# Northern Michigan University NSSE 2013 Major Field Report, Part II Comparisons to Other Institutions Bio, Agric, & Nat Res

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

The Major Field Report category 'Bio, Agric, & Nat Res' includes the following majors: Biology (general); Agriculture; Biochemistry or biophysics; Biomedical science; Botany; Cell and molecular biology; Environmental science/studies; Marine science; Microbiology or bacteriology; Natural resources and conservation; Natural science; Neuroscience; Physiology and developmental biology; Zoology; Other agriculture and natural resources; Other biological sciences.





### **NSSE 2013 Major Field Report, Part II**

### **About This Report**

### About Your Major Field Report, Part II

NSSE data serve to identify institutional strengths and weaknesses in reference to selected comparison institutions, yet 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: Bio, Agric, & Nat Res.

### NSSE results included in MFR, Part II

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

### **Majors**

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

### Sample

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

### **Class**

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

### **Technical Requirements**

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

### **Report Sections**

Engagement Indicators (pp. 3-6)	Results on NSSE's ten Engagement Indicators (Els) organized into four themes adapted from the former Benchmarks of Effective Educational Practice. See your <i>Engagement Indicators</i> report for more details.
High-Impact Practices (p. 7)	Results on student participation in six High-Impact Practices (HIPs). See your High-Impact Practices report for more details.
Frequencies and Statistical Comparisons (pp. 8-41)	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. 42-48)	Response frequencies for all demographic questions for your institution and your three core comparison groups.



Engagement Indicators: Bio, Agric, & Nat Res
Northern Michigan University

# First-year students<sup>a</sup> in Bio. Agric. & Nat Res

Bio, Agric, & Nat Res	Mea	n statistics			Perce	ntile <sup>d</sup> scores	5		(	Comparison re	esults	
								<del></del>	Deg. of	Mean		Effect
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	freedom <sup>e</sup>	diff.	Sig. <sup>f</sup>	size <sup>9</sup>
Academic Challenge												
Higher-Order Learning												
NMU (N = 33)	41.4	14.2	2.46	15	30	40	55	60				
Great Lakes Public	39.4	13.3	.40	20	30	40	50	60	1,155	1.9		.144
Carnegie Class	40.2	13.4	.44	20	30	40	50	60	976	1.1		.08:
NSSE 2013	40.7	13.5	.13	20	30	40	50	60	11,512	.7		.049
Reflective & Integrative Learning												
NMU (N = 34)	39.2	11.4	1.95	20	31	40	46	60				
Great Lakes Public	34.4	12.0	.35	17	26	34	43	57	1,176	4.8	*	.40
Carnegie Class	35.9	12.3	.40	17	29	34	43	57	995	3.4		.27
NSSE 2013	35.9	12.3	.11	17	29	34	43	57	11,746	3.3		.27
Learning Strategies												
NMU (N = 34)	42.0	13.6	2.33	20	33	43	53	60				
Great Lakes Public	41.2	14.0	.42	20	33	40	53	60	1,160	.7		.05
Carnegie Class	41.7	13.3	.43	20	33	40	53	60	984	.3		.01
NSSE 2013	41.7	13.6	.13	20	33	40	53	60	11,587	.3		.02
Quantitative Reasoning												
NMU (N = 34)	31.4	17.6	3.01	7	20	27	47	60				
Great Lakes Public	29.9	15.7	.46	0	20	27	40	60	1,173	1.5		.09
Carnegie Class	29.6	15.8	.51	0	20	27	40	60	992	1.7		.10
NSSE 2013	30.1	15.7	.14	0	20	27	40	60	11,718	1.3		.08
earning with Peers												
Collaborative Learning												
NMU (N = 33)	34.2	14.1	2.45	15	20	35	45	60				
Great Lakes Public	34.7	13.7	.41	15	25	35	45	60	1,162	4		03
Carnegie Class	35.3	13.6	.44	15	25	35	45	60	985	-1.0		07
NSSE 2013	35.4	13.7	.13	15	25	35	45	60	11,594	-1.1		08
Discussions with Diverse Others												
NMU (N = 34)	40.4	17.3	2.97	15	20	40	60	60				
Great Lakes Public	42.0	15.4	.45	20	30	40	60	60	1,181	-1.5		09
Carnegie Class	41.0	15.1	.49	15	30	40	55	60	991	6		03
NSSE 2013	41.9	15.4	.14	15	30	40	60	60	11,696	-1.5		096



Engagement Indicators: Bio, Agric, & Nat Res
Northern Michigan University

# First-year students<sup>a</sup> in Bio Agric & Nat Res

Bio, Agric, & Nat Res	Mea	n statistics			Perce	ntile <sup>d</sup> scores	<b>i</b>		(	Comparison re	sults	
	-			-					Deg. of	Mean		Effect
	Mean	SD b	SEM <sup>c</sup>	5th	25th	50th	75th	95th	freedom <sup>e</sup>	diff.	Sig. <sup>f</sup>	size <sup>g</sup>
Experiences with Faculty												
Student-Faculty Interaction												
NMU (N = 34)	21.3	13.8	2.37	0	15	20	25	55				
Great Lakes Public	19.9	14.2	.42	0	10	15	30	50	1,169	1.4		.097
Carnegie Class	22.2	14.1	.46	0	10	20	30	50	984	9		063
NSSE 2013	21.5	14.3	.13	0	10	20	30	50	11,621	2		011
Effective Teaching Practices												
NMU (N = 33)	43.2	10.6	1.85	24	36	44	52	60				
Great Lakes Public	39.9	12.8	.38	20	32	40	48	60	1,179	3.3		.257
Carnegie Class	40.6	12.9	.41	20	32	40	52	60	999	2.5		.198
NSSE 2013	40.9	12.7	.12	20	32	40	52	60	11,780	2.3		.178
Campus Environment												
Quality of Interactions												
NMU (N = 33)	42.5	11.8	2.06	23	35	44	50	60				
Great Lakes Public	41.1	12.1	.37	20	34	42	50	60	1,117	1.3		.110
Carnegie Class	42.6	12.1	.39	20	36	44	52	60	980	1		012
NSSE 2013	42.3	12.0	.11	20	36	44	50	60	11,400	.2		.017
Supportive Environment												
NMU (N = 34)	41.3	13.7	2.35	20	33	43	53	60				
Great Lakes Public	37.8	14.0	.41	15	28	38	48	60	1,167	3.5		.249
Carnegie Class	38.5	13.5	.44	17	30	40	48	60	992	2.8		.206
NSSE 2013	39.0	13.3	.12	15	30	40	50	60	11,685	2.2		.166



Engagement Indicators: Bio, Agric, & Nat Res
Northern Michigan University

### Seniors<sup>a</sup> in

Bio, Agric, & Nat Res	Mea	n statistics			Perce	ntile <sup>d</sup> scores	5		(	Comparison re	esults	
	<del></del>							<del></del>	Deg. of	Mean		Effec
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	freedom <sup>e</sup>	diff.	Sig. <sup>f</sup>	size
Academic Challenge												
Higher-Order Learning												
NMU (N = 39)	38.6	14.9	2.39	5	30	40	50	60				
Great Lakes Public	38.4	14.5	.41	15	30	40	50	60	1,307	.2		.01
Carnegie Class	40.7	14.2	.44	15	30	40	55	60	1,068	-2.2		15
NSSE 2013	40.2	14.2	.12	15	30	40	50	60	13,775	-1.6		11
Reflective & Integrative Learning												
NMU $(N = 41)$	36.8	11.2	1.75	20	29	37	43	57				
Great Lakes Public	36.3	12.3	.34	17	29	37	43	60	1,333	.5		.04
Carnegie Class	37.8	12.5	.38	17	29	37	46	60	1,100	-1.0		08
NSSE 2013	37.3	12.4	.10	17	29	37	46	60	14,079	5		03
Learning Strategies												
NMU (N = 39)	38.1	13.5	2.16	13	27	40	47	60				
Great Lakes Public	40.6	14.4	.40	20	27	40	53	60	1,319	-2.5		17
Carnegie Class	42.0	14.3	.44	20	33	40	53	60	1,084	-3.8		27
NSSE 2013	41.5	14.2	.12	20	33	40	53	60	13,882	-3.4		23
Quantitative Reasoning												
NMU (N = 40)	33.2	15.9	2.52	7	20	33	47	60				
Great Lakes Public	32.9	16.0	.44	7	20	33	40	60	1,334	.3		.01
Carnegie Class	35.8	15.0	.46	13	27	33	47	60	1,094	-2.6		17
NSSE 2013	34.3	15.9	.13	7	20	33	47	60	14,031	-1.1		07
earning with Peers												
Collaborative Learning												
NMU (N = 40)	33.5	12.2	1.92	15	23	33	43	53				
Great Lakes Public	33.5	13.7	.38	15	25	30	40	60	1,322	.0		.00
Carnegie Class	37.1	13.0	.40	15	30	35	45	60	1,075	-3.6		27
NSSE 2013	35.0	13.8	.12	15	25	35	45	60	13,842	-1.5		11
Discussions with Diverse Others												
NMU (N = 41)	34.1	13.0	2.04	20	25	35	40	60				
Great Lakes Public	40.2	15.5	.43	15	30	40	55	60	1,329	-6.0	*	38
Carnegie Class	41.1	15.7	.49	15	30	40	55	60	1,085	-6.9	**	44
NSSE 2013	41.4	15.6	.13	15	30	40	60	60	13,988	-7.2	**	46



Engagement Indicators: Bio, Agric, & Nat Res
Northern Michigan University

### Seniors<sup>a</sup> in

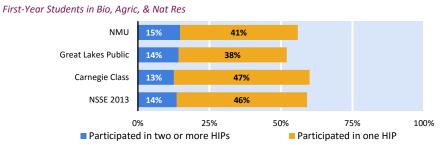
Bio, Agric, & Nat Res	Mea	n statistics			Perce	ntile <sup>d</sup> scores	5		(	Comparison re	esults	
									Deg. of	Mean		Effect
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	freedom <sup>e</sup>	diff.	Sig. <sup>f</sup>	size <sup>g</sup>
Experiences with Faculty												
Student-Faculty Interaction												
NMU (N = 40)	23.5	14.2	2.24	0	15	20	35	53				
Great Lakes Public	24.9	16.1	.45	0	15	25	35	60	1,316	-1.4		087
Carnegie Class	29.1	15.9	.49	5	20	25	40	60	1,091	-5.6	*	353
NSSE 2013	27.0	16.4	.14	0	15	25	40	60	13,963	-3.5		213
Effective Teaching Practices												
NMU $(N = 39)$	39.5	13.2	2.11	4	32	40	44	60				
Great Lakes Public	39.7	13.4	.37	20	32	40	48	60	1,335	2		013
Carnegie Class	41.5	12.9	.40	20	32	40	52	60	1,093	-1.9		150
NSSE 2013	40.9	13.0	.11	20	32	40	52	60	14,104	-1.4		110
Campus Environment												
Quality of Interactions												
NMU (N = 40)	39.6	10.6	1.67	17	36	41	48	51				
Great Lakes Public	40.7	11.4	.32	20	34	42	50	60	1,296	-1.2		101
Carnegie Class	43.2	10.9	.34	22	38	44	50	60	1,082	-3.6	*	333
NSSE 2013	42.1	11.4	.10	20	36	44	50	60	13,757	-2.5		222
Supportive Environment												
NMU (N = 41)	30.5	10.8	1.69	13	25	33	38	48				
Great Lakes Public	32.2	13.6	.38	10	23	33	40	58	44	-1.7		125
Carnegie Class	34.1	13.6	.42	13	25	35	43	60	45	-3.6	*	263
NSSE 2013	34.3	13.6	.12	13	25	35	43	60	40	-3.8	*	281

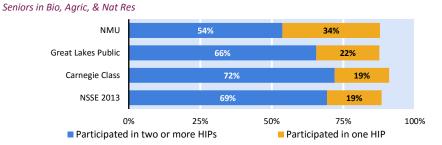


High-Impact Practices: Bio, Agric, & Nat Res
Northern Michigan University

### **Overall HIP Participation**<sup>a</sup>

The figures below display the percentage of students who participated in high-impact practices. Both figures include participation in learning communities, service-learning, and research with faculty. The senior figure also includes participation in internships or field experiences, study abroad, and culminating senior experiences. 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.





### Statistical Comparisons<sup>a</sup>

The table below compares the percentage of your students who participated in a high-impact practice, as well as the percentage who participated overall (at least one, two or more), with those at institutions in your comparison groups.

-	NMU	Great Lakes Pu	blic	Carnegie Class		NSS	E 2013	
First-Year Students in Bio, Agric, & Nat Res	%	% <sup>i</sup>	Effect size <sup>j</sup>	% <sup>i</sup> Effe	ect size <sup>j</sup>	% <sup>i</sup>	Effec	ct size <sup>j</sup>
11c. Learning community	26	20	.15	15	.28	17		.24
12. Service-learning	45	41	.09	53	15	51		11
11e. Research with faculty	0	7	53	6	50	7		54
Participated in at least one	56	52	.08	60	08	59		07
Participated in two or more	15	14	.01	13	.06	14		.03
Seniors in Bio, Agric, & Nat Res	_							
11c. Learning community	20	24	12	25	12	26		15
12. Service-learning	58	46	.23	63	11	56		.02
11e. Research with faculty	29	44	31	48 *	39	47 *		37
11a. Internship or field exp.	32	47	31	51 *	40	55 **		47
11d. Study abroad	20	15	.11	15	.12	18		.03
11f. Culminating senior exp.	22	55 ***	69	53 ***	66	48 ***		56
Participated in at least one	88	88	.01	91	10	88		02
Participated in two or more	54	66	24	72 *	38	69 *		32



First-Year Stud	ents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	D, Agric, & Nat Res  tem wording Variable					Great Lak	es				_	NINALL						
· / · / · / · · ·				NMU		Public		Carnegie C	lass	NSSE 201	.3	NMU	Great Lake		Carnegie	Class	NSSE 2	
Item wording or description		Values <sup>r</sup>	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
1. During the current sch	ool year, about h	ow ofte	en have you done the	following?														
a. Asked questions or	askquest	1	Never	0	0	35	3	28	3	324	3							
contributed to course		2	Sometimes	20	59	437	38	322	33	3,943	33							
discussions in other ways		3	Often	8	24	395	34	336	35	4,218	36	2.6	2.8	26	2.9 *	37	2.9 *	36
		4	Very often	6	18	284	25	285	29	3,292	28							
			Total	34	100	1,151	100	971	100	11,777	100							
b. Prepared two or more	drafts	1	Never	2	6	173	15	128	13	1,708	15							
drafts of a paper or		2	Sometimes	7	21	409	36	323	33	4,020	34							
assignment before turning it in		3	Often	9	27	339	30	307	32	3,504	30	3.1	2.5 ***	.61	2.6 **	.52	2.6 **	.55
it iii		4	Very often	15	45	222	19	208	22	2,493	21							
			Total	33	100	1,143	100	966	100	11,725	100							
c. Come to class without	unpreparedr	1	Very often	2	6	48	4	31	3	500	4							
completing readings or		2	Often	3	9	118	10	95	10	1,137	10							
assignments	(Reverse-coded version of	3	Sometimes	20	61	665	58	551	57	6,698	57	3.0	3.1	08	3.1	14	3.1	10
	unprepared created	4	Never	8	24	316	28	284	30	3,368	29							
	by NSSE.)		Total	33	100	1,147	100	961	100	11,703	100							
d. Attended an art exhibit,	attendart	1	Never	15	44	467	41	274	28	3,745	32							
play or other arts		2	Sometimes	11	32	468	41	437	45	4,987	43							
performance (dance,		3	Often	4	12	152	13	169	18	2,059	18	1.9	1.8	.10	2.1	17	2.0	11
music, etc.)		4	Very often	4	12	59	5	83	9	912	8							
			Total	34	100	1,146	100	963	100	11,703	100							
e. Asked another student to	CLaskhelp	1	Never	2	6	62	5	46	5	663	6							
help you understand		2	Sometimes	12	36	422	37	365	38	4,251	36							
course material		3	Often	12	36	416	36	353	36	4,214	36	2.7	2.7	02	2.7	01	2.7	02
		4	Very often	7	21	248	22	205	21	2,606	22							
			Total	33	100	1,148	100	969	100	11,734	100							
f. Explained course material	CLexplain	1	Never	1	3	31	3	26	3	297	3							
to one or more students	-	2	Sometimes	14	41	348	30	301	31	3,681	31							
		3	Often	13	38	488	43	423	44	4,835	41	2.7	2.9	22	2.9	19	2.9	22
		4	Very often	6	18	276	24	212	22	2,881	25			_		-		
			Total	34	100	1,143	100	962	100	11,694	100							



First-Year Stude	ents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res					Great Lak	es											
_ 10,116,110,				NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	.013
Item wording or description	Variable name <sup>l</sup>	Values <sup>n</sup>	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
g. Prepared for exams by	CLstudy	1	Never	5	15	127	11	91	9	1,129	10							
discussing or working		2	Sometimes	8	24	397	35	304	32	3,805	32							
through course material with other students		3	Often	13	38	356	31	323	33	3,741	32	2.7	2.7	.04	2.8	05	2.7	04
with other students		4	Very often	8	24	266	23	247	26	3,057	26							
			Total	34	100	1,146	100	965	100	11,732	100							
h. Worked with other	CLproject	1	Never	1	3	63	6	58	6	675	6							
students on course		2	Sometimes	16	47	472	41	358	37	4,481	38							
projects or assignments		3	Often	10	29	405	35	361	37	4,218	36	2.7	2.7	.02	2.7	04	2.7	03
		4	Very often	7	21	205	18	192	20	2,357	20							
			Total	34	100	1,145	100	969	100	11,731	100							
i. Gave a course	present	1	Never	4	12	309	27	232	24	2,629	22							
presentation		2	Sometimes	19	56	559	49	449	46	5,735	49							
		3	Often	8	24	210	18	213	22	2,405	21	2.3	2.0	.33	2.1	.19	2.1	.18
		4	Very often	3	9	63	6	73	8	955	8							
			Total	34	100	1,141	100	967	100	11,724	100							
2. During the current scho	ol year, about	how ofte	en have you done the	following?														
a. Combined ideas from	RIintegrate	1	Never	1	3	58	5	50	5	656	6							
different courses when		2	Sometimes	8	24	472	41	362	38	4,464	38							
completing assignments		3	Often	15	44	415	36	359	37	4,372	37	3.0	2.7 *	.42	2.7	.33	2.7 *	.36
		4	Very often	10	29	198	17	194	20	2,239	19							
			Total	34	100	1,143	100	965	100	11,731	100							
b. Connected your learning	RIsocietal	1	Never	1	3	122	11	90	9	958	8							
to societal problems or		2	Sometimes	10	29	456	40	370	39	4,696	40							
issues		3	Often	18	53	403	35	332	35	4,074	35	2.8	2.5 *	.32	2.6	.23	2.6	.23
		4	Very often	5	15	156	14	162	17	1,926	17							
			Total	34	100	1,137	100	954	100	11,654	100							
c. Included diverse	RIdiverse	1	Never	3	9	153	13	100	10	1,162	10							
perspectives (political,		2	Sometimes	13	38	508	45	404	42	4,806	41							
religious, racial/ethnic, gender, etc.) in course		3	Often	12	35	333	29	305	32	3,849	33	2.6	2.4	.24	2.5	.10	2.6	.08
discussions or		4	Very often	6	18	144	13	153	16	1,882	16							
assignments			Total	34	100	1,138	100	962	100	11,699	100							



First-Year Stude	nts in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>l</sup>	Values	<sup>77</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size"	Mean	Effect size"	Mean	Effect size"
d. Examined the strengths	RIownview	1	Never	0	0	65	6	50	5	542	5							
and weaknesses of your		2	Sometimes	9	27	402	35	304	32	3,786	32							
own views on a topic or issue		3	Often	18	55	466	41	414	43	4,966	42	2.9	2.7	.24	2.8	.15	2.8	.15
issuc		4	Very often	6	18	205	18	195	20	2,396	20							
			Total	33	100	1,138	100	963	100	11,690	100							
e. Tried to better understand	RIperspect	1	Never	1	3	48	4	33	3	427	4							
someone else's views by		2	Sometimes	7	21	373	33	274	29	3,476	30							
imagining how an issue looks from his or her		3	Often	17	50	472	41	416	43	4,950	42	3.0	2.8	.24	2.9	.13	2.9	.16
perspective		4	Very often	9	26	245	22	238	25	2,823	24							
			Total	34	100	1,138	100	961	100	11,676	100							
f. Learned something that	RInewview	1	Never	0	0	38	3	25	3	297	3							·
changed the way you		2	Sometimes	9	26	381	33	286	30	3,490	30							
understand an issue or concept		3	Often	15	44	478	42	418	43	5,023	43	3.0	2.8	.27	2.9	.17	2.9	.17
сопсері		4	Very often	10	29	243	21	232	24	2,869	25							
			Total	34	100	1,140	100	961	100	11,679	100							
g. Connected ideas from	RIconnect	1	Never	0	0	14	1	11	1	143	1							
your courses to your prior		2	Sometimes	3	9	206	18	166	17	2,076	18							
experiences and knowledge		3	Often	16	47	543	48	462	48	5,263	45	3.4	3.1	.31	3.1	.30	3.2	.26
kilo wiedge		4	Very often	15	44	375	33	319	33	4,178	36							
			Total	34	100	1,138	100	958	100	11,660	100							
3. During the current school	ol year, about	how oft	en have you done the	following?														
a. Talked about career plans	SFcareer	1	Never	5	15	201	18	149	15	2,019	17							
with a faculty member		2	Sometimes	13	38	556	49	457	48	5,533	47							
		3	Often	11	32	247	22	246	26	2,772	24	2.5	2.3	.21	2.3	.16	2.3	.19
		4	Very often	5	15	141	12	110	11	1,382	12							
			Total	34	100	1,145	100	962	100	11,706	100							
b. Worked with a faculty	SFotherwork	1	Never	20	59	618	54	448	47	5,696	49							
member on activities other		2	Sometimes	9	26	338	30	324	34	3,746	32							
than coursework (committees, student		3	Often	4	12	118	10	124	13	1,492	13	1.6	1.7	11	1.8	22	1.8	20
groups, etc.)		4	Very often	1	3	68	6	60	6	735	6							
5 1, ,			Total	34	100	1,142	100	956	100	11,669	100							



First-Year Stude	ents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>I</sup>	Values '	<sup>77</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
c. Discussed course topics,	SFdiscuss	1	Never	10	29	389	34	230	24	3,365	29							
ideas, or concepts with a		2	Sometimes	16	47	484	42	454	47	5,117	44							
faculty member outside of class		3	Often	6	18	190	17	185	19	2,223	19	2.0	2.0	.04	2.1	16	2.1	08
Class		4	Very often	2	6	78	7	91	9	975	8							
			Total	34	100	1,141	100	960	100	11,680	100							
d. Discussed your academic	SFperform	1	Never	6	18	304	27	212	22	2,620	22							
performance with a		2	Sometimes	18	53	552	48	451	47	5,599	48							
faculty member		3	Often	7	21	196	17	196	20	2,341	20	2.2	2.1	.17	2.2	.01	2.2	.05
		4	Very often	3	9	89	8	101	11	1,102	9							
			Total	34	100	1,141	100	960	100	11,662	100							
4. During the current school	ol year, how m	uch has	your coursework en	nphasized the	follov	ving?												
a. Memorizing course	memorize	1	Very little	0	0	33	3	23	2	288	2							
material		2	Some	4	12	204	18	189	20	2,192	19							
		3	Quite a bit	14	41	495	43	426	44	5,158	44	3.4	3.1	.28	3.1	.33	3.1	.31
		4	Very much	16	47	415	36	322	34	4,078	35							
			Total	34	100	1,147	100	960	100	11,716	100							
b. Applying facts, theories,	HOapply	1	Very little	0	0	25	2	17	2	225	2							
or methods to practical		2	Some	8	24	208	18	178	19	2,011	17							
problems or new		3	Quite a bit	13	38	517	45	421	44	5,150	44	3.1	3.1	.04	3.1	.01	3.2	01
situations		4	Very much	13	38	395	34	343	36	4,302	37							
			Total	34	100	1,145	100	959	100	11,688	100							
c. Analyzing an idea,	HOanalyze	1	Very little	1	3	37	3	33	3	330	3							
experience, or line of		2	Some	8	24	263	23	206	22	2,403	21							
reasoning in depth by		3	Quite a bit	10	30	496	43	393	41	4,871	42	3.1	3.0	.14	3.1	.08	3.1	.05
examining its parts		4	Very much	14	42	346	30	326	34	4,045	35							
			Total	33	100	1,142	100	958	100	11,649	100							
d. Evaluating a point of	HOevaluate	1	Very little	1	3	56	5	43	4	466	4							
view, decision, or		2	Some	9	26	320	28	264	28	2,957	25							
information source		3	Quite a bit	11	32	486	43	391	41	4,917	42	3.1	2.9	.24	2.9	.18	3.0	.13
		4	Very much	13	38	274	24	260	27	3,324	28							
			Total	34	100	1,136	100	958	100	11,664	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

<b>First-Year Stude</b>	nts in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Nat	Res					Great Lak	es											
Dio, rigilio, a ria	. 1103			NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>I</sup>	Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size "	Mean	Effect size "
e. Forming a new idea or	HOform	1	Very little	3	9	64	6	32	3	516	4							
understanding from		2	Some	8	24	290	25	258	27	2,927	25							
various pieces of information		3	Quite a bit	13	38	497	43	405	42	4,872	42	2.9	2.9	01	2.9	07	2.9	08
momenton		4	Very much	10	29	292	26	262	27	3,351	29							
			Total	34	100	1,143	100	957	100	11,666	100							
5. During the current schoo	l year, to wha	at extent	have your instructo	rs done the fo	llowir	ıg?												
a. Clearly explained course	ETgoals	1	Very little	0	0	23	2	15	2	184	2							
goals and requirements		2	Some	3	9	174	15	153	16	1,732	15							
		3	Quite a bit	12	35	541	47	438	45	5,357	46	3.5	3.2 *	.41	3.2 *	.38	3.2 *	.36
		4	Very much	19	56	411	36	364	38	4,486	38							
			Total	34	100	1,149	100	970	100	11,759	100							
b. Taught course sessions in	ETorganize	1	Very little	0	0	22	2	21	2	231	2							
an organized way		2	Some	4	12	201	18	181	19	1,892	16							
		3	Quite a bit	19	58	538	47	439	45	5,368	46	3.2	3.1	.08	3.1	.10	3.2	.03
		4	Very much	10	30	385	34	326	34	4,232	36							
			Total	33	100	1,146	100	967	100	11,723	100							
c. Used examples or	ETexample	1	Very little	0	0	28	2	24	2	252	2							
illustrations to explain		2	Some	4	12	204	18	159	16	1,879	16							
difficult points		3	Quite a bit	18	55	467	41	391	40	4,731	40	3.2	3.2	.06	3.2	.03	3.2	.00
		4	Very much	11	33	444	39	392	41	4,832	41							
			Total	33	100	1,143	100	966	100	11,694	100							
d. Provided feedback on a	ETdraftfb	1	Very little	1	3	110	10	90	9	924	8							
draft or work in progress		2	Some	7	21	322	28	272	28	3,237	28							
		3	Quite a bit	12	36	410	36	338	35	4,204	36	3.1	2.8 *	.35	2.8	.33	2.9	.29
		4	Very much	13	39	302	26	265	27	3,334	28							
			Total	33	100	1,144	100	965	100	11,699	100							
e. Provided prompt and	ETfeedback	1	Very little	2	6	120	11	62	6	923	8							
detailed feedback on tests		2	Some	12	36	348	31	271	28	3,419	29							
or completed assignments		3	Quite a bit	10	30	392	34	369	38	4,388	38	2.8	2.7	.06	2.9	08	2.8	02
		4	Very much	9	27	279	24	259	27	2,947	25							
			Total	33	100	1,139	100	961	100	11,677	100							



First-Year Stud	ents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	at Res			NA		Great Lak	es	C		NISSE 204	2	NMU	Carat tal	D. I-1'-	C	Class	NCCE	2042
				NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NIVIU	Great Lak		Carnegie		NSSE 2	
Item wording or description	Variable name <sup>l</sup>	Values '	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
6. During the current sch	ool year, about l	now ofte	en have you done the	following?														
a. Reached conclusions	QRconclude	1	Never	3	9	94	8	82	8	932	8							
based on your own		2	Sometimes	11	32	323	28	311	32	3,602	31							
analysis of numerical		3	Often	10	29	479	42	360	37	4,600	39	2.8	2.8	.02	2.7	.07	2.8	.04
information (numbers, graphs, statistics, etc.)		4	Very often	10	29	253	22	213	22	2,623	22							
graphs, statistics, etc.)			Total	34	100	1,149	100	966	100	11,757	100							
b. Used numerical	QRproblem	1	Never	7	21	221	19	180	19	2,248	19							
information to examine a		2	Sometimes	13	38	445	39	398	41	4,635	39							
real-world problem or		3	Often	7	21	350	31	261	27	3,316	28	2.4	2.3	.08	2.3	.08	2.4	.06
issue (unemployment, climate change, public		4	Very often	7	21	131	11	124	13	1,539	13							
health, etc.)			Total	34	100	1,147	100	963	100	11,738	100							
, ,						ŕ				ŕ								
c. Evaluated what others	QRevaluate	1	Never	4	12	210	18	147	15	1,913	16							
have concluded from		2	Sometimes	14	41	449	39	420	44	4,684	40							
numerical information		3	Often	11	32	345	30	276	29	3,625	31	2.5	2.4	.15	2.4	.13	2.4	.11
		4	Very often	5	15	141	12	119	12	1,501	13							
			Total	34	100	1,145	100	962	100	11,723	100							
7. During the current sch	ool vear, about h	now ma	ny papers, reports, o	r other writin	ıg task	s of the foll	owing	length have	vou b	een assigne	ed? (Incl	ide those not vet	completed.	)				
a. Up to 5 pages	wrshortnum	0	None	0	0	45	4	39	4	491	4	·	•	,				
		1.5	1-2	3	9	223	20	201	21	2,181	19							
	(Recoded version	4	3-5	6	18	386	34	283	30	3,607	31							
	of wrshort created	8	6-10	15	45	270	24	220	23	2,952	26	9.3	6.6 **	.47	6.9 *	.41	6.9 *	.41
	by NSSE. Values are estimated	13	11-15	3	9	102	9	128	13	1,247	11							
	number of papers,	18	16-20	4	12	55	5	45	5	546	5							
	reports, etc.)	23	More than 20	2	6	49	4	42	4	541	5							
			Total	33	100	1,130	100	958	100	11,565	100							
b. Between 6 and 10 pages	wrmednum	0	None	9	27	357	33	337	37	3,518	31							
. 0		1.5	1-2	15	45	446	41	373	40	4,746	42							
	(Recoded version	4	3-5	6	18	191	18	164	18	2,090	19							
	of wrmed created by NSSE. Values	8	6-10	1	3	65	6	36	4	628	6	2.6	2.2	.14	1.8	.31	2.1	.17
	are estimated	13	11-15	1	3	18	2	7	1	136	1							
	number of papers,	18	16-20	1	3	0	0	5	1	30	0							
	reports, etc.)	23	More than 20	0	0	7	1	0	0	39	0							
			Total	33	100	1,084	100	922	100	11,187	100							



	dents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Sta	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	lat Res			NMU		Great Lake Public	es	Carnegie Cl	ass	NSSE 201	13	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>I</sup>	Values <sup>1</sup>	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size "
c. 11 pages or more	wrlongnum	0	None	28	88	836	79	715	80	8,303	77							
		1.5	1-2	2	6	174	16	149	17	1,985	18							
	(Recoded version of wrlong created	4	3-5	1	3	29	3	19	2	294	3							
	by NSSE. Values	8	6-10	0	0	11	1	2	0	119	1	0.8	0.6	.07	0.6	.11	0.7	.04
	are estimated	13	11-15	0	0	5	0	7	1	70	1							
	number of papers,	18	16-20	1	3	2	0	4	0	27	0							
	reports, etc.)	23	More than 20	0	0	4	0	1	0	43	0							
			Total	32	100	1,061	100	897	100	10,841	100							
Estimated number of assigned pages of studen	wrpages																	
writing.	(Continuous varial	t, wrmed	led and summed by and wrlong. Values are writing)									58	44	.26	42	.31	46	.22
0.70.1	h11										<del></del>							
8. During the current sc	nooi year, about i	ow oft	en have you had discu	ıssions with p	eople	from the fo	llowin	g groups?										
a. People of a race or	DDrace	ow ofte	en have you had discu Never	ussions with p 2	eople 6	from the fo 65	llowin 6	g groups? 49	5	539	5							
People of a race or ethnicity other than your	-								5 24	539 2,757	5 23							
a. People of a race or	-	1	Never	2	6	65	6	49				2.9	3.0	18	3.1	22	3.1	28
People of a race or ethnicity other than your	-	1 2	Never Sometimes	2 13	6 38	65 301	6 26	49 237	24	2,757	23	2.9	3.0	18	3.1	22	3.1	28
People of a race or ethnicity other than your	-	1 2 3	Never Sometimes Often	2 13 7	6 38 21	65 301 331	6 26 29	49 237 292	24 30	2,757 3,286	23 28	2.9	3.0	18	3.1	22	3.1	28
People of a race or ethnicity other than your	DDrace	1 2 3	Never Sometimes Often Very often	2 13 7 12	6 38 21 35	65 301 331 456	6 26 29 40	49 237 292 390	24 30 40	2,757 3,286 5,170	23 28 44	2.9	3.0	18	3.1	22	3.1	28
a. People of a race or ethnicity other than your own      b. People from an economic background other than	DDrace	1 2 3 4	Never Sometimes Often Very often Total	2 13 7 12	6 38 21 35 100	65 301 331 456 1,153	6 26 29 40 100	49 237 292 390 968	24 30 40 100	2,757 3,286 5,170 11,752	23 28 44 100	2.9	3.0	18	3.1	22	3.1	28
People of a race or ethnicity other than your own  b. People from an economic	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never	2 13 7 12 34	6 38 21 35 100	65 301 331 456 1,153	6 26 29 40 100	49 237 292 390 968 33	24 30 40 100 3	2,757 3,286 5,170 11,752 460	23 28 44 100 4	3.1	3.0	18	3.1	22	3.1	28
People of a race or ethnicity other than your own      People from an economic background other than	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes	2 13 7 12 34 1 9	6 38 21 35 100 3 26	65 301 331 456 1,153 39 244	6 26 29 40 100 3 21	49 237 292 390 968 33 202	24 30 40 100 3 21	2,757 3,286 5,170 11,752 460 2,366	23 28 44 100 4 20							
a. People of a race or ethnicity other than your own      b. People from an economic background other than	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often	2 13 7 12 34 1 9	6 38 21 35 100 3 26 26	65 301 331 456 1,153 39 244 383	6 26 29 40 100 3 21 33	49 237 292 390 968 33 202 345	24 30 40 100 3 21 36	2,757 3,286 5,170 11,752 460 2,366 3,918	23 28 44 100 4 20 33							
People of a race or ethnicity other than your own      People from an economic background other than	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often	2 13 7 12 34 1 9 9	6 38 21 35 100 3 26 26 44	65 301 331 456 1,153 39 244 383 484	6 26 29 40 100 3 21 33 42	49 237 292 390 968 33 202 345 385	24 30 40 100 3 21 36 40	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995	23 28 44 100 4 20 33 43							
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your	DDrace DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total	2 13 7 12 34 1 9 9	6 38 21 35 100 3 26 26 44 100	65 301 331 456 1,153 39 244 383 484 1,150	6 26 29 40 100 3 21 33 42 100	49 237 292 390 968 33 202 345 385 965	24 30 40 100 3 21 36 40 100	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739	23 28 44 100 4 20 33 43 100							
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious	DDrace DDeconomic	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never	2 13 7 12 34 1 9 9 15 34	38 21 35 100 3 26 26 44 100	65 301 331 456 1,153 39 244 383 484 1,150	6 26 29 40 100 3 21 33 42 100	49 237 292 390 968 33 202 345 385 965	24 30 40 100 3 21 36 40 100 6	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725	23 28 44 100 4 20 33 43 100 6							
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your	DDrace DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Sometimes	2 13 7 12 34 1 9 9 15 34	6 38 21 35 100 3 26 26 44 100 3 32	65 301 331 456 1,153 39 244 383 484 1,150 55 255	6 26 29 40 100 3 21 33 42 100 5	49 237 292 390 968 33 202 345 385 965 57 233	24 30 40 100 3 21 36 40 100 6 24	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725 2,729	23 28 44 100 4 20 33 43 100 6 23	3.1	3.1	03	3.1	.00	3.1	03
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your	DDrace DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Often Often Often Often Often Often Often	2 13 7 12 34 1 9 9 15 34 1 11	6 38 21 35 100 3 26 26 44 100 3 32 21	65 301 331 456 1,153 39 244 383 484 1,150 55 255 367	6 26 29 40 100 3 21 33 42 100 5 22 32	49 237 292 390 968 33 202 345 385 965 57 233 315	24 30 40 100 3 21 36 40 100 6 24 33	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725 2,729 3,409	23 28 44 100 4 20 33 43 100 6 23 29	3.1	3.1	03	3.1	.00	3.1	03
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your	DDrace DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Very often Very often Very often	2 13 7 12 34 1 9 9 15 34 1 11 7	6 38 21 35 100 3 26 26 44 100 3 32 21 44	65 301 331 456 1,153 39 244 383 484 1,150 55 255 367 476	6 26 29 40 100 3 21 33 42 100 5 22 32 41	49 237 292 390 968 33 202 345 385 965 57 233 315 359	24 30 40 100 3 21 36 40 100 6 24 33 37	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725 2,729 3,409 4,866	23 28 44 100 4 20 33 43 100 6 23 29 41	3.1	3.1	03	3.1	.00	3.1	03
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your own	DDrace  DDeconomic  DDreligion  DDpolitical	1 2 3 4 1 2 3 4 4 1 2 3 4 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Very often Total Never Sometimes Often Very often Total	2 13 7 12 34 1 9 9 15 34 1 11 7	6 38 21 35 100 3 26 26 44 100 3 32 21 44	65 301 331 456 1,153 39 244 383 484 1,150 55 255 367 476 1,153	6 26 29 40 100 3 21 33 42 100 5 22 32 41 100	49 237 292 390 968 33 202 345 385 965 57 233 315 359 964	24 30 40 100 3 21 36 40 100 6 24 33 37 100	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725 2,729 3,409 4,866 11,729	23 28 44 100 4 20 33 43 100 6 23 29 41 100	3.1	3.1	03	3.1	.00	3.1	03
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your own  d. People with political	DDrace  DDeconomic  DDreligion  DDpolitical	1 2 3 4 1 2 3 4 1 1 2 1 1	Never Sometimes Often Very often Total Never	2 13 7 12 34 1 9 9 15 34 1 11 7 15 34	6 38 21 35 100 3 26 26 44 100 3 32 21 44 100 3	65 301 331 456 1,153 39 244 383 484 1,150 55 255 367 476 1,153 57	6 26 29 40 100 3 21 33 42 100 5 22 32 41 100 5	49 237 292 390 968 33 202 345 385 965 57 233 315 359 964	24 30 40 100 3 21 36 40 100 6 24 33 37 100	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725 2,729 3,409 4,866 11,729 640	23 28 44 100 4 20 33 43 100 6 23 29 41 100 5	3.1	3.1	03	3.1	.00	3.1	03
a. People of a race or ethnicity other than your own  b. People from an economic background other than your own  c. People with religious beliefs other than your own  d. People with political	DDrace  DDeconomic  DDreligion  DDpolitical	1 2 3 4 1 2 3 4 1 2 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often Total Never Sometimes Sometimes	2 13 7 12 34 1 9 9 15 34 1 11 7 15 34	38 21 35 100 3 26 26 44 100 3 32 21 44 100 3 29	65 301 331 456 1,153 39 244 383 484 1,150 55 255 367 476 1,153 57 227	6 26 29 40 100 3 21 33 42 100 5 22 32 41 100 5 20	49 237 292 390 968 33 202 345 385 965 57 233 315 359 964 55 233	24 30 40 100 3 21 36 40 100 6 24 33 37 100 6 24	2,757 3,286 5,170 11,752 460 2,366 3,918 4,995 11,739 725 2,729 3,409 4,866 11,729 640 2,688	23 28 44 100 4 20 33 43 100 6 23 29 41 100 5 23	3.1	3.1	03	3.1	.00	3.1	03



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

First-Year Stude	nts in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Roc					Great Lak	es											
Dio, Agric, & Na	t ites			NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>I</sup>	Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
9. During the current school	ol year, about	how oft	en have you done the	following?														
a. Identified key information	LSreading	1	Never	0	0	9	1	7	1	89	1							
from reading assignments		2	Sometimes	6	18	206	18	144	15	1,670	14							
		3	Often	12	35	483	42	439	45	5,003	43	3.3	3.2	.13	3.2	.09	3.3	.04
		4	Very often	16	47	448	39	377	39	4,966	42							
			Total	34	100	1,146	100	967	100	11,728	100							
b. Reviewed your notes after	LSnotes	1	Never	1	3	37	3	29	3	413	4							
class		2	Sometimes	8	24	283	25	229	24	3,027	26							
		3	Often	11	32	381	33	327	34	3,825	33	3.1	3.1	.05	3.1	.02	3.1	.08
		4	Very often	14	41	443	39	381	39	4,440	38							
			Total	34	100	1,144	100	966	100	11,705	100							
c. Summarized what you	LSsummary	1	Never	1	3	63	6	44	5	583	5							
learned in class or from course materials		2	Sometimes	11	32	335	30	271	28	3,241	28							
course materials		3	Often	13	38	369	33	344	36	4,114	35	2.9	2.9	04	2.9	06	2.9	06
		4	Very often	9	26	366	32	296	31	3,686	32							
			Total	34	100	1,133	100	955	100	11,624	100							
10. During the current scho	ool year, to wh	nat exter	nt have your courses	challenged yo	u to d	o your best	work?	•										
	challenge	1	Not at all	0	0	5	0	1	0	34	0							
		2		0	0	7	1	12	1	81	1							
		3		0	0	19	2	22	2	264	2							
		4		2	6	75	7	80	8	849	7	5.7	5.7	03	5.7	.02	5.7	02
		5		13	38	340	30	275	28	3,337	28							
		6		12	35	403	35	334	35	4,075	35							
		7	Very much	7	21	300	26	244	25	3,107	26							
			Total	34	100	1,149	100	968	100	11,747	100							



First-Year Stud	ents in			ı	requen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	at Res		NMU		Great Lak Public	es	Carnegie C	lass	NSSE 201	3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
11. Which of the followin	g have you done	or do you plan to do before	you graduate	e?°													
a. Participate in an	intern	Have not decided	3	9	124	11	87	9	975	8							
internship, co-op, field	(Means indicate	Do not plan to do	1	3	48	4	21	2	317	3							
experience, student teaching, or clinical	the percentage who responded "Done	Plan to do	26	76	892	78	781	81	9,417	80	12%	7%	.16	8%	.12	9%	.09
placement	or in progress.")	Done or in progress	4	12	83	7	79	8	1,044	9							
•		Total	34	100	1,147	100	968	100	11,753	100							
b. Hold a formal leadership	leader	Have not decided	9	27	290	25	255	26	3,059	26							
role in a student	(Means indicate	Do not plan to do	6	18	291	25	229	24	2,417	21							
organization or group	dent (Means indicate	Plan to do	13	39	431	38	376	39	4,751	41	15%	12%	.11	11%	.13	13%	.07
	or in progress.")	Done or in progress	5	15	132	12	104	11	1,485	13							
	10 /	Total	33	100	1,144	100	964	100	11,712	100							
c. Participate in a learning	learncom	Have not decided	10	29	319	28	304	32	3,597	31							
community or some other	(Means indicate	Do not plan to do	6	18	342	30	273	28	3,127	27							
formal program where groups of students take	the percentage who responded "Done	Plan to do	9	26	253	22	239	25	3,019	26	26%	20%	.15	15%	.28	17%	.24
two or more classes	or in progress.")	Done or in progress	9	26	233	20	148	15	1,964	17							
together		Total	34	100	1,147	100	964	100	11,707	100							
d. Participate in a study	abroad	Have not decided	14	41	315	28	277	29	3,152	27							
abroad program	(Means indicate	Do not plan to do	7	21	273	24	236	25	2,556	22							
	the percentage who	Plan to do	13	38	507	44	418	43	5,601	48	0%	4%	41	3%	37	3%	37
	responded "Done or in progress.")	Done or in progress	0	0	47	4	32	3	390	3							
	or in progress.	Total	34	100	1,142	100	963	100	11,699	100							
e. Work with a faculty	research	Have not decided	10	29	339	30	293	30	3,400	29							
member on a research	(Means indicate	Do not plan to do	6	18	135	12	119	12	1,252	11							
project	the percentage who	Plan to do	18	53	584	51	491	51	6,176	53	0%	7%	53	6%	50	7%	54
	responded "Done or in progress.")	Done or in progress	0	0	79	7	58	6	835	7	0,0	,,,		0,0	.50	,,,	
	or in progress.	Total	34	100	1,137	100	961	100	11,663	100							
f. Complete a culminating	capstone	Have not decided	14	41	352	31	278	29	3,245	28							
senior experience	(Means indicate	Do not plan to do	2	6	75	7	69	7	786	7							
(capstone course, senior	the percentage who		18	53	679	60	586	61	7,358	63	0%	3%	32	3%	33	2%	31
project or thesis, comprehensive exam,	responded "Done or in progress.")	Done or in progress	0	0	29	3	26	3	283	2	3 / 0	570	.52	270	.55	270	.51
portfolio, etc.)	or in progress. )	Total	34	100	1,135	100	959	100	11,672	100							
					, 22				, <u> </u>								



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

First-Year Stud	lents in					Frequen	cy D	istributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	at Res			NMU		Great Lak Public		Carnegie C	lass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	: Class	NSSE 2	2013
Item wording or description	Variable name <sup>l</sup>	Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size"	Mean	Effect size"	Mean	Effect size "
12. About how many of y	our courses at t	his insti	tution have included	a community	-based	project (se	rvice-	learning)?										
	servcourse	1	None	18	55	674	59	456	47	5,718	49							
		2	Some	12	36	417	37	442	46	5,174	44							
		3	Most	3	9	42	4	61	6	691	6	1.5	1.5	.15	1.6	09	1.6	06
		4	All	0	0	7	1	5	1	90	1							
			Total	33	100	1,140	100	964	100	11,673	100							
13. Indicate the quality o	of your interaction	ons with	the following people	at your insti	tution.													
a. Students	QIstudent	1	Poor	0	0	10	1	12	1	158	1							
		2		1	3	31	3	12	1	218	2							
		3		0	0	48	4	49	5	498	4							
		4		3	9	105	9	84	9	1,014	9							
		5		11	32	243	21	238	25	2,524	21	5.6	5.6	01	5.6	01	5.7	03
		6		11	32	364	32	266	27	3,578	30							
		7	Excellent	8	24	345	30	307	32	3,735	32							
		_	Not applicable	0	0	3	0	1	0	33	0							
			Total	34	100	1,149	100	969	100	11,758	100							
b. Academic advisors	QIadvisor	1	Poor	1	3	43	4	36	4	399	3							
		2		4	13	67	6	56	6	633	5							
		3		2	6	107	9	80	8	930	8							
		4		3	9	154	13	119	12	1,575	13							
		5		8	25	221	19	192	20	2,236	19	4.9	5.1	07	5.2	13	5.2	14
		6		7	22	244	21	207	21	2,634	22							
		7	Excellent	7	22	281	24	265	27	3,119	27							
		_	Not applicable	0	0	31	3	9	1	213	2							
			Total	32	100	1,148	100	964	100	11,739	100							
c. Faculty	QIfaculty	1	Poor	1	3	17	1	17	2	209	2							
		2		0	0	39	3	27	3	329	3							
		3		2	6	90	8	45	5	705	6							
		4		5 7	15	185	16	125	13	1,492	13	5.3	5.3	11	<i>5.5</i>	00	5.3	0.1
		5		12	21 36	268	24 28	188	20 32	2,757	24	5.5	5.2	.11	5.5	09	5.3	01
		7	Evraellant			318		307		3,499	30							
		/	Excellent Not applies blo	6	18 0	217 5	19 0	250 3	26 0	2,609 70	22 1							
		_	Not applicable								•							
			Total	33	100	1,139	100	962	100	11,670	100							



First-Year Stude	ents in					Frequen	cy Di	istributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res			NMU		Great Lak Public		Carnegie C	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	· Class	NSSE 2	2013
Item wording or description	n wording Variable lescription name <sup>I</sup> Values <sup>m</sup> Response		<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
d. Student services staff	QIstaff	1	Poor	0	0	54	5	41	4	496	4							
(career services, student		2		2	6	64	6	42	4	536	5							
activities, housing, etc.)		3		3	9	83	7	67	7	807	7							
		4		3	9	153	13	138	14	1,626	14							
		5		7	21	255	22	210	22	2,485	21	5.1	4.9	.13	5.1	.03	5.0	.05
		6		12	36	226	20	214	22	2,658	23							
		7	Excellent	3	9	189	17	198	21	2,200	19							
		_	Not applicable	3	9	116	10	52	5	889	8							
			Total	33	100	1,140	100	962	100	11,697	100							
e. Other administrative staff	QIadmin	1	Poor	1	3	55	5	45	5	532	5							
and offices (registrar,		2		3	9	81	7	58	6	688	6							
financial aid, etc.)		3		3	9	92	8	81	8	970	8							
		4		1	3	156	14	133	14	1,704	15							
		5		4	12	233	20	200	21	2,457	21	5.2	4.8	.23	5.0	.13	4.9	.17
		6		14	41	233	20	193	20	2,573	22							
		7	Excellent	6	18	176	15	211	22	2,082	18							
		_	Not applicable	2	6	118	10	39	4	709	6							
			Total	34	100	1,144	100	960	100	11,715	100							
14. How much does your in	nstitution empl	nasize th	e following?															
a. Spending significant	empstudy	1	Very little	0	0	13	1	10	1	137	1							
amounts of time studying		2	Some	5	15	123	11	98	10	1,192	10							
and on academic works		3	Quite a bit	17	50	494	43	394	41	4,885	42	3.2	3.3	16	3.4	21	3.3	19
		4	Very much	12	35	515	45	462	48	5,487	47							
			Total	34	100	1,145	100	964	100	11,701	100							
b. Providing support to help	SEacademic	1	Very little	1	3	28	2	27	3	313	3							
students succeed		2	Some	7	21	183	16	135	14	1,712	15							
academically		3	Quite a bit	8	24	453	40	379	40	4,555	39	3.3	3.2	.07	3.2	.04	3.2	.04
		4	Very much	18	53	473	42	413	43	5,058	43							
			Total	34	100	1,137	100	954	100	11,638	100							
c. Using learning support	SElearnsup	1	Very little	2	6	51	4	34	4	438	4							
services (tutoring services,	_	2	Some	3	9	165	14	142	15	1,546	13							
writing center, etc.)		3	Quite a bit	9	26	387	34	338	35	4,084	35	3.4	3.2	.17	3.2	.16	3.3	.13
		4	Very much	20	59	535	47	448	47	5,572	48							
			Total	34	100	1,138	100	962	100	11,640	100							



First-Year Stude	nts in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Nat	t Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	13	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	.013
Item wording or description	Variable name <sup>I</sup>	Values '	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
d. Encouraging contact	SEdiverse	1	Very little	4	12	127	11	119	12	1,295	11							
among students from		2	Some	11	32	372	33	271	28	3,416	29							
different backgrounds (social, racial/ethnic,		3	Quite a bit	10	29	330	29	306	32	3,726	32	2.7	2.7	02	2.7	04	2.8	06
religious, etc.)		4	Very much	9	26	310	27	263	27	3,234	28							
,			Total	34	100	1,139	100	959	100	11,671	100							
e. Providing opportunities to	SEsocial	1	Very little	1	3	66	6	54	6	535	5							
be involved socially		2	Some	4	12	254	22	185	19	2,247	19							
		3	Quite a bit	16	47	397	35	389	41	4,394	38	3.2	3.0	.19	3.0	.19	3.1	.12
		4	Very much	13	38	422	37	332	35	4,477	38							
			Total	34	100	1,139	100	960	100	11,653	100							
f. Providing support for your	SEwellness	1	Very little	1	3	73	6	46	5	601	5							
overall well-being		2	Some	3	9	228	20	202	21	2,158	19							
(recreation, health care,		3	Quite a bit	12	35	395	35	349	36	4,390	38	3.4	3.1 *	.36	3.1 *	.35	3.1	.32
counseling, etc.)		4	Very much	18	53	438	39	363	38	4,496	39							
			Total	34	100	1,134	100	960	100	11,645	100							
g. Helping you manage your	SEnonacad	1	Very little	5	15	243	21	197	21	2,189	19							
non-academic		2	Some	12	35	409	36	348	36	4,194	36							
responsibilities (work,		3	Quite a bit	6	18	291	26	255	27	3,266	28	2.7	2.4	.29	2.4	.29	2.4	.25
family, etc.)		4	Very much	11	32	192	17	158	16	1,995	17							
			Total	34	100	1,135	100	958	100	11,644	100							
h. Attending campus	SEactivities	1	Very little	2	6	88	8	62	6	708	6							
activities and events		2	Some	7	21	263	23	223	23	2,451	21							
(performing arts, athletic		3	Quite a bit	12	35	443	39	353	37	4,467	38	3.1	2.9	.16	3.0	.10	3.0	.05
events, etc.)		4	Very much	13	38	341	30	320	33	3,992	34							
			Total	34	100	1,135	100	958	100	11,618	100							
i. Attending events that	SEevents	1	Very little	1	3		14	114	12	1,272	11							
address important social,		2	Some	14	41	404	36	305	32	3,598	31							
economic, or political		3	Quite a bit	9	26		31	308	32	4,021	35	2.8	2.6	.27	2.7	.15	2.7	.13
issues		4	Very much	10	29		20	226	24	2,709	23						=	
			Total	34	100	1,132	100	953	100	11,600	100							



First-Year Stud	ents in					Frequen	cy Di	stributio	ns <sup>a</sup>				St	atistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	at Res			NMU		Great Lak Public	es	Carnegie Cl	200	NSSE 201	2	NMU	Great I	akes Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>I</sup>	Values <sup>1</sup>	" Response options	Count	%	Count	%	Count	%	Count	. <u>.                                   </u>	Mean	Mean	Effect	Mean	Effect size"	Mean	Effect size"
<del></del>						Count	,,,	count	70	count		- Wedn	ivieur	3126	ivieuri	3126	Weum	3126
a. Preparing for class	tmprephrs	п <b>а сур</b> О	0 hrs	g the followin	ig: 0	2	0	1	0	30	0							
(studying, reading,	шргершз	3	1-5 hrs	4	12		9	99	10	1,136	10							
writing, doing homework		8	6-10 hrs	5	15		21	192	20	2,194	19							
or lab work, analyzing	(Recoded version	13	11-15 hrs	11	32		20	197	20	2,433	21							
data, rehearsing, and other academic activities)	of tmprep created by NSSE. Values	18	16-20 hrs	8	24	236	21	200	21	2,328	20	15.1	16.1	13	16.1	12	16.4	16
academic acaviaes)	are estimated	23	21-25 hrs	1	3	155	14	124	13	1,593	14	15.1	10.1	15	10.1	12	10.4	10
	number of hours	28	26-30 hrs	3	9	90	8	74	8	1,005	9							
	per week.)	33	More than 30 hrs	2	6	89	8	79	8	1,010	9							
			Total	34	100	1,148	100	966	100	11,729	100							
b. Participating in co-	tmcocurrhrs	0	0 hrs	14	41	357	31	285	30	3,190	27							
curricular activities		3	1-5 hrs	9	26	440	39	350	36	4,409	38							
(organizations, campus	Ø 1 - 1	8	6-10 hrs	5	15	192	17	164	17	1,992	17							
publications, student government, fraternity or	(Recoded version of tmcocurr	13	11-15 hrs	4	12	68	6	77	8	1,015	9							
sorority, intercollegiate or		18	16-20 hrs	1	3	44	4	54	6	583	5	4.7	4.9	03	5.3	10	5.6	14
intramural sports, etc.)	Values are	23	21-25 hrs	1	3	28	2	22	2	268	2							
	estimated number of hours per week.)	28	26-30 hrs	0	0	6	1	6	1	118	1							
	oj nours per week.)	33	More than 30 hrs	0	0	7	1	4	0	100	1							
			Total	34	100	1,142	100	962	100	11,675	100							
c. Working for pay on	tmworkonhrs	0	0 hrs	28	82	922	80	746	77	8,953	77							
campus		3	1-5 hrs	0	0	40	3	56	6	624	5							
	(Recoded version	8	6-10 hrs	2	6	87	8	73	8	1,092	9							
	of tmworkon	13	11-15 hrs	1	3	60	5	41	4	566	5							
	created by NSSE.	18	16-20 hrs	3	9	21	2	28	3	318	3	2.4	2.1	.06	2.4	.01	2.4	.02
	Values are	23	21-25 hrs	0	0	7	1	8	1	77	1							
	estimated number of hours per week.)	28	26-30 hrs	0	0	2	0	6	1	30	0							
	z,a. s per meen.)	33	More than 30 hrs	0	0	7	1	5	1	38	0							
			Total	34	100	1,146	100	963	100	11,698	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

First-Year Stud	ents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	at Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	13	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	.013
Item wording or description	Variable name <sup>l</sup>	Values '	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
d. Working for pay off	tmworkoffhrs	0	0 hrs	27	79	823	72	736	77	8,888	76							
campus		3	1-5 hrs	0	0	56	5	41	4	516	4							
	(Recoded version	8	6-10 hrs	2	6	57	5	45	5	527	5							
	of tmworkoff	13	11-15 hrs	2	6	63	6	27	3	503	4							
	created by NSSE.	18	16-20 hrs	1	3	57	5	40	4	499	4	3.3	4.1	10	3.7	05	3.5	03
	Values are	23	21-25 hrs	1	3	40	4	31	3	327	3							
	estimated number of hours per week.)	28	26-30 hrs	1	3	19	2	13	1	162	1							
	of nours per week.)	33	More than 30 hrs	0	0	22	2	28	3	237	2							
			Total	34	100	1,137	100	961	100	11,659	100							
e. Doing community service	tmservicehrs	0	0 hrs	20	59	646	57	525	55	6,044	52							-
or volunteer work		3	1-5 hrs	11	32	363	32	342	36	4,364	38							
	(Recoded version	8	6-10 hrs	1	3	77	7	43	5	669	6							
	of tmservice	13	11-15 hrs	1	3	18	2	21	2	251	2							
	created by NSSE.	18	16-20 hrs	0	0	14	1	10	1	128	1	2.3	2.2	.01	2.3	01	2.4	02
	Values are	23	21-25 hrs	1	3	6	1	9	1	66	1							
	estimated number of hours per week.)	72	26-30 hrs	0	0	2	0	2	0	18	0							
	oj nours per week.)	33	More than 30 hrs	0	0	4	0	3	0	37	0							
			Total	34	100	1,130	100	955	100	11,577	100							
f. Relaxing and socializing	tmrelaxhrs	0	0 hrs	0	0	18	2	7	1	160	1							
(time with friends, video		3	1-5 hrs	2	6	255	22	237	25	2,649	23							
games, TV or videos, keeping up with friends	(Recoded version	8	6-10 hrs	7	21	303	27	261	27	3,317	29							
online, etc.)	of tmrelax created	13	11-15 hrs	9	27	229	20	187	20	2,314	20							
, ,	by NSSE. Values	18	16-20 hrs	4	12	156	14	113	12	1,487	13	16.2	12.1 **	.50	11.7 **	.55	11.8 **	.54
	are estimated	23	21-25 hrs	7	21	85	7	74	8	783	7							
	number of hours per week.)	28	26-30 hrs	2	6	43	4	35	4	371	3							
	рег шеек.)	33	More than 30 hrs	2	6	48	4	36	4	528	5							
			Total	33	100	1,137	100	950	100	11,609	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

First-Year Stud	dents in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	lat Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	13	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>l</sup>	Values'	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
g. Providing care for	tmcarehrs	0	0 hrs	27	84	931	82	736	78	9,383	81							
dependents (children,		3	1-5 hrs	3	9	114	10	101	11	1,114	10							
parents, etc.)	(Recoded version	8	6-10 hrs	2	6	35	3	48	5	431	4							
	of tmcare created	13	11-15 hrs	0	0	20	2	17	2	231	2							
	by NSSE. Values	18	16-20 hrs	0	0	11	1	12	1	136	1	0.8	1.7	17	2.2 **	24	1.9 **	19
	are estimated	23	21-25 hrs	0	0	4	0	9	1	85	1							
	number of hours	28	26-30 hrs	0	0	4	0	5	1	39	0							
	per week.)	33	More than 30 hrs	0	0	20	2	20	2	193	2							
			Total	32	100	1,139	100	948	100	11,612	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	14	42	422	37	479	50	5,379	46							
(driving, walking, etc.)		3	1-5 hrs	13	39	489	43	330	34	4,250	36							
		8	6-10 hrs	5	15	155	14	74	8	1,173	10							
	(Recoded version of tmcommute	13	11-15 hrs	1	3	42	4	33	3	445	4							
	created by NSSE.	18	16-20 hrs	0	0	18	2	18	2	191	2	2.8	3.5	16	3.2	07	3.3	09
	Values are	23	21-25 hrs	0	0	10	1	8	1	98	1							
	estimated number	28	26-30 hrs	0	0	2	0	7	1	43	0							
	of hours per week.)	33	More than 30 hrs	0	0	6	1	10	1	101	1							
			Total	33	100	1,144	100	959	100	11,680	100							
Estimated number of hours working for pay	tmworkhrs (Continuous variable created by NSSE)											5.7	6.1	04	6.1	04	5.8	01
6. Of the time you spen	d preparing for cl	ass in a	a typical 7-day week,	about how n	any h	ours are on	assign	ed reading	?									
	tmreadhrs	0	0 hrs	0	0	47	4	23	2	333	3							
		3	1-5 hrs	20	59	649	57	500	52	5,928	51							
	(Recoded version	8	6-10 hrs	9	26	301	26	269	28	3,320	28							
	of tmread created	13	11-15 hrs	1	3	104	9	93	10	1,288	11							
	by NSSE. Values	18	16-20 hrs	4	12	20	2	54	6	522	4	6.4	5.9	.11	6.8	07	6.7	07
	are estimated	23	21-25 hrs	0	0	12	1	13	1	189	2							
	number of hours	28	26-30 hrs	0	0	6	1	9	1	76	1							
	per week.)	33	More than 30 hrs	0	0	6	1	5	1	65	1							
			Total	34	100	1,145	100	966	100	11,721	100							



First-Year Stude	nts in				1	Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Nat	t Res					Great Lak	es											
210,718110, 011101				NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>l</sup>	Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
17. How much has your exp	perience at th	is institu	tion contributed to y	our knowled	ge, skill	s, and pers	onal d	evelopment	in the	following a	reas?							
a. Writing clearly and	pgwrite	1	Very little	1	3	110	10	76	8	911	8							
effectively		2	Some	6	18	332	29	274	28	3,064	26							
		3	Quite a bit	17	50	451	39	363	38	4,662	40	3.1	2.7 *	.35	2.8	.27	2.8	.23
		4	Very much	10	29	253	22	249	26	3,103	26							
			Total	34	100	1,146	100	962	100	11,740	100							
b. Speaking clearly and	pgspeak	1	Very little	3	9	179	16	103	11	1,456	12							
effectively		2	Some	16	47	404	35	301	31	3,772	32							
		3	Quite a bit	9	26	384	34	367	38	4,167	36	2.5	2.5	.04	2.7	15	2.6	10
		4	Very much	6	18	177	15	188	20	2,313	20							
			Total	34	100	1,144	100	959	100	11,708	100							
c. Thinking critically and	pgthink	1	Very little	0	0	36	3	18	2	305	3							
analytically		2	Some	4	12	199	17	165	17	1,946	17							
		3	Quite a bit	15	44	527	46	414	43	4,973	43	3.3	3.1	.29	3.2	.21	3.2	.20
		4	Very much	15	44	382	33	358	37	4,471	38							
			Total	34	100	1,144	100	955	100	11,695	100							
d. Analyzing numerical and	pganalyze	1	Very little	3	9	80	7	75	8	925	8							
statistical information		2	Some	11	32	320	28	250	26	3,221	28							
		3	Quite a bit	15	44	439	38	393	41	4,481	38	2.6	2.8	22	2.8	21	2.8	20
		4	Very much	5	15	305	27	239	25	3,080	26							
			Total	34	100	1,144	100	957	100	11,707	100							
e. Acquiring job- or work-	pgwork	1	Very little	3	9	197	17	123	13	1,741	15							
related knowledge and		2	Some	13	38	373	33	312	32	3,806	32							
skills		3	Quite a bit	11	32	359	31	333	35	3,855	33	2.6	2.5	.13	2.6	.03	2.6	.07
		4	Very much	7	21	215	19	193	20	2,318	20							
			Total	34	100	1,144	100	961	100	11,720	100							
f. Working effectively with	pgothers	1	Very little	0	0	91	8	53	6	774	7							
others		2	Some	8	24	313	27	272	28	3,183	27							
		3	Quite a bit	15	45	441	39	384	40	4,643	40	3.1	2.8	.26	2.9	.23	2.9	.23
		4	Very much	10	30	297	26	250	26	3,096	26			-	-	-	-	
			Total	33	100	1,142	100	959	100	11,696	100							



First-Year Stude	nts in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>l</sup>	Values <sup>1</sup>	<sup>77</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size"	Mean	Effect size "	Mean	Effect size "
g. Developing or clarifying a	pgvalues	1	Very little	2	6	178	16	104	11	1,348	12							
personal code of values		2	Some	13	39	368	32	280	29	3,363	29							
and ethics		3	Quite a bit	6	18	359	31	322	34	3,978	34	2.8	2.6	.28	2.8	.10	2.7	.11
		4	Very much	12	36	238	21	254	26	3,012	26							
			Total	33	100	1,143	100	960	100	11,701	100							
h. Understanding people of	pgdiverse	1	Very little	5	15	140	12	98	10	1,314	11							
other backgrounds		2	Some	8	24	369	32	298	31	3,451	29							
(economic, racial/ethnic, political, religious,		3	Quite a bit	11	32	375	33	301	31	3,959	34	2.8	2.7	.11	2.8	.01	2.7	.03
nationality, etc.)		4	Very much	10	29	259	23	260	27	2,985	25							
<b>3</b> , ,			Total	34	100	1,143	100	957	100	11,709	100							
i. Solving complex real-	pgprobsolve	1	Very little	4	12	155	14	100	10	1,389	12							
world problems		2	Some	10	29	385	34	353	37	3,896	33							
		3	Quite a bit	11	32	391	34	312	33	3,980	34	2.7	2.6	.17	2.6	.12	2.6	.10
		4	Very much	9	26	212	19	192	20	2,442	21							
			Total	34	100	1,143	100	957	100	11,707	100							
j. Being an informed and	pgcitizen	1	Very little	3	9	158	14	113	12	1,366	12							·
active citizen		2	Some	9	26	372	33	313	33	3,666	31							
		3	Quite a bit	15	44	397	35	325	34	4,055	35	2.8	2.6	.19	2.6	.12	2.7	.10
		4	Very much	7	21	212	19	203	21	2,582	22							
			Total	34	100	1,139	100	954	100	11,669	100							
18. How would you evaluat	e your entire o	educatio	onal experience at thi	s institution?							<del></del>							
•	evalexp	1	Poor	0	0	18	2	7	1	174	1							
		2	Fair	3	9	110	10	111	12	1,195	10							
		3	Good	20	59	610	53	461	48	5,469	47	3.2	3.2	.01	3.3	05	3.3	07
		4	Excellent	11	32	408	36	386	40	4,901	42							
			Total	34	100	1,146	100	965	100	11,739	100							
19. If you could start over a	gain, would y	ou go to	the same institution	you are now	atten	ding?												
	sameinst	1	Definitely no	1	3	41	4	38	4	407	3							
		2	Probably no	4	12	121	11	118	12	1,427	12							
		3	Probably yes	11	32	497	43	393	41	4,649	40	3.4	3.2	.13	3.2	.15	3.3	.12
		4	Definitely yes	18	53	490	43	417	43	5,267	45							
			Total	34	100	1,149	100	966	100	11,750	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	at Res					Great Lak	es											
510, 71g110, Ca 110				NMU		Public		Carnegie C	lass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>l</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size"	Mean	Effect size "	Mean	Effect size "
. During the current sch	ool year, about h	ow ofte	en have you done the	e following?														
a. Asked questions or	askquest	1	Never	0	0	22	2	16	2	363	3							
contributed to course discussions in other ways		2	Sometimes	9	22	375	29	253	24	3,771	27							
discussions in other ways		3	Often	18	44	418	32	345	32	4,552	32	3.1	3.1	.08	3.2	04	3.1	.07
		4	Very often	14	34	486	37	449	42	5,414	38							
			Total	41	100	1,301	100	1,063	100	14,100	100							
b. Prepared two or more	drafts	1	Never	4	10	298	23	210	20	2,951	21							
drafts of a paper or		2	Sometimes	15	37	484	37	398	38	5,202	37							
assignment before turning it in		3	Often	10	24	318	25	276	26	3,581	26	2.7	2.3 **	.42	2.4 *	.35	2.4 *	.36
it iii		4	Very often	12	29	192	15	171	16	2,306	16							
			Total	41	100	1,292	100	1,055	100	14,040	100							
c. Come to class without	unpreparedr	1	Very often	3	7	71	5	50	5	743	5							
completing readings or		2	Often	3	7	169	13	141	13	1,908	14							
assignments	(Reverse-coded version of	3	Sometimes	25	61	753	58	637	60	8,219	59	3.0	3.0	.04	3.0	.04	3.0	.05
	unprepared created	4	Never	10	24	302	23	232	22	3,166	23							
	by NSSE.)		Total	41	100	1,295	100	1,060	100	14,036	100							
d. Attended an art exhibit,	attendart	1	Never	13	32	567	44	356	34	5,147	37							
play or other arts		2	Sometimes	21	51	524	41	472	45	5,967	43							
performance (dance,		3	Often	3	7	141	11	172	16	2,058	15	2.0	1.8	.24	1.9	.02	1.9	.06
music, etc.)		4	Very often	4	10	57	4	59	6	859	6							
			Total	41	100	1,289	100	1,059	100	14,031	100							
e. Asked another student to	CLaskhelp	1	Never	5	12	117	9	66	6	1,101	8							
help you understand		2	Sometimes	14	34	580	45	445	42	6,040	43							
course material		3	Often	18	44	403	31	354	34	4,481	32	2.5	2.5	02	2.6	14	2.6	08
		4	Very often	4	10	199	15	190	18	2,412	17							
			Total	41	100	1,299	100	1,055	100	14,034	100							
f. Explained course material	CLexplain	1	Never	2	5	25	2	9	1	290	2							
to one or more students		2	Sometimes	10	25	410	32	275	26	4,111	29							
		3	Often	18	45	522	40	452	43	5,681	41	2.9	2.9	01	3.0	16	2.9	06
		4	Very often	10	25	340	26	318	30	3,918	28							
			Total	40	100	1,297	100	1,054	100	14,000	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res					Great Lak	es											
bio, Agric, & iva	t ites			NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>I</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size "
g. Prepared for exams by	CLstudy	1	Never	4	10	193	15	89	8	1,593	11							
discussing or working		2	Sometimes	17	41	511	39	347	33	4,918	35							
through course material with other students		3	Often	10	24	342	26	324	31	4,113	29	2.6	2.5	.14	2.8	16	2.7	03
with other students		4	Very often	10	24	252	19	299	28	3,418	24							
			Total	41	100	1,298	100	1,059	100	14,042	100							
h. Worked with other	CLproject	1	Never	0	0	70	5	27	3	702	5							
students on course		2	Sometimes	17	41	450	35	286	27	4,632	33							
projects or assignments		3	Often	19	46	494	38	430	41	5,243	37	2.7	2.8	06	3.0 *	33	2.8	13
		4	Very often	5	12	282	22	314	30	3,452	25							
			Total	41	100	1,296	100	1,057	100	14,029	100							
i. Gave a course	present	1	Never	1	2	150	12	88	8	1,635	12							
presentation		2	Sometimes	19	46	571	44	393	37	5,353	38							
		3	Often	16	39	374	29	351	33	4,405	31	2.6	2.5	.14	2.7	07	2.6	.04
		4	Very often	5	12	203	16	225	21	2,639	19							
			Total	41	100	1,298	100	1,057	100	14,032	100							
2. During the current school	ol year, about	how ofter	n have you done the	following?														
a. Combined ideas from	RIintegrate	1	Never	0	0	21	2	15	1	318	2							
different courses when		2	Sometimes	7	17	342	26	258	24	3,551	25							
completing assignments		3	Often	19	46	516	40	423	40	5,708	41	3.2	3.0	.21	3.1	.15	3.0	.21
		4	Very often	15	37	417	32	364	34	4,489	32							
			Total	41	100	1,296	100	1,060	100	14,066	100							
b. Connected your learning	RIsocietal	1	Never	3	7	85	7	61	6	882	6							
to societal problems or		2	Sometimes	12	29	492	38	361	34	4,903	35							
issues		3	Often	17	41	438	34	390	37	5,066	36	2.8	2.7	.09	2.8	.01	2.7	.04
		4	Very often	9	22	276	21	245	23	3,155	23							
			Total	41	100	1,291	100	1,057	100	14,006	100							
c. Included diverse	RIdiverse	1	Never	6	15	194	15	131	12	1,923	14							
perspectives (political,		2	Sometimes	18	44	602	47	438	41	5,872	42							
religious, racial/ethnic,		3	Often	14	34	317	25	316	30	3,950	28	2.3	2.4	04	2.5	18	2.5	14
gender, etc.) in course discussions or		4	Very often	3	7	180	14	174	16	2,265	16							
assignments			Total	41	100	1,293	100	1,059	100	14,010	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						•	•	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Nat	Res			NMU		Great Lak Public	es	Carnegie Cl	200	NSSE 201	2	NMU	Great Lak	oc Dublic	Carnegie	Class	NSSE 2	0012
Item wording or description	Variable name <sup>I</sup>	Values <sup>r</sup>	<sup>1</sup> Response options	Count	%	Count	%	Count	ass %	Count	. <u></u>	Mean	Mean	Effect size"	Mean	Effect size"	Mean	Effect size "
d. Examined the strengths	RIownview	1	Never	5	12	74	6	49	5	755	5							
and weaknesses of your		2	Sometimes	14	34	480	37	348	33	4,705	34							
own views on a topic or issue		3	Often	14	34	503	39	421	40	5,635	40	2.6	2.7	11	2.8	23	2.8	18
issuc		4	Very often	8	20	237	18	238	23	2,920	21							
			Total	41	100	1,294	100	1,056	100	14,015	100							
e. Tried to better understand	RIperspect	1	Never	1	2	55	4	42	4	550	4							
someone else's views by		2	Sometimes	17	41	422	33	304	29	4,185	30							
imagining how an issue looks from his or her		3	Often	15	37	537	42	447	42	5,863	42	2.7	2.8	08	2.9	18	2.9	16
perspective		4	Very often	8	20	275	21	264	25	3,403	24							
1 1			Total	41	100	1,289	100	1,057	100	14,001	100							
f. Learned something that	RInewview	1	Never	0	0	34	3	21	2	292	2							
changed the way you		2	Sometimes	16	39	397	31	319	30	3,987	28							
understand an issue or concept		3	Often	16	39	547	42	421	40	5,994	43	2.8	2.9	06	2.9	13	2.9	14
сопсері		4	Very often	9	22	310	24	296	28	3,717	27							
			Total	41	100	1,288	100	1,057	100	13,990	100							
g. Connected ideas from	RIconnect	1	Never	0	0	11	1	7	1	115	1							
your courses to your prior		2	Sometimes	4	10	201	16	158	15	2,117	15							
experiences and knowledge		3	Often	17	41	564	44	447	42	6,059	43	3.4	3.2	.23	3.3	.18	3.2	.21
Miowiedge		4	Very often	20	49	509	40	446	42	5,683	41							
			Total	41	100	1,285	100	1,058	100	13,974	100							
3. During the current school	l year, about	how ofte	en have you done the	following?														
a. Talked about career plans	SFcareer	1	Never	6	15	197	15	100	9	1,780	13							
with a faculty member		2	Sometimes	17	43	516	40	383	36	5,332	38							
		3	Often	12	30	340	26	320	30	3,799	27	2.4	2.5	08	2.7	31	2.6	19
		4	Very often	5	13	239	18	255	24	3,123	22							
			Total	40	100	1,292	100	1,058	100	14,034	100							
b. Worked with a faculty	SFotherwork	1	Never	16	40	496	39	328	31	4,825	34							
member on activities other		2	Sometimes	12	30	382	30	335	32	4,204	30							
than coursework (committees, student		3	Often	7	18	221	17	206	20	2,658	19	2.0	2.1	05	2.2	20	2.2	14
groups, etc.)		4	Very often	5	13	185	14	187	18	2,318	17							
C 1 / /			Total	40	100	1,284	100	1,056	100	14,005	100							



Seniors in					Frequen	cy Di	stributio	<b>ns</b> <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>			
Rio Agric & Na	t Res				Great Lak	es												
DIO, Agric, & Na	io, Agric, & Nat Res  Item wording Variable or description name' Values Response options					Public		Carnegie C	lass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>I</sup>	Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size "	Mean	Effect size "
c. Discussed course topics,	SFdiscuss	1	Never	5	13	275	21	139	13	2,609	19							
ideas, or concepts with a faculty member outside of		2	Sometimes	24	60	547	42	434	41	5,734	41							
class		3	Often	8	20	300	23	288	27	3,413	24	2.2	2.3	06	2.5 *	31	2.4	16
		4	Very often	3	8	167	13	197	19	2,246	16							
			Total	40	100	1,289	100	1,058	100	14,002	100							
d. Discussed your academic	SFperform	1	Never	9	23	323	25	177	17	2,978	21							
performance with a faculty member		2	Sometimes	24	60	577	45	463	44	6,198	44							
faculty member		3	Often	3	8	262	20	255	24	3,029	22	2.1	2.1	11	2.4 *	35	2.3	22
		4	Very often	4	10	126	10	162	15	1,784	13							
			Total	40	100	1,288	100	1,057	100	13,989	100							
4. During the current school	ol year, how m	uch ha	s your coursework en	phasized the	follov	ving?												
a. Memorizing course	memorize	1	Very little	2	5	32	2	30	3	415	3							
material		2	Some	8	20	240	18	199	19	2,676	19							
		3	Quite a bit	18	44	541	42	414	39	5,585	40	3.0	3.1	14	3.1	15	3.1	13
		4	Very much	13	32	485	37	413	39	5,355	38							
			Total	41	100	1,298	100	1,056	100	14,031	100							
b. Applying facts, theories,	HOapply	1	Very little	1	3	39	3	23	2	309	2							
or methods to practical		2	Some	6	15	265	20	183	17	2,320	17							
problems or new situations		3	Quite a bit	19	48	532	41	429	41	5,978	43	3.2	3.1	.07	3.2	04	3.2	03
Situations		4	Very much	14	35	459	35	418	40	5,385	38							
			Total	40	100	1,295	100	1,053	100	13,992	100							
c. Analyzing an idea,	HOanalyze	1	Very little	3	8	58	4	35	3	535	4							
experience, or line of		2	Some	6	15	289	22	212	20	2,817	20							
reasoning in depth by examining its parts		3	Quite a bit	18	45	514	40	398	38	5,576	40	3.0	3.0	.01	3.1	10	3.1	07
		4	Very much	13	33	429	33	398	38	5,018	36							
			Total	40	100	1,290	100	1,043	100	13,946	100							
d. Evaluating a point of	HOevaluate	1	Very little	4	10	106	8	59	6	937	7							
view, decision, or information source		2	Some	14	35	399	31	288	27	3,839	27							
miormation source		3	Quite a bit	13	33	486	38	397	38	5,362	38	2.7	2.8	09	2.9	26	2.9	21
		4	Very much	9	23	300	23	309	29	3,823	27							
			Total	40	100	1,291	100	1,053	100	13,961	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Nat	Res					Great Lak	es											
210,118,10,0111				NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>I</sup>	Values '	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
e. Forming a new idea or	HOform	1	Very little	5	13	93	7	57	5	815	6							
understanding from		2	Some	5	13	380	30	265	25	3,615	26							
various pieces of information		3	Quite a bit	19	49	505	39	407	39	5,490	39	2.9	2.8	.08	2.9	08	2.9	05
mommuon		4	Very much	10	26	310	24	321	31	4,038	29							
			Total	39	100	1,288	100	1,050	100	13,958	100							
5. During the current schoo	l year, to wha	t extent	have your instructo	rs done the fo	llowir	ıg?												
a. Clearly explained course	ETgoals	1	Very little	2	5	25	2	14	1	224	2							
goals and requirements		2	Some	6	15	207	16	158	15	1,951	14							
		3	Quite a bit	16	41	581	45	455	43	6,168	44	3.1	3.2	06	3.2	14	3.2	15
		4	Very much	15	38	486	37	432	41	5,734	41							
			Total	39	100	1,299	100	1,059	100	14,077	100							
b. Taught course sessions in	ETorganize	1	Very little	1	3	34	3	22	2	289	2							
an organized way		2	Some	2	5	244	19	170	16	2,159	15							
		3	Quite a bit	19	50	588	45	479	46	6,504	46	3.3	3.1	.29	3.2	.21	3.2	.20
		4	Very much	16	42	429	33	379	36	5,087	36							
			Total	38	100	1,295	100	1,050	100	14,039	100							
c. Used examples or	ETexample	1	Very little	2	5	34	3	23	2	268	2							
illustrations to explain		2	Some	1	3	185	14	138	13	1,903	14							
difficult points		3	Quite a bit	16	42	541	42	424	40	5,621	40	3.4	3.2	.20	3.3	.13	3.3	.13
		4	Very much	19	50	531	41	466	44	6,231	44							
			Total	38	100	1,291	100	1,051	100	14,023	100							
d. Provided feedback on a	ETdraftfb	1	Very little	7	18	172	13	91	9	1,627	12							
draft or work in progress		2	Some	16	41	439	34	304	29	4,302	31							
		3	Quite a bit	12	31	398	31	380	36	4,624	33	2.3	2.6	29	2.8 **	51	2.7 *	39
		4	Very much	4	10	284	22	279	26	3,465	25							
			Total	39	100	1,293	100	1,054	100	14,018	100							
e. Provided prompt and	ETfeedback	1	Very little	4	10	91	7	70	7	966	7							
detailed feedback on tests		2	Some	10	26	364	28	258	25	3,771	27							
or completed assignments		3	Quite a bit	17	44	526	41	421	40	5,620	40	2.7	2.8	08	2.9	18	2.9	12
		4	Very much	8	21	311	24	298	28	3,628	26							
			Total	39	100	1,292	100	1,047	100	13,985	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	at Res		NMU		Great Lak Public	es	Carnegie Cl	200	NSSE 201	13	NMU	Great Lak	res Dublic	Carnegie	Class	NSSE 2	2013	
Item wording	Variable			INIVIO		Fublic		Carriegie Ci	ass	N33L 201		Tuvio	Great Lak	Effect	Carriegie	Effect	NJJL 2	Effect
or description	name <sup>1</sup>	Values '	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
6. During the current sch	ool year, about ho	ow ofte	en have you done the	following?														
a. Reached conclusions	QRconclude	1	Never	2	5	83	6	33	3	729	5							
based on your own		2	Sometimes	15	38	394	30	279	26	3,858	27							
analysis of numerical		3	Often	12	30	488	37	424	40	5,400	38	2.8	2.8	03	3.0	22	2.9	13
information (numbers, graphs, statistics, etc.)		4	Very often	11	28	338	26	326	31	4,094	29							
graphs, statistics, etc.)			Total	40	100	1,303	100	1,062	100	14,081	100							
b. Used numerical	QRproblem	1	Never	5	13	201	15	117	11	2,004	14							-
information to examine a		2	Sometimes	15	38	485	37	368	35	4,921	35							
real-world problem or		3	Often	13	33	381	29	356	34	4,368	31	2.6	2.5	.05	2.6	10	2.6	01
issue (unemployment, climate change, public		4	Very often	7	18	235	18	219	21	2,783	20							
health, etc.)			Total	40	100	1,302	100	1,060	100	14,076	100							
neum, every						-,		-,,,,,		- 1,0,0								
c. Evaluated what others	QRevaluate	1	Never	6	15	146	11	89	8	1,417	10							
have concluded from	`	2	Sometimes	12	30	476	37	338	32	4,849	35							
numerical information		3	Often	13	33	433	33	389	37	4,777	34	2.6	2.6	.03	2.7	13	2.7	04
		4	Very often	9	23	242	19	242	23	2,991	21		-1.0		=			
			Total	40	100	1,297	100	1,058	100	14,034	100							
7. During the current sch	ool year, about ho	ow ma	ny papers, reports, o	r other writi	ng task	s of the foll	owing	length have	you b	een assigne	ed? (Incl	ude those not yet	completed.	.)				
a. Up to 5 pages	wrshortnum		None	5	13	84	7	45	4	817	6	·	ı î					
		1.5	1-2	9	24	286	23	209	20	2,895	21							
	(Recoded version	4	3-5	8	21	357	28	354	35	3,909	29							
	of wrshort created	8	6-10	8	21	251	20	195	19	2,869	21	6.7	6.8	03	6.9	04	7.2	08
	by NSSE. Values are estimated	13	11-15	3	8	145	11	94	9	1,439	11							
	number of papers,	18	16-20	2	5	65	5	52	5	769	6							
	reports, etc.)	23	More than 20	3	8	74	6	71	7	986	7							
			Total	38	100	1,262	100	1,020	100	13,684	100							
b. Between 6 and 10 pages	wrmednum	0	None	3	8	292	23	198	20	3,015	22							
		1.5	1-2	14	35	521	42	427	42	5,328	40							
	(Recoded version	4	3-5	17	43	295	24	266	26	3,397	25							
	of wrmed created by NSSE. Values	8	6-10	2	5	91	7	77	8	1,142	8	4.2	2.8 *	.37	2.9 *	.39	3.0 *	.33
	are estimated	13	11-15	3	8	28	2	27	3	372	3							
	number of papers,	18	16-20	0	0	14	1	7	1	127	1							
	reports, etc.)	23	More than 20	1	3	10	1	4	0	99	1							
			Total	40	100	1,251	100	1,006	100	13,480	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	-	tributio	ns <sup>a</sup>				Stati	stical (	Comparis	ons <sup>k</sup>		
Bio, Agric, & N	lat Res			NMU		Great Lak Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lake	s Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>I</sup>	Values <sup>r</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size"	Mean	Effect size "
c. 11 pages or more	wrlongnum	0	None	17	44	567	47	458	47	6,144	47							
		1.5	1-2	15	38	495	41	369	38	5,076	39							
	(Recoded version	4	3-5	4	10	105	9	109	11	1,278	10							
	of wrlong created by NSSE. Values	8	6-10	2	5	23	2	20	2	339	3	2.0	1.4	.21	1.6	.15	1.6	.14
	are estimated	13	11-15	0	0	11	1	20	2	145	1							
	number of papers,	18	16-20	0	0	4	0	5	1	64	0							
	reports, etc.)	23	More than 20	1	3	7	1	2	0	100	1							
			Total	39	100	1,212	100	983	100	13,146	100							
Estimated number of assigned pages of stude	wrpages					· · · · · · · · · · · · · · · · · · ·												
writing.	(Continuous varia	t, wrmed,	led and summed by and wrlong. Values are writing)									77	63	.20	66	.16	67	.14
a. People of a race or ethnicity other than you	DDrace	1	Never	1	2	86	7	68	6 27	742 3 633	5							
a. People of a race or	DDrace	1 2	Never Sometimes	1 30	2 73	86 407	7 31	68 283	27	3,633	26	23	20 ***	- 63	3 0 ***	- 74	3 () ***	- 81
People of a race or ethnicity other than your	DDrace	1 2 3	Never Sometimes Often	1 30 7	2 73 17	86 407 370	7 31 29	68 283 295	27 28	3,633 3,868	26 28	2.3	2.9 ***	63	3.0 ***	74	3.0 ***	81
People of a race or ethnicity other than your	DDrace	1 2	Never Sometimes Often Very often	1 30 7 3	2 73 17 7	86 407 370 434	7 31 29 33	68 283 295 411	27 28 39	3,633 3,868 5,816	26 28 41	2.3	2.9 ***	63	3.0 ***	74	3.0 ***	81
People of a race or ethnicity other than you own	DDrace	1 2 3	Never Sometimes Often Very often Total	1 30 7 3 41	2 73 17 7 100	86 407 370 434 1,297	7 31 29 33 100	68 283 295 411 1,057	27 28 39 100	3,633 3,868 5,816 14,059	26 28 41 100	2.3	2.9 ***	63	3.0 ***	74	3.0 ***	81
People of a race or ethnicity other than your	DDrace	1 2 3	Never Sometimes Often Very often	1 30 7 3	2 73 17 7	86 407 370 434	7 31 29 33	68 283 295 411	27 28 39	3,633 3,868 5,816	26 28 41	2.3	2.9 ***	63	3.0 ***	74	3.0 ***	81
a. People of a race or ethnicity other than you own  b. People from an econom	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes	1 30 7 3 41 2 15	2 73 17 7 100	86 407 370 434 1,297 49 330	7 31 29 33 100 4	68 283 295 411 1,057 39 236	27 28 39 100 4 22	3,633 3,868 5,816 14,059 521 3,115	26 28 41 100 4 22							
a. People of a race or ethnicity other than you own  b. People from an econom background other than	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often	1 30 7 3 41	2 73 17 7 100 5 37 44	86 407 370 434 1,297 49 330 468	7 31 29 33 100 4 25 36	68 283 295 411 1,057 39 236 355	27 28 39 100 4 22 34	3,633 3,868 5,816 14,059 521 3,115 4,767	26 28 41 100 4 22 34	2.3	2.9 ***	63	3.0 ***	74	3.0 ***	
a. People of a race or ethnicity other than you own  b. People from an econom background other than	DDrace	1 2 3 4 1 2 3	Never Sometimes Often Very often Total Never Sometimes Often Very often	1 30 7 3 41 2 15 18 6	2 73 17 7 100 5 37 44 15	86 407 370 434 1,297 49 330 468 451	7 31 29 33 100 4 25 36 35	68 283 295 411 1,057 39 236 355 427	27 28 39 100 4 22 34 40	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647	26 28 41 100 4 22 34 40							
a. People of a race or ethnicity other than you own      b. People from an econom background other than your own	DDrace c DDeconomic	1 2 3 4 1 2 3	Never Sometimes Often Very often Total Never Sometimes Often Very often Total	1 30 7 3 41 2 15 18 6 41	2 73 17 7 100 5 37 44 15 100	86 407 370 434 1,297 49 330 468 451 1,298	7 31 29 33 100 4 25 36 35 100	68 283 295 411 1,057 39 236 355 427 1,057	27 28 39 100 4 22 34 40 100	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050	26 28 41 100 4 22 34 40 100							
a. People of a race or ethnicity other than you own  b. People from an econom background other than	DDrace	1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never	1 30 7 3 41 2 15 18 6	2 73 17 7 100 5 37 44 15 100	86 407 370 434 1,297 49 330 468 451 1,298	7 31 29 33 100 4 25 36 35 100 5	68 283 295 411 1,057 39 236 355 427 1,057	27 28 39 100 4 22 34 40 100 6	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823	26 28 41 100 4 22 34 40 100 6							
a. People of a race or ethnicity other than you own      b. People from an econom background other than your own      c. People with religious	DDrace c DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Sometimes	1 30 7 3 41 2 15 18 6 41 2	2 73 17 7 100 5 37 44 15 100 5	86 407 370 434 1,297 49 330 468 451 1,298	7 31 29 33 100 4 25 36 35 100 5 24	68 283 295 411 1,057 39 236 355 427 1,057 64 258	27 28 39 100 4 22 34 40 100 6 25	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416	26 28 41 100 4 22 34 40 100 6 24	2.7	3.0 *	39	3.1 **	49	3.1 **	49
a. People of a race or ethnicity other than you own  b. People from an econom background other than your own  c. People with religious beliefs other than your	DDrace c DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Often Often Often Often Often Often Often Often	1 30 7 3 41 2 15 18 6 41 2 9	2 73 17 7 100 5 37 44 15 100 5 22	86 407 370 434 1,297 49 330 468 451 1,298 67 315 412	7 31 29 33 100 4 25 36 35 100 5 24 32	68 283 295 411 1,057 39 236 355 427 1,057 64 258 310	27 28 39 100 4 22 34 40 100 6 25 29	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416 4,081	26 28 41 100 4 22 34 40 100 6 24 29							49
a. People of a race or ethnicity other than you own  b. People from an econom background other than your own  c. People with religious beliefs other than your	DDrace c DDeconomic	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Very often Very often Very often	1 30 7 3 41 2 15 18 6 41 2 9	2 73 17 7 100 5 37 44 15 100 5 22 44 29	86 407 370 434 1,297 49 330 468 451 1,298 67 315 412 502	7 31 29 33 100 4 25 36 35 100 5 24 32 39	68 283 295 411 1,057 39 236 355 427 1,057 64 258 310 419	27 28 39 100 4 22 34 40 100 6 25 29 40	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416 4,081 5,700	26 28 41 100 4 22 34 40 100 6 24 29 41	2.7	3.0 *	39	3.1 **	49	3.1 **	49
a. People of a race or ethnicity other than you own  b. People from an econom background other than your own  c. People with religious beliefs other than your own	DDrace  c DDeconomic  DDreligion	1 2 3 4 1 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Very often Total Never Sometimes Often Very often Total	1 30 7 3 41 2 15 18 6 41 2 9 18 12	2 73 17 7 100 5 37 44 15 100 5 22 44 29 100	86 407 370 434 1,297 49 330 468 451 1,298 67 315 412 502 1,296	7 31 29 33 100 4 25 36 35 100 5 24 32 39 100	68 283 295 411 1,057 39 236 355 427 1,057 64 258 310 419 1,051	27 28 39 100 4 22 34 40 100 6 25 29 40 100	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416 4,081 5,700 14,020	26 28 41 100 4 22 34 40 100 6 24 29 41 100	2.7	3.0 *	39	3.1 **	49	3.1 **	49
a. People of a race or ethnicity other than you own  b. People from an econom background other than your own  c. People with religious beliefs other than your	DDrace  c DDeconomic  DDreligion  DDpolitical	1 2 3 4 1 2 3 4 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Never Sometimes Often Very often Total Never	1 30 7 3 41 2 15 18 6 41 2 9 18 12 41	2 73 17 7 100 5 37 44 15 100 5 22 44 29 100 5	86 407 370 434 1,297 49 330 468 451 1,298 67 315 412 502 1,296 45	7 31 29 33 100 4 25 36 35 100 5 24 32 39 100 3	68 283 295 411 1,057 39 236 355 427 1,057 64 258 310 419 1,051	27 28 39 100 4 22 34 40 100 6 25 29 40 100 5	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416 4,081 5,700 14,020 619	26 28 41 100 4 22 34 40 100 6 24 29 41 100 4	2.7	3.0 *	39	3.1 **	49	3.1 **	49
a. People of a race or ethnicity other than you own  b. People from an econom background other than your own  c. People with religious beliefs other than your own  d. People with political	DDrace  c DDeconomic  DDreligion  DDpolitical	1 2 3 4 1 2 3 4 1 2 2 3 4	Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often Total Never Sometimes Sometimes	1 30 7 3 41 2 15 18 6 41 2 9 18 12 41	2 73 17 7 100 5 37 44 15 100 5 22 44 29 100 5 3	86 407 370 434 1,297 49 330 468 451 1,298 67 315 412 502 1,296 45 303	7 31 29 33 100 4 25 36 35 100 5 24 32 39 100 3 23	68 283 295 411 1,057 39 236 355 427 1,057 64 258 310 419 1,051 48 258	27 28 39 100 4 22 34 40 100 6 25 29 40 100 5 25	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416 4,081 5,700 14,020 619 3,372	26 28 41 100 4 22 34 40 100 6 24 29 41 100 4 24	3.0	3.0 *	39	3.1 **	49	3.1 **	49
a. People of a race or ethnicity other than you own  b. People from an econom background other than your own  c. People with religious beliefs other than your own  d. People with political	DDrace  c DDeconomic  DDreligion  DDpolitical	1 2 3 4 1 2 3 4 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Never Sometimes Often Very often Total Never	1 30 7 3 41 2 15 18 6 41 2 9 18 12 41	2 73 17 7 100 5 37 44 15 100 5 22 44 29 100 5	86 407 370 434 1,297 49 330 468 451 1,298 67 315 412 502 1,296 45	7 31 29 33 100 4 25 36 35 100 5 24 32 39 100 3	68 283 295 411 1,057 39 236 355 427 1,057 64 258 310 419 1,051	27 28 39 100 4 22 34 40 100 6 25 29 40 100 5	3,633 3,868 5,816 14,059 521 3,115 4,767 5,647 14,050 823 3,416 4,081 5,700 14,020 619	26 28 41 100 4 22 34 40 100 6 24 29 41 100 4	2.7	3.0 *	39	3.1 **	49	3.1 **	49



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Rio Agric & Na	o, Agric, & Nat Res  Item wording Variable					Great Lak	es											
Dio, Agric, & Na	tem wording Variable					Public		Carnegie C	ass	NSSE 201	L3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description		Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
9. During the current school	ol year, about	how oft	en have you done the	following?														
a. Identified key information	LSreading	1	Never	0	0	22	2	11	1	193	1							
from reading assignments		2	Sometimes	7	17	200	15	140	13	1,902	14							
		3	Often	17	41	508	39	389	37	5,254	37	3.2	3.2	.00	3.3	12	3.3	09
		4	Very often	17	41	563	44	516	49	6,693	48							
			Total	41	100	1,293	100	1,056	100	14,042	100							
b. Reviewed your notes after	LSnotes	1	Never	6	15	77	6	59	6	777	6							
class		2	Sometimes	13	33	362	28	273	26	3,968	28							
		3	Often	10	25	401	31	301	29	4,198	30	2.7	3.0 *	32	3.0 *	40	3.0 *	34
		4	Very often	11	28	454	35	421	40	5,069	36							
			Total	40	100	1,294	100	1,054	100	14,012	100							
c. Summarized what you	LSsummary	1	Never	2	5	83	6	79	8	803	6							
learned in class or from course materials		2	Sometimes	13	33	374	29	270	26	3,804	27							
course materials		3	Often	16	40	429	33	346	33	4,701	34	2.8	2.9	10	2.9	14	2.9	16
		4	Very often	9	23	405	31	356	34	4,613	33							
			Total	40	100	1,291	100	1,051	100	13,921	100							
10. During the current scho	ool year, to wh	ıat exter	nt have your courses	challenged yo	ou to d	o your best	work?	•										
	challenge	1	Not at all	0	0	8	1	4	0	60	0							
		2		0	0	23	2	14	1	157	1							
		3		4	10	31	2	19	2	330	2							
		4		2	5	113	9	77	7	1,058	8	5.7	5.6	.08	5.7	06	5.7	04
		5		8	20	384	30	290	27	3,792	27							
		6		17	41	470	36	364	34	4,982	35							
		7	Very much	10	24	270	21	291	27	3,686	26							
			Total	41	100	1,299	100	1,059	100	14,065	100							



Seniors in					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Comparis	ons <sup>k</sup>		
Bio, Agric, & N	at Res		NMU		Great Lak Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lake	es Public	Carnegie	Class	NSSE 20	013
Item wording or description	Variable name <sup>I</sup>	Values <sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
11. Which of the following	ng have you done	or do you plan to do before	you graduate	e?º													
a. Participate in an	intern	Have not decided	4	10	99	8	95	9	976	7							
internship, co-op, field	(Means indicate	Do not plan to do	6	15	288	22	170	16	2,289	16							
experience, student teaching, or clinical	the percentage who responded "Done	Plan to do	18	44	302	23	249	24	3,118	22	32%	47%	31	51% *	40	55% **	47
placement	or in progress.")	Done or in progress	13	32	604	47	543	51	7,670	55							
1	1 0 /	Total	41	100	1,293	100	1,057	100	14,053	100							
b. Hold a formal leadership	leader	Have not decided	2	5	90	7	75	7	1,108	8							
role in a student	(Means indicate	Do not plan to do	21	51	606	47	461	44	5,667	40							
organization or group	the percentage who responded "Done	Plan to do	2	5	75	6	71	7	906	6	39%	41%	03	43%	07	45%	13
	or in progress.")	Done or in progress	16	39	525	41	449	43	6,341	45							
		Total	41	100	1,296	100	1,056	100	14,022	100							
c. Participate in a learning	learncom	Have not decided	2	5	110	9	116	11	1,456	10							<del></del>
community or some other	(Means indicate	Do not plan to do	26	63	793	61	606	57	7,947	57							
formal program where groups of students take	the percentage who responded "Done	Plan to do	5	12	74	6	75	7	992	7	20%	24%	12	25%	12	26%	15
two or more classes	or in progress.")	Done or in progress	8	20	317	24	259	25	3,624	26							
together	1 0 /	Total	41	100	1,294	100	1,056	100	14,019	100							
d. Participate in a study	abroad	Have not decided	7	17	111	9	134	13	1,415	10							
abroad program	(Means indicate	Do not plan to do	20	49	890	69	694	66	8,955	64							
	the percentage who responded "Done	Plan to do	6	15	92	7	73	7	1,081	8	20%	15%	.11	15%	.12	18%	.03
	or in progress.")	Done or in progress	8	20	197	15	157	15	2,542	18							
	1 0 /	Total	41	100	1,290	100	1,058	100	13,993	100							
e. Work with a faculty	research	Have not decided	7	17	134	10	101	10	1,380	10							
member on a research	(Means indicate	Do not plan to do	16	39	395	31	290	28	3,991	29							
project	the percentage who responded "Done	Plan to do	6	15	189	15	152	14	2,034	15	29%	44%	31	48% *	39	47% *	37
	or in progress.")	Done or in progress	12	29	572	44	507	48	6,566	47							
	1 0 /	Total	41	100	1,290	100	1,050	100	13,971	100							
f. Complete a culminating	capstone	Have not decided	6	15	82	6	61	6	1,160	8							
senior experience	(Means indicate	Do not plan to do	13	32	256	20	202	19	3,384	24							
(capstone course, senior project or thesis,	the percentage who responded "Done	Plan to do	13	32	244	19	227	22	2,736	20	22%	55% ***	69	53% ***	66	48% ***	56
comprehensive exam,	or in progress.")	Done or in progress	9	22	709	55	559	53	6,717	48							
portfolio, etc.)		Total	41	100	1,291	100	1,049	100	13,997	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						requen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	at Res		NINALL		Great Lak		C		NCCE 201	2	NMU	Canat Lak	مالمان م	C	Class	NCCE	2012	
Item wording	Variable			NMU		Public		Carnegie C	iass	NSSE 201	.3	NIVIO	Great Lak	Effect	Carnegie	Effect	NSSE 2	Effect
or description	name <sup>1</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size <sup>n</sup>
12. About how many of y	our courses at t	his institu	ution have included	a community	-based	project (se	rvice-l	earning)?										
	servcourse	1	None	17	43	696	54	394	37	6,101	44							
		2	Some	23	58	551	43	594	56	7,234	52							
		3	Most	0	0	45	3	58	5	614	4	1.6	1.5	.14	1.7	20	1.6	07
		4	All	0	0	1	0	9	1	69	0							
			Total	40	100	1,293	100	1,055	100	14,018	100							
13. Indicate the quality o	of your interaction	ons with t	the following people	at your insti	tution.													
a. Students	QIstudent	1	Poor	1	2	14	1	8	1	147	1							
		2		0	0	20	2	14	1	202	1							
		3		1	2	66	5	41	4	503	4							
		4		5	12	138	11	75	7	1,185	8							
		5		11	27	297	23	222	21	3,065	22	5.6	5.6	.02	5.8	14	5.7	10
		6		11	27	416	32	368	35	4,564	32							
		7	Excellent	12	29	348	27	331	31	4,361	31							
		_	Not applicable	0	0	1	0	2	0	51	0							
			Total	41	100	1,300	100	1,061	100	14,078	100							
b. Academic advisors	QIadvisor	1	Poor	4	10	89	7	39	4	726	5							
		2		1	2	98	8	45	4	794	6							
		3		5	12	111	9	63	6	1,103	8							
		4		8	20	168	13	101	10	1,641	12							
		5		9	22	236	18	195	18	2,473	18	4.7	4.9	12	5.4 **	47	5.2	28
		6		5	12	270	21	235	22	2,972	21							
		7	Excellent	9	22	305	24	373	35	4,228	30							
		_	Not applicable	0	0	20	2	6	1	129	1							
			Total	41	100	1,297	100	1,057	100	14,066	100							
c. Faculty	QIfaculty	1	Poor	1	2	17	1	15	1	191	1							
		2		0	0	29	2	15	1	299	2							
		3		1	2	63	5	29	3	626	4							
		4		4	10	145	11	85	8	1,403	10							
		5		12	29	306	24	217	21	3,015	22	5.4	5.5	03	5.7	24	5.6	10
		6		18	44	413	32	353	34	4,470	32							
		7	Excellent	5	12	312	24	336	32	3,929	28							
		_	Not applicable	0	0	1	0	2	0	53	0							
			Total	41	100	1,286	100	1,052	100	13,986	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Comparis	sons <sup>k</sup>		
Bio, Agric, & Na	t Res				Great Lak	es			NCCE 204		NINALL				01		040	
_				NMU		Public		Carnegie Cl	ass	NSSE 201	13	NMU	Great Lake		Carnegie		NSSE 2	
Item wording or description	Variable name <sup>l</sup>	Values <sup>r</sup>	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
d. Student services staff	QIstaff	1	Poor	2	5	59	5	43	4	741	5							
(career services, student	`	2		3	8	80	6	60	6	758	5							
activities, housing, etc.)		3		3	8	97	8	87	8	1,062	8							
		4		9	23	182	14	150	14	2,024	14							
		5		10	25	262	20	233	22	2,911	21	4.5	4.7	11	4.8	17	4.8	15
		6		10	25	230	18	204	19	2,695	19							
		7	Excellent	2	5	164	13	154	15	2,119	15							
		_	Not applicable	1	3	215	17	127	12	1,688	12							
			Total	40	100	1,289	100	1,058	100	13,998	100							
e. Other administrative staff	QIadmin	1	Poor	3	7	82	6	76	7	847	6							
and offices (registrar,		2		3	7	95	7	56	5	895	6							
financial aid, etc.)		3		3	7	118	9	85	8	1,224	9							
		4		7	17	217	17	166	16	2,251	16							
		5		10	24	260	20	236	22	3,172	23	4.6	4.6	04	4.8	12	4.8	10
		6		11	27	290	22	257	24	2,991	21							
		7	Excellent	3	7	170	13	165	16	2,195	16							
		_	Not applicable	1	2	64	5	21	2	475	3							
			Total	41	100	1,296	100	1,062	100	14,050	100							
14. How much does your in	stitution emph	asize th	e following?															
<ul> <li>a. Spending significant</li> </ul>	empstudy	1	Very little	4	10	23	2	15	1	213	2							
amounts of time studying		2	Some	8	20	200	16	120	11	1,813	13							
and on academic works		3	Quite a bit	20	49	571	44	440	42	5,842	42	2.8	3.2 **	47	3.3 ***	66	3.3 ***	60
		4	Very much	9	22	491	38	478	45	6,126	44							
			Total	41	100	1,285	100	1,053	100	13,994	100							
b. Providing support to help	SEacademic	1	Very little	3	7	65	5	32	3	548	4							
students succeed		2	Some	7	17	294	23	207	20	2,868	21							
academically		3	Quite a bit	25	61	546	43	452	43	5,860	42	2.8	3.0	16	3.1	31	3.0	26
		4	Very much	6	15	375	29	351	34	4,637	33							
			Total	41	100	1,280	100	1,042	100	13,913	100							
c. Using learning support	SElearnsup	1	Very little	2	5	89	7	59	6	812	6							
services (tutoring services,		2	Some	9	22	318	25	238	23	3,074	22							
writing center, etc.)		3	Quite a bit	22	54	490	38	397	38	5,430	39	2.9	2.9	04	3.0	13	3.0	13
		4	Very much	8	20	381	30	347	33	4,608	33							
			Total	41	100	1,278	100	1,041	100	13,924	100							



Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stati	stical (	Comparis	ons <sup>k</sup>		
Bio, Agric, & Nat	Res		NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lake	s Public	Carnegie	Class	NSSE 20	013	
Item wording or description	Variable name <sup>I</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
d. Encouraging contact	SEdiverse	1	Very little	13	33	256	20	206	20	2,375	17							
among students from different backgrounds		2	Some	18	45	474	37	334	32	4,823	35							
(social, racial/ethnic,		3	Quite a bit	8	20	356	28	293	28	3,999	29	1.9	2.4 ***	48	2.5 ***	55	2.5 ***	59
religious, etc.)		4	Very much	1	3	197	15	210	20	2,757	20							
			Total	40	100	1,283	100	1,043	100	13,954	100							
e. Providing opportunities to	SEsocial	1	Very little	2	5	95	7	72	7	944	7							
be involved socially		2	Some	11	27	342	27	270	26	3,324	24							
		3	Quite a bit	19	46	521	41	390	37	5,494	39	2.9	2.8	.01	2.9	05	2.9	08
		4	Very much	9	22	328	26	313	30	4,197	30							
			Total	41	100	1,286	100	1,045	100	13,959	100							
f. Providing support for your	SEwellness	1	Very little	5	13	117	9	95	9	1,138	8							
overall well-being		2	Some	12	30	350	27	258	25	3,468	25							
(recreation, health care,		3	Quite a bit	15	38	498	39	405	39	5,327	38	2.7	2.8	16	2.8	21	2.9	24
counseling, etc.)		4	Very much	8	20	318	25	290	28	3,996	29							
			Total	40	100	1,283	100	1,048	100	13,929	100							
g. Helping you manage your	SEnonacad	1	Very little	19	46	481	38	352	34	4,539	33							
non-academic		2	Some	13	32	481	38	399	38	5,180	37							
responsibilities (work,		3	Quite a bit	8	20	222	17	199	19	2,789	20	1.8	2.0	18	2.0	28	2.1 *	31
family, etc.)		4	Very much	1	2	98	8	99	9	1,432	10							
			Total	41	100	1,282	100	1,049	100	13,940	100							
h. Attending campus	SEactivities	1	Very little	3	7	126	10	82	8	1,278	9							
activities and events		2	Some	12	29	439	34	325	31	3,911	28							
(performing arts, athletic		3	Quite a bit	20	49	467	36	407	39	5,180	37	2.7	2.7	.06	2.8	06	2.8	09
events, etc.)		4	Very much	6	15	251	20	237	23	3,555	26							
			Total	41	100	1,283	100	1,051	100	13,924	100							
i. Attending events that	SEevents	1	Very little	3	7	212	17	162	16	2,105	15							
address important social,		2	Some	15	37	533	42	373	36	5,097	37							
economic, or political		3	Quite a bit	19	46	375	29	320	31	4,344	31	2.6	2.4	.23	2.5	.07	2.5	.09
issues		4	Very much	4	10	162	13	190	18	2,359	17						=	
			Total	41	100	1,282	100	1,045	100	13,905	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res
Northern Michigan University

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>					Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	at Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	3	NMU	G	ireat Lak	es Public	Carnegie	Class	NSSE 2	013
Item wording or description	Variable name <sup>l</sup>	Values '	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean		Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
15. About how many hou	rs do you spend ii	n a typ	oical 7-day week doin	g the following	ng?														
a. Preparing for class	tmprephrs	0	0 hrs	0	0	4	0	3	0	27	0								
(studying, reading,		3	1-5 hrs	4	10	136	11	98	9	1,338	10								
writing, doing homework or lab work, analyzing	(Recoded version	8	6-10 hrs	12	29	265	21	215	20	2,741	20								
data, rehearsing, and other	,	13	11-15 hrs	8	20	285	22	223	21	2,774	20								
academic activities)	by NSSE. Values	18	16-20 hrs	9	22	250	19	209	20	2,724	19	14.5		15.7	15	16.1	19	16.6	24
	are estimated	23	21-25 hrs	3	7	149	12	140	13	1,786	13								
	number of hours	28	26-30 hrs	3	7	96	7	74	7	1,181	8								
	per week.)	33	More than 30 hrs	2	5	103	8	91	9	1,438	10								
			Total	41	100	1,288	100	1,053	100	14,009	100								
b. Participating in co-	tmcocurrhrs	0	0 hrs	13	33	495	39	352	34	4,609	33								
curricular activities		3	1-5 hrs	18	45	473	37	385	37	4,855	35								
(organizations, campus		8	6-10 hrs	4	10	153	12	141	13	2,079	15								
publications, student government, fraternity or	(Recoded version of tmcocurr	13	11-15 hrs	2	5	78	6	67	6	1,098	8								
sorority, intercollegiate or		18	16-20 hrs	1	3	40	3	56	5	649	5	4.8		4.3	.07	5.2	06	5.3	08
intramural sports, etc.)	Values are	23	21-25 hrs	0	0	20	2	24	2	323	2								
	estimated number	28	26-30 hrs	1	3	8	1	9	1	145	1								
	of hours per week.)	33	More than 30 hrs	1	3	15	1	14	1	166	1								
			Total	40	100	1,282	100	1,048	100	13,924	100								
c. Working for pay on	tmworkonhrs	0	0 hrs	31	76	837	65	611	58	8,214	59								
campus		3	1-5 hrs	2	5	59	5	83	8	1,036	7								
		8	6-10 hrs	2	5	127	10	138	13	1,800	13								
	(Recoded version of tmworkon	13	11-15 hrs	3	7	107	8	90	9	1,245	9								
	created by NSSE.	18	16-20 hrs	2	5	96	7	88	8	1,119	8	2.9		4.5	21	4.9 *	27	4.9 *	27
	Values are	23	21-25 hrs	1	2	30	2	24	2	286	2					,		,	,
	estimated number	28	26-30 hrs	0	0	15	1	10	1	125	1								
	of hours per week.)	33	More than 30 hrs	0	0	11	1	7	1	146	1								
			Total	41	100	1,282	100	1,051	100	13,971	100								



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	at Res			NMU		Great Lak Public	es	Carnegie Cl	lass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>l</sup>	Values'	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size "	Mean	Effect size "
d. Working for pay off	tmworkoffhrs	0	0 hrs	24	59	621	49	549	52	7,753	56							
campus		3	1-5 hrs	1	2	65	5	64	6	821	6							
	(Recoded version	8	6-10 hrs	0	0	75	6	78	7	941	7							
	of tmworkoff	13	11-15 hrs	1	2	92	7	85	8	898	6							
	created by NSSE.	18	16-20 hrs	2	5	131	10	102	10	1,149	8	9.7	9.9	02	8.1	.15	7.8	.17
	Values are	23	21-25 hrs	7	17	105	8	68	7	774	6							
	estimated number of hours per week.)	28	26-30 hrs	3	7	80	6	40	4	563	4							
	of nours per weekly	33	More than 30 hrs	3	7	109	9	60	6	976	7							
			Total	41	100	1,278	100	1,046	100	13,875	100							
e. Doing community service	tmservicehrs	0	0 hrs	23	56	609	48	480	46	5,939	43							
or volunteer work		3	1-5 hrs	14	34	526	41	432	41	5,869	42							
	(Recoded version	8	6-10 hrs	3	7	77	6	82	8	1,276	9							
	of tmservice	13	11-15 hrs	0	0	31	2	30	3	415	3							
	created by NSSE.	18	16-20 hrs	1	2	23	2	10	1	197	1	2.0	2.6	13	2.7	15	3.0	21
	Values are	23	21-25 hrs	0	0	7	1	4	0	73	1							
	estimated number of hours per week.)	28	26-30 hrs	0	0	2	0	1	0	31	0							
	of nours per week.)	33	More than 30 hrs	0	0	2	0	4	0	59	0							
			Total	41	100	1,277	100	1,043	100	13,859	100							
f. Relaxing and socializing	tmrelaxhrs	0	0 hrs	0	0	30	2	15	1	285	2							
•		3	1-5 hrs	7	18	282	22	270	26	3,531	25							
0 ,	(Recoded version	8	6-10 hrs	14	35	376	29	318	30	4,023	29							
	of tmrelax created	13	11-15 hrs	7	18	266	21	204	19	2,763	20							
, ,	by NSSE. Values	18	16-20 hrs	6	15	151	12	128	12	1,590	11	12.5	11.5	.12	10.9	.21	11.1	.18
	are estimated	23	21-25 hrs	2	5	86	7	53	5	824	6							
	number of hours per week.)	28	26-30 hrs	2	5	31	2	23	2	324	2							
e. Doing community service or volunteer work  (I)  cr  es of  f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)  (I)  (I)  (I)  (I)  (I)  (I)  (I)  (	рег жеек.)	33	More than 30 hrs	2	5	57	4	37	4	569	4							
			Total	40	100	1,279	100	1,048	100	13,909	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	-	stributio	ns <sup>a</sup>				Stat	tistical (	Compari	sons <sup>k</sup>		
Bio, Agric, & N	lat Res			NMU		Great Lak Public	es	Carnegie Cl	ass	NSSE 201	3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording or description	Variable name <sup>l</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size"	Mean	Effect size "
g. Providing care for	tmcarehrs	0	0 hrs	32	80	968	76	792	76	10,408	75							
dependents (children,		3	1-5 hrs	1	3	123	10	94	9	1,389	10							
parents, etc.)	m 11 .	8	6-10 hrs	4	10	54	4	41	4	596	4							
	(Recoded version of tmcare created	13	11-15 hrs	0	0	31	2	24	2	341	2							
	by NSSE. Values	18	16-20 hrs	2	5	22	2	15	1	259	2	2.5	3.1	07	3.4	11	3.3	10
	are estimated	23	21-25 hrs	0	0	11	1	9	1	117	1							
	number of hours	28	26-30 hrs	1	3	4	0	9	1	97	1							
	per week.)	33	More than 30 hrs	0	0	58	5	57	5	676	5							
			Total	40	100	1,271	100	1,041	100	13,883	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	5	12	117	9	174	17	2,518	18							
(driving, walking, etc.)		3	1-5 hrs	28	68	805	63	665	63	8,045	58							
	<i>(</i> D	8	6-10 hrs	5	12	254	20	142	13	2,266	16							
	(Recoded version of tmcommute	13	11-15 hrs	2	5	74	6	39	4	707	5							
	created by NSSE.	18	16-20 hrs	1	2	12	1	16	2	211	2	4.1	4.9	17	4.1	01	4.4	07
	Values are	23	21-25 hrs	0	0	12	1	8	1	82	1							
	estimated number	28	26-30 hrs	0	0	5	0	3	0	50	0							
	of hours per week.)	33	More than 30 hrs	0	0	8	1	5	0	94	1							
			Total	41	100	1,287	100	1,052	100	13,973	100							
Estimated number of hours working for pay	tmworkhrs (Continuous variable created by NSSE)											12.6	14.3	14	12.9	03	12.6	.00
16. Of the time you spen	d preparing for cl	ass in a	typical 7-day week,	about how m	any h	ours are on	assign	ed reading	?									
_	tmreadhrs	0	0 hrs	0	0	90	7	50	5	680	5							
		3	1-5 hrs	27	66	703	54	522	50	6,916	49							
	(Danadad wassian	8	6-10 hrs	8	20	319	25	300	28	3,802	27							
	(Recoded version of tmread created	13	11-15 hrs	5	12	114	9	104	10	1,509	11							
	by NSSE. Values	18	16-20 hrs	1	2	36	3	49	5	637	5	5.6	5.9	06	6.6	19	6.8	21
	are estimated	23	21-25 hrs	0	0	15	1	16	2	281	2							
	number of hours	28	26-30 hrs	0	0	5	0	7	1	90	1							
	per week.)	33	More than 30 hrs	0	0	9	1	5	0	112	1							
			Total	41	100	1,291	100	1,053	100	14,027	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequer	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Na	t Res					Great La					_	NINALL						
				NMU		Public		Carnegie C	lass	NSSE 201	L3	NMU	Great Lak		Carnegie		NSSE 2	
Item wording or description	Variable name <sup>I</sup>	Values	" Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
7. How much has your exp	perience at th	is institu	tion contributed to y	our knowled	ge, sk	ills, and per	sonal d	evelopment	in the	following a	reas?							
a. Writing clearly and	pgwrite	1	Very little	2	5	106	8	68	6	904	6							
effectively		2	Some	11	27	320	25	265	25	3,157	23							
		3	Quite a bit	16	39	457	35	394	37	5,341	38	2.9	2.9	.03	2.9	.00	3.0	05
		4	Very much	12	29	406	31	324	31	4,620	33							
			Total	41	100	1,289	100	1,051	100	14,022	100							
b. Speaking clearly and	pgspeak	1	Very little	4	10	131	10	75	7	1,172	8							
effectively		2	Some	14	34	367	29	286	27	3,585	26							
		3	Quite a bit	15	37	430	34	392	37	5,113	37	2.7	2.8	13	2.9	23	2.9	23
		4	Very much	8	20	353	28	296	28	4,106	29							
			Total	41	100	1,281	100	1,049	100	13,976	100							
c. Thinking critically and	pgthink	1	Very little	1	2	35	3	23	2	320	2							
analytically		2	Some	3	7	183	14	92	9	1,589	11							
		3	Quite a bit	15	37	491	38	399	38	5,170	37	3.4	3.3	.20	3.4	.05	3.3	.10
		4	Very much	22	54	577	45	531	51	6,913	49							
			Total	41	100	1,286	100	1,045	100	13,992	100							
d. Analyzing numerical and	pganalyze	1	Very little	3	7	58	5	44	4	609	4							
statistical information		2	Some	11	27	299	23	187	18	2,870	21							
		3	Quite a bit	13	32	503	39	394	38	5,287	38	2.9	3.0	09	3.1	25	3.1	18
		4	Very much	14	34	423	33	422	40	5,212	37							
			Total	41	100	1,283	100	1,047	100	13,978	100							
e. Acquiring job- or work-	pgwork	1	Very little	5	13	159	12	92	9	1,526	11							
related knowledge and		2	Some	11	28	350	27	292	28	3,641	26							
skills		3	Quite a bit	16	40	430	33	341	33	4,672	33	2.7	2.8	08	2.9	19	2.8	15
		4	Very much	8	20	350	27	323	31	4,161	30							
			Total	40	100	1,289	100	1,048	100	14,000	100							
f. Working effectively with	pgothers	1	Very little	4	10	62	5	43	4	758	5							
others		2	Some	9	22	336	26	223	21	3,252	23							
		3	Quite a bit	23	56	520	41	426	41	5,455	39	2.7	2.9	25	3.0 *	40	3.0 *	31
		4	Very much	5	12	361	28	357	34	4,501	32							
			Total	41	100	1,279	100	1,049	100	13,966	100							



Frequencies and Statistical Comparisons: Bio, Agric, & Nat Res

Seniors in						Frequen	cy Di	stributio	ns <sup>a</sup>				Stat	istical (	Compari	sons <sup>k</sup>		
Bio, Agric, & Nat	t Res					Great Lak	es											
Dio, Agric, a real	· nes			NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU	Great Lak	es Public	Carnegie	Class	NSSE 2	2013
Item wording	Variable I		71 2				21		2/		0.6			Effect		Effect		Effect
or description	name '		Response options	Count	%	Count	%	Count	%	Count	% ————————————————————————————————————	Mean	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
<ul> <li>g. Developing or clarifying a personal code of values</li> </ul>	pgvalues	1	Very little	6	15		18	132	13	1,989	14							
and ethics		2	Some	10 18	24 44	405 374	32 29	274	26 33	3,780	27	2.6	2.5	0.0	2.0		2.5	00
		4	Quite a bit	7	17	374 279	29	344 299	33 29	4,346 3,857	31 28	2.0	2.5	.08	2.8	14	2.7	09
		4	Very much Total	41	100	1,284	100											
h. Understanding people of	n adirrana	1		9	22	1,284	15	1,049	100	13,972	100							
other backgrounds	pgdiverse	1 2	Very little Some	18	44	460	36	152 319	15 30	1,955								
(economic, racial/ethnic,		3	Ouite a bit	7	17	364	28	319	31	4,360 4,248	31 30	2.3	2.5	25	26*	25	27.*	26
political, religious,		4	Very much	7	17	265	21	253	24	3,430	25	2.3	2.5	25	2.6 *	35	2.7 *	36
nationality, etc.)		4	Total	41	100	1,286	100	1,046	100	13,993	100							
i. Solving complex real-	pgprobsolve	1	Very little	7	17	1,280	13	89	8	1,415	100							
world problems	pgproosorve	2	Some	15	37	403	31	279	27	4,150	30							
•		3	Quite a bit	13	32	442	34	394	38	4,900	35	2.4	2.7	22	2.8 **	43	2.8 *	33
		4	Very much	6	15	279	22	286	27	3,527	25	2.7	2.7	22	2.6	43	2.0	33
		7	Total	41	100	1,287	100	1,048	100	13,992	100							
j. Being an informed and	pgcitizen	1	Very little	6	15	203	16	116	11	1,885	14							
active citizen	10	2	Some	13	32	441	34	315	30	4,262	31							
		3	Quite a bit	17	41	397	31	362	35	4,555	33	2.5	2.5	02	2.7	21	2.7	15
		4	Very much	5	12	242	19	248	24	3,234	23	_,_	2.0	.02	2.,	.21	2.,	
			Total	41	100	1,283	100	1,041	100	13,936	100							
18. How would you evaluate	e vour entire <i>e</i>	educatio	nal experience at th	is institution?							<del></del>							
ioi iion would you evaluate	evalexp	1	Poor	2	5	44	3	23	2	309	2							
	•	2	Fair	3	7	161	12	99	9	1,464	10							
		3	Good	24	59	623	48	480	46	6,151	44	3.1	3.2	06	3.3	23	3.3	22
		4	Excellent	12	29	467	36	451	43	6,112	44							
			Total	41	100	1,295	100	1,053	100	14,036	100							
19. If you could start over a	gain, would y	ou go to	the same institution	you are now	atten	ding?												
-	sameinst	1	Definitely no	3	7	71	5	47	4	695	5							
		2	Probably no	3	7	196	15	134	13	1,858	13							
		3	Probably yes	16	39	532	41	392	37	5,348	38	3.2	3.1	.14	3.2	.00	3.2	.04
		4	Definitely yes	19	46	496	38	481	46	6,150	44							
			Total	41	100	1,295	100	1,054	100	14,051	100							



							140	i tilei li	IVIIC	iligali C	ייווע	SISILY						
Bio	o, Agric, & Nat	Res				First-	⁄ear	Students	а						Seni	ors <sup>a</sup>		
						Great Lak	es							Great Lak				
				NMU		Public		Carnegie Cl	lass	NSSE 201	.3	NMU		Public		Carnegie C	lass	NSSE 20
	Item wording	Variable																
20.	or description  What is your class level?	name class	Response options Freshman/First-year	Count 34	100	1,047	% 91	Count 868	% 89	20unt 10,610	90	Count 0	% 0	Count 0	0	Count 1	0	Count 11
20.	what is your class level:	Ciass	Sophomore Sophomore	0	0	92	8	90	9	982	8	0	0	9	1	4	0	89
			Junior	0	0	8	1	9	1	110	1	0	0	84	6	83	8	1,204
			Senior	0	0	3	0	1	0	33	0	41	100	1,172	90	948	89	12,537
			Unclassified	0	0	5	0	5	1	57	0	0	0	35	3	26	2	274
			Total	34	100	1,155	100	973	100	11,792	100	41	100	1,300	100	1,062	100	14,115
21.	Thinking about this	fulltime	No	0	0	20	2	32	3	253	2	6	15	205	16	118	11	1,718
21.	current academic term, are	iuntime	Yes	34	100	1,133	98	939	97	11,502	98	35	85	1,092	84	944	89	12,359
	you a full-time student?		Total	34	100	1,153	100	971	100	11,755	100	41	100	1,297	100	1,062	100	14,077
22a.	How many courses are	coursenum	0	0	0	7	1	3	0	46	0	1	2	23	2	34	3	276
	you taking for credit this		1	0	0	5	0	3	0	35	0	1	2	25	2	22	2	236
	current academic term?		2	0	0	5	0	13	1	84	1	3	7	62	5	30	3	597
			3	3	9	41	4	18	2	431	4	10	24	139	11	84	8	1,386
			4	21	62	430	37	222	23	3,333	28	16	39	401	31	301	28	4,422
			5	5	15	415	36	385	40	4,134	35	7	17	377	29	350	33	4,010
			6	2	6	150	13	174	18	2,122	18	3	7	157	12	141	13	1,740
			7 or more	3	9	101	9	154	16	1,604	14	0	0	117	9	100	9	1,452
			Total	34	100	1,154	100	972	100	11,789	100	41	100	1,301	100	1,062	100	14,119
	o. Of these, how many are	onlinenum	0	34	100	1,054	92	883	92	10,684	91	31	78	1,114	87	896	87	11,750
	entirely online?		1	0	0	71	6	58	6	775	7	9	23	125	10	103	10	1,445
			2	0	0	12	1	9	1	138	1	0	0	25	2	24	2	372
			3	0	0	1	0	8	1	46	0	0	0	9	1	5	0	129
			4	0	0	1	0	2	0	29	0	0	0	3	0	0	0	61
			5	0	0	1	0	1	0	14	0	0	0	1	0	0	0	12
			6	0	0	0	0	0	0	8	0	0	0	1	0	1	0	21
			7 or more	0	0	1	0	1	0	10	0	0	0	0	0	0	0	26
			Total	34	100	1,141	100	962	100	11,704	100	40	100	1,278	100	1,029	100	13,816
	Student taking all courses	allonline	No	34	100	1,145	100	957	99	11,655	99	41	100	1,287	99	1,054	99	13,845
	online	(Based on	Yes	0	0	3	0	7	1	88	1	0	0	11	1	6	1	223
		responses to coursenum and onlinenum.)	Total	34	100	1,148	100	964	100	11,743	100	41	100	1,298	100	1,060	100	14,068
		ommonani.)																



							INO	rtnern	IVIIC	nigan c	אוווענ	ersity						
Bic	, Agric, & Nat	Res						Students	a						Seni	ors <sup>a</sup>		
						Great Lak	es							Great Lak	es			
	Item wording	Variable		NMU		Public		Carnegie C	iass	NSSE 201	.3	NMU		Public		Carnegie C	iass	NSSE 20
	or description	name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
23a.	How many majors do you	MAJnum	One	31	91	1,041	90	845	87	10,260	87	37	90	1,136	87	930	87	12,275
	plan to complete? (Do not		More than one	3	9	114	10	128	13	1,551	13	4	10	166	13	133	13	1,858
	count minors.)		Total	34	100	1,155	100	973	100	11,811	100	41	100	1,302	100	1,063	100	14,133
	First major or expected	MAJfirstcol	Arts & Humanities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	first major, in NSSE's	(Recoded from	Biological Sci., Agriculture,															
	default major field categories. (This does not	MAJfirst.)	& Natural Resources	34	100	1,155	100	973	100	11,811	100	41	100	1,303	100	1,064	100	14,137
	reflect any customization		Physical Sci., Mathematics, & Computer Science	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	made for the Major Field		Social Sciences	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Report.)		Business	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Communications, Media,	o o	U	· ·	Ü	V	U	v	Ū	· ·	U	O O	Ü	O .	Ü	v
			& Public Relations	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
			Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Health professions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Social service professions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			All other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Undecided/undeclared	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Total	34	100	1,155	100	973	100	11,811	100	41	100	1,303	100	1,064	100	14,137
	Second major or expected	MAJsecondcol	Arts & Humanities	0	0	14	12	34	27	341	22	3	75	26	16	20	15	342
	second major, in NSSE's	(Recoded from	Biological Sci., Agriculture,															
	default major field categories. (This does not	MAJsecond.)	& Natural Resources	1	33	32	28	18	14	300	19	0	0	48	29	40	30	442
	reflect any customization		Physical Sci., Mathematics, & Computer Science	0	0	15	13	25	20	236	15	0	0	22	13	21	16	241
	made for the Major Field		Social Sciences	1	33	17	15	13	10	294	19	1	25	27	16	24	18	380
	Report.)		Business	0	0	5	4	4	3	62	4	0	0	4	2	4	3	64
			Communications, Media,	V	Ů	J			3	02		Ů	Ů	•	-		3	01
			& Public Relations	0	0	1	1	2	2	19	1	0	0	2	1	0	0	17
			Education	0	0	3	3	6	5	50	3	0	0	9	5	3	2	69
			Engineering	0	0	1	1	1	1	19	1	0	0	5	3	0	0	29
			Health professions	0	0	22	19	17	13	148	10	0	0	14	8	15	11	167
			Social service professions	0	0	1	1	2	2	33	2	0	0	3	2	5	4	38
			All other	1	33	0	0	2	2	13	1	0	0	3	2	0	0	52
			Undecided, undeclared	0	0	3	3	4	3	30	2	0	0	2	1	0	0	10
			Total	3	100	114	100	128	100	1,545	100	4	100	165	100	132	100	1,851



Respondent Profile: Bio, Agric, & Nat Res Northern Michigan University

#### Bio, Agric, & Nat Res **Seniors**<sup>a</sup> First-Year Students<sup>a</sup> **Great Lakes Great Lakes** NMU **Public** Carnegie Class NSSE 2013 NMU **Public** Carnegie Class NSSE 20 Item wording Variable % or description name Response options Count Count Count Count Count Count Count Count What have most of your grades C- or lower grades been up to now at C this institution? C+ B-В 2.059 2,890 B+ 2,177 2,673 A-2,402 2,775 3,270 3,830 Α Total 1,154 1,301 11,782 1,062 14,111 Did you begin college at 1.084 10,943 begincol Started here 9,097 this institution or Started elsewhere 5,001 elsewhere? 1,152 11,776 1,299 1,062 14,098 Since graduating from Vocational or technical school attend voc high school, which of the attend com Community or junior college 4,830 following types of schools 4-year college or university attend col have you attended other other than this one 3,396 than the one you are now attend none None 9,727 6,835 attending? (Select all that attend other Other apply.) What is the highest level edaspire Some college but less than a of education you ever bachelor's expect to complete? Bachelor's degree 1,669 2,378 Master's degree 2,403 3,713 Doctoral or professional degree 7,363 7,668

1,149

11,737

40 100

1,297

Total

1,061

14,066



Bio	o, Agric, & Nat	Res				First-\	ear :	Students	a					:	Seni	ors <sup>a</sup>		
						Great Lak	es							Great Lak	es			
				NMU		Public		Carnegie C	lass	NSSE 201	.3	NMU		Public		Carnegie C	lass	NSSE 20
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
28.	What is the highest level	parented	Did not finish high school	0	0	26	2	51	5	438	4	0	0	20	2	43	4	456
	of education completed by	-	High school diploma or G.E.D.	7	21	187	16	170	18	1,740	15	2	5	237	18	169	16	2,146
	either of your parents (or		Attended college, but did not															
	those who raised you)?		complete degree	5	15	135	12	116	12	1,239	11	4	10	124	10	118	11	1,319
			Associate's degree (A.A., A.S., etc.)	6	18	149	13	112	12	1,190	10	7	17	191	15	145	14	1,505
			Bachelor's degree (B.A., B.S., etc.)	10	29	320	28	260	27	3,318	28	20	49	360	28	294	28	3,970
			Master's degree (M.A., M.S., etc.)	3	9	228	20	155	16	2,494	21	5	12	239	18	201	19	2,922
			Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	3	9	103	9	102	11	1,327	11	3	7	126	10	85	8	1,768
			Total	34	100	1,148	100	966	100	11,746	100	41	100	1,297	100	1,055	100	14,086
	First-generation status	firstgen	No	16	47	651	57	517	54	7,139	61	28	68	725	56	580	55	8,660
	(Neither parent holds a	(Recoded from	Yes	18	53	497	43	449	46	4,607	39	13	32	572	44	475	45	5,426
	bachelor's degree.)	parented.)	Total	34	100	1,148	100	966	100	11,746	100	41	100	1,297	100	1,055	100	14,086
29.	What is your gender?	gender	Female	19	56	777	68	684	71	8,135	69	24	60	800	62	702	66	8,874
			Male	15	44	373	32	286	29	3,626	31	16	40	500	38	359	34	5,220
			Total	34	100	1,150	100	970	100	11,761	100	40	100	1,300	100	1,061	100	14,094
30.	Age Category	agecat	19 or younger	33	97	1,064	93	884	91	10,801	92	0	0	15	1	5	0	131
		(Recoded from	20-23	0	0	59	5	50	5	626	5	35	85	967	75	775	73	10,635
		birthyear.)	24-29	0	0	14	1	17	2	157	1	3	7	205	16	172	16	2,030
			30-39	1	3	6	1	11	1	102	1	1	2	71	5	77	7	848
			40-55	0	0	5	0	7	1	50	0	2	5	31	2	25	2	355
			Over 55	0	0	0	0	0	0	6	0	0	0	5	0	3	0	37
			Total	34	100	1,148	100	969	100	11,742	100	41	100	1,294	100	1,057	100	14,036
31.	Are you an international	internat	No	34	100	1,091	95	909	94	10,979	94	41	100	1,250	97	1,010	96	13,290
	student or foreign		Yes	0	0	52	5	54	6	695	6	0	0	38	3	40	4	696
	national?		Total	34	100	1,143	100	963	100	11,674	100	41	100	1,288	100	1,050	100	13,986



Bio	o, Agric, & Nat	Res				First-Y	ear/	Students	3						Seni	ors <sup>a</sup>		
						Great Lak	es							Great Lak	es			
				NMU		Public		Carnegie Cl	ass	NSSE 201	.3	NMU		Public		Carnegie C	lass	NSSE 20
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
32.	What is your racial or	re_amind	American Indian or Alaska Native	2	6		2	19	2	262	2	3	7	16	1	20	2	256
	ethnic identification?	re_asian	Asian	0	0	83	7	70	7	1,136	10	0	0	65	5	61	6	1,245
	(Select all that apply.)	re_black	Black or African American	0	0	97	8	94	10	1,236	11	0	0	43	3	59	6	900
		re_latino	Hispanic or Latino	0	0	45	4	159	16	1,345	11	2	5	29	2	91	9	1,226
		re_pacific	Native Hawaiian/Other Pac. Islander	0	0	3	0	12	1	107	1	0	0	2	0	6	1	100
		re_white	White	32	94	918	80	645	67	8,038	68	34	83	1,118	86	820	78	10,285
		re_other	Other	0	0	38	3	27	3	351	3	0	0	33	3	22	2	352
		re_pnr	I prefer not to respond	2	6	33	3	36	4	426	4	6	15	59	5	59	6	756
	Racial or ethnic	re_all	American Indian or Alaska Native	0	0	4	0	4	0	38	0	1	2	0	0	2	0	50
	identification	(Recoded from	Asian	0	0	71	6	53	5	890	8	0	0	55	4	46	4	1,024
		re_amind through re pnr	Black or African American	0	0	69	6	74	8	991	8	0	0	30	2	51	5	747
		where each	Hispanic or Latino	0	0	22	2	124	13	962	8	0	0	13	1	60	6	857
		student is	Native Hawaiian/Other Pac. Islander	0	0	1	0	3	0	26	0	0	0	0	0	1	0	30
		represented	White	30	88	857	74	579	60	7,275	62	31	76	1,070	82	756	71	9,506
		only once.)	Other	0	0	24	2	16	2	197	2	0	0	16	1	12	1	209
			Multiracial	2	6	70	6	79	8	956	8	3	7	57	4	71	7	901
			I prefer not to respond	2	6	33	3	36	4	426	4	6	15	59	5	59	6	756
			Total	34	100	1,151	100	968	100	11,761	100	41	100	1,300	100	1,058	100	14,080
33.	Are you a member of a	greek	No	32	94	1,058	92	898	93	10,706	91	40	98	1,182	91	1,003	95	12,648
	social fraternity or		Yes	2	6	92	8	72	7	1,037	9	1	2	117	9	54	5	1,405
	sorority?		Total	34	100	1,150	100	970	100	11,743	100	41	100	1,299	100	1,057	100	14,053
34.	Which of the following	living	Dormitory or other campus housing															
	best describes where you are living while attending		(not fraternity or sorority house)	29	85	773	67	695	72	8,238	70	7	17	131	10	219	21	2,977
	college?		Fraternity or sorority house	0	0	3	0	1	0	106	1	0	0	13	1	3	0	228
	5		Residence, within walking dist.	3	9	106	9	64	7	855	7	26	63	495	38	383	36	4,134
			Residence, farther than	1	3	241	21	181	19	2,260	19	8	20	651	50	436	41	6,485
			walking dist. None of the above	1	3	241	21	22	2	2,260	2	0	0	11	1	16	2	245
			Total	34	100	1,147	100	963	100	11,730	100	41	100	1,301	100	1,057	100	14,069
35.	Are you a student-athlete	athlete	No	32	97	1,147	95	833	87	10,429	89	40	98	1,301	96	947	90	13,034
55.	on a team sponsored by	annece	Yes	1	3	59	5	129	13	1,293	11	1	2	48	4	107	10	1,001
	your institution's athletics		Total	33	100	1,149	100	962	100	11,722	100	41	100	1,296	100	1,054	100	14,035
	department?			33	100	1,177	100	702	100	11,722	100	71	100	1,270	100	1,054	100	11,055



							110	· ciiciii		ingail (								
Bic	, Agric, & Nat	Res				First-\	ear :	Students	а						Seni	ors <sup>a</sup>		
						Great Lak	es							Great Lak	es			
				NMU		Public		Carnegie C	lass	NSSE 201	13	NMU		Public		Carnegie C	lass	NSSE 20
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
36.	Are you a current or	veteran	No	34	100		99	954	99	11,574	99	39	95	1,250	96	1,034	98	13,521
	former member of the		Yes	0	0	10	1	6	1	133	1	2	5	47	4	22	2	499
	U.S. Armed Forces, Reserves, or National Guard?		Total	34	100	1,151	100	960	100	11,707	100	41	100	1,297	100	1,056	100	14,020
37a.	Have you been diagnosed	disability	No	32	94	1,028	89	868	90	10,688	91	34	83	1,140	88	937	89	12,529
	with any disability or	•	Yes	2	6	90	8	58	6	722	6	4	10	113	9	79	7	1,113
	impairment?		I prefer not to respond	0	0	32	3	41	4	326	3	3	7	40	3	40	4	417
			Total	34	100	1,150	100	967	100	11,736	100	41	100	1,293	100	1,056	100	14,059
b	. [If, yes] Which of the	dis_sense	A sensory impairment	1	50	12	10	11	11	125	12	1	14	14	9	5	4	150
	following have been	dis_mobility	A mobility impairment	0	0	7	6	4	4	53	5	0	0	12	8	6	5	95
	diagnosed? (Select all that	dis_learning	A learning disability	1	50	51	42	22	22	359	34	4	57	67	44	52	44	598
	apply)	dis_mental	A mental health disorder	0	0	25	20	19	19	180	17	1	14	36	24	20	17	309
		dis_other	A disability not listed	0	0	15	12	13	13	153	15	0	0	13	8	10	8	211
	Disability or impairment	disability_all	A sensory impairment	1	3	9	1	8	1	89	1	0	0	11	1	4	0	98
		(Recoded from	A mobility impairment	0	0	4	0	3	0	29	0	0	0	4	0	2	0	48
		disability and	A learning disability	1	3	35	3	17	2	266	2	2	5	49	4	41	4	445
		dis_sense through	A mental health disorder	0	0	16	1	12	1	114	1	0	0	17	1	14	1	168
		dis_other where	A disability not listed	0	0	8	1	8	1	95	1	0	0	4	0	5	0	135
		each student is	More than one disability	0	0	18	2	10	1	127	1	2	5	28	2	13	1	218
		represented only once.)	No disability or impairment	32	94	1,028	89	868	90	10,688	91	34	83	1,140	88	937	89	12,529
		only once.)	Prefer not to respond	0	0	32	3	41	4	326	3	3	7	40	3	40	4	417
			Total	34	100	1,150	100	967	100	11,734	100	41	100	1,293	100	1,056	100	14,058
38.	Which of the following	sexorient	Heterosexual			533	90	284	82	3,228	88			509	89	469	84	3,925
	best describes your sexual		Gay			7	1	5	1	37	1			10	2	6	1	76
	orientation? (Optional question administered		Lesbian			3	1	1	0	23	1			2	0	7	1	39
	per institution request.)		Bisexual			12	2	17	5	109	3			9	2	25	4	148
	1		Questioning or unsure			5	1	10	3	62	2			4	1	6	1	45
			I prefer not to respond			30	5	30	9	219	6			37	6	45	8	319
			Total			590	100	347	100	3,678	100			571	100	558	100	4,552



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io, Agric, & Na	t Res				First-	/ear	Students	а						Seni	ors <sup>a</sup>		
					Great Lak	es							Great Lak	ces			
			NMU		Public		Carnegie C	lass	NSSE 201	13	NMU		Public		Carnegie C	lass	NSSE 20
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
stitution-reported info	rmation																
riables provided by your	institution in your	NSSE population file.)															
Institution-reported:	IRgender	Female	19	56	779	67	688	71	8,179	69	25	61	802	62	705	66	8,890
Gender		Male	15	44	376	33	285	29	3,632	31	16	39	501	38	359	34	5,246
		Total	34	100	1,155	100	973	100	11,811	100	41	100	1,303	100	1,064	100	14,136
Institution-reported:	IRrace	American Indian or Alaska Native	0	0	5	1	2	0	56	1	0	0	2	0	4	0	74
Race		Asian	0	0	41	4	34	4	516	5	0	0	43	4	33	3	646
		Black or African American	0	0	69	7	54	6	954	9	0	0	32	3	48	5	742
		Hispanic or Latino	0	0	39	4	141	16	1,138	11	0	0	31	3	84	9	1,051
		Native Hawaiian/Other Pac. Islander	0	0	0	0	4	0	18	0	0	0	0	0	0	0	22
		White	0	0	684	74	539	62	6,339	63	0	0	920	85	699	72	8,757
		Other	0	0	5	1	7	1	33	0	0	0	1	0	6	1	50
		Foreign or nonresident alien	0	0	29	3	23	3	302	3	0	0	19	2	17	2	271
		Two or more races/ethnicities	0	0	27	3	22	3	333	3	0	0	9	1	18	2	197
		Unknown	0	0	26	3	37	4	402	4	0	0	31	3	57	6	567
		Total	0	0	925	100	863	100	10,091	100	0	0	1,088	100	966	100	12,377
Institution-reported:	IRclass	Freshman/First-Year	34	100	1,155	100	973	100	11,811	100	0	0	0	0	0	0	0
Class level		Sophomore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Junior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Senior	0	0	0	0	0	0	0	0	41	100	1,303	100	1,064	100	14,137
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Total	34	100	1,155	100	973	100	11,811	100	41	100	1,303	100	1,064	100	14,137
Institution-reported:	IRftfy	No	8	24	110	10	136	14	1,187	10	41	100	1,303	100	1,062	100	13,600
First-time first-year		Yes	26	76	1,045	90	837	86	10,624	90	0	0	0	0	2	0	537
(FTFY)		Total	34	100	1,155	100	973	100	11,811	100	41	100	1,303	100	1,064	100	14,137
Institution-reported:	IRenrollment	Not full-time	5	15	19	2	35	4	279	2	3	7	196	15	97	9	1,469
Enrollment status		Full-time	29	85	1,136	98	938	96	11,532	98	38	93	1,107	85	967	91	12,668
		Total	34	100	1,155	100	973	100	11,811	100	41	100	1,303	100	1,064	100	14,137

| % | 3 | 15 | 9 | 11 | 28 | 21 | 13 | 100 | 61 | 39 | 100 | 63 | 37 | 100 | 1 | 76 | 14 | 6 | 3 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

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Endnotes: Bio, Agric, & Nat Res
Northern Michigan University

#### **Endnotes**

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