	51	22	206	23	2.2	2.2	-.01	2.2	.00	2.2	-.01
		2	Sometimes	66	44	149	41	105	44	363	41							
		3	Often	41	28	91	25	56	24	212	24							
		4	Very often	12	8	42	11	25	11	107	12							
		Total	149	100	366	100	237	100	888	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	9	6	30	8	14	6	71	8	2.7	2.7	.04	2.7	-.01	2.7	.01	
		2	Sometimes	53	36	129	35	88	37	307	35								
		3	Often	59	40	144	39	89	38	335	38								
		4	Very often	26	18	63	17	46	19	172	19								
		Total	147	100	366	100	237	100	885	100									
e. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective	Rlperspect	1	Never	4	3	22	6	9	4	55	6	2.8	2.7	.07	2.8	-.03	2.8	-.01	
		2	Sometimes	55	37	118	32	80	34	264	30								
		3	Often	55	37	156	43	90	38	357	40								
		4	Very often	34	23	69	19	57	24	207	23								
		Total	148	100	365	100	236	100	883	100									
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	4	3	12	3	4	2	29	3	2.8	2.8	-.06	2.9	-.19	2.9	-.11	
		2	Sometimes	54	36	119	33	79	33	280	32								
		3	Often	63	42	158	43	84	36	362	41								
		4	Very often	28	19	77	21	69	29	216	24								
		Total	149	100	366	100	236	100	887	100									
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	2	1	5	1	0	0	13	1	3.1	3.1	.05	3.2	-.16	3.1	-.03	
		2	Sometimes	29	20	78	21	42	18	169	19								
		3	Often	69	47	172	47	101	43	398	45								
		4	Very often	48	32	110	30	94	40	306	35								
		Total	148	100	365	100	237	100	886	100									
3. During the current school year, about how often have you done the following?																			
a. Talked about career plans with a faculty member	SFcareer	1	Never	21	14	72	20	26	11	178	20	2.4	2.4	-.06	2.6 **	-.29	2.4	-.07	
		2	Sometimes	75	51	144	40	92	39	324	36								
		3	Often	30	20	71	20	58	25	209	24								
		4	Very often	22	15	76	21	59	25	177	20								
		Total	148	100	363	100	235	100	888	100									
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	47	32	152	42	72	31	355	40	2.1	2.1	-.02	2.3 *	-.20	2.1	-.04	
		2	Sometimes	59	40	91	25	76	32	232	26								
		3	Often	29	20	60	17	40	17	151	17								
		4	Very often	13	9	59	16	47	20	145	16								
		Total	148	100	362	100	235	100	883	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD	UMD Peers		Competitors		NSSE Carnegie		UMD	Your seniors compared with						
					UMD	UMD Peers	Competitors	NSSE Carnegie	UMD	UMD Peers		Competitors	NSSE Carnegie					
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	29	20	76	21	39	17	200	23	2.2	2.3	-.17	2.5 ***	-.37	2.3 *	-.19
		2	Sometimes	77	53	150	41	88	37	334	38							
		3	Often	29	20	87	24	60	26	208	24							
		4	Very often	11	8	50	14	48	20	143	16							
		Total	146	100	363	100	235	100	885	100								
d. Discussed your academic performance with a faculty member	SFperform	1	Never	43	29	96	27	50	21	217	24	2.0	2.2 **	-.25	2.3 ***	-.37	2.3 ***	-.31
		2	Sometimes	75	51	146	40	100	43	350	39							
		3	Often	23	16	73	20	47	20	198	22							
		4	Very often	7	5	46	13	36	15	122	14							
		Total	148	100	361	100	233	100	887	100								
4. During the current school year, how much has your coursework emphasized the following?																		
a. Memorizing course material	memorize	1	Very little	6	4	17	5	10	4	35	4	3.0	3.0	.01	2.9	.08	2.9	.05
		2	Some	35	23	87	24	63	27	244	27							
		3	Quite a bit	62	42	148	40	98	41	344	39							
		4	Very much	46	31	114	31	66	28	268	30							
		Total	149	100	366	100	237	100	891	100								
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	3	2	12	3	6	3	26	3	3.0	3.0	.00	3.2 *	-.24	3.1	-.12
		2	Some	30	20	76	21	34	15	161	18							
		3	Quite a bit	77	52	169	46	100	43	384	43							
		4	Very much	39	26	108	30	94	40	318	36							
		Total	149	100	365	100	234	100	889	100								
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	6	4	19	5	10	4	45	5	3.0	2.9	.12	3.2	-.20	3.0	-.01
		2	Some	33	22	97	27	39	17	191	22							
		3	Quite a bit	65	44	151	41	87	37	358	40							
		4	Very much	45	30	99	27	98	42	292	33							
		Total	149	100	366	100	234	100	886	100								
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	15	10	36	10	14	6	86	10	2.6	2.6	.00	2.8 *	-.23	2.7	-.14
		2	Some	58	39	142	39	83	35	286	32							
		3	Quite a bit	48	33	127	35	77	33	320	36							
		4	Very much	26	18	59	16	60	26	195	22							
		Total	147	100	364	100	234	100	887	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors^a in Sciences Math

				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your seniors compared with						
		UMD										UMD Peers		Competitors		NSSE Carnegie		
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	12	8	20	5	11	5	63	7	2.8	2.7	.03	2.9 *	-.21	2.9	-.11
		2	Some	43	29	128	35	60	26	236	27							
		3	Quite a bit	61	41	143	39	93	40	349	39							
		4	Very much	32	22	73	20	70	30	237	27							
		Total	148	100	364	100	234	100	885	100								
5. During the current school year, to what extent have your instructors done the following?																		
a. Clearly explained course goals and requirements	ETgoals	1	Very little	2	1	2	1	4	2	19	2	3.1	3.2	-.06	3.2	-.14	3.2	-.06
		2	Some	23	15	64	17	26	11	154	17							
		3	Quite a bit	78	52	171	47	120	50	371	41							
		4	Very much	46	31	130	35	88	37	350	39							
		Total	149	100	367	100	238	100	894	100								
b. Taught course sessions in an organized way	ETorganize	1	Very little	4	3	4	1	5	2	26	3	3.0	3.1	-.07	3.1	-.12	3.1	-.10
		2	Some	29	20	72	20	41	17	156	17							
		3	Quite a bit	75	51	185	50	113	48	418	47							
		4	Very much	40	27	107	29	78	33	295	33							
		Total	148	100	368	100	237	100	895	100								
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	3	2	5	1	5	2	27	3	3.2	3.2	.01	3.3	-.11	3.2	.02
		2	Some	20	14	58	16	28	12	158	18							
		3	Quite a bit	70	48	169	46	101	43	340	38							
		4	Very much	54	37	134	37	103	43	368	41							
		Total	147	100	366	100	237	100	893	100								
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	19	13	50	14	24	10	122	14	2.6	2.6	-.04	2.8 *	-.24	2.7	-.11
		2	Some	50	34	123	33	63	26	286	32							
		3	Quite a bit	57	39	122	33	95	40	261	29							
		4	Very much	22	15	73	20	56	24	225	25							
		Total	148	100	368	100	238	100	894	100								
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	10	7	26	7	23	10	69	8	2.7	2.8	-.15	2.8	-.11	2.8 *	-.16
		2	Some	44	30	101	28	64	27	245	28							
		3	Quite a bit	76	51	147	40	89	38	330	37							
		4	Very much	19	13	89	25	61	26	244	27							
		Total	149	100	363	100	237	100	888	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD	UMD Peers		Competitors		NSSE Carnegie		UMD	Your seniors compared with						
					Count	%	Count	%	Count	%		Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
6. During the current school year, about how often have you done the following?																		
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	7	5	15	4	8	3	54	6	3.0	2.9	.14	3.1	-.10	2.9	.09
		2	Sometimes	34	23	117	32	57	24	238	27							
		3	Often	58	39	129	35	76	32	313	35							
		4	Very often	50	34	106	29	97	41	289	32							
		Total	149	100	367	100	238	100	894	100								
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	23	15	59	16	33	14	154	17	2.6	2.5	.06	2.7	-.12	2.5	.05
		2	Sometimes	53	36	142	39	79	33	315	35							
		3	Often	41	28	96	26	58	24	251	28							
		4	Very often	32	21	71	19	67	28	174	19							
		Total	149	100	368	100	237	100	894	100								
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	12	8	42	11	21	9	119	13	2.7	2.6	.05	2.7	-.09	2.6	.08
		2	Sometimes	61	41	134	36	85	36	316	35							
		3	Often	41	28	115	31	65	27	273	31							
		4	Very often	35	23	77	21	67	28	185	21							
		Total	149	100	368	100	238	100	893	100								
7. During the current school year, about how many papers, reports, or other writing tasks of the following length have you been assigned? (Include those not yet completed.)																		
a. Up to 5 pages	wrshortnum (Recoded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	0	None	6	4	33	9	28	12	95	11	8.0	6.5 *	.23	5.6 ***	.38	5.7 ***	.37
		1.5	1-2	32	22	82	23	62	27	242	28							
		4	3-5	35	24	97	27	56	25	234	27							
		8	6-10	29	20	78	22	46	20	139	16							
		13	11-15	17	12	31	9	21	9	77	9							
		18	16-20	13	9	13	4	4	2	30	3							
		23	More than 20	12	8	24	7	11	5	42	5							
		Total	144	100	358	100	228	100	859	100								
b. Between 6 and 10 pages	wrmednum (Recoded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	0	None	47	32	120	34	64	29	284	33	2.7	2.6	.04	3.3	-.12	2.6	.05
		1.5	1-2	52	35	122	34	84	38	321	38							
		4	3-5	27	18	69	19	34	15	143	17							
		8	6-10	14	10	30	8	26	12	70	8							
		13	11-15	5	3	8	2	7	3	19	2							
		18	16-20	1	1	4	1	4	2	10	1							
		23	More than 20	1	1	2	1	4	2	7	1							
		Total	147	100	355	100	223	100	854	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
c. 11 pages or more	wrlongnum	0	None	81	57	204	60	115	52	491	59	1.3	1.2	.06	1.8	-.15	1.3	.02	
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	43	30	104	31	64	29	254	30								
	4	3-5	11	8	17	5	19	9	49	6									
	8	6-10	4	3	10	3	16	7	25	3									
	13	11-15	2	1	2	1	4	2	8	1									
	18	16-20	0	0	1	0	0	0	1	0									
	23	More than 20	1	1	2	1	2	1	7	1									
	Total		142	100	340	100	220	100	835	100									
Estimated number of assigned pages of student writing.	wrpages											66.1	56.5	.13	69.0	-.03	54.8	.15	
(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)																			
8. During the current school year, about how often have you had discussions with people from the following groups?																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	7	5	21	6	8	3	65	7	2.7	3.0 *** ▼	-.36	3.0 *** ▼	-.41	3.0 *** ▼	-.32	
		2	Sometimes	64	43	89	24	66	28	227	25								
		3	Often	47	32	124	34	73	31	256	29								
		4	Very often	31	21	135	37	92	38	346	39								
		Total		149	100	369	100	239	100	894	100								
b. People from an economic background other than your own	DDeconomic	1	Never	6	4	20	5	6	3	46	5	2.8	3.0 ** ▼	-.26	3.1 ** ▼	-.32	3.0 ** ▼	-.24	
		2	Sometimes	51	34	81	22	61	26	223	25								
		3	Often	60	40	140	38	84	35	301	34								
		4	Very often	32	21	126	34	88	37	321	36								
		Total		149	100	367	100	239	100	891	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	8	5	27	7	8	3	74	8	2.8	3.0 * ▼	-.19	3.0 * ▼	-.23	3.0	-.15	
		2	Sometimes	48	32	78	21	63	26	207	23								
		3	Often	52	35	121	33	78	33	263	30								
		4	Very often	41	28	141	38	90	38	346	39								
		Total		149	100	367	100	239	100	890	100								
d. People with political views other than your own	DDpolitical	1	Never	6	4	23	6	11	5	64	7	2.9	3.0	-.14	3.0	-.17	3.0	-.14	
		2	Sometimes	47	32	91	25	59	25	210	24								
		3	Often	58	39	120	33	85	36	283	32								
		4	Very often	38	26	132	36	82	35	330	37								
		Total		149	100	366	100	237	100	887	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD	UMD Peers		Competitors		NSSE Carnegie		UMD	Your seniors compared with						
												UMD Peers		Competitors		NSSE Carnegie		
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
9. During the current school year, about how often have you done the following?																		
a. Identified key information from reading assignments	LSreading	1	Never	5	3	10	3	8	3	23	3	3.1	3.0	.07	3.1	-.03	3.1	-.06
		2	Sometimes	27	18	83	22	44	19	181	20							
		3	Often	65	44	159	43	96	41	337	38							
		4	Very often	51	34	117	32	89	38	352	39							
		Total	148	100	369	100	237	100	893	100								
b. Reviewed your notes after class	LSnotes	1	Never	15	10	28	8	14	6	58	7	2.6	2.7	-.19	2.9 **	-.33	2.9 ***	-.38
		2	Sometimes	57	39	123	34	73	31	246	28							
		3	Often	51	34	128	35	74	31	284	32							
		4	Very often	25	17	87	24	74	31	302	34							
		Total	148	100	366	100	235	100	890	100								
c. Summarized what you learned in class or from course materials	LSummary	1	Never	21	14	25	7	15	6	68	8	2.5	2.7 **	-.26	2.9 ***	-.44	2.9 ***	-.37
		2	Sometimes	53	36	125	34	69	29	258	29							
		3	Often	49	34	135	37	72	31	294	33							
		4	Very often	23	16	81	22	79	34	267	30							
		Total	146	100	366	100	235	100	887	100								
10. During the current school year, to what extent have your courses challenged you to do your best work?																		
challenge		1	Not at all	4	3	1	0	1	0	11	1	5.5	5.5	.01	5.7	-.17	5.6	-.08
		2		1	1	7	2	2	1	19	2							
		3		5	3	12	3	5	2	28	3							
		4		10	7	42	11	18	8	77	9							
		5		48	32	124	34	79	33	248	28							
		6		51	34	102	28	66	28	266	30							
		7	Very much	30	20	81	22	67	28	243	27							
		Total	149	100	369	100	238	100	892	100								
11. Which of the following have you done or do you plan to do before you graduate? ^o																		
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	Have not decided		15	10	29	8	22	9	82	9	45%	52%	-.14	46%	-.03	42%	.07
		Do not plan to do		33	22	65	18	42	18	195	22							
		Plan to do		34	23	83	23	63	27	242	27							
		Done or in progress		67	45	191	52	110	46	371	42							
		Total		149	100	368	100	237	100	890	100							
(Means indicate the percentage who responded "Done or in progress.")																		

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

			Frequency Distributions								Statistical Comparisons ^k					
											Your seniors compared with					
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD	UMD Peers	Competitors	NSSE Carnegie		
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ
b. Hold a formal leadership role in a student organization or group	leader (Means indicate the percentage who responded "Done or in progress.")		Have not decided	14	9	36	10	17	7	88	10	42%	39%	.04	43%	-.02
			Do not plan to do	62	42	170	46	98	41	435	49					
			Plan to do	11	7	17	5	21	9	53	6					
			Done or in progress	62	42	145	39	101	43	315	35					
			Total	149	100	368	100	237	100	891	100					
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom (Means indicate the percentage who responded "Done or in progress.")		Have not decided	20	14	45	12	27	11	117	13	14%	20%	-.16	19%	-.13
			Do not plan to do	92	63	226	62	138	59	552	62					
			Plan to do	14	10	21	6	25	11	63	7					
			Done or in progress	21	14	74	20	45	19	158	18					
			Total	147	100	366	100	235	100	890	100					
d. Participate in a study abroad program	abroad (Means indicate the percentage who responded "Done or in progress.")		Have not decided	12	8	39	11	24	10	105	12	17%	16%	.01	13%	.12
			Do not plan to do	103	70	237	65	166	71	639	72					
			Plan to do	8	5	29	8	15	6	55	6					
			Done or in progress	25	17	60	16	30	13	87	10					
			Total	148	100	365	100	235	100	886	100					
e. Work with a faculty member on a research project	research (Means indicate the percentage who responded "Done or in progress.")		Have not decided	20	14	56	15	26	11	132	15	42%	38%	.08	49%	-.14
			Do not plan to do	49	33	124	34	58	25	293	33					
			Plan to do	16	11	46	13	35	15	150	17					
			Done or in progress	62	42	140	38	114	49	316	35					
			Total	147	100	366	100	233	100	891	100					
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone (Means indicate the percentage who responded "Done or in progress.")		Have not decided	20	14	29	8	22	9	83	9	41%	43%	-.06	51% *	-.21
			Do not plan to do	49	33	94	26	45	19	177	20					
			Plan to do	19	13	84	23	48	20	228	26					
			Done or in progress	60	41	158	43	120	51	400	45					
			Total	148	100	365	100	235	100	888	100					

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

servcourse	1	None	65	44	200	54	106	45	486	55	1.6	1.5 *	.21	1.6	-.02	1.5 *
	2	Some	74	50	157	43	118	50	369	41						
	3	Most	7	5	6	2	8	3	26	3						
	4	All	1	1	4	1	5	2	9	1						
	Total		147	100	367	100	237	100	890	100						

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors^a in
Sciences Math

				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
		UMD Peers												Competitors		NSSE Carnegie			
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
13. Indicate the quality of your interactions with the following people at your institution.																			
a. Students	QIstudent	1	Poor	0	0	4	1	3	1	11	1	5.7	5.5 *	.19	5.7	-.03	5.6	.10	
		2		3	2	4	1	4	2	16	2								
		3		2	1	21	6	7	3	38	4								
		4		15	10	48	13	16	7	94	11								
		5		34	23	94	26	53	22	213	24								
		6		58	39	108	29	82	35	270	30								
		7	Excellent	36	24	89	24	72	30	245	27								
		—	Not applicable	1	1	0	0	0	0	6	1								
		Total		149	100	368	100	237	100	893	100								
b. Academic advisors	QIadvisor	1	Poor	8	5	18	5	9	4	57	6	4.8	5.0	-.10	5.4 **	-.34	5.1 *	-.19	
		2		13	9	18	5	7	3	44	5								
		3		13	9	39	11	14	6	65	7								
		4		24	16	51	14	35	15	111	12								
		5		34	23	81	22	44	19	156	17								
		6		24	16	67	18	49	21	156	17								
		7	Excellent	33	22	88	24	79	33	281	31								
		—	Not applicable	0	0	5	1	0	0	23	3								
		Total		149	100	367	100	237	100	893	100								
c. Faculty	QIfaculty	1	Poor	0	0	2	1	4	2	13	1	5.5	5.4	.05	5.5	-.05	5.6	-.06	
		2		3	2	11	3	7	3	24	3								
		3		9	6	13	4	8	3	34	4								
		4		14	9	48	13	20	9	86	10								
		5		45	30	100	27	59	25	203	23								
		6		43	29	116	32	73	31	280	31								
		7	Excellent	34	23	75	21	64	27	244	27								
		—	Not applicable	1	1	0	0	0	0	5	1								
		Total		149	100	365	100	235	100	889	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Student services staff (career services, student activities, housing, etc.)	Qlstaff	1	Poor	5	3	14	4	9	4	37	4	5.1	4.8	.16	5.0	.04	5.0	.04	
		2		4	3	19	5	13	5	28	3								
		3		7	5	18	5	15	6	39	4								
		4		23	16	61	17	34	14	135	15								
		5		40	27	86	23	49	21	138	16								
		6		35	24	61	17	49	21	168	19								
		7	Excellent	21	14	45	12	44	19	137	15								
		—	Not applicable	13	9	64	17	24	10	208	23								
Total			148	100	368	100	237	100	890	100									
e. Other administrative staff and offices (registrar, financial aid, etc.)	Qladmin	1	Poor	5	3	12	3	10	4	38	4	5.1	4.7 ** Δ	.27	5.0	.09	5.0	.06	
		2		3	2	19	5	9	4	34	4								
		3		8	5	31	8	22	9	68	8								
		4		22	15	74	20	34	14	117	13								
		5		43	29	98	27	57	24	207	23								
		6		35	24	71	19	58	25	195	22								
		7	Excellent	26	18	41	11	44	19	176	20								
		—	Not applicable	6	4	22	6	2	1	56	6								
Total			148	100	368	100	236	100	891	100									
14. How much does your institution emphasize the following?																			
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	2	1	9	2	7	3	22	2	3.2	3.1	.03	3.2	-.02	3.2	.00	
		2	Some	20	13	66	18	42	18	144	16								
		3	Quite a bit	79	53	157	43	91	38	396	44								
		4	Very much	48	32	135	37	97	41	329	37								
		Total			149	100	367	100	237	100	891								100
b. Providing support to help students succeed academically	SEacademic	1	Very little	5	3	14	4	16	7	46	5	2.9	2.9	-.01	2.9	.06	2.9	-.01	
		2	Some	36	24	93	25	57	24	224	25								
		3	Quite a bit	73	49	164	45	103	44	356	40								
		4	Very much	35	23	96	26	60	25	260	29								
		Total			149	100	367	100	236	100	886								100
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	3	2	23	6	18	8	68	8	3.0	2.9	.10	2.9	.17	2.9	.14	
		2	Some	35	24	93	25	65	28	217	24								
		3	Quite a bit	67	45	138	38	83	35	349	39								
		4	Very much	43	29	113	31	70	30	252	28								
		Total			148	100	367	100	236	100	886								100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	24	16	80	22	48	20	159	18	2.5	2.3	.14	2.5	.00	2.5	.00	
		2	Some	52	35	134	37	73	31	312	35								
		3	Quite a bit	50	34	97	27	67	28	245	28								
		4	Very much	23	15	55	15	48	20	174	20								
		Total	149	100	366	100	236	100	890	100									
e. Providing opportunities to be involved socially	SEsocial	1	Very little	6	4	26	7	23	10	93	11	2.9	2.8	.12	2.8	.13	2.8	.12	
		2	Some	45	30	114	31	67	29	250	28								
		3	Quite a bit	60	40	146	40	90	38	317	36								
		4	Very much	38	26	81	22	55	23	225	25								
		Total	149	100	367	100	235	100	885	100									
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	3	2	35	10	25	11	113	13	3.0	2.7 ** Δ	.25	2.9	.08	2.7 *** Δ	.30	
		2	Some	39	27	103	28	52	22	266	30								
		3	Quite a bit	66	45	153	42	86	36	304	34								
		4	Very much	38	26	75	20	74	31	202	23								
		Total	146	100	366	100	237	100	885	100									
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	44	30	132	36	77	33	325	37	2.1	1.9 * Δ	.20	2.1	-.02	2.0	.06	
		2	Some	58	39	154	42	84	36	301	34								
		3	Quite a bit	35	24	60	16	47	20	168	19								
		4	Very much	11	7	20	5	28	12	93	10								
		Total	148	100	366	100	236	100	887	100									
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	11	7	44	12	26	11	140	16	2.7	2.6	.08	2.6	.06	2.6	.10	
		2	Some	48	33	116	32	80	34	275	31								
		3	Quite a bit	66	45	148	40	87	37	290	33								
		4	Very much	22	15	59	16	42	18	180	20								
		Total	147	100	367	100	235	100	885	100									
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	22	15	59	16	53	23	190	21	2.3	2.4	-.08	2.3	.01	2.3	-.04	
		2	Some	68	46	150	41	93	40	321	36								
		3	Quite a bit	48	32	119	32	54	23	250	28								
		4	Very much	10	7	40	11	35	15	123	14								
		Total	148	100	368	100	235	100	884	100									

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your seniors compared with						
												UMD	UMD Peers	Competitors	NSSE Carnegie			
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
15. About how many hours do you spend in a typical 7-day week doing the following?																		
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmpprephrs	0	0 hrs	0	0	0	0	0	0	5	1	18.0	15.7 ** ▲	.25	16.7	.14	16.0 ** ▲	.22
	(Recoded version of tmpprep created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	9	6	47	13	28	12	103	12							
		8	6-10 hrs	24	16	83	23	44	19	202	23							
		13	11-15 hrs	24	16	69	19	44	19	160	18							
		18	16-20 hrs	40	27	62	17	45	19	160	18							
		23	21-25 hrs	19	13	43	12	26	11	96	11							
		28	26-30 hrs	16	11	24	7	16	7	66	7							
		33	More than 30 hrs	16	11	39	11	32	14	101	11							
		Total			148	100	367	100	235	100	893							
b. Participating in co- curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs	0	0 hrs	43	29	157	43	82	35	428	48	4.5	4.1	.06	4.7	-.03	3.9	.09
	(Recoded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	64	43	118	32	90	38	256	29							
		8	6-10 hrs	24	16	46	13	28	12	101	11							
		13	11-15 hrs	12	8	22	6	16	7	43	5							
		18	16-20 hrs	1	1	10	3	11	5	27	3							
		23	21-25 hrs	1	1	7	2	4	2	17	2							
		28	26-30 hrs	3	2	1	0	0	0	2	0							
		33	More than 30 hrs	0	0	4	1	3	1	13	1							
		Total			148	100	365	100	234	100	887							
c. Working for pay on campus	tmworkonhrs	0	0 hrs	91	61	235	64	125	53	549	62	4.6	4.4	.03	6.3 * ▼	5.1	-.07	
	(Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	11	7	19	5	18	8	48	5							
		8	6-10 hrs	22	15	34	9	25	11	85	10							
		13	11-15 hrs	11	7	36	10	26	11	92	10							
		18	16-20 hrs	6	4	32	9	32	13	71	8							
		23	21-25 hrs	2	1	6	2	7	3	17	2							
		28	26-30 hrs	4	3	1	0	1	0	11	1							
		33	More than 30 hrs	2	1	2	1	4	2	17	2							
		Total			149	100	365	100	238	100	890							100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	66	45	182	50	129	56	354	40	8.6	9.0	-.04	8.3	.03	12.7 ***	- .33	
	(Recoded version of tmworkoff created by NSSE.	3	1-5 hrs	11	7	19	5	6	3	45	5								
	Values are estimated number of hours per week.)	8	6-10 hrs	15	10	30	8	17	7	53	6								
		13	11-15 hrs	14	9	20	5	16	7	58	7								
		18	16-20 hrs	19	13	36	10	17	7	85	10								
		23	21-25 hrs	15	10	38	10	22	10	80	9								
		28	26-30 hrs	3	2	16	4	10	4	62	7								
		33	More than 30 hrs	5	3	23	6	14	6	145	16								
		Total			148	100	364	100	231	100	882								100
Estimated number of hours working for pay	tmworkhrs											13.2	13.3	-.02	14.3	-.10	17.7 ***	- .36	
	(Continuous variable created by NSSE)																		
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	66	45	190	52	124	53	502	57	2.4	2.8	-.10	2.1	.07	2.5	-.02	
	(Recoded version of tmservice created by NSSE.	3	1-5 hrs	68	46	121	33	93	40	278	31								
	Values are estimated number of hours per week.)	8	6-10 hrs	8	5	25	7	9	4	56	6								
		13	11-15 hrs	5	3	11	3	4	2	23	3								
		18	16-20 hrs	1	1	11	3	4	2	12	1								
		23	21-25 hrs	0	0	2	1	1	0	6	1								
		28	26-30 hrs	0	0	0	0	0	0	2	0								
		33	More than 30 hrs	0	0	2	1	0	0	6	1								
		Total			148	100	362	100	235	100	885								100
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	0	0	2	1	4	2	25	3	12.8	12.4	.05	12.1	.08	10.9 **	.23	
	(Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	35	24	76	21	48	20	235	26								
		8	6-10 hrs	35	24	99	27	65	28	249	28								
		13	11-15 hrs	31	21	82	22	56	24	174	20								
		18	16-20 hrs	20	14	58	16	30	13	102	11								
		23	21-25 hrs	10	7	17	5	10	4	42	5								
		28	26-30 hrs	5	3	13	4	8	3	21	2								
		33	More than 30 hrs	11	7	20	5	14	6	41	5								
		Total			147	100	367	100	235	100	889								100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with				
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	126	85	282	78	183	77	590	67	1.1	2.8 ***	-.27	2.7 **	-.28	4.9 ***	-.42
	(Recoded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	13	9	29	8	25	11	109	12							
		8	6-10 hrs	5	3	18	5	4	2	46	5							
		13	11-15 hrs	2	1	9	2	6	3	22	2							
		18	16-20 hrs	1	1	6	2	9	4	26	3							
		23	21-25 hrs	0	0	5	1	3	1	14	2							
		28	26-30 hrs	0	0	2	1	1	0	7	1							
		33	More than 30 hrs	1	1	12	3	6	3	72	8							
		Total		148	100	363	100	237	100	886	100							
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	9	6	32	9	30	13	132	15	3.9	4.8 **	-.24	4.5	-.13	4.4	-.12
	(Recoded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	116	78	219	60	157	66	538	61							
		8	6-10 hrs	19	13	87	24	28	12	147	17							
		13	11-15 hrs	3	2	18	5	14	6	44	5							
		18	16-20 hrs	1	1	7	2	7	3	21	2							
		23	21-25 hrs	0	0	1	0	0	0	3	0							
		28	26-30 hrs	1	1	1	0	0	0	0	0							
		33	More than 30 hrs	0	0	0	0	2	1	4	0							
		Total		149	100	365	100	238	100	889	100							
16. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?																		
	reading	1	Very little	30	20	86	24	59	25	200	23	2.5	2.3	.18	2.5	.04	2.4	.10
(Revised for 2014. Comparison data are limited to NSSE 2014 participating institutions.)	2	Some	54	36	137	38	68	29	307	35								
	3	About half	31	21	85	23	61	26	230	26								
	4	Most	25	17	47	13	38	16	119	13								
	5	Almost all	9	6	9	2	12	5	32	4								
	Total		149	100	364	100	238	100	888	100								
tmreadinghrs												7.7	5.8 **	.31	6.5	.17	6.2 *	.23
(Continuous variable created by NSSE. Calculated as a proportion of tmprephrs based on reading, where Very little= .10; Some= .25; About half= .50; Most= .75; Almost all= .90)																		

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ⁱ	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
(Collapsed version of tmreadinghrs created by NSSE.)	tmreadinghrscol	1	0 hrs	0	0	0	0	0	0	5	1	2.9	2.7	.19	2.9	.05	2.8	.15	
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	71	48	217	60	124	53	502	57								
		3	More than 5, up to 10 hrs	37	25	88	24	64	27	215	24								
		4	More than 10, up to 15 hrs	18	12	21	6	20	9	73	8								
		5	More than 15, up to 20 hrs	12	8	25	7	16	7	51	6								
		6	More than 20, up to 25 hrs	6	4	11	3	8	3	31	3								
		7	More than 25 hrs	4	3	1	0	3	1	10	1								
		Total	148	100	363	100	235	100	887	100									
17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?																			
a. Writing clearly and effectively	pgwrite	1	Very little	9	6	33	9	30	13	89	10	2.9	2.7	.19	2.9	.05	2.8	.15	
	2	Some	39	26	114	31	50	21	244	27									
	3	Quite a bit	57	38	134	37	80	34	336	38									
	4	Very much	44	30	86	23	78	33	223	25									
	Total	149	100	367	100	238	100	892	100										
b. Speaking clearly and effectively	pgspeak	1	Very little	15	10	43	12	26	11	105	12	2.8	2.7	.06	2.9	-.06	2.7	.06	
	2	Some	42	28	100	28	56	23	246	28									
	3	Quite a bit	50	34	128	35	82	34	314	35									
	4	Very much	42	28	92	25	75	31	225	25									
	Total	149	100	363	100	239	100	890	100										
c. Thinking critically and analytically	pgthink	1	Very little	3	2	13	4	6	3	31	3	3.3	3.2	.13	3.3	.02	3.2	.13	
	2	Some	18	12	50	14	34	14	135	15									
	3	Quite a bit	53	36	141	38	76	32	321	36									
	4	Very much	74	50	163	44	123	51	403	45									
	Total	148	100	367	100	239	100	890	100										
d. Analyzing numerical and statistical information	pganalyze	1	Very little	3	2	18	5	9	4	45	5	3.2	3.1	.18	3.2	.04	3.1 *	.18	
	2	Some	27	18	74	20	46	19	189	21									
	3	Quite a bit	49	33	129	35	68	28	297	33									
	4	Very much	70	47	144	39	116	49	358	40									
	Total	149	100	365	100	239	100	889	100										

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k						
				UMD		UMD Peers		Competitors		NSSE Carnegie		Your seniors compared with						
												UMD		UMD Peers		Competitors		NSSE Carnegie
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ
e. Acquiring job- or work- related knowledge and skills	pgwork	1	Very little	12	8	43	12	22	9	91	10	2.8	2.6	.14	2.8	-.05	2.8	-.02
		2	Some	53	36	121	33	67	28	253	28							
		3	Quite a bit	40	27	124	34	79	33	295	33							
		4	Very much	44	30	78	21	70	29	251	28							
		Total	149	100	366	100	238	100	890	100								
f. Working effectively with others	pgothers	1	Very little	6	4	22	6	11	5	76	9	2.9	2.9	.04	3.1	-.16	2.9	.04
		2	Some	38	26	98	27	50	21	225	25							
		3	Quite a bit	68	46	149	41	93	39	320	36							
		4	Very much	37	25	98	27	84	35	267	30							
		Total	149	100	367	100	238	100	888	100								
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	29	19	68	19	46	19	174	20	2.5	2.5	-.06	2.6	-.10	2.5	-.06
		2	Some	45	30	115	32	70	29	263	30							
		3	Quite a bit	51	34	102	28	62	26	254	29							
		4	Very much	24	16	80	22	61	26	197	22							
		Total	149	100	365	100	239	100	888	100								
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	23	15	58	16	43	18	147	17	2.5	2.6	-.07	2.6	-.09	2.5	-.05
		2	Some	55	37	114	31	72	30	295	33							
		3	Quite a bit	45	30	126	34	65	27	261	29							
		4	Very much	26	17	69	19	59	25	183	21							
		Total	149	100	367	100	239	100	886	100								
i. Solving complex real- world problems	pgprobsolve	1	Very little	14	9	50	14	32	13	116	13	2.7	2.6	.03	2.7	-.09	2.7	-.02
		2	Some	54	36	115	31	65	27	263	30							
		3	Quite a bit	49	33	124	34	75	31	302	34							
		4	Very much	31	21	77	21	67	28	209	23							
		Total	148	100	366	100	239	100	890	100								
j. Being an informed and active citizen	pgcitizen	1	Very little	31	21	69	19	51	22	151	17	2.3	2.4	-.03	2.4	-.09	2.5	-.12
		2	Some	55	37	144	39	82	35	331	37							
		3	Quite a bit	40	27	98	27	52	22	243	27							
		4	Very much	21	14	54	15	52	22	160	18							
		Total	147	100	365	100	237	100	885	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Frequencies and Statistical Comparisons: Sciences Math

University of Minnesota Duluth

Seniors^a in Sciences Math

Seniors ^a in Sciences Math				Frequency Distributions								Statistical Comparisons ^k							
				UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		Your seniors compared with					
														UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name ^l	Values ^m	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size ⁿ	Mean	Effect size ⁿ	Mean	Effect size ⁿ	
18. How would you evaluate your entire educational experience at this institution?																			
	evalexp	1	Poor	5	3	12	3	10	4	25	3	3.1	3.1	.02	3.1	.05	3.1	-.01	
		2	Fair	21	14	54	15	37	16	129	14								
		3	Good	72	49	181	49	112	47	434	49								
		4	Excellent	50	34	120	33	78	33	302	34								
		Total		148	100	367	100	237	100	890	100								
19. If you could start over again, would you go to the same institution you are now attending?																			
	sameinst	1	Definitely no	8	5	23	6	21	9	54	6	3.1	3.1	.02	2.9	.15	3.1	.00	
		2	Probably no	20	14	63	17	42	18	144	16								
		3	Probably yes	72	49	150	41	105	44	375	42								
		4	Definitely yes	48	32	134	36	71	30	322	36								
		Total		148	100	370	100	239	100	895	100								

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	First-Year Students ^a								Seniors ^a							
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
20a. How many majors do you plan to complete? (Do not count minors.)	MAJnum	One	129	83	322	88	143	89	546	91	114	77	310	84	206	86	767	86
		More than one	27	17	44	12	18	11	54	9	35	23	60	16	33	14	129	14
		Total	156	100	366	100	161	100	600	100	149	100	370	100	239	100	896	100
First major or expected first major, in NSSE's default related-major categories. (Does not reflect any customization made for the Major Field Report)	MAJfirstcol (Recoded from MAJfirst.)	Arts & Humanities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Biological Sci., Agriculture, & Natural Resources	95	61	187	51	100	62	320	53	98	66	189	51	152	64	418	47
		Physical Sci., Mathematics, & Computer Science	53	34	145	40	45	28	203	34	48	32	144	39	57	24	366	41
		Social Sciences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Business	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Health Professions	2	1	14	4	3	2	27	5	0	0	0	0	0	0	2	0
		Social Service Professions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		All Other	6	4	20	5	13	8	50	8	3	2	37	10	30	13	110	12
		Undecided, Undeclared	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	156	100	366	100	161	100	600	100	149	100	370	100	239	100	896	100
Second major or expected second major, in NSSE's default related-major categories. (Does not reflect any customization made for the Major Field Report)	MAJsecondcol (Recoded from MAJsecond.)	Arts & Humanities	10	37	9	20	2	12	13	24	5	14	12	20	3	9	17	13
		Biological Sci., Agriculture, & Natural Resources	3	11	4	9	1	6	5	9	11	31	5	8	6	19	15	12
		Physical Sci., Mathematics, & Computer Science	2	7	13	30	0	0	13	24	13	37	18	31	11	34	29	23
		Social Sciences	6	22	7	16	4	24	3	6	1	3	16	27	2	6	27	21
		Business	3	11	2	5	1	6	6	11	0	0	4	7	1	3	6	5
		Communications, Media, & Public Relations	0	0	0	0	0	0	0	0	2	6	0	0	0	0	0	0
		Education	0	0	1	2	0	0	5	9	0	0	1	2	1	3	3	2
		Engineering	1	4	0	0	1	6	1	2	0	0	1	2	4	13	8	6
		Health Professions	1	4	3	7	0	0	3	6	1	3	1	2	2	6	12	9
		Social Service Professions	0	0	2	5	4	24	2	4	1	3	1	2	0	0	6	5
		All Other	0	0	2	5	4	24	3	6	1	3	0	0	1	3	4	3
		Undecided, Undeclared	1	4	1	2	0	0	0	0	0	0	0	0	1	3	1	1
		Total	27	100	44	100	17	100	54	100	35	100	59	100	32	100	128	100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	First-Year Students ^a								Seniors ^a							
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
21. What is your class level?	class	Freshman/First-year	149	96	323	89	144	90	512	86	0	0	1	0	1	0	2	0
		Sophomore	6	4	37	10	11	7	72	12	3	2	3	1	4	2	11	1
		Junior	1	1	3	1	2	1	7	1	24	16	22	6	24	10	55	6
		Senior	0	0	0	0	1	1	2	0	115	78	337	91	200	84	798	89
		Unclassified	0	0	1	0	2	1	4	1	6	4	6	2	9	4	27	3
		Total	156	100	364	100	160	100	597	100	148	100	369	100	238	100	893	100
22. Thinking about this current academic term, are you a full-time student?	fulltime	No	0	0	9	2	5	3	25	4	12	8	56	15	27	11	211	24
		Yes	156	100	353	98	155	97	571	96	135	92	312	85	209	89	677	76
		Total	156	100	362	100	160	100	596	100	147	100	368	100	236	100	888	100
23a. How many courses are you taking for credit this current academic term?	coursenum	0	0	0	2	1	0	0	1	0	0	0	2	1	3	1	16	2
		1	0	0	0	0	0	0	5	1	0	0	8	2	4	2	31	3
		2	0	0	1	0	0	0	10	2	6	4	21	6	9	4	86	10
		3	16	10	5	1	4	3	24	4	10	7	43	12	27	11	124	14
		4	78	50	112	31	55	35	226	38	44	30	98	27	68	29	265	30
		5	39	25	143	40	53	34	225	38	56	38	111	30	63	26	209	23
		6	8	5	67	19	30	19	60	10	19	13	42	11	32	13	72	8
		7 or more	15	10	32	9	16	10	47	8	14	9	44	12	32	13	90	10
		Total	156	100	362	100	158	100	598	100	149	100	369	100	238	100	893	100
b. Of these, how many are entirely online?	onlinenum	0	144	92	326	90	139	89	484	82	109	74	309	84	187	79	620	70
		1	10	6	31	9	12	8	85	14	30	20	48	13	39	16	159	18
		2	2	1	2	1	2	1	16	3	7	5	8	2	7	3	68	8
		3	0	0	3	1	3	2	5	1	1	1	2	1	3	1	22	2
		4	0	0	0	0	0	0	0	0	0	0	1	0	1	0	17	2
		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
		6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
		7 or more	0	0	0	0	0	0	2	0	0	0	1	0	1	0	1	0
		Total	156	100	362	100	156	100	592	100	147	100	369	100	238	100	891	100
Collapsed recode of courses taken online (Based on responses to coursenum and onlinenum)	onlinecrscol	No courses taken online	144	92	326	90	139	89	484	82	109	74	309	84	187	79	620	70
		Some courses taken online	12	8	36	10	17	11	103	17	38	26	59	16	48	20	203	23
		All courses taken online	0	0	0	0	0	0	5	1	0	0	1	0	3	1	68	8
		Total	156	100	362	100	156	100	592	100	147	100	369	100	238	100	891	100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
24. What have most of your grades been up to now at this institution?	grades	C- or lower	1	1	9	2	2	1	13	2	2	1	2	1	1	0	3	0
		C	6	4	13	4	6	4	22	4	7	5	7	2	9	4	21	2
		C+	5	3	12	3	6	4	16	3	6	4	19	5	6	3	41	5
		B-	16	10	29	8	8	5	31	5	13	9	20	5	16	7	72	8
		B	34	22	64	18	50	31	101	17	25	17	81	22	47	20	171	19
		B+	25	16	69	19	23	14	94	16	26	17	58	16	41	17	146	16
		A-	24	15	64	18	23	14	111	19	35	23	65	18	37	16	128	14
		A	44	28	103	28	42	26	209	35	35	23	116	32	81	34	312	35
Total	155	100	363	100	160	100	597	100	149	100	368	100	238	100	894	100		
25. Did you begin college at this institution or elsewhere?	begincol	Started here	142	92	329	91	144	91	540	91	100	68	214	58	136	57	477	53
		Started elsewhere	13	8	32	9	15	9	55	9	47	32	154	42	102	43	415	47
		Total	155	100	361	100	159	100	595	100	147	100	368	100	238	100	892	100
26. Since graduating from high school, which of the following types of schools have you attended <i>other than</i> the one you are now attending? (Select all that apply.)	attend_voc	Vocational or technical school	0	0	11	3	5	3	19	3	3	2	20	5	28	12	70	8
	attend_com	Community or junior college	7	5	39	11	15	9	54	9	45	31	125	34	69	29	321	36
	attend_col	4-year college or university other than this one	12	8	18	5	11	7	35	6	23	16	93	25	60	25	259	29
	attend_none	None	133	86	291	81	126	79	488	82	86	59	165	45	108	46	372	42
	attend_other	Other	4	3	8	2	5	3	12	2	4	3	10	3	10	4	34	4
27. What is the highest level of education you ever expect to complete?	edaspire	Some college but less than a bachelor's degree	3	2	19	5	6	4	27	5	5	3	8	2	7	3	29	3
		Bachelor's degree (B.A., B.S., etc.)	33	21	80	22	39	25	158	27	33	23	108	29	60	25	274	31
		Master's degree (M.A., M.S., etc.)	44	29	98	27	47	30	146	25	46	32	96	26	71	30	267	30
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	74	48	161	45	65	41	261	44	62	42	156	42	98	42	320	36
		Total	154	100	358	100	157	100	592	100	146	100	368	100	236	100	890	100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	First-Year Students ^a								Seniors ^a							
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
28. What is the highest level of education completed by either of your parents (or those who raised you)?	parented	Did not finish high school	4	3	7	2	8	5	28	5	4	3	11	3	9	4	34	4
		High school diploma or G.E.D.	12	8	43	12	24	15	100	17	23	16	39	11	41	17	188	21
		Attended college, but did not complete degree	11	7	51	14	17	11	73	12	14	10	43	12	32	14	105	12
		Associate's degree (A.A., A.S., etc.)	28	18	54	15	23	14	86	14	18	12	40	11	37	16	119	13
		Bachelor's degree (B.A., B.S., etc.)	63	41	116	32	56	35	172	29	51	35	126	34	68	29	261	29
		Master's degree (M.A., M.S., etc.)	27	18	64	18	22	14	95	16	21	14	71	19	32	14	128	14
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	9	6	27	7	10	6	41	7	16	11	37	10	18	8	54	6
		Total	154	100	362	100	160	100	595	100	147	100	367	100	237	100	889	100
First-generation status (No parent holds a bachelor's degree)	firstgen	Not first-generation	99	64	207	57	88	55	308	52	88	60	234	64	118	50	443	50
	(Recoded from parented)	First-generation	55	36	155	43	72	45	287	48	59	40	133	36	119	50	446	50
		Total	154	100	362	100	160	100	595	100	147	100	367	100	237	100	889	100
29. What is your gender identity?	genderid	Man	69	45	137	38	56	35	245	41	61	41	170	46	107	46	460	52
		Woman	85	55	216	60	100	63	335	56	81	55	189	51	124	53	415	47
		Another gender identity	0	0	3	1	0	0	1	0	3	2	2	1	2	1	2	0
		I prefer not to respond	1	1	5	1	3	2	13	2	2	1	7	2	2	1	14	2
		Total	155	100	361	100	159	100	594	100	147	100	368	100	235	100	891	100
30. Enter your year of birth (e.g., 1994):	agecat	19 or younger	151	98	346	96	147	92	510	87	7	5	3	1	3	1	10	1
	(Recoded from the information entered in birthyear)	20-23	2	1	9	2	7	4	43	7	123	84	278	76	165	72	502	57
		24-29	1	1	3	1	0	0	14	2	13	9	54	15	41	18	212	24
		30-39	0	0	2	1	4	3	12	2	2	1	20	5	16	7	107	12
		40-55	0	0	0	0	0	0	7	1	1	1	10	3	5	2	41	5
		Over 55	0	0	1	0	1	1	3	1	0	0	2	1	0	0	9	1
		Total	154	100	361	100	159	100	589	100	146	100	367	100	230	100	881	100
31a. Are you an international student?	internat	No	150	99	345	96	145	91	563	95	141	99	350	96	218	93	856	97
		Yes	1	1	15	4	15	9	30	5	2	1	15	4	16	7	30	3
		Total	151	100	360	100	160	100	593	100	143	100	365	100	234	100	886	100
International student country of citizenship, collapsed into regions by NSSE. Responses to country are in the data file. U.S. (domestic) students did not receive this question.	countrycol	Africa Sub-Saharan	0	0	0	0	4	27	3	10	0	0	0	0	0	0	1	3
	(Recoded from country.)	Asia	1	100	10	71	9	60	20	69	1	100	10	67	10	63	20	67
		Canada	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0
		Europe	0	0	1	7	1	7	1	3	0	0	3	20	3	19	7	23
		Latin America and Caribbean	0	0	1	7	1	7	2	7	0	0	1	7	2	13	1	3
		Middle East and North Africa	0	0	2	14	0	0	3	10	0	0	0	0	1	6	1	3
		Oceania	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Unknown region/uncoded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1	100	14	100	15	100	29	100	1	100	15	100	16	100	30	100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	First-Year Students ^a								Seniors ^a							
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
32. What is your racial or ethnic identification? (Select all that apply.)	re_amind	American Indian or Alaska Native	6	4	10	3	9	6	7	1	2	1	5	1	6	3	20	2
	re_asian	Asian	9	6	39	11	30	19	53	9	5	3	31	8	26	11	61	7
	re_black	Black or African American	8	5	53	15	15	9	51	9	3	2	19	5	10	4	50	6
	re_latino	Hispanic or Latino	4	3	22	6	10	6	38	6	2	1	9	2	15	6	47	5
	re_pacific	Native Hawaiian or Other Pacific Islander	1	1	4	1	1	1	3	1	0	0	0	0	1	0	1	0
	re_white	White	130	84	247	68	105	66	446	75	132	90	297	81	176	76	702	79
	re_other	Other	3	2	13	4	4	3	17	3	2	1	10	3	3	1	21	2
	re_pnr	I prefer not to respond	4	3	12	3	4	3	21	4	5	3	15	4	4	2	48	5
	Racial or ethnic identification	re_all	1	1	0	0	2	1	0	0	0	0	1	0	4	2	4	0
		(Recoded from re_amind through re_pnr where each student is represented only once)	9	6	32	9	27	17	41	7	5	3	26	7	25	11	51	6
33. Are you a member of a social fraternity or sorority?	re_amind	Black or African American	6	4	40	11	10	6	36	6	3	2	16	4	10	4	43	5
	re_pnr	Hispanic or Latino	2	1	14	4	8	5	31	5	1	1	3	1	10	4	27	3
		Native Hawaiian/Other Pac. Islander	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0
		White	123	79	224	62	95	59	417	70	128	87	281	76	168	72	650	73
		Other	1	1	9	2	3	2	12	2	1	1	8	2	3	1	11	1
		Multiracial	9	6	29	8	11	7	34	6	4	3	18	5	8	3	54	6
		I prefer not to respond	4	3	12	3	4	3	21	4	5	3	15	4	4	2	48	5
		Total	155	100	361	100	160	100	593	100	147	100	368	100	233	100	888	100
		Yes	6	4	32	9	12	8	48	8	5	3	34	9	17	7	68	8
		Total	154	100	360	100	159	100	591	100	147	100	367	100	234	100	886	100
34. Which of the following best describes where you are living while attending college?	living	Dormitory or other campus housing (not fraternity or sorority house)	134	88	233	65	107	67	307	52	17	12	40	11	35	15	72	8
		Fraternity or sorority house	0	0	2	1	3	2	5	1	0	0	3	1	4	2	9	1
		Residence (house, apartment, etc.) within walking distance to the institution	3	2	33	9	21	13	64	11	65	44	128	35	94	40	235	26
		Residence (house, apartment, etc.) farther than walking distance to the institution	14	9	81	23	26	16	197	33	64	44	190	52	98	42	545	61
		None of the above	1	1	10	3	3	2	20	3	1	1	6	2	4	2	27	3
		Total	152	100	359	100	160	100	593	100	147	100	367	100	235	100	888	100
		Total	152	100	359	100	160	100	593	100	147	100	367	100	235	100	888	100
35. Are you a student-athlete on a team sponsored by your institution's athletics department?	athlete	No	145	95	347	97	151	95	561	95	137	93	355	97	224	95	852	96
		Yes	8	5	12	3	8	5	31	5	10	7	12	3	11	5	34	4
		Total	153	100	359	100	159	100	592	100	147	100	367	100	235	100	886	100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

			First-Year Students ^a								Seniors ^a							
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
36. Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?	veteran	No	151	98	354	99	158	99	580	98	142	97	349	96	221	94	827	93
		Yes	3	2	5	1	2	1	13	2	4	3	16	4	13	6	59	7
		Total	154	100	359	100	160	100	593	100	146	100	365	100	234	100	886	100
37a. Have you been diagnosed with any disability or impairment?	disability	No	140	92	319	88	153	96	525	89	125	85	310	85	203	87	769	87
		Yes	10	7	36	10	6	4	51	9	18	12	39	11	23	10	84	9
		I prefer not to respond	3	2	6	2	1	1	17	3	4	3	17	5	7	3	35	4
		Total	153	100	361	100	160	100	593	100	147	100	366	100	233	100	888	100
b. [If answered "yes"] Which of the following has been diagnosed? (Select all that apply.)	dis_sense	A sensory impairment (vision or hearing)	2	20	4	11	1	17	7	14	2	11	4	11	1	4	10	12
	dis_mobility	A mobility impairment	0	0	2	6	2	33	8	16	1	6	4	11	1	4	13	15
	dis_learning	A learning disability (e.g., ADHD, dyslexia)	4	40	18	50	3	50	22	43	6	33	21	55	10	43	40	48
	dis_mental	A mental health disorder	6	60	17	47	4	67	16	31	12	67	18	47	10	43	32	38
	dis_other	A disability or impairment not listed above	0	0	5	14	2	33	13	25	1	6	3	8	5	22	17	20
Disability or impairment	disability_all	A sensory impairment	1	1	1	0	0	0	4	1	0	0	2	1	0	0	4	0
	(Recoded from	A mobility impairment	0	0	0	0	0	0	2	0	1	1	3	1	0	0	5	1
	disability and	A learning disability	3	2	12	3	0	0	12	2	5	3	9	2	9	4	27	3
	dis_sense	A mental health disorder	4	3	12	3	2	1	13	2	9	6	10	3	8	3	20	2
	through	A disability or impairment not listed	0	0	3	1	0	0	7	1	0	0	2	1	3	1	7	1
	dis_other where	More than one disability or	2	1	8	2	4	3	13	2	3	2	12	3	3	1	21	2
	each student is	impairment																
	represented only	No disability or impairment	140	92	319	88	153	96	525	89	125	85	310	85	203	87	769	87
	once)	Prefer not to respond	3	2	6	2	1	1	17	3	4	3	17	5	7	3	35	4
Total			153	100	361	100	160	100	593	100	147	100	365	100	233	100	888	100
38. Which of the following best describes your sexual orientation? (Question administered per institution request)	sexorient14	Heterosexual	134	88	191	87	47	80	223	85	130	90	202	86	108	94	380	85
		Gay	2	1	2	1	1	2	1	0	2	1	8	3	3	3	10	2
		Lesbian	1	1	1	0	0	0	2	1	1	1	2	1	0	0	7	2
		Bisexual	5	3	7	3	4	7	8	3	4	3	4	2	2	2	12	3
		Another sexual orientation	1	1	7	3	1	2	6	2	1	1	1	0	0	0	5	1
		Questioning or unsure	3	2	1	0	2	3	3	1	0	0	1	0	0	0	6	1
		I prefer not to respond	6	4	11	5	4	7	18	7	6	4	18	8	2	2	25	6
		Total	152	100	220	100	59	100	261	100	144	100	236	100	115	100	445	100

NSSE 2016 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Sciences Math

University of Minnesota Duluth

Sciences Math

First-Year Students^a

Seniors^a

Item wording or description	Variable name	Response options	First-Year Students ^a								Seniors ^a							
			UMD		UMD Peers		Competitors		NSSE Carnegie		UMD		UMD Peers		Competitors		NSSE Carnegie	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Institution-reported information																		
(Variables provided by your institution in your NSSE population file.)																		
Institution-reported sex	IRsex	Female	85	54	224	61	101	63	346	58	85	57	192	52	126	53	417	47
		Male	71	46	142	39	60	37	254	42	64	43	178	48	113	47	479	53
		Total	156	100	366	100	161	100	600	100	149	100	370	100	239	100	896	100
Institution-reported race or ethnicity	IRrace	American Indian or Alaska Native	5	3	2	1	5	3	2	0	3	2	2	1	4	2	4	0
		Asian	9	6	8	3	19	12	25	4	4	3	6	2	16	7	34	4
		Black or African American	7	4	29	11	7	4	37	6	3	2	14	5	10	4	40	5
		Hispanic or Latino	3	2	18	7	9	6	33	6	2	1	9	3	14	6	46	5
		Native Hawaiian/Other Pac. Islander	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0
		White	131	84	166	65	97	60	428	73	135	91	202	78	168	70	659	77
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Foreign or nonresident alien	1	1	15	6	15	9	26	4	2	1	13	5	15	6	27	3
		Two or more races/ethnicities	0	0	9	4	5	3	17	3	0	0	6	2	5	2	20	2
		Unknown	0	0	8	3	4	2	14	2	0	0	8	3	6	3	29	3
		Total	156	100	256	100	161	100	583	100	149	100	260	100	239	100	859	100
Institution-reported class level	IRclass	Freshman/First-Year	156	100	366	100	161	100	600	100	0	0	0	0	0	0	0	0
		Sophomore	0	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	0
		Senior	0	0	0	0	0	0	0	0	149	100	370	100	239	100	896	100
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	156	100	366	100	161	100	600	100	149	100	370	100	239	100	896	100
Institution-reported first-time first-year (FTFY) status	IRftfy	No	0	0	20	5	10	6	72	12	149	100	370	100	239	100	896	100
		Yes	156	100	346	95	151	94	527	88	0	0	0	0	0	0	0	0
		Total	156	100	366	100	161	100	599	100	149	100	370	100	239	100	896	100
Institution-reported enrollment status	IRenrollment	Not full-time	0	0	6	2	1	1	25	4	14	9	52	14	26	11	211	24
		Full-time	156	100	360	98	160	99	575	96	135	91	318	86	213	89	685	76
		Total	156	100	366	100	161	100	600	100	149	100	370	100	239	100	896	100

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 $\pm 1.96 \times \text{SEM}$.
- 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. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview.
- 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. NSSE research has found that interpretations vary by HIP: For service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large. For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).
- 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.
- l. 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.
- ▲ Your students' average was significantly higher ($p < .05$) with an effect size less than .3 in magnitude.
- ▼ Your students' average was significantly lower ($p < .05$) with an effect size less than .3 in magnitude.
- ▼ Your students' average was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

Note: It is important to interpret the direction of differences relative to item wording and your institutional context.

Reference: Rocconi, L., & Gonyea, R. M. (2015). Contextualizing student engagement effect sizes: An empirical analysis. Paper presented at the Association for Institutional Research Annual Forum, Denver, CO.