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# Northern Michigan University

## *NSSE 2018 Major Field Report, Part II*

### *Comparisons to Other Institutions*

#### **Bio, Agric, & Nat Res**

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

*The Major Field Report group '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.*



*Note:*

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

### About Your Major Field Report, Part II

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

#### NSSE results included in MFR, Part II

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

### Related-Major Groups

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

### Sample

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

### Class

Results are presented separately by institution-reported class level. Keep in mind that majors are student-reported. First-year students may report *intended* majors that have not yet been *declared*. Also, much of the first-year experience may take place outside of the major field. For these reasons, first-year results should be interpreted with caution.

### Technical Requirements

Related-major groups with fewer than 5 respondents in a given class are not reported (columns are blank). Groups containing at least 5 respondents, but fewer than 20, are reported in frequency distributions only. Comparison groups must contain at least 20 respondents in the major category, or they remain blank. Although 20 is a minimum requirement for all other statistics (Engagement Indicators, means, etc.), keep in mind that any statistical result requires a sufficient number of respondents per group to produce a reliable estimate. Due to the disaggregation of results by student-reported major, *Major Field Report* results are unweighted.





**Report Sections** (Those marked with an asterisk are included if at least one related-major group includes 20 or more respondents.)







Engagement Indicators*	Results on NSSE's ten Engagement Indicators (EIs) organized into four themes. See your <i>Engagement Indicators</i> report for more details.
High-Impact Practices*	Results on student participation in six High-Impact Practices (HIPs). See your <i>High-Impact Practices</i> report for more details.
Frequencies and Statistical Comparisons*	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	Response frequencies for all demographic questions for your institution and your three core comparison groups.

### Engagement Indicators: Overview

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

Use the following key:

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

Theme	Engagement Indicator	First-Year Students in Bio, Agric, & Nat Res			Seniors in Bio, Agric, & Nat Res		
		Your first-year students compared with State Peers	Your first-year students compared with State and Regional	Your first-year students compared with Crngie Size/Setting	Your seniors compared with State Peers	Your seniors compared with State and Regional	Your seniors compared with Crngie Size/Setting
Academic Challenge	<b>Higher-Order Learning</b>	--	--		--	--	--
	<b>Reflective &amp; Integrative Learning</b>	--	--	--	--	--	--
	<b>Learning Strategies</b>	--	--	--	--	--	--
	<b>Quantitative Reasoning</b>	--	--	--	--	--	--
Learning with Peers	<b>Collaborative Learning</b>	--	--	--	--	--	--
	<b>Discussions with Diverse Others</b>	--	--	--			
Experiences with Faculty	<b>Student-Faculty Interaction</b>	--	--		--	--	--
	<b>Effective Teaching Practices</b>	--	--	--	--	--	--
Campus Environment	<b>Quality of Interactions</b>	--	--	--	--	--	--
	<b>Supportive Environment</b>	--	--		--	--	--

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Bio, Agric, & Nat Res

### Northern Michigan University

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

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Academic Challenge</b>												
<b>Higher-Order Learning</b>												
NMU (N = 50)	35.2	13.6	1.93	15	25	35	45	60				
State Peers	37.3	13.0	.86	20	30	35	45	60	278	-2.1		-.159
State and Regional	37.0	11.9	.55	20	30	40	45	60	517	-1.8		-.150
Crngie Size/Setting	38.9	12.9	.23	20	30	40	50	60	3,128	-3.7	*	-.285
<b>Reflective &amp; Integrative Learning</b>												
NMU (N = 50)	32.6	11.8	1.67	13	26	34	43	49				
State Peers	34.7	11.3	.74	17	26	34	43	54	281	-2.1		-.187
State and Regional	33.1	10.7	.49	17	26	34	40	51	522	-.5		-.047
Crngie Size/Setting	35.5	11.7	.21	17	29	34	43	57	3,160	-2.9		-.249
<b>Learning Strategies</b>												
NMU (N = 49)	39.3	14.2	2.02	20	33	40	47	60				
State Peers	39.8	12.9	.85	20	33	40	53	60	280	-.5		-.034
State and Regional	36.9	12.8	.59	20	27	37	47	60	519	2.4		.183
Crngie Size/Setting	39.5	13.5	.24	20	27	40	53	60	3,130	-.2		-.016
<b>Quantitative Reasoning</b>												
NMU (N = 50)	27.2	12.8	1.81	0	20	27	40	47				
State Peers	27.7	14.5	.95	7	20	27	40	53	281	-.5		-.037
State and Regional	27.1	13.5	.63	7	20	27	33	53	515	.1		.006
Crngie Size/Setting	29.6	14.5	.26	7	20	27	40	60	3,119	-2.4		-.167
<b>Learning with Peers</b>												
<b>Collaborative Learning</b>												
NMU (N = 49)	35.4	14.0	1.99	15	25	35	45	60				
State Peers	36.0	14.0	.92	15	25	35	45	60	280	-.6		-.041
State and Regional	33.9	12.9	.60	15	25	35	40	60	519	1.5		.117
Crngie Size/Setting	36.1	13.7	.25	15	25	35	45	60	3,140	-.7		-.049
<b>Discussions with Diverse Others</b>												
NMU (N = 49)	39.1	12.4	1.78	20	35	40	50	60				
State Peers	40.3	14.5	.96	20	30	40	55	60	277	-1.2		-.088
State and Regional	36.4	15.4	.71	10	25	40	45	60	64	2.7		.178
Crngie Size/Setting	39.7	15.6	.28	15	30	40	55	60	50	-.6		-.039

## NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

### Engagement Indicators: Bio, Agric, & Nat Res

#### Northern Michigan University

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

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Experiences with Faculty</b>												
<b>Student-Faculty Interaction</b>												
NMU (N = 49)	18.1	10.1	1.45	0	10	15	25	35				
State Peers	20.5	14.5	.95	0	10	20	30	50	95	-2.5		-.179
State and Regional	19.6	13.3	.61	0	10	15	25	45	517	-1.5		-.117
Crngie Size/Setting	23.2	14.5	.26	0	15	20	30	50	51	-5.2	***	-.358
<b>Effective Teaching Practices</b>												
NMU (N = 50)	38.5	13.7	1.94	20	28	40	48	60				
State Peers	38.0	12.1	.80	20	28	40	48	60	281	.5		.039
State and Regional	37.8	12.1	.55	16	28	40	48	60	521	.7		.054
Crngie Size/Setting	38.2	13.0	.23	16	28	40	48	60	3,156	.3		.022
<b>Campus Environment</b>												
<b>Quality of Interactions</b>												
NMU (N = 49)	41.9	12.6	1.80	20	38	46	50	58				
State Peers	42.0	11.9	.79	20	36	43	50	60	275	-.1		-.011
State and Regional	42.2	10.7	.50	22	36	44	50	58	509	-.4		-.033
Crngie Size/Setting	41.5	12.1	.22	18	34	43	50	60	3,096	.3		.026
<b>Supportive Environment</b>												
NMU (N = 50)	33.3	11.5	1.62	18	25	30	43	60				
State Peers	36.0	13.1	.86	13	28	38	44	58	280	-2.7		-.210
State and Regional	34.5	12.3	.57	15	25	35	43	55	519	-1.2		-.098
Crngie Size/Setting	37.1	13.3	.24	18	28	38	48	60	3,151	-3.8	*	-.288

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Bio, Agric, & Nat Res

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Academic Challenge</b>												
<b>Higher-Order Learning</b>												
NMU (N = 95)	40.3	12.5	1.28	20	30	40	50	60				
State Peers	38.5	12.7	.77	20	30	40	45	60	362	1.8		.146
State and Regional	38.7	13.4	.55	15	30	40	50	60	691	1.6		.121
Crngie Size/Setting	39.7	13.4	.24	20	30	40	50	60	3,246	.6		.044
<b>Reflective &amp; Integrative Learning</b>												
NMU (N = 97)	36.7	11.8	1.20	14	31	37	43	57				
State Peers	36.3	11.7	.71	17	29	37	43	57	369	.4		.031
State and Regional	36.7	11.2	.46	20	29	37	43	57	696	.0		-.004
Crngie Size/Setting	36.6	11.7	.21	20	29	37	43	57	3,265	.1		.005
<b>Learning Strategies</b>												
NMU (N = 97)	38.7	11.7	1.19	20	27	40	47	60				
State Peers	40.0	14.1	.86	20	27	40	53	60	203	-1.3		-.099
State and Regional	38.5	14.3	.59	13	27	40	47	60	147	.2		.017
Crngie Size/Setting	39.4	13.7	.24	20	27	40	53	60	104	-.7		-.052
<b>Quantitative Reasoning</b>												
NMU (N = 96)	35.8	14.4	1.47	13	23	33	47	60				
State Peers	33.2	14.4	.88	13	20	33	40	60	362	2.6		.184
State and Regional	34.6	14.5	.59	13	27	33	47	60	687	1.3		.087
Crngie Size/Setting	34.1	14.9	.27	7	20	33	40	60	3,236	1.7		.116
<b>Learning with Peers</b>												
<b>Collaborative Learning</b>												
NMU (N = 95)	38.2	14.0	1.44	15	25	35	50	60				
State Peers	35.3	13.3	.80	15	25	35	45	60	368	2.9		.212
State and Regional	36.7	13.4	.55	15	25	35	45	60	691	1.5		.111
Crngie Size/Setting	37.0	13.3	.24	15	25	35	45	60	3,253	1.2		.091
<b>Discussions with Diverse Others</b>												
NMU (N = 96)	32.9	13.4	1.36	10	25	30	40	60				
State Peers	39.9	14.9	.91	20	30	40	50	60	363	-7.0	***	-.486
State and Regional	37.3	14.4	.59	15	25	40	50	60	690	-4.5	**	-.312
Crngie Size/Setting	40.0	15.1	.27	15	30	40	55	60	3,243	-7.1	***	-.473

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Bio, Agric, & Nat Res

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

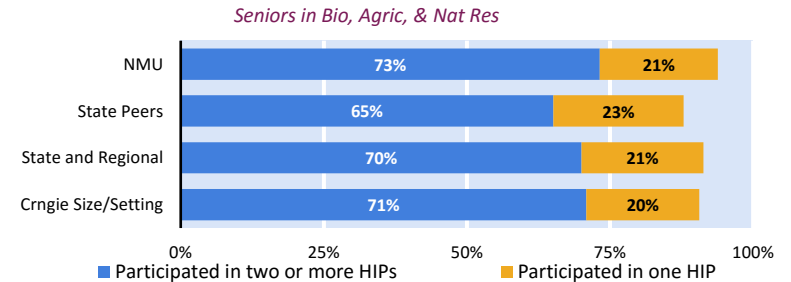
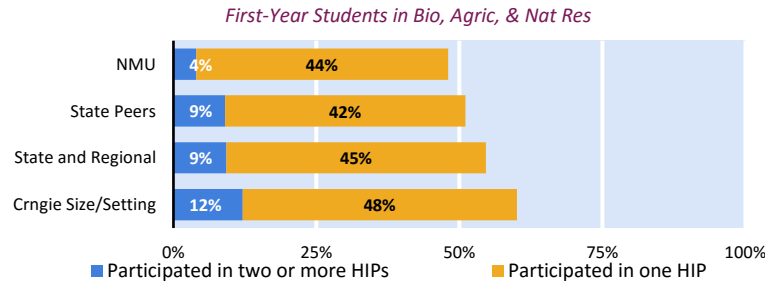
	Mean statistics			Percentile <sup>d</sup> scores					Comparison results			
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	Mean diff.	Sig. <sup>f</sup>	Effect size <sup>g</sup>
<b>Experiences with Faculty</b>												
<b>Student-Faculty Interaction</b>												
NMU (N = 96)	26.7	15.8	1.61	0	15	25	40	55				
State Peers	26.3	15.8	.96	5	15	25	35	60	366	.4		.026
State and Regional	29.0	15.5	.64	5	20	25	40	60	685	-2.3		-.149
Crnge Size/Setting	29.6	15.7	.28	5	20	30	40	60	3,236	-2.9		-.184
<b>Effective Teaching Practices</b>												
NMU (N = 97)	41.7	11.7	1.18	24	32	40	52	60				
State Peers	40.0	11.9	.72	20	32	40	51	60	367	1.7		.143
State and Regional	40.7	12.3	.50	20	32	40	52	60	695	1.0		.080
Crnge Size/Setting	40.0	12.7	.23	20	32	40	48	60	3,265	1.7		.131
<b>Campus Environment</b>												
<b>Quality of Interactions</b>												
NMU (N = 94)	42.3	9.4	.97	26	36	44	50	56				
State Peers	40.8	12.0	.74	18	34	40	50	60	206	1.5		.136
State and Regional	42.9	10.7	.44	22	36	44	50	60	678	-.6		-.055
Crnge Size/Setting	41.9	11.3	.20	22	35	44	50	60	3,203	.4		.034
<b>Supportive Environment</b>												
NMU (N = 97)	32.2	11.5	1.17	13	23	33	40	53				
State Peers	32.6	13.1	.80	10	23	33	40	58	366	-.4		-.032
State and Regional	32.9	12.7	.52	13	23	33	40	55	695	-.7		-.056
Crnge Size/Setting	33.1	13.2	.23	13	23	33	40	58	104	-.9		-.070

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Overall HIP Participation<sup>a,h</sup>

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



### Statistical Comparisons

The table below displays the percentage of your students who participated in a given High-Impact Practice, including the percentage who participated overall (at least one, two or more). It also graphs the difference, in percentage points, between your students and those of your comparison groups. Blue bars indicate how much higher your institution's percentage is compared to the comparison group. Dark red bars indicate how much lower your institution's percentage is compared to the comparison group.

	<i>Your students' participation compared with:</i>							
	NMU	State Peers		State and Regional		Crngie Size/Setting		
	%	Difference <sup>i</sup>	ES <sup>j</sup>	Difference <sup>i</sup>	ES <sup>j</sup>	Difference <sup>i</sup>	ES <sup>j</sup>	
<i>First-Year Students in Bio, Agric, &amp; Nat Res</i>								
12. Service-Learning	36	-9	-0.19	-14	-0.29	-17	* -0.34	
11c. Learning Community	8	-1	-0.05	-1	-0.03	-6	-0.21	
11e. Research with Faculty	8	+1	.04	+3	.10	+1	.05	
<b>Participated in at least one</b>	48	-3	-0.06	-7	-0.13	-12	-0.24	
<b>Participated in two or more</b>	4	-5	-0.21	-5	-0.22	-8	-0.31	
<i>Seniors in Bio, Agric, &amp; Nat Res</i>								
12. Service-Learning	59	+12	* .24	+3	.05	-2	-0.04	
11c. Learning Community	32	+9	.21	+10	* .24	+4	.09	
11e. Research with Faculty	49	+7	.14	+10	.21	+3	.06	
11a. Internship or Field Exp.	58	+12	* .25	+4	.08	+6	.12	
11d. Study Abroad	27	+11	* .28	+8	.19	+9	* .23	
11f. Culminating Senior Exp.	33	-25	*** -0.50	-21	*** -0.42	-17	** -0.35	
<b>Participated in at least one</b>	94	+6	.21	+2	.09	+3	.12	
<b>Participated in two or more</b>	73	+8	.18	+3	.07	+2	.05	

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	State Peers	State and Regional	Crngie Size/Setting	Effect size <sup>n</sup>	Effect size <sup>n</sup>	Effect size <sup>n</sup>	
													Mean	Mean	Mean	Effect size <sup>n</sup>	Effect size <sup>n</sup>	Effect size <sup>n</sup>	
<b>1. During the current school year, about how often have you done the following?</b>																			
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	6	12	15	6	16	3	89	3	2.5	2.6	-.16	2.7	-.19	2.8 **	-0.40	
		2	Sometimes	23	46	90	39	203	43	1,104	35								
		3	Often	11	22	91	39	184	39	1,150	37								
		4	Very often	10	20	36	16	70	15	774	25								
		Total		50	100	232	100	473	100	3,117	100								
b. Prepared two or more drafts of a paper or assignment before turning it in	drafts	1	Never	8	16	35	15	95	20	491	16	2.5	2.5	-.03	2.4	.07	2.5	-.06	
		2	Sometimes	18	36	88	38	168	35	1,084	35								
		3	Often	17	34	72	31	141	30	964	31								
		4	Very often	7	14	38	16	70	15	575	18								
		Total		50	100	233	100	474	100	3,114	100								
c. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1	Very often	2	4	6	3	17	4	116	4	2.9	3.1	-.23	3.1	-.23	3.1	-.22	
		2	Often	6	12	26	11	50	11	352	11								
		3	Sometimes	35	70	139	60	274	58	1,749	56								
		4	Never	7	14	61	26	133	28	901	29								
		Total		50	100	232	100	474	100	3,118	100								
d. Attended an art exhibit, play, or other arts performance (dance, music, etc.)	attendart	1	Never	22	44	75	32	194	41	1,096	35	1.9	1.9	-.09	1.8	.06	2.0	-.10	
		2	Sometimes	16	32	106	45	197	42	1,295	42								
		3	Often	9	18	45	19	62	13	507	16								
		4	Very often	3	6	7	3	21	4	217	7								
		Total		50	100	233	100	474	100	3,115	100								
e. Asked another student to help you understand course material	CLaskhelp	1	Never	2	4	12	5	30	6	179	6	3.0	2.8	.27	2.7 *	.37	2.8	.26	
		2	Sometimes	10	20	75	32	163	34	970	31								
		3	Often	22	44	91	39	186	39	1,202	39								
		4	Very often	16	32	55	24	94	20	763	25								
		Total		50	100	233	100	473	100	3,114	100								
f. Explained course material to one or more students	CLexplain	1	Never	0	0	9	4	6	1	93	3	3.0	2.9	.08	2.8	.27	2.9	.12	
		2	Sometimes	15	31	60	26	174	37	943	30								
		3	Often	20	41	105	45	212	45	1,322	42								
		4	Very often	14	29	59	25	82	17	759	24								
		Total		49	100	233	100	474	100	3,117	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
																			Mean
g. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	5	10	25	11	56	12	305	10	2.6	2.7	-.20	2.6	-.03	2.7	-.20	
		2	Sometimes	19	39	70	30	174	37	992	32								
		3	Often	18	37	79	34	160	34	1,022	33								
		4	Very often	7	14	59	25	85	18	797	26								
		Total		49	100	233	100	475	100	3,116	100								
h. Worked with other students on course projects or assignments	CLproject	1	Never	5	10	13	6	20	4	148	5	2.5	2.7	-.24	2.7	-.21	2.8 *	-0.31	
		2	Sometimes	21	42	88	38	184	39	1,073	34								
		3	Often	17	34	81	35	196	41	1,214	39								
		4	Very often	7	14	51	22	75	16	680	22								
		Total		50	100	233	100	475	100	3,115	100								
i. Given a course presentation	present	1	Never	4	8	50	22	80	17	506	16	2.3	2.2	.18	2.2	.13	2.3	.01	
		2	Sometimes	28	56	116	50	251	53	1,501	48								
		3	Often	17	34	46	20	114	24	795	25								
		4	Very often	1	2	20	9	30	6	316	10								
		Total		50	100	232	100	475	100	3,118	100								
<b>2. During the current school year, about how often have you done the following?</b>																			
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	6	12	14	6	23	5	226	7	2.5	2.6	-.04	2.5	.00	2.6	-.09	
		2	Sometimes	18	36	102	44	222	47	1,204	39								
		3	Often	19	38	86	37	177	37	1,224	39								
		4	Very often	7	14	31	13	51	11	456	15								
		Total		50	100	233	100	473	100	3,110	100								
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	3	6	24	10	44	9	291	9	2.6	2.5	.08	2.5	.12	2.6	-.03	
		2	Sometimes	22	44	94	41	212	45	1,207	39								
		3	Often	19	38	89	38	172	36	1,121	36								
		4	Very often	6	12	25	11	47	10	497	16								
		Total		50	100	232	100	475	100	3,116	100								
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	11	22	28	12	66	14	318	10	2.3	2.5	-.18	2.4	-.09	2.6 *	-0.30	
		2	Sometimes	17	34	98	42	207	44	1,216	39								
		3	Often	18	36	81	35	159	33	1,079	35								
		4	Very often	4	8	26	11	43	9	505	16								
		Total		50	100	233	100	475	100	3,118	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	8	16	10	4	25	5	152	5	2.4	2.7 **	-0.41	2.6	-0.24	2.8 **	-0.45	
		2	Sometimes	18	37	79	34	194	41	989	32								
		3	Often	18	37	106	45	202	43	1,408	45								
		4	Very often	5	10	38	16	52	11	561	18								
		Total		49	100	233	100	473	100	3,110	100								
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIperspect	1	Never	2	4	7	3	20	4	98	3	2.9	2.9	-0.01	2.8	.12	2.9	-0.05	
		2	Sometimes	15	30	67	29	152	32	827	27								
		3	Often	20	40	105	45	214	45	1,424	46								
		4	Very often	13	26	54	23	88	19	761	24								
		Total		50	100	233	100	474	100	3,110	100								
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	4	8	8	3	17	4	79	3	2.6	2.9	-0.30	2.8	-0.19	2.9 *	-0.35	
		2	Sometimes	19	38	67	29	148	31	852	27								
		3	Often	18	36	99	43	227	48	1,440	46								
		4	Very often	9	18	57	25	82	17	738	24								
		Total		50	100	231	100	474	100	3,109	100								
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	3	6	2	1	6	1	38	1	3.1	3.1	-0.03	3.0	.07	3.1	.03	
		2	Sometimes	7	14	44	19	80	17	601	19								
		3	Often	22	44	110	47	271	57	1,552	50								
		4	Very often	18	36	77	33	115	24	914	29								
		Total		50	100	233	100	472	100	3,105	100								
<b>3. During the current school year, about how often have you done the following?</b>																			
a. Talked about career plans with a faculty member	SFcareer	1	Never	13	27	40	17	82	17	467	15	2.2	2.4	-0.24	2.3	-0.11	2.4	-0.26	
		2	Sometimes	17	35	94	40	223	47	1,348	43								
		3	Often	16	33	63	27	123	26	824	26								
		4	Very often	3	6	36	15	45	10	475	15								
		Total		49	100	233	100	473	100	3,114	100								
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	26	52	122	52	237	50	1,325	43	1.7	1.7	.05	1.8	-0.02	1.9	-0.16	
		2	Sometimes	13	26	73	31	144	30	1,028	33								
		3	Often	9	18	25	11	63	13	534	17								
		4	Very often	2	4	13	6	30	6	222	7								
		Total		50	100	233	100	474	100	3,109	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
												Your first-year students compared with							
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	17	34	84	36	158	33	814	26	1.8	1.9	-.09	1.9	-.14	2.1 *	-0.34	
		2	Sometimes	25	50	104	45	213	45	1,361	44								
		3	Often	8	16	31	13	75	16	684	22								
		4	Very often	0	0	14	6	27	6	245	8								
		Total		50	100	233	100	473	100	3,104	100								
d. Discussed your academic performance with a faculty member	SFperform	1	Never	12	24	60	26	148	31	640	21	1.9	2.1	-.20	1.9	-.01	2.2 **	-0.32	
		2	Sometimes	29	58	108	47	226	48	1,430	46								
		3	Often	9	18	39	17	73	15	726	23								
		4	Very often	0	0	24	10	25	5	307	10								
		Total		50	100	231	100	472	100	3,103	100								
<b>4. During the current school year, how much has your coursework emphasized the following?</b>																			
a. Memorizing course material	memorize	1	Very little	1	2	4	2	8	2	62	2	3.1	3.2	-.05	3.1	.09	3.1	.03	
		2	Some	7	14	35	15	93	20	582	19								
		3	Quite a bit	27	54	113	49	236	50	1,463	47								
		4	Very much	15	30	80	34	136	29	1,003	32								
		Total		50	100	232	100	473	100	3,110	100								
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	1	2	3	1	8	2	60	2	3.0	3.1	-.03	3.0	.03	3.0	.02	
		2	Some	10	20	48	21	90	19	700	23								
		3	Quite a bit	25	50	113	49	259	55	1,446	47								
		4	Very much	14	28	68	29	114	24	900	29								
		Total		50	100	232	100	471	100	3,106	100								
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	3	6	6	3	13	3	101	3	2.8	2.9	-.12	2.9	-.14	3.0	-.24	
		2	Some	18	36	79	34	130	27	762	25								
		3	Quite a bit	17	34	90	39	237	50	1,415	46								
		4	Very much	12	24	58	25	93	20	827	27								
		Total		50	100	233	100	473	100	3,105	100								
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	2	4	16	7	26	5	122	4	2.7	2.8	-.11	2.7	-.08	2.9	-.26	
		2	Some	21	42	69	30	150	32	849	27								
		3	Quite a bit	18	36	98	42	217	46	1,380	44								
		4	Very much	9	18	49	21	80	17	751	24								
		Total		50	100	232	100	473	100	3,102	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	6	12	14	6	21	4	111	4	2.6	2.8	-.22	2.8	-.28	2.9 *	-0.42	
		2	Some	18	36	80	34	143	30	850	27								
		3	Quite a bit	18	36	87	38	227	48	1,397	45								
		4	Very much	8	16	51	22	81	17	747	24								
		Total		50	100	232	100	472	100	3,105	100								
<b>5. During the current school year, to what extent have your instructors done the following?</b>																			
a. Clearly explained course goals and requirements	ETgoals	1	Very little	1	2	8	3	10	2	60	2	3.2	3.1	.12	3.1	.16	3.1	.17	
		2	Some	6	12	41	18	86	18	641	21								
		3	Quite a bit	26	52	107	46	242	51	1,478	48								
		4	Very much	17	34	77	33	135	29	925	30								
		Total		50	100	233	100	473	100	3,104	100								
b. Taught course sessions in an organized way	ETorganize	1	Very little	2	4	4	2	14	3	121	4	3.0	3.0	-.11	3.0	-.09	3.0	-.02	
		2	Some	10	20	43	18	87	18	697	22								
		3	Quite a bit	26	52	126	54	245	52	1,418	46								
		4	Very much	12	24	60	26	127	27	866	28								
		Total		50	100	233	100	473	100	3,102	100								
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	3	6	2	1	11	2	92	3	3.1	3.0	.11	3.0	.08	3.1	.06	
		2	Some	7	14	55	24	95	20	676	22								
		3	Quite a bit	22	44	114	49	231	49	1,309	42								
		4	Very much	18	36	62	27	136	29	1,025	33								
		Total		50	100	233	100	473	100	3,102	100								
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	6	12	20	9	39	8	223	7	2.9	2.7	.13	2.7	.15	2.8	.08	
		2	Some	9	18	71	31	148	31	964	31								
		3	Quite a bit	21	42	89	38	188	40	1,153	37								
		4	Very much	14	28	52	22	98	21	763	25								
		Total		50	100	232	100	473	100	3,103	100								
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	9	18	22	9	42	9	311	10	2.5	2.6	-.11	2.6	-.09	2.7	-.17	
		2	Some	14	28	84	36	175	37	993	32								
		3	Quite a bit	19	38	88	38	187	40	1,181	38								
		4	Very much	8	16	39	17	69	15	610	20								
		Total		50	100	233	100	473	100	3,095	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
												Your first-year students compared with							
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
<b>6. During the current school year, about how often have you done the following?</b>																			
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	3	6	19	8	31	7	161	5	<b>2.8</b>	2.6	.13	2.6	.20	2.7	.04	
		2	Sometimes	14	28	84	36	191	41	1,085	35								
		3	Often	25	50	90	39	185	39	1,295	42								
		4	Very often	8	16	40	17	64	14	561	18								
			Total	50	100	233	100	471	100	3,102	100								
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	14	28	55	24	98	21	565	18	<b>2.1</b>	2.2	-.08	2.2	-.09	2.3	-.21	
		2	Sometimes	19	38	97	42	210	45	1,293	42								
		3	Often	13	26	57	24	121	26	876	28								
		4	Very often	4	8	24	10	41	9	360	12								
			Total	50	100	233	100	470	100	3,094	100								
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	10	20	42	18	78	17	476	15	<b>2.2</b>	2.3	-.13	2.2	-.08	2.4	-.23	
		2	Sometimes	22	44	104	45	228	49	1,300	42								
		3	Often	17	34	63	27	135	29	972	31								
		4	Very often	1	2	24	10	29	6	344	11								
			Total	50	100	233	100	470	100	3,092	100								
<b>7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)</b>																			
a. Up to 5 pages	wrshortnum	0	None	5	10	15	7	27	6	172	6	<b>6.6</b>	6.3	.06	6.2	.07	6.6	.00	
	(Recoded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	6	12	45	20	101	21	612	20								
		4	3-5	18	36	79	34	157	33	1,025	33								
		8	6-10	10	20	53	23	110	23	718	23								
		13	11-15	7	14	19	8	42	9	316	10								
		18	16-20	3	6	10	4	24	5	119	4								
		23	More than 20	1	2	9	4	13	3	152	5								
			Total	50	100	230	100	474	100	3,114	100								
b. Between 6 and 10 pages	wrmednum	0	None	18	36	65	29	189	40	1,104	36	<b>1.8</b>	2.2	-.13	1.8	.02	2.1	-.11	
	(Recoded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	20	40	110	48	200	42	1,178	38								
		4	3-5	10	20	32	14	56	12	533	17								
		8	6-10	1	2	14	6	16	3	205	7								
		13	11-15	1	2	6	3	3	1	48	2								
		18	16-20	0	0	1	0	4	1	12	0								
		23	More than 20	0	0	0	0	3	1	11	0								
			Total	50	100	228	100	471	100	3,091	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

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				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
												Your first-year students compared with							
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
c. 11 pages or more	wrlongnum	0	None	37	74	170	74	399	85	2,395	77	<b>.4</b>	▽ .7 *	-0.19	.5	-0.06	▽ .8 ***	-0.17	
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	13	26	45	19	57	12	482	16								
	4	3-5	0	0	11	5	8	2	104	3									
	8	6-10	0	0	4	2	2	0	64	2									
	13	11-15	0	0	1	0	2	0	33	1									
	18	16-20	0	0	0	0	2	0	12	0									
	23	More than 20	0	0	0	0	2	0	10	0									
	Total			50	100	231	100	472	100	3,100	100								
Estimated number of assigned pages of student writing.	wpages		(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)									<b>40.2</b>	46.0	-0.12	40.3	.00	48.7	-0.14	
<b>8. During the current school year, about how often have you had discussions with people from the following groups?</b>																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	6	12	6	3	38	8	177	6	<b>2.5</b>	▽ 3.0 ***	-0.52	2.7	-0.18	▽ 3.0 ***	-0.53	
		2	Sometimes	20	40	73	31	190	40	779	25								
		3	Often	16	32	73	31	127	27	980	32								
		4	Very often	8	16	80	34	119	25	1,172	38								
			Total	50	100	232	100	474	100	3,108	100								
b. People from an economic background other than your own	DDeconomic	1	Never	2	4	8	3	30	6	142	5	<b>3.0</b>	3.1	-0.07	2.8	.22	3.0	.01	
		2	Sometimes	9	18	48	21	143	30	725	23								
		3	Often	24	48	89	38	171	36	1,124	36								
		4	Very often	15	30	87	38	129	27	1,113	36								
			Total	50	100	232	100	473	100	3,104	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	1	2	10	4	44	9	222	7	<b>3.1</b>	3.0	.05	2.8	.26	3.0	.13	
		2	Sometimes	12	24	54	23	129	27	794	26								
		3	Often	18	37	86	37	160	34	977	31								
		4	Very often	18	37	82	35	140	30	1,114	36								
			Total	49	100	232	100	473	100	3,107	100								
d. People with political views other than your own	DDpolitical	1	Never	0	0	13	6	33	7	203	7	<b>3.1</b>	3.0	.20	2.9	.27	2.9	.23	
		2	Sometimes	12	24	64	28	127	27	868	28								
		3	Often	19	38	74	32	171	36	991	32								
		4	Very often	19	38	80	35	143	30	1,047	34								
			Total	50	100	231	100	474	100	3,109	100								

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				Frequency Distributions								Statistical Comparisons <sup>k</sup>								
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting		
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Your first-year students compared with		Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
													Mean	Effect size <sup>n</sup>						
<b>9. During the current school year, about how often have you done the following?</b>																				
a. Identified key information from reading assignments	LSreading	1	Never	1	2	2	1	11	2	47	2	2.9	3.1	-.16	3.0	-.03	3.0	-.14		
		2	Sometimes	14	28	48	21	103	22	681	22									
		3	Often	22	44	118	51	251	53	1,466	47									
		4	Very often	13	26	65	28	108	23	909	29									
		Total		50	100	233	100	473	100	3,103	100									
b. Reviewed your notes after class	LSnotes	1	Never	1	2	8	3	19	4	117	4	3.2	3.0	.14	2.9 *	.34	3.0	.17		
		2	Sometimes	12	24	59	25	150	32	809	26									
		3	Often	15	30	82	35	178	38	1,088	35									
		4	Very often	22	44	84	36	126	27	1,089	35									
		Total		50	100	233	100	473	100	3,103	100									
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	2	4	12	5	27	6	163	5	2.8	2.9	-.04	2.7	.14	2.9	-.03		
		2	Sometimes	17	35	70	30	173	36	931	30									
		3	Often	17	35	87	37	182	38	1,170	38									
		4	Very often	13	27	64	27	92	19	842	27									
		Total		49	100	233	100	474	100	3,106	100									
<b>10. During the current school year, to what extent have your courses challenged you to do your best work?</b>																				
challenge		1	Not at all	0	0	1	0	0	0	9	0	5.6	5.6	.01	5.6	-.01	5.6	.04		
		2		2	4	1	0	3	1	30	1									
		3		0	0	4	2	13	3	109	4									
		4		2	4	31	13	52	11	342	11									
		5		17	34	72	31	141	30	1,007	32									
		6		20	40	66	28	151	32	804	26									
		7	Very much	9	18	58	25	111	24	808	26									
		Total		50	100	233	100	471	100	3,109	100									
<b>11. Which of the following have you done or do you plan to do before you graduate?<sup>o</sup></b>																				
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	Have not decided		8	16	24	10	53	11	276	9	6%	7%	-.05	6%	.00	8%	-.07		
		Do not plan to do		1	2	14	6	13	3	99	3									
		Plan to do		37	76	178	76	379	80	2,486	80									
		Done or in progress		3	6	17	7	29	6	249	8									
		Total		49	100	233	100	474	100	3,110	100									

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

			Frequency Distributions								Statistical Comparisons <sup>k</sup>							
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	
b. Hold a formal leadership role in a student organization or group	leader	Have not decided	13	26	60	26	148	31	793	26	<b>10%</b>	10%	-.01	11%	-.04	12%	-.08	
		Do not plan to do	11	22	46	20	97	20	600	19								
		Plan to do	21	42	103	44	176	37	1,326	43								
		Done or in progress	5	10	24	10	53	11	386	12								
		Total	50	100	233	100	474	100	3,105	100								
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom	Have not decided	26	52	83	36	168	36	964	31	<b>8%</b>	9%	-.05	9%	-.03	14%	-.21	
		Do not plan to do	12	24	70	30	147	31	701	23								
		Plan to do	8	16	57	25	115	24	984	32								
		Done or in progress	4	8	22	9	41	9	447	14								
		Total	50	100	232	100	471	100	3,096	100								
d. Participate in a study abroad program	abroad	Have not decided	21	42	73	31	137	29	793	26	<b>2%</b>	4%	-.13	2%	.02	3%	-.08	
		Do not plan to do	11	22	59	25	123	26	692	22								
		Plan to do	17	34	91	39	204	43	1,520	49								
		Done or in progress	1	2	10	4	8	2	101	3								
		Total	50	100	233	100	472	100	3,106	100								
e. Work with a faculty member on a research project	research	Have not decided	15	30	69	30	164	35	838	27	<b>8%</b>	7%	.04	5%	.10	7%	.05	
		Do not plan to do	5	10	25	11	61	13	351	11								
		Plan to do	26	52	123	53	223	47	1,708	55								
		Done or in progress	4	8	16	7	26	5	210	7								
		Total	50	100	233	100	474	100	3,107	100								
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone	Have not decided	17	34	65	28	148	31	896	29	<b>2%</b>	2%	-.01	0% **	.28	2%	.03	
		Do not plan to do	4	8	23	10	34	7	225	7								
		Plan to do	28	56	139	60	289	61	1,936	62								
		Done or in progress	1	2	5	2	0	0	48	2								
		Total	50	100	232	100	471	100	3,105	100								
<b>12. About how many of your courses at this institution have included a community-based project (service-learning)?</b>																		
	servcourse	1 None	32	64	127	55	235	50	1,473	47	<b>1.5</b>	1.5	-.10	1.6	-.17	1.6	-.24	
		2 Some	15	30	91	39	216	46	1,360	44								
		3 Most	1	2	10	4	17	4	234	8								
		4 All	2	4	4	2	6	1	38	1								
		Total	50	100	232	100	474	100	3,105	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	State Peers	State and Regional	Crngie Size/Setting	Effect size <sup>n</sup>	Effect size <sup>n</sup>	Effect size <sup>n</sup>	
													Mean	Mean	Mean	Mean	Mean	Mean	
<b>13. Indicate the quality of your interactions with the following people at your institution.</b>																			
a. Students	QIstudent	1	Poor	2	4	4	2	11	2	57	2	<b>5.1</b>	5.3	-.16	5.3	-.18	5.4	-.18	
		2		2	4	5	2	3	1	68	2								
		3		3	6	16	7	17	4	176	6								
		4		7	14	30	13	69	15	397	13								
		5		14	28	64	27	141	30	861	28								
		6		12	24	59	25	150	32	788	25								
		7	Excellent	10	20	55	24	81	17	750	24								
		—	Not applicable	0	0	0	0	2	0	14	0								
			Total	50	100	233	100	474	100	3,111	100								
b. Academic advisors	QIadvisor	1	Poor	1	2	10	4	9	2	108	3	<b>5.3</b>	5.3	.01	5.2	.08	5.1	.10	
		2		4	8	9	4	25	5	155	5								
		3		6	12	20	9	36	8	275	9								
		4		3	6	23	10	71	15	445	14								
		5		7	14	40	17	107	23	632	20								
		6		12	24	63	27	105	22	614	20								
		7	Excellent	17	34	66	28	114	24	848	27								
		—	Not applicable	0	0	2	1	7	1	32	1								
			Total	50	100	233	100	474	100	3,109	100								
c. Faculty	QIfaculty	1	Poor	1	2	4	2	6	1	68	2	<b>5.3</b>	5.2	.08	5.3	.02	5.3	.03	
		2		1	2	8	3	14	3	88	3								
		3		1	2	10	4	22	5	202	6								
		4		6	12	36	15	59	12	435	14								
		5		20	40	71	30	143	30	804	26								
		6		12	24	64	27	153	32	816	26								
		7	Excellent	9	18	39	17	74	16	679	22								
		—	Not applicable	0	0	1	0	3	1	16	1								
			Total	50	100	233	100	474	100	3,108	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
																			State Peers
d. Student services staff (career services, student activities, housing, etc.)	Qlstaff	1	Poor	3	6	9	4	19	4	124	4	5.1	5.1	.00	5.2	-.07	5.0	.02	
		2		2	4	9	4	10	2	137	4								
		3		4	8	19	8	24	5	245	8								
		4		6	12	27	12	57	12	441	14								
		5		8	16	48	21	125	26	666	21								
		6		11	22	51	22	116	25	680	22								
		7	Excellent	12	24	46	20	84	18	617	20								
		—	Not applicable	4	8	22	10	37	8	194	6								
	Total	50	100	231	100	472	100	3,104	100										
e. Other administrative staff and offices (registrar, financial aid, etc.)	Qladmin	1	Poor	1	2	6	3	15	3	127	4	5.1	5.0	.02	5.1	-.04	5.0	.05	
		2		2	4	14	6	12	3	158	5								
		3		4	8	18	8	37	8	244	8								
		4		8	16	36	16	65	14	493	16								
		5		12	24	44	19	116	25	673	22								
		6		11	22	54	23	121	26	664	21								
		7	Excellent	9	18	46	20	85	18	613	20								
		—	Not applicable	3	6	14	6	22	5	139	4								
	Total	50	100	232	100	473	100	3,111	100										
<b>14. How much does your institution emphasize the following?</b>																			
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	1	2	2	1	4	1	35	1	3.1	3.3	-.16	3.1	.01	3.2	-.05	
		2	Some	8	16	30	13	79	17	487	16								
		3	Quite a bit	24	48	106	46	241	51	1,470	47								
		4	Very much	17	34	93	40	150	32	1,115	36								
			Total	50	100	231	100	474	100	3,107	100								
b. Providing support to help students succeed academically	SEacademic	1	Very little	0	0	4	2	16	3	97	3	3.1	3.2	-.08	3.0	.09	3.1	.01	
		2	Some	10	20	39	17	99	21	603	19								
		3	Quite a bit	25	50	106	45	214	45	1,325	43								
		4	Very much	15	30	84	36	143	30	1,081	35								
			Total	50	100	233	100	472	100	3,106	100								
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	2	4	8	3	17	4	143	5	3.3	3.2	.06	3.2	.13	3.2	.13	
		2	Some	4	8	32	14	83	18	496	16								
		3	Quite a bit	22	44	90	39	175	37	1,151	37								
		4	Very much	22	44	102	44	198	42	1,313	42								
			Total	50	100	232	100	473	100	3,103	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>						
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with				
Item wording or description	Variable name <sup>l</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 <sup>n</sup>
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	10	20	19	8	80	17	342	11	2.5	2.8 *	-0.36	2.5	-0.06	2.8 *	-0.31
		2	Some	15	30	68	29	148	31	868	28							
		3	Quite a bit	17	34	88	38	166	35	1,085	35							
		4	Very much	8	16	58	25	79	17	808	26							
		Total		50	100	233	100	473	100	3,103	100							
e. Providing opportunities to be involved socially	SEsocial	1	Very little	2	4	19	8	24	5	123	4	2.9	2.9	-0.01	2.9	-0.01	3.0	-0.13
		2	Some	12	24	54	23	116	25	709	23							
		3	Quite a bit	25	50	89	38	211	45	1,288	42							
		4	Very much	11	22	71	30	121	26	980	32							
		Total		50	100	233	100	472	100	3,100	100							
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	3	6	20	9	29	6	174	6	2.7	2.8	-0.14	2.9	-0.20	3.0 *	-0.31
		2	Some	19	38	58	25	115	24	712	23							
		3	Quite a bit	18	36	95	41	217	46	1,254	40							
		4	Very much	10	20	58	25	111	24	961	31							
		Total		50	100	231	100	472	100	3,101	100							
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	18	36	52	22	103	22	690	22	2.0	2.2	-0.28	2.2 *	-0.31	2.4 **	-0.41
		2	Some	19	38	100	43	191	40	1,059	34							
		3	Quite a bit	10	20	60	26	141	30	883	28							
		4	Very much	3	6	20	9	37	8	473	15							
		Total		50	100	232	100	472	100	3,105	100							
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	3	6	20	9	53	11	224	7	2.7	2.8	-0.07	2.7	.07	2.9	-0.15
		2	Some	15	30	64	28	142	30	783	25							
		3	Quite a bit	24	48	90	39	179	38	1,256	41							
		4	Very much	8	16	58	25	96	20	834	27							
		Total		50	100	232	100	470	100	3,097	100							
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	12	24	37	16	74	16	381	12	2.2	2.5 *	-0.31	2.4	-0.24	2.6 **	-0.46
		2	Some	22	44	84	36	191	40	1,051	34							
		3	Quite a bit	11	22	77	33	156	33	1,064	34							
		4	Very much	5	10	35	15	51	11	607	20							
		Total		50	100	233	100	472	100	3,103	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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### Northern Michigan University

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				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
												Your first-year students compared with							
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
<b>15. About how many hours do you spend in a typical 7-day week doing the following?</b>																			
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs <i>(Recoded version of tmprep created by NSSE. Values are estimated number of hours per week.)</i>	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	1 3 12 15 8 4 6 1	2 6 24 30 16 8 12 2	0 19 46 60 42 29 20 17	0 8 20 26 18 12 9 7	0 33 98 116 105 54 42 25	0 7 21 25 22 11 9 5	10 320 621 694 637 389 227 210	0 10 20 22 20 13 7 7	<b>14.7</b>	16.1	-.16	15.9	-.15	15.7	-.11	
Total				50	100	233	100	473	100	3,108	100								
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs <i>(Recoded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)</i>	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	17 20 5 4 4 0 0 0	34 40 10 8 8 0 0 0	70 85 35 23 9 7 1 1	30 37 15 10 4 3 0 0	132 204 67 32 19 7 3 8	28 43 14 7 4 1 1 2	847 1,151 514 251 168 87 34 47	27 37 17 8 5 3 1 2	<b>4.5</b>	5.3	-.13	5.1	-.10	5.9	-.20	
Total				50	100	231	100	472	100	3,099	100								
c. Working for pay on campus	tmworkonhrs <i>(Recoded version of tmworkon created by NSSE. Values are estimated number of hours per week.)</i>	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	33 2 5 6 3 0 0 0	67 4 10 12 6 0 0 0	192 10 13 9 5 2 1 0	83 4 6 4 2 1 0 0	370 24 35 22 12 3 2 2	79 5 7 5 3 1 0 0	2,418 145 232 153 104 26 15 10	78 5 7 5 3 1 0 0	<b>3.6</b>	1.8 *	.37	2.2	.26	2.4	.22	
Total				49	100	232	100	470	100	3,103	100								

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				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with				
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	37	74	167	72	291	62	2,237	72	<b>3.7</b>	4.3	-.07	<b>6.2 *</b>	-.26	4.2	-.06
	(Recoded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	3	6	11	5	26	6	146	5							
	8	6-10 hrs	1	2	12	5	36	8	156	5								
	13	11-15 hrs	2	4	11	5	34	7	170	5								
	18	16-20 hrs	5	10	15	6	28	6	153	5								
	23	21-25 hrs	1	2	8	3	19	4	139	4								
	28	26-30 hrs	1	2	5	2	18	4	48	2								
	33	More than 30 hrs	0	0	4	2	20	4	55	2								
Total				50	100	233	100	472	100	3,104	100							
Estimated number of hours working for pay	tmworkhrs		(Continuous variable created by NSSE)									<b>7.4</b>	6.1	.14	8.2	-.08	6.6	.08
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	29	58	108	46	276	58	1,712	55	<b>1.8</b>	2.6	-.23	2.2	-.10	2.4	-.16
	(Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	17	34	92	39	153	32	1,026	33							
	8	6-10 hrs	3	6	26	11	24	5	202	7								
	13	11-15 hrs	1	2	4	2	8	2	83	3								
	18	16-20 hrs	0	0	0	0	3	1	47	2								
	23	21-25 hrs	0	0	2	1	2	0	23	1								
	28	26-30 hrs	0	0	0	0	0	0	4	0								
	33	More than 30 hrs	0	0	1	0	6	1	10	0								
Total				50	100	233	100	472	100	3,107	100							
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	2	4	2	1	3	1	62	2	<b>14.2</b>	12.0	.26	12.9	.16	11.8 *	.29
	(Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	4	8	55	24	90	19	692	22							
	8	6-10 hrs	14	28	59	25	121	26	861	28								
	13	11-15 hrs	13	26	56	24	101	21	657	21								
	18	16-20 hrs	5	10	27	12	89	19	428	14								
	23	21-25 hrs	6	12	14	6	27	6	157	5								
	28	26-30 hrs	2	4	6	3	15	3	78	3								
	33	More than 30 hrs	4	8	14	6	27	6	174	6								
Total				50	100	233	100	473	100	3,109	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with								
Item wording or description	Variable name <sup>l</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 <sup>n</sup>				
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	44	88	184	79	394	83	2,557	83	<b>1.2</b>	1.4	-.06	1.5	-.06	1.7	-.10				
		(Recoded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	3	6	26	11	42	9	243								8			
			8	6-10 hrs	2	4	13	6	17	4	104								3			
			13	11-15 hrs	0	0	7	3	9	2	82								3			
			18	16-20 hrs	0	0	0	0	2	0	50								2			
			23	21-25 hrs	0	0	1	0	4	1	33								1			
			28	26-30 hrs	0	0	0	0	2	0	3								0			
			33	More than 30 hrs	1	2	1	0	4	1	24								1			
				Total	50	100	232	100	474	100	3,096								100			
	h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	23	47	74	32	212	45	1,599								51	<b>3.1</b>	4.2	-.19
		(Recoded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	19	39	99	42	181	38	936	30										
			8	6-10 hrs	3	6	41	18	55	12	310	10										
			13	11-15 hrs	2	4	11	5	14	3	125	4										
			18	16-20 hrs	1	2	2	1	2	0	69	2										
			23	21-25 hrs	0	0	3	1	3	1	31	1										
			28	26-30 hrs	1	2	1	0	2	0	11	0										
			33	More than 30 hrs	0	0	2	1	5	1	26	1										
			Total	49	100	233	100	474	100	3,107	100											
<b>16. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?</b>																						
	reading	1	Very little	7	14	38	16	78	16	425	14	<b>2.5</b>	2.5	-.02	2.5	.06	2.6	-.07				
		2	Some	21	42	86	37	199	42	1,177	38											
		3	About half	13	26	62	27	114	24	866	28											
		4	Most	7	14	35	15	64	14	498	16											
		5	Almost all	2	4	10	4	18	4	139	4											
			Total	50	100	231	100	473	100	3,105	100											
	tmreadinghrs															<b>6.3</b>	6.5	-.04	6.2	.02	6.6	-.06
	(Continuous variable created by NSSE. Calculated as a proportion of tmprephrs based on reading, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)																					

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
	tmreadinghrscol	1	0 hrs	1	2	0	0	0	0	10	0								
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	28	56	124	54	259	55	1,577	51								
		3	More than 5, up to 10 hrs	12	24	65	28	135	29	911	29								
		4	More than 10, up to 15 hrs	4	8	22	10	42	9	293	9								
		5	More than 15, up to 20 hrs	3	6	7	3	16	3	176	6								
		6	More than 20, up to 25 hrs	2	4	10	4	17	4	99	3								
		7	More than 25 hrs	0	0	3	1	3	1	31	1								
			Total	50	100	231	100	472	100	3,097	100								

#### 17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

a. Writing clearly and effectively	pgwrite	1	Very little	4	8	23	10	39	8	206	7	<b>2.7</b>	2.7	.03	2.7	.02	2.8	-.13
		2	Some	14	28	74	32	151	32	870	28							
		3	Quite a bit	26	52	96	41	210	44	1,402	45							
		4	Very much	6	12	39	17	72	15	617	20							
			Total	50	100	232	100	472	100	3,095	100							
b. Speaking clearly and effectively	pgspeak	1	Very little	11	22	48	21	56	12	377	12	<b>2.3</b>	2.4	-.10	2.6 *	-.31	2.6 *	-.35
		2	Some	16	33	83	36	162	34	1,029	33							
		3	Quite a bit	19	39	64	28	186	39	1,148	37							
		4	Very much	3	6	36	16	67	14	549	18							
			Total	49	100	231	100	471	100	3,103	100							
c. Thinking critically and analytically	pgthink	1	Very little	3	6	10	4	14	3	86	3	<b>2.9</b>	2.9	-.06	3.0	-.18	3.1	-.25
		2	Some	10	20	59	25	93	20	585	19							
		3	Quite a bit	26	52	96	41	223	47	1,376	44							
		4	Very much	11	22	67	29	142	30	1,059	34							
			Total	50	100	232	100	472	100	3,106	100							
d. Analyzing numerical and statistical information	pganalyze	1	Very little	2	4	22	10	33	7	190	6	<b>2.8</b>	2.6	.24	2.8	.07	2.9	-.04
		2	Some	15	30	88	38	146	31	852	27							
		3	Quite a bit	23	46	79	34	198	42	1,289	41							
		4	Very much	10	20	42	18	97	20	778	25							
			Total	50	100	231	100	474	100	3,109	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	11	22	44	19	78	16	495	16	2.2	2.3	-.14	2.5 *	-.29	2.5 *	-	-.34
		2	Some	23	46	97	42	165	35	1,035	33								
		3	Quite a bit	11	22	62	27	157	33	1,019	33								
		4	Very much	5	10	29	13	73	15	559	18								
		Total		50	100	232	100	473	100	3,108	100								
f. Working effectively with others	pgothers	1	Very little	7	14	17	7	33	7	188	6	2.6	2.7	-.16	2.8	-.25	2.8 *	-	-.31
		2	Some	15	30	77	33	133	28	855	28								
		3	Quite a bit	20	40	93	40	206	43	1,302	42								
		4	Very much	8	16	45	19	102	22	764	25								
		Total		50	100	232	100	474	100	3,109	100								
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	14	28	39	17	64	14	329	11	2.4	2.5	-.12	2.6	-.19	2.7 *	-	-.34
		2	Some	12	24	75	32	164	35	948	31								
		3	Quite a bit	15	30	82	35	163	34	1,175	38								
		4	Very much	9	18	36	16	83	18	655	21								
		Total		50	100	232	100	474	100	3,107	100								
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	11	22	28	12	54	11	283	9	2.3	2.6	-.30	2.6	-.28	2.8 ***	-	-.48
		2	Some	16	32	78	34	168	36	876	28								
		3	Quite a bit	18	36	80	34	165	35	1,182	38								
		4	Very much	5	10	46	20	85	18	769	25								
		Total		50	100	232	100	472	100	3,110	100								
i. Solving complex real-world problems	pgprobsolve	1	Very little	11	22	37	16	63	13	360	12	2.2	2.4	-.22	2.5 *	-.34	2.6 **	-	-.44
		2	Some	21	42	94	41	172	36	1,030	33								
		3	Quite a bit	14	28	66	28	166	35	1,116	36								
		4	Very much	4	8	35	15	73	15	601	19								
		Total		50	100	232	100	474	100	3,107	100								
j. Being an informed and active citizen	pgcitizen	1	Very little	10	20	30	13	65	14	368	12	2.3	2.4	-.21	2.5	-.27	2.6 **	-	-.40
		2	Some	20	40	97	42	176	37	1,033	33								
		3	Quite a bit	17	34	77	33	161	34	1,087	35								
		4	Very much	3	6	28	12	72	15	619	20								
		Total		50	100	232	100	474	100	3,107	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### First-Year Students<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>						
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your first-year students compared with				
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	State Peers	State and Regional	Crngie Size/Setting	Effect size <sup>n</sup>		
													Mean	Mean	Mean	Effect size <sup>n</sup>	Effect size <sup>n</sup>	Effect size <sup>n</sup>
<b>18. How would you evaluate your entire educational experience at this institution?</b>																		
	evalexp	1	Poor	1	2	4	2	8	2	66	2	<b>3.1</b>	3.2	-.16	3.2	-.14	3.2	-.10
		2	Fair	10	20	27	12	51	11	455	15							
		3	Good	23	46	120	52	266	56	1,533	49							
		4	Excellent	16	32	81	35	150	32	1,057	34							
		Total		50	100	232	100	475	100	3,111	100							
<b>19. If you could start over again, would you go to the same institution you are now attending?</b>																		
	sameinst	1	Definitely no	2	4	14	6	21	4	150	5	<b>3.3</b>	3.2	.12	3.2	.10	3.1	.19
		2	Probably no	6	12	27	12	49	10	441	14							
		3	Probably yes	17	34	90	39	208	44	1,338	43							
		4	Definitely yes	25	50	101	44	196	41	1,183	38							
		Total		50	100	232	100	474	100	3,112	100							
<b>20. Do you intend to return to this institution next year?<sup>f</sup></b>																		
	returnexp		No	4	8	8	9	12	10	80	5	<b>90%</b>	86%	.14	83%	.22	87%	.09
			Yes	45	90	77	86	99	83	1,361	87							
			Not sure	1	2	5	6	9	8	123	8							
			Total	50	100	90	100	120	100	1,564	100							
			<i>(Means indicate the percentage who responded "Yes." Comparison data are limited to NSSE 2018 participants.)</i>															

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
<b>1. During the current school year, about how often have you done the following?</b>																			
a. Asked questions or contributed to course discussions in other ways	askquest	1	Never	2	2	5	2	8	1	48	2	<b>3.0</b>	3.0	.02	3.0	-.05	3.1	-.11	
		2	Sometimes	28	29	93	34	181	30	856	27								
		3	Often	36	38	80	30	199	33	1,074	34								
		4	Very often	30	31	93	34	209	35	1,185	37								
		Total		96	100	271	100	597	100	3,163	100								
b. Prepared two or more drafts of a paper or assignment before turning it in	drafts	1	Never	24	25	53	19	128	21	662	21	<b>2.4</b>	2.4	-.02	2.4	.01	2.4	.04	
		2	Sometimes	28	29	105	38	209	35	1,197	38								
		3	Often	28	29	67	24	167	28	828	26								
		4	Very often	17	18	49	18	94	16	478	15								
		Total		97	100	274	100	598	100	3,165	100								
c. Come to class without completing readings or assignments	unpreparedr <i>(Reverse-coded version of unprepared created by NSSE.)</i>	1	Very often	4	4	14	5	27	5	162	5	<b>3.1</b>	3.0	.14	3.1	.06	3.0	.13	
		2	Often	9	9	43	16	76	13	431	14								
		3	Sometimes	55	58	147	54	330	55	1,804	57								
		4	Never	27	28	70	26	167	28	772	24								
		Total		95	100	274	100	600	100	3,169	100								
d. Attended an art exhibit, play, or other arts performance (dance, music, etc.)	attendart	1	Never	35	36	127	46	288	48	1,339	42	<b>1.9</b>	1.7	.20	1.7	.21	1.8	.08	
		2	Sometimes	43	45	111	41	228	38	1,267	40								
		3	Often	14	15	25	9	61	10	429	14								
		4	Very often	4	4	11	4	22	4	137	4								
		Total		96	100	274	100	599	100	3,172	100								
e. Asked another student to help you understand course material	CLaskhelp	1	Never	2	2	18	7	36	6	197	6	<b>2.8</b>	2.6 *	.28	2.7	.15	2.7	.15	
		2	Sometimes	34	35	122	44	225	37	1,173	37								
		3	Often	38	40	88	32	219	36	1,181	37								
		4	Very often	22	23	47	17	121	20	621	20								
		Total		96	100	275	100	601	100	3,172	100								
f. Explained course material to one or more students	CLexplain	1	Never	2	2	3	1	4	1	42	1	<b>3.0</b>	3.0	.04	3.0	-.01	3.0	.02	
		2	Sometimes	26	27	79	29	168	28	852	27								
		3	Often	37	38	111	40	233	39	1,337	42								
		4	Very often	32	33	82	30	195	33	945	30								
		Total		97	100	275	100	600	100	3,176	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
g. Prepared for exams by discussing or working through course material with other students	CLstudy	1	Never	8	8	24	9	65	11	305	10	2.7	2.6	.13	2.6	.11	2.8	-.01	
		2	Sometimes	37	38	111	40	224	37	1,007	32								
		3	Often	24	25	84	31	178	30	1,034	33								
		4	Very often	28	29	56	20	134	22	825	26								
		Total		97	100	275	100	601	100	3,171	100								
h. Worked with other students on course projects or assignments	CLproject	1	Never	0	0	11	4	11	2	100	3	3.1	2.9 *	.24	3.0	.11	2.9	.13	
		2	Sometimes	29	30	83	30	174	29	851	27								
		3	Often	33	34	115	42	239	40	1,352	43								
		4	Very often	34	35	66	24	175	29	868	27								
		Total		96	100	275	100	599	100	3,171	100								
i. Given a course presentation	present	1	Never	3	3	27	10	38	6	235	7	2.8	2.6 *	.26	2.8	.07	2.8	.04	
		2	Sometimes	34	35	105	38	209	35	978	31								
		3	Often	37	38	93	34	213	35	1,174	37								
		4	Very often	23	24	49	18	141	23	787	25								
		Total		97	100	274	100	601	100	3,174	100								
<b>2. During the current school year, about how often have you done the following?</b>																			
a. Combined ideas from different courses when completing assignments	RIintegrate	1	Never	4	4	8	3	10	2	97	3	2.9	2.9	-.01	3.1	-.16	3.0	-.04	
		2	Sometimes	25	26	71	26	136	23	807	25								
		3	Often	42	43	125	46	268	45	1,386	44								
		4	Very often	26	27	70	26	186	31	878	28								
		Total		97	100	274	100	600	100	3,168	100								
b. Connected your learning to societal problems or issues	RIsocietal	1	Never	10	10	21	8	37	6	200	6	2.7	2.6	.15	2.7	.05	2.7	.04	
		2	Sometimes	25	26	113	41	226	38	1,173	37								
		3	Often	43	44	95	35	224	37	1,183	37								
		4	Very often	19	20	45	16	113	19	611	19								
		Total		97	100	274	100	600	100	3,167	100								
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1	Never	16	16	40	15	98	16	459	14	2.4	2.4	.03	2.3	.11	2.4	.03	
		2	Sometimes	37	38	119	43	270	45	1,365	43								
		3	Often	29	30	77	28	158	26	907	29								
		4	Very often	15	15	38	14	74	12	437	14								
		Total		97	100	274	100	600	100	3,168	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
d. Examined the strengths and weaknesses of your own views on a topic or issue	RIownview	1	Never	4	4	12	4	27	4	160	5	2.7	2.7	.03	2.7	.00	2.8	-.01	
		2	Sometimes	34	35	99	36	207	34	1,058	33								
		3	Often	41	43	120	44	263	44	1,360	43								
		4	Very often	17	18	44	16	104	17	589	19								
		Total		96	100	275	100	601	100	3,167	100								
e. Tried to better understand someone else's views by imagining how an issue looks from their perspective	RIperspect	1	Never	2	2	8	3	14	2	96	3	2.9	2.9	-.07	2.9	.00	2.9	-.01	
		2	Sometimes	25	26	80	29	180	30	889	28								
		3	Often	52	54	107	39	269	45	1,445	46								
		4	Very often	18	19	80	29	138	23	738	23								
		Total		97	100	275	100	601	100	3,168	100								
f. Learned something that changed the way you understand an issue or concept	RInewview	1	Never	1	1	2	1	11	2	55	2	2.9	2.9	-.05	2.9	-.02	2.9	-.03	
		2	Sometimes	27	28	80	29	167	28	877	28								
		3	Often	49	51	123	45	279	47	1,469	46								
		4	Very often	20	21	68	25	143	24	762	24								
		Total		97	100	273	100	600	100	3,163	100								
g. Connected ideas from your courses to your prior experiences and knowledge	RIconnect	1	Never	0	0	1	0	1	0	18	1	3.2	3.2	.06	3.2	-.03	3.2	.04	
		2	Sometimes	17	18	51	19	79	13	474	15								
		3	Often	43	44	125	45	302	50	1,603	51								
		4	Very often	37	38	98	36	219	36	1,072	34								
		Total		97	100	275	100	601	100	3,167	100								
<b>3. During the current school year, about how often have you done the following?</b>																			
a. Talked about career plans with a faculty member	SFcareer	1	Never	14	15	32	12	48	8	274	9	2.5	2.5	-.04	2.7 *	-.24	2.7 *	-.24	
		2	Sometimes	41	43	114	42	225	37	1,151	36								
		3	Often	20	21	76	28	172	29	927	29								
		4	Very often	21	22	52	19	156	26	818	26								
		Total		96	100	274	100	601	100	3,170	100								
b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.)	SFotherwork	1	Never	27	28	96	35	154	26	816	26	2.3	2.1	.17	2.3	-.01	2.3	-.02	
		2	Sometimes	28	29	86	32	208	35	1,036	33								
		3	Often	26	27	47	17	119	20	738	23								
		4	Very often	16	16	44	16	116	19	576	18								
		Total		97	100	273	100	597	100	3,166	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
c. Discussed course topics, ideas, or concepts with a faculty member outside of class	SFdiscuss	1	Never	18	19	50	18	84	14	475	15	<b>2.4</b>	2.3	.03	2.5	-.11	2.5	-.09	
		2	Sometimes	39	40	117	43	248	41	1,297	41								
		3	Often	26	27	70	26	168	28	865	27								
		4	Very often	14	14	37	14	99	17	524	17								
		Total		97	100	274	100	599	100	3,161	100								
d. Discussed your academic performance with a faculty member	SFperform	1	Never	22	23	55	20	112	19	510	16	<b>2.2</b>	2.2	-.03	2.3	-.08	<b>2.4 *</b> ▽	-.22	
		2	Sometimes	39	40	134	49	287	48	1,348	43								
		3	Often	31	32	50	18	123	21	844	27								
		4	Very often	5	5	33	12	74	12	463	15								
		Total		97	100	272	100	596	100	3,165	100								
<b>4. During the current school year, how much has your coursework emphasized the following?</b>																			
a. Memorizing course material	memorize	1	Very little	3	3	7	3	11	2	86	3	<b>3.2</b>	3.2	-.01	3.1	.11	3.1	.09	
		2	Some	10	11	47	17	114	19	623	20								
		3	Quite a bit	51	54	113	41	294	49	1,378	44								
		4	Very much	31	33	106	39	181	30	1,079	34								
		Total		95	100	273	100	600	100	3,166	100								
b. Applying facts, theories, or methods to practical problems or new situations	HOapply	1	Very little	0	0	4	1	16	3	67	2	<b>3.1</b>	3.1	.07	3.1	.00	3.1	.00	
		2	Some	18	19	49	18	106	18	547	17								
		3	Quite a bit	47	49	138	51	261	44	1,449	46								
		4	Very much	31	32	81	30	217	36	1,110	35								
		Total		96	100	272	100	600	100	3,173	100								
c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts	HOanalyze	1	Very little	1	1	4	1	22	4	93	3	<b>3.0</b>	3.0	.07	3.0	.05	3.0	-.01	
		2	Some	23	24	73	27	147	25	707	22								
		3	Quite a bit	45	46	119	44	245	41	1,353	43								
		4	Very much	28	29	74	27	186	31	1,013	32								
		Total		97	100	270	100	600	100	3,166	100								
d. Evaluating a point of view, decision, or information source	HOevaluate	1	Very little	5	5	17	6	33	6	172	5	<b>2.9</b>	2.8	.14	2.8	.16	2.9	.07	
		2	Some	21	22	76	28	193	32	890	28								
		3	Quite a bit	47	49	123	45	243	41	1,320	42								
		4	Very much	23	24	56	21	130	22	785	25								
		Total		96	100	272	100	599	100	3,167	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
e. Forming a new idea or understanding from various pieces of information	HOform	1	Very little	3	3	14	5	29	5	142	4	<b>3.0</b>	2.8	.20	2.8	.17	2.9	.08	
		2	Some	19	20	71	26	183	31	823	26								
		3	Quite a bit	52	54	136	50	245	41	1,362	43								
		4	Very much	23	24	51	19	142	24	837	26								
		Total		97	100	272	100	599	100	3,164	100								
<b>5. During the current school year, to what extent have your instructors done the following?</b>																			
a. Clearly explained course goals and requirements	ETgoals	1	Very little	0	0	3	1	11	2	49	2	<b>3.2</b>	3.2	.09	3.2	.07	3.2	.09	
		2	Some	12	12	44	16	85	14	526	17								
		3	Quite a bit	51	53	131	48	290	48	1,462	46								
		4	Very much	34	35	94	35	213	36	1,127	36								
		Total		97	100	272	100	599	100	3,164	100								
b. Taught course sessions in an organized way	ETorganize	1	Very little	1	1	3	1	15	3	79	2	<b>3.2</b>	3.1	.19	3.1	.14	3.1	.19	
		2	Some	11	11	56	21	105	18	621	20								
		3	Quite a bit	51	53	130	48	276	46	1,461	46								
		4	Very much	34	35	83	31	202	34	1,004	32								
		Total		97	100	272	100	598	100	3,165	100								
c. Used examples or illustrations to explain difficult points	ETexample	1	Very little	0	0	2	1	8	1	60	2	<b>3.3</b>	3.2	.08	3.3	-.02	3.2	.12	
		2	Some	14	15	42	15	66	11	469	15								
		3	Quite a bit	39	41	115	42	253	42	1,371	43								
		4	Very much	43	45	113	42	272	45	1,264	40								
		Total		96	100	272	100	599	100	3,164	100								
d. Provided feedback on a draft or work in progress	ETdraftfb	1	Very little	7	7	26	10	52	9	281	9	<b>2.9</b>	2.7	.16	2.8	.12	2.8	.13	
		2	Some	25	26	81	30	188	31	961	30								
		3	Quite a bit	37	39	105	39	208	35	1,167	37								
		4	Very much	27	28	60	22	150	25	758	24								
		Total		96	100	272	100	598	100	3,167	100								
e. Provided prompt and detailed feedback on tests or completed assignments	ETfeedback	1	Very little	5	5	17	6	29	5	199	6	<b>2.8</b>	2.8	.01	2.8	-.03	2.8	-.02	
		2	Some	35	36	82	30	186	31	913	29								
		3	Quite a bit	32	33	116	43	247	41	1,339	42								
		4	Very much	25	26	57	21	135	23	712	23								
		Total		97	100	272	100	597	100	3,163	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>						
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with				
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	State Peers	State and Regional	Crngie Size/Setting	Effect size <sup>n</sup>		
													Mean	Mean	Mean	Effect size <sup>n</sup>	Effect size <sup>n</sup>	Effect size <sup>n</sup>
<b>6. During the current school year, about how often have you done the following?</b>																		
a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)	QRconclude	1	Never	0	0	8	3	19	3	118	4	2.9	2.9	-.01	2.9	.01	2.9	.05
		2	Sometimes	29	30	75	28	177	30	927	29							
		3	Often	46	48	117	43	241	40	1,337	42							
		4	Very often	21	22	71	26	160	27	782	25							
			Total	96	100	271	100	597	100	3,164	100							
b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)	QRproblem	1	Never	11	11	33	12	67	11	417	13	2.6	2.5	.09	2.6	.02	2.6	.02
		2	Sometimes	39	40	109	40	226	38	1,092	35							
		3	Often	25	26	85	31	198	33	1,042	33							
		4	Very often	22	23	43	16	107	18	607	19							
			Total	97	100	270	100	598	100	3,158	100							
c. Evaluated what others have concluded from numerical information	QRevaluate	1	Never	5	5	29	11	47	8	266	8	2.9	2.5 **	.36	2.7	.19	2.7 *	.23
		2	Sometimes	31	32	107	39	216	36	1,157	37							
		3	Often	34	35	97	36	212	35	1,151	36							
		4	Very often	27	28	40	15	123	21	585	19							
			Total	97	100	273	100	598	100	3,159	100							
<b>7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)</b>																		
a. Up to 5 pages	wrshortnum	0	None	7	7	20	7	33	6	199	6	6.7	6.9	-.04	6.6	.01	7.2	-.07
	(Recorded version of wrshort created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	18	19	54	20	130	22	591	19							
		4	3-5	29	30	80	30	198	33	968	31							
		8	6-10	25	26	56	21	118	20	679	22							
		13	11-15	6	6	28	10	59	10	331	10							
		18	16-20	6	6	12	4	26	4	165	5							
		23	More than 20	5	5	19	7	35	6	225	7							
			Total	96	100	269	100	599	100	3,158	100							
b. Between 6 and 10 pages	wrmednum	0	None	20	21	58	21	165	28	736	23	3.4	3.1	.09	2.3 **	.36	3.2	.05
	(Recorded version of wrmed created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	33	34	108	40	269	45	1,174	37							
		4	3-5	27	28	61	23	113	19	761	24							
		8	6-10	12	12	33	12	38	6	303	10							
		13	11-15	2	2	7	3	5	1	90	3							
		18	16-20	3	3	3	1	4	1	39	1							
		23	More than 20	0	0	1	0	3	1	45	1							
			Total	97	100	271	100	597	100	3,148	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
												Mean		Effect size <sup>n</sup>		Effect size <sup>n</sup>		Effect size <sup>n</sup>	
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
c. 11 pages or more	wrlongnum	0	None	38	40	123	46	355	60	1,547	49	<b>1.8</b>	1.4	.14	.9 **	.49	1.6	.06	
	(Recoded version of wrlong created by NSSE. Values are estimated number of papers, reports, etc.)	1.5	1-2	40	42	110	41	191	32	1,165	37								
	4	3-5	10	11	25	9	42	7	259	8									
	8	6-10	5	5	5	2	4	1	95	3									
	13	11-15	1	1	5	2	4	1	47	1									
	18	16-20	1	1	1	0	0	0	21	1									
	23	More than 20	0	0	0	0	0	0	24	1									
	Total			95	100	269	100	596	100	3,158	100								
Estimated number of assigned pages of student writing.	wpages		(Continuous variable, recoded and summed by NSSE from wrshort, wrmed, and wrlong. Values are estimated pages of assigned writing.)									<b>74.8</b>	67.0	.11	51.8 **	.39	71.0	.05	
<b>8. During the current school year, about how often have you had discussions with people from the following groups?</b>																			
a. People of a race or ethnicity other than your own	DDrace	1	Never	9	9	11	4	56	9	172	5	<b>2.4</b>	3.0 ***	-.67	2.7 **	-.32	3.0 ***	-.66	
		2	Sometimes	54	56	79	29	225	38	820	26								
		3	Often	20	21	80	30	162	27	967	31								
		4	Very often	14	14	101	37	157	26	1,208	38								
			Total	97	100	271	100	600	100	3,167	100								
b. People from an economic background other than your own	DDeconomic	1	Never	3	3	7	3	26	4	131	4	<b>2.7</b>	3.0 **	-.31	2.9	-.17	3.1 ***	-.37	
		2	Sometimes	37	39	78	29	179	30	689	22								
		3	Often	38	40	93	34	228	38	1,217	39								
		4	Very often	18	19	92	34	164	27	1,124	36								
			Total	96	100	270	100	597	100	3,161	100								
c. People with religious beliefs other than your own	DDreligion	1	Never	5	5	8	3	30	5	159	5	<b>2.8</b>	3.0 *	-.28	2.9	-.16	3.0 *	-.23	
		2	Sometimes	34	35	72	27	172	29	834	26								
		3	Often	35	36	97	36	208	35	1,056	33								
		4	Very often	23	24	94	35	189	32	1,116	35								
			Total	97	100	271	100	599	100	3,165	100								
d. People with political views other than your own	DDpolitical	1	Never	6	6	10	4	22	4	162	5	<b>2.6</b>	2.9 **	-.35	3.0 ***	-.36	2.9 **	-.33	
		2	Sometimes	40	41	82	30	173	29	916	29								
		3	Often	34	35	93	34	216	36	1,049	33								
		4	Very often	17	18	87	32	188	31	1,039	33								
			Total	97	100	272	100	599	100	3,166	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		<i>Your seniors compared with</i>					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
													State Peers	State and Regional	Crngie Size/Setting	State Peers	State and Regional	Crngie Size/Setting	
<b>9. During the current school year, about how often have you done the following?</b>																			
a. Identified key information from reading assignments	LSreading	1	Never	0	0	3	1	14	2	58	2	<b>3.1</b>	3.1	.04	3.1	.07	3.1	.01	
		2	Sometimes	15	15	55	20	119	20	561	18								
		3	Often	53	55	119	44	266	44	1,442	46								
		4	Very often	29	30	93	34	201	34	1,106	35								
		Total		97	100	270	100	600	100	3,167	100								
b. Reviewed your notes after class	LSnotes	1	Never	4	4	12	4	37	6	188	6	<b>2.8</b>	3.0	-.16	2.9	-.02	2.9	-.07	
		2	Sometimes	30	31	76	28	199	33	927	29								
		3	Often	40	41	86	32	170	28	1,039	33								
		4	Very often	23	24	97	36	193	32	1,010	32								
		Total		97	100	271	100	599	100	3,164	100								
c. Summarized what you learned in class or from course materials	LSsummary	1	Never	1	1	18	7	46	8	188	6	<b>2.8</b>	2.9	-.10	2.8	.01	2.9	-.06	
		2	Sometimes	36	37	74	27	174	29	911	29								
		3	Often	40	41	97	36	227	38	1,205	38								
		4	Very often	20	21	83	31	150	25	865	27								
		Total		97	100	272	100	597	100	3,169	100								
<b>10. During the current school year, to what extent have your courses challenged you to do your best work?</b>																			
challenge		1	Not at all	0	0	3	1	2	0	26	1	<b>5.5</b>	5.5	.04	5.6	-.08	5.6	-.04	
		2		0	0	4	1	7	1	43	1								
		3		3	3	6	2	17	3	119	4								
		4		11	11	32	12	60	10	304	10								
		5		36	37	91	34	173	29	900	29								
		6		24	25	65	24	172	29	865	27								
		7	Very much	23	24	68	25	166	28	898	28								
		Total		97	100	269	100	597	100	3,155	100								
<b>11. Which of the following have you done or do you plan to do before you graduate?<sup>o</sup></b>																			
a. Participate in an internship, co-op, field experience, student teaching, or clinical placement	intern	Have not decided		9	9	21	8	44	7	254	8	<b>58%</b>	46% *	.25	54%	.08	52%	.12	
		Do not plan to do		14	15	61	22	96	16	461	15								
		Plan to do		17	18	66	24	136	23	807	25								
		Done or in progress		55	58	124	46	323	54	1,646	52								
		Total		95	100	272	100	599	100	3,168	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

			Frequency Distributions								Statistical Comparisons <sup>k</sup>						
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with				
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
b. Hold a formal leadership role in a student organization or group	leader <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	8	8	18	7	36	6	263	8	<b>52%</b>	42%	.19	50%	.04	47%	.10
		Do not plan to do	36	37	124	46	226	38	1,177	37							
		Plan to do	3	3	15	6	41	7	246	8							
		Done or in progress	50	52	113	42	297	50	1,479	47							
		Total	97	100	270	100	600	100	3,165	100							
c. Participate in a learning community or some other formal program where groups of students take two or more classes together	learncom <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	8	8	28	10	67	11	400	13	<b>32%</b>	23%	.21	22% *	.24	28%	.09
		Do not plan to do	54	56	157	58	363	61	1,608	51							
		Plan to do	3	3	25	9	35	6	265	8							
		Done or in progress	31	32	62	23	130	22	882	28							
		Total	96	100	272	100	595	100	3,155	100							
d. Participate in a study abroad program	abroad <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	4	4	17	6	50	8	346	11	<b>27%</b>	15% *	.28	19%	.19	17% *	.23
		Do not plan to do	64	66	193	71	411	69	2,024	64							
		Plan to do	3	3	19	7	25	4	242	8							
		Done or in progress	26	27	42	15	113	19	554	17							
		Total	97	100	271	100	599	100	3,166	100							
e. Work with a faculty member on a research project	research <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	12	12	35	13	65	11	344	11	<b>49%</b>	43%	.14	39%	.21	46%	.06
		Do not plan to do	25	26	79	29	214	36	919	29							
		Plan to do	12	12	41	15	85	14	434	14							
		Done or in progress	48	49	115	43	235	39	1,469	46							
		Total	97	100	270	100	599	100	3,166	100							
f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.)	capstone <i>(Means indicate the percentage who responded "Done or in progress.")</i>	Have not decided	8	8	12	4	38	6	274	9	<b>33%</b>	58% ***	-0.50	54% ***	-0.42	50% **	-0.35
		Do not plan to do	30	31	46	17	101	17	668	21							
		Plan to do	26	27	56	21	137	23	629	20							
		Done or in progress	32	33	158	58	323	54	1,592	50							
		Total	96	100	272	100	599	100	3,163	100							

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

servcourse	1	2	3	4	Total	Count	%	Count	%	Count	%	Count	%	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
1	None	40	41	142	53	262	44	1,241	39	<b>1.7</b>	1.5 *	.27	1.6	.10	1.7	.00	
2	Some	48	49	114	43	304	51	1,691	53								
3	Most	8	8	10	4	28	5	188	6								
4	All	1	1	2	1	5	1	42	1								
Total		97	100	268	100	599	100	3,162	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
<b>13. Indicate the quality of your interactions with the following people at your institution.</b>																			
a. Students	QIstudent	1	Poor	0	0	5	2	4	1	34	1	<b>5.7</b>	5.5	.19	5.6	.07	5.5	.16	
		2		0	0	3	1	8	1	50	2								
		3		4	4	15	6	23	4	143	5								
		4		6	6	30	11	56	9	366	12								
		5		31	32	73	27	164	27	853	27								
		6		27	28	74	27	169	28	886	28								
		7	Excellent	28	29	71	26	176	29	827	26								
		—	Not applicable	0	0	1	0	0	0	10	0								
			Total	96	100	272	100	600	100	3,169	100								
b. Academic advisors	QIadvisor	1	Poor	4	4	14	5	23	4	144	5	<b>5.0</b>	4.9	.01	5.2	-.13	5.2	-.16	
		2		7	7	21	8	37	6	127	4								
		3		8	8	25	9	45	8	246	8								
		4		13	13	37	14	79	13	400	13								
		5		17	18	51	19	110	18	624	20								
		6		25	26	49	18	114	19	634	20								
		7	Excellent	19	20	71	26	188	31	976	31								
		—	Not applicable	4	4	5	2	3	1	17	1								
			Total	97	100	273	100	599	100	3,168	100								
c. Faculty	QIfaculty	1	Poor	1	1	2	1	8	1	39	1	<b>5.6</b>	5.5	.08	5.7	-.12	5.5	.02	
		2		0	0	7	3	6	1	73	2								
		3		8	8	10	4	21	4	144	5								
		4		5	5	30	11	42	7	334	11								
		5		31	32	72	27	140	23	745	24								
		6		25	26	95	35	204	34	976	31								
		7	Excellent	27	28	54	20	175	29	839	27								
		—	Not applicable	0	0	1	0	0	0	7	0								
			Total	97	100	271	100	596	100	3,157	100								

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>	
d. Student services staff (career services, student activities, housing, etc.)	Qlstaff	1	Poor	1	1	16	6	25	4	138	4	5.1	4.7 *	.23	4.9	.11	4.8	.14	
		2		3	3	8	3	24	4	168	5								
		3		6	6	26	10	45	8	249	8								
		4		18	19	48	18	92	15	513	16								
		5		26	27	43	16	131	22	670	21								
		6		16	17	31	11	127	21	594	19								
		7	Excellent	17	18	46	17	87	15	519	16								
		—	Not applicable	8	8	53	20	69	12	319	10								
Total				95	100	271	100	600	100	3,170	100								
e. Other administrative staff and offices (registrar, financial aid, etc.)	Qladmin	1	Poor	3	3	15	6	21	4	157	5	4.8	4.7	.07	5.0	-.07	4.8	.02	
		2		5	5	14	5	29	5	170	5								
		3		9	9	24	9	46	8	300	9								
		4		18	19	59	22	98	16	568	18								
		5		20	21	56	21	142	24	717	23								
		6		23	24	44	16	134	22	602	19								
		7	Excellent	13	14	47	17	102	17	558	18								
		—	Not applicable	5	5	13	5	28	5	94	3								
Total				96	100	272	100	600	100	3,166	100								
<b>14. How much does your institution emphasize the following?</b>																			
a. Spending significant amounts of time studying and on academic work	empstudy	1	Very little	1	1	1	0	4	1	41	1	2.9	3.2 ***	-.40	3.2 **	-.34	3.2 **	-.32	
		2	Some	26	27	41	15	105	17	524	17								
		3	Quite a bit	49	51	130	48	275	46	1,464	46								
		4	Very much	21	22	100	37	217	36	1,137	36								
		Total				97	100	272	100	601	100								3,166
b. Providing support to help students succeed academically	SEacademic	1	Very little	2	2	7	3	18	3	120	4	2.9	3.0	-.09	3.0	-.15	3.0	-.09	
		2	Some	23	24	70	26	129	22	729	23								
		3	Quite a bit	53	55	117	43	273	46	1,411	45								
		4	Very much	18	19	78	29	180	30	906	29								
		Total				96	100	272	100	600	100								3,166
c. Using learning support services (tutoring services, writing center, etc.)	SElearnsup	1	Very little	3	3	5	2	31	5	203	6	2.9	3.1	-.17	3.0	-.07	2.9	.01	
		2	Some	21	22	62	23	129	22	752	24								
		3	Quite a bit	52	54	115	42	251	42	1,273	40								
		4	Very much	21	22	91	33	189	32	933	30								
		Total				97	100	273	100	600	100								3,161

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>									
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with							
Item wording or description	Variable name <sup>l</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 <sup>n</sup>	
														Effect size <sup>n</sup>	Effect size <sup>n</sup>		Effect size <sup>n</sup>	Effect size <sup>n</sup>			
d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.)	SEdiverse	1	Very little	27	28	45	17	116	19	496	16	2.2	2.6 **	-0.33	2.4	-0.19	2.5 **	-0.31			
		2	Some	28	29	84	31	201	34	1,037	33										
		3	Quite a bit	33	34	83	31	187	31	1,031	33										
		4	Very much	9	9	59	22	92	15	601	19										
		Total		97	100	271	100	596	100	3,165	100										
e. Providing opportunities to be involved socially	SEsocial	1	Very little	6	6	20	7	25	4	180	6	2.9	2.8	.08	2.9	-0.02	2.9	.01			
		2	Some	21	22	75	28	166	28	833	26										
		3	Quite a bit	48	49	111	41	250	42	1,342	42										
		4	Very much	22	23	66	24	157	26	806	25										
		Total		97	100	272	100	598	100	3,161	100										
f. Providing support for your overall well-being (recreation, health care, counseling, etc.)	SEwellness	1	Very little	10	10	26	10	49	8	231	7	2.7	2.7	.00	2.8	-0.16	2.8	-0.13			
		2	Some	30	31	87	32	153	26	875	28										
		3	Quite a bit	36	37	101	37	239	40	1,306	41										
		4	Very much	21	22	58	21	158	26	753	24										
		Total		97	100	272	100	599	100	3,165	100										
g. Helping you manage your non-academic responsibilities (work, family, etc.)	SEnonacad	1	Very little	34	35	103	38	192	32	1,078	34	2.0	1.9	.04	2.0	-0.06	2.0	-0.07			
		2	Some	36	37	102	38	239	40	1,167	37										
		3	Quite a bit	22	23	45	17	124	21	626	20										
		4	Very much	5	5	21	8	43	7	295	9										
		Total		97	100	271	100	598	100	3,166	100										
h. Attending campus activities and events (performing arts, athletic events, etc.)	SEactivities	1	Very little	4	4	26	10	66	11	352	11	2.8	2.6	.21	2.6	.19	2.6	.14			
		2	Some	33	34	103	38	217	36	1,047	33										
		3	Quite a bit	41	43	99	37	211	35	1,168	37										
		4	Very much	18	19	42	16	105	18	597	19										
		Total		96	100	270	100	599	100	3,164	100										
i. Attending events that address important social, economic, or political issues	SEevents	1	Very little	7	7	45	17	100	17	497	16	2.5	2.4	.13	2.4	.14	2.4	.05			
		2	Some	47	48	114	42	251	42	1,241	39										
		3	Quite a bit	33	34	80	30	182	30	997	32										
		4	Very much	10	10	32	12	64	11	428	14										
		Total		97	100	271	100	597	100	3,163	100										

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>																				
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with																		
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>														
<b>15. About how many hours do you spend in a typical 7-day week doing the following?</b>																																
a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs <i>(Recorded version of tmprep created by NSSE. Values are estimated number of hours per week.)</i>	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	0 11 19 29 15 10 6 7	0 11 20 30 15 10 6 7	0 29 44 60 48 44 22 23	0 11 16 22 18 16 8 9	0 62 124 129 100 94 42 47	0 10 21 22 17 16 7 8	6 328 646 666 584 388 229 309	0 10 20 21 19 12 7 10	<b>15.1</b>	16.6	-.17	16.0	-.10	16.1	-.12														
Total				97	100	270	100	598	100	3,156	100																					
b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)	tmcocurrhrs <i>(Recorded version of tmcocurr created by NSSE. Values are estimated number of hours per week.)</i>	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	0 36 18 6 1 6 0 1	0 37 19 6 1 6 0 1	115 86 35 15 10 3 4 2	43 32 13 6 4 1 1 1	166 228 107 36 36 15 7 4	28 38 18 6 6 3 1 1	920 1,078 538 273 180 82 48 48	29 34 17 9 6 3 2 2								<b>5.4</b>	4.3	.16	5.6	-.03	6.0	-.10							
Total				97	100	270	100	599	100	3,167	100																					
c. Working for pay on campus	tmworkonhrs <i>(Recorded version of tmworkon created by NSSE. Values are estimated number of hours per week.)</i>	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	0 7 9 14 15 3 0 1	0 7 9 15 16 3 0 1	173 18 26 17 19 12 2 3	64 7 10 6 7 4 1 1	350 50 86 46 36 23 4 3	59 8 14 8 6 4 1 1	1,880 231 402 268 253 72 25 29	59 7 13 8 8 2 1 1															<b>6.7</b>	4.7 *	.27	4.7 *	.28	4.8 *	.26
Total				96	100	270	100	598	100	3,160	100																					

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>						
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with				
Item wording or description	Variable name <sup>l</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 <sup>n</sup>		Mean	Effect size <sup>n</sup>
d. Working for pay off campus	tmworkoffhrs	0	0 hrs	54	57	117	43	263	44	1,524	48	<b>7.9</b>	12.0 **	-0.34	9.8	-0.17	9.7	-0.16
	(Recorded version of tmworkoff created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	7	7	9	3	34	6	149	5							
		8	6-10 hrs	3	3	13	5	58	10	233	7							
		13	11-15 hrs	5	5	17	6	47	8	262	8							
		18	16-20 hrs	8	8	37	14	76	13	329	10							
		23	21-25 hrs	7	7	26	10	45	8	229	7							
		28	26-30 hrs	6	6	19	7	33	6	175	6							
		33	More than 30 hrs	5	5	34	13	41	7	267	8							
	Total			95	100	272	100	597	100	3,168	100							
Estimated number of hours working for pay	tmworkhrs		(Continuous variable created by NSSE)									<b>14.3</b>	16.6	-0.19	14.5	-0.02	14.5	-0.02
e. Doing community service or volunteer work	tmservicehrs	0	0 hrs	52	54	111	41	285	48	1,444	46	<b>3.0</b>	3.8	-0.15	2.5	.12	3.2	-0.05
	(Recorded version of tmservice created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	26	27	98	36	249	42	1,181	37							
		8	6-10 hrs	13	14	39	14	45	8	297	9							
		13	11-15 hrs	2	2	9	3	9	2	119	4							
		18	16-20 hrs	0	0	4	1	7	1	71	2							
		23	21-25 hrs	2	2	5	2	2	0	17	1							
		28	26-30 hrs	0	0	2	1	1	0	15	0							
	33	More than 30 hrs	1	1	2	1	2	0	20	1								
	Total			96	100	270	100	600	100	3,164	100							
f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.)	tmrelaxhrs	0	0 hrs	1	1	5	2	17	3	74	2	<b>11.8</b>	11.2	.08	10.9	.11	10.6	.16
	(Recorded version of tmrelax created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	27	28	61	22	151	25	877	28							
		8	6-10 hrs	23	24	83	31	175	29	935	30							
		13	11-15 hrs	18	19	58	21	129	22	592	19							
		18	16-20 hrs	12	13	35	13	54	9	357	11							
		23	21-25 hrs	7	7	15	6	34	6	124	4							
	28	26-30 hrs	1	1	5	2	10	2	76	2								
	33	More than 30 hrs	7	7	10	4	30	5	131	4								
	Total			96	100	272	100	600	100	3,166	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>							
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with					
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	
Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options																
g. Providing care for dependents (children, parents, etc.)	tmcarehrs	0	0 hrs	83	87	200	74	488	81	2,418	76	<b>2.0</b>	3.5	-0.19	2.5	-0.07	3.0	-0.13	
		(Recorded version of tmcare created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	5	5	26	10	44	7	304								10
			8	6-10 hrs	1	1	14	5	18	3	133								4
			13	11-15 hrs	1	1	5	2	9	2	71								2
			18	16-20 hrs	0	0	5	2	9	2	57								2
			23	21-25 hrs	1	1	5	2	6	1	27								1
			28	26-30 hrs	0	0	2	1	2	0	17								1
			33	More than 30 hrs	4	4	13	5	23	4	139								4
		Total			95	100	270	100	599	100	3,166								100
h. Commuting to campus (driving, walking, etc.)	tmcommutehrs	0	0 hrs	17	18	23	8	89	15	564	18	<b>3.8</b>	5.5 **	-0.33	4.1	-0.08	4.9 *	-0.20	
		(Recorded version of tmcommute created by NSSE. Values are estimated number of hours per week.)	3	1-5 hrs	69	71	156	57	400	67	1,757								55
			8	6-10 hrs	5	5	62	23	70	12	526								17
			13	11-15 hrs	3	3	20	7	25	4	175								6
			18	16-20 hrs	0	0	3	1	7	1	65								2
			23	21-25 hrs	2	2	4	1	4	1	23								1
			28	26-30 hrs	0	0	0	0	1	0	16								1
			33	More than 30 hrs	1	1	4	1	4	1	46								1
	Total			97	100	272	100	600	100	3,172	100								
<b>16. Of the time you spend preparing for class in a typical 7-day week, about how much is on assigned reading?</b>																			
reading	1	Very little	15	15	53	20	124	21	557	18	<b>2.6</b>	2.5	.10	2.4	.14	2.6	.01		
	2	Some	30	31	98	36	224	37	1,091	34									
	3	About half	35	36	68	25	139	23	842	27									
	4	Most	14	14	38	14	94	16	501	16									
	5	Almost all	3	3	13	5	19	3	175	6									
		Total			97	100	270	100	600	100								3,166	100
tmreadinghrs																			
(Continuous variable created by NSSE. Calculated as a proportion of tmprephrs based on reading, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)																			
				<b>6.7</b>		6.7		.00		6.0		.12		6.8		-0.02			

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Frequency Distributions								Statistical Comparisons <sup>k</sup>					
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with			
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean
	tmreadinghrscol	1	0 hrs	0	0	0	0	0	0	6	0						
	(Collapsed version of tmreadinghrs created by NSSE.)	2	More than zero, up to 5 hrs	49	51	137	51	322	54	1,602	51						
		3	More than 5, up to 10 hrs	28	29	75	28	174	29	881	28						
		4	More than 10, up to 15 hrs	11	11	31	12	59	10	311	10						
		5	More than 15, up to 20 hrs	5	5	13	5	23	4	184	6						
		6	More than 20, up to 25 hrs	4	4	9	3	16	3	118	4						
		7	More than 25 hrs	0	0	4	1	4	1	45	1						
			Total	97	100	269	100	598	100	3,147	100						

#### 17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

a. Writing clearly and effectively	pgwrite	1	Very little	0	0	16	6	32	5	148	5	<b>3.0</b>	2.9	.07	2.9	.02	3.0	-.04
		2	Some	29	30	72	27	134	22	698	22							
		3	Quite a bit	42	44	104	39	267	45	1,330	42							
		4	Very much	25	26	77	29	165	28	978	31							
			Total	96	100	269	100	598	100	3,154	100							
b. Speaking clearly and effectively	pgspeak	1	Very little	3	3	19	7	37	6	190	6	<b>2.8</b>	2.8	.08	2.9	-.08	2.9	-.10
		2	Some	34	35	92	34	150	25	761	24							
		3	Quite a bit	34	35	91	34	238	40	1,287	41							
		4	Very much	25	26	68	25	172	29	922	29							
			Total	96	100	270	100	597	100	3,160	100							
c. Thinking critically and analytically	pgthink	1	Very little	1	1	4	1	14	2	44	1	<b>3.4</b>	3.2	.23	3.3	.12	3.3	.12
		2	Some	5	5	42	16	67	11	382	12							
		3	Quite a bit	43	45	106	40	223	37	1,230	39							
		4	Very much	47	49	116	43	291	49	1,511	48							
			Total	96	100	268	100	595	100	3,167	100							
d. Analyzing numerical and statistical information	pganalyze	1	Very little	2	2	9	3	20	3	103	3	<b>3.2</b>	3.1	.20	3.2	.06	3.1	.14
		2	Some	14	14	59	22	104	17	623	20							
		3	Quite a bit	40	41	105	39	218	36	1,218	39							
		4	Very much	41	42	97	36	257	43	1,219	39							
			Total	97	100	270	100	599	100	3,163	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

				Frequency Distributions								Statistical Comparisons <sup>k</sup>						
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with				
Item wording or description	Variable name <sup>l</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 <sup>n</sup>
e. Acquiring job- or work-related knowledge and skills	pgwork	1	Very little	8	8	36	13	55	9	318	10	<b>2.8</b>	2.7	.19	2.9	-.01	2.8	.04
		2	Some	27	28	84	31	155	26	861	27							
		3	Quite a bit	33	34	85	32	211	35	1,100	35							
		4	Very much	28	29	64	24	177	30	881	28							
		Total		96	100	269	100	598	100	3,160	100							
f. Working effectively with others	pgothers	1	Very little	0	0	15	6	20	3	130	4	<b>3.1</b>	2.9 *	.21	3.1	.04	3.0	.06
		2	Some	19	20	70	26	119	20	658	21							
		3	Quite a bit	51	53	109	41	270	45	1,350	43							
		4	Very much	27	28	75	28	190	32	1,027	32							
		Total		97	100	269	100	599	100	3,165	100							
g. Developing or clarifying a personal code of values and ethics	pgvalues	1	Very little	15	15	47	17	65	11	312	10	<b>2.7</b>	2.5	.11	2.7	-.06	2.8	-.13
		2	Some	27	28	87	32	175	29	907	29							
		3	Quite a bit	31	32	76	28	221	37	1,114	35							
		4	Very much	24	25	59	22	138	23	833	26							
		Total		97	100	269	100	599	100	3,166	100							
h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)	pgdiverse	1	Very little	10	10	34	13	79	13	359	11	<b>2.6</b>	2.7	-.12	2.6	-.04	2.7	-.17
		2	Some	39	40	82	30	197	33	921	29							
		3	Quite a bit	31	32	93	34	206	34	1,078	34							
		4	Very much	17	18	63	23	117	20	797	25							
		Total		97	100	272	100	599	100	3,155	100							
i. Solving complex real-world problems	pgprobsolve	1	Very little	9	9	28	10	60	10	291	9	<b>2.7</b>	2.7	.04	2.7	-.01	2.8	-.06
		2	Some	29	30	91	34	176	29	911	29							
		3	Quite a bit	38	40	91	34	228	38	1,184	37							
		4	Very much	20	21	60	22	135	23	777	25							
		Total		96	100	270	100	599	100	3,163	100							
j. Being an informed and active citizen	pgcitizen	1	Very little	10	10	41	15	73	12	408	13	<b>2.6</b>	2.6	.01	2.6	-.05	2.7	-.08
		2	Some	34	35	91	34	197	33	995	31							
		3	Quite a bit	39	40	78	29	203	34	1,017	32							
		4	Very much	14	14	60	22	125	21	741	23							
		Total		97	100	270	100	598	100	3,161	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

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

### Northern Michigan University

#### Seniors<sup>a</sup> in Bio, Agric, & Nat Res

Item wording or description	Variable name <sup>l</sup>	Values <sup>m</sup>	Response options	Frequency Distributions								Statistical Comparisons <sup>k</sup>						
				NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		Your seniors compared with				
				Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
<b>18. How would you evaluate your entire educational experience at this institution?</b>																		
	evalexp	1	Poor	2	2	7	3	9	2	65	2	<b>3.2</b>	3.2	.03	3.3	-.17	3.2	-.02
		2	Fair	9	9	36	13	57	10	419	13							
		3	Good	53	55	129	47	263	44	1,433	45							
		4	Excellent	33	34	100	37	269	45	1,250	39							
		Total		97	100	272	100	598	100	3,167	100							
<b>19. If you could start over again, would you go to the same institution you are now attending?</b>																		
	sameinst	1	Definitely no	4	4	13	5	15	3	151	5	<b>3.2</b>	3.1	.17	3.3	-.06	3.1	.12
		2	Probably no	10	10	38	14	75	13	478	15							
		3	Probably yes	41	42	129	47	227	38	1,294	41							
		4	Definitely yes	42	43	93	34	283	47	1,248	39							
		Total		97	100	273	100	600	100	3,171	100							

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Bio, Agric, & Nat Res

### Northern Michigan University

#### Bio, Agric, & Nat Res

			First-Year Students <sup>a</sup>								Seniors <sup>a</sup>								
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting		
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
21a. How many majors do you plan to complete? (Do not count minors.)	MAJnum	One	46	92	195	84	414	87	2,649	85	81	85	223	82	498	83	2,671	84	
		More than one	4	8	37	16	61	13	470	15	14	15	50	18	102	17	505	16	
		Total	50	100	232	100	475	100	3,119	100	95	100	273	100	600	100	3,176	100	
First major or expected first major, in NSSE's default related-major categories. (This does not reflect any customization made for the Major Field Report.)	MAJfirstcol <i>(Recoded from MAJfirst.)</i>	Arts & Humanities	0	0	2	1	1	0	12	0	0	0	0	0	1	0	8	0	
		Biological Sci., Agriculture, & Natural Resources	48	96	224	96	462	97	3,014	96	95	98	264	96	577	96	3,050	96	
		Physical Sci., Mathematics, & Computer Science	0	0	0	0	2	0	25	1	0	0	1	0	7	1	25	1	
		Social Sciences	1	2	3	1	1	0	12	0	1	1	4	1	1	0	27	1	
		Business	0	0	1	0	1	0	8	0	1	1	0	0	2	0	10	0	
		Communications, Media, & Public Relations	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	
		Education	0	0	0	0	1	0	7	0	0	0	0	0	2	0	12	0	
		Engineering	0	0	0	0	0	0	7	0	0	0	0	0	1	0	4	0	
		Health Professions	1	2	1	0	6	1	30	1	0	0	3	1	8	1	27	1	
		Social Service Professions	0	0	1	0	1	0	8	0	0	0	2	1	2	0	8	0	
		All Other	0	0	1	0	0	0	2	0	0	0	1	0	0	0	4	0	
		Undecided, Undeclared	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
		Total	50	100	233	100	475	100	3,128	100	97	100	275	100	601	100	3,178	100	
Second major or expected second major, in NSSE's default related-major categories. (This does not reflect any customization made for the Major Field Report.)	MAJsecondcol <i>(Recoded from MAJsecond.)</i>	Arts & Humanities	1	25	3	8	5	8	39	8	5	36	5	10	12	12	54	11	
		Biological Sci., Agriculture, & Natural Resources	2	50	13	35	25	41	198	42	2	14	23	46	52	51	220	44	
		Physical Sci., Mathematics, & Computer Science	0	0	2	5	5	8	54	12	2	14	3	6	6	6	42	8	
		Social Sciences	0	0	10	27	9	15	62	13	1	7	7	14	12	12	66	13	
		Business	0	0	3	8	3	5	15	3	1	7	0	0	0	0	6	1	
		Communications, Media, & Public Relations	0	0	1	3	0	0	4	1	0	0	0	0	1	1	5	1	
		Education	0	0	0	0	1	2	11	2	2	14	0	0	0	0	11	2	
		Engineering	0	0	0	0	1	2	5	1	0	0	2	4	5	5	10	2	
		Health Professions	1	25	2	5	10	16	53	11	1	7	6	12	7	7	59	12	
		Social Service Professions	0	0	1	3	1	2	10	2	0	0	0	0	4	4	11	2	
		All Other	0	0	1	3	0	0	3	1	0	0	2	4	3	3	9	2	
		Undecided, Undeclared	0	0	1	3	1	2	14	3	0	0	2	4	0	0	9	2	
		Total	4	100	37	100	61	100	468	100	14	100	50	100	102	100	502	100	

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

Respondent Profile: Bio, Agric, & Nat Res

Northern Michigan University

## Bio, Agric, & Nat Res

			First-Year Students <sup>a</sup>								Seniors <sup>a</sup>							
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
22. What is your class level?	class	Freshman/First-year	39	78	194	84	415	89	2,731	88	1	1	0	0	1	0	7	0
		Sophomore	10	20	28	12	42	9	307	10	0	0	2	1	1	0	13	0
		Junior	1	2	9	4	10	2	38	1	3	3	13	5	53	9	254	8
		Senior	0	0	0	0	1	0	9	0	92	96	252	92	533	89	2,814	89
		Unclassified	0	0	0	0	0	0	7	0	0	0	6	2	13	2	61	2
		Total	50	100	231	100	468	100	3,092	100	96	100	273	100	601	100	3,149	100
23. Thinking about this current academic term, are you a full-time student?	fulltime	No	2	4	6	3	14	3	54	2	5	5	64	23	74	12	331	11
		Yes	48	96	225	97	451	97	3,015	98	91	95	210	77	526	88	2,798	89
		Total	50	100	231	100	465	100	3,069	100	96	100	274	100	600	100	3,129	100
24a. How many courses are you taking for credit this current academic term?	coursenum	0	0	0	0	0	0	12	0	0	0	7	3	3	0	53	2	
		1	0	0	0	0	0	4	0	2	2	10	4	9	1	38	1	
		2	1	2	2	1	9	2	17	1	3	3	19	7	21	3	132	4
		3	11	22	7	3	20	4	99	3	25	26	34	12	56	9	321	10
		4	29	58	95	41	179	38	812	26	49	51	91	33	184	31	967	31
		5	7	14	97	42	186	40	1,129	36	11	11	72	26	186	31	948	30
		6	1	2	16	7	47	10	590	19	2	2	22	8	95	16	370	12
		7 or more	1	2	14	6	29	6	432	14	5	5	19	7	47	8	319	10
Total	50	100	231	100	470	100	3,095	100	97	100	274	100	601	100	3,148	100		
b. Of these, how many are entirely online?	onlinenum	0	47	94	194	84	383	82	2,650	86	78	81	216	79	486	82	2,448	78
		1	2	4	26	11	75	16	325	11	14	15	44	16	89	15	484	15
		2	0	0	9	4	7	1	72	2	4	4	6	2	16	3	130	4
		3	1	2	1	0	2	0	21	1	0	0	3	1	4	1	36	1
		4	0	0	0	0	1	0	7	0	0	0	2	1	1	0	17	1
		5	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0
		6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0
		7 or more	0	0	0	0	0	0	5	0	0	0	1	0	0	0	5	0
		Total	50	100	230	100	468	100	3,082	100	96	100	272	100	596	100	3,129	100
Collapsed recode of courses taken online (Based on responses to coursenum and onlinenum.)	onlinecrscol	No courses taken online	47	94	194	84	383	82	2,649	86	78	81	216	79	486	82	2,448	78
		Some courses taken online	2	4	36	16	85	18	414	13	17	18	51	19	107	18	642	21
		All courses taken online	1	2	0	0	0	0	18	1	1	1	5	2	3	1	39	1
		Total	50	100	230	100	468	100	3,081	100	96	100	272	100	596	100	3,129	100

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Bio, Agric, & Nat Res

### Northern Michigan University

#### Bio, Agric, & Nat Res

			First-Year Students <sup>a</sup>								Seniors <sup>a</sup>							
Item wording or description	Variable name	Response options	NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
25. What have most of your grades been up to now at this institution?	grades	C- or lower	2	4	2	1	6	1	55	2	1	1	1	0	2	0	18	1
		C	0	0	9	4	15	3	104	3	3	3	6	2	10	2	84	3
		C+	1	2	4	2	18	4	159	5	4	4	8	3	21	4	155	5
		B-	5	10	9	4	38	8	221	7	11	12	15	5	39	7	259	8
		B	8	16	39	17	95	20	582	19	22	23	57	21	140	23	618	20
		B+	10	20	42	18	95	20	609	20	14	15	53	19	99	17	558	18
		A-	8	16	59	26	80	17	565	18	11	12	50	18	110	18	595	19
		A	16	32	67	29	123	26	791	26	28	30	84	31	179	30	855	27
	Total		50	100	231	100	470	100	3,086	100	94	100	274	100	600	100	3,142	100
26. Did you begin college at this institution or elsewhere?	begincol	Started here	45	90	207	90	435	93	2,874	93	73	76	160	59	391	65	2,103	67
		Started elsewhere	5	10	23	10	34	7	210	7	23	24	113	41	208	35	1,033	33
		Total	50	100	230	100	469	100	3,084	100	96	100	273	100	599	100	3,136	100
27. Since graduating from high school, which of the following types of schools have you attended <i>other than</i> the one you are now attending? (Select all that apply.)	attend_voc	Vocational or technical school	1	2	5	2	16	3	84	3	6	6	10	4	55	9	169	5
	attend_com	Community or junior college	7	14	29	13	30	6	257	8	24	25	148	54	154	26	990	32
	attend_col	4-year college or university other than this one	2	4	11	5	23	5	240	8	13	14	60	22	147	25	732	23
	attend_none	None	38	76	175	76	390	84	2,457	80	56	59	91	33	297	50	1,538	49
	attend_other	Other	2	4	12	5	13	3	72	2	3	3	12	4	24	4	104	3
28. What is the highest level of education you ever expect to complete?	edaspire	Some college but less than a bachelor's degree	2	4	12	5	21	4	189	6	1	1	16	6	33	5	152	5
		Bachelor's degree (B.A., B.S., etc.)	19	38	33	14	126	27	587	19	32	33	54	20	203	34	695	22
		Master's degree (M.A., M.S., etc.)	15	30	40	17	120	26	707	23	27	28	68	25	144	24	872	28
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	14	28	144	63	202	43	1,593	52	36	38	135	49	221	37	1,419	45
		Total	50	100	229	100	469	100	3,076	100	96	100	273	100	601	100	3,138	100

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Bio, Agric, & Nat Res

### Northern Michigan University

#### Bio, Agric, & Nat Res

			First-Year Students <sup>a</sup>								Seniors <sup>a</sup>									
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting			
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%		
29. What is the highest level of education completed by either of your parents (or those who raised you)?	parented	Did not finish high school	0	0	3	1	10	2	132	4	0	0	9	3	12	2	122	4		
		High school diploma or G.E.D.	9	18	38	17	81	17	556	18	10	10	45	16	93	16	534	17		
		Attended college, but did not complete degree	5	10	27	12	49	10	367	12	7	7	35	13	56	9	326	10		
		Associate's degree (A.A., A.S., etc.)	5	10	21	9	60	13	335	11	21	22	38	14	95	16	371	12		
		Bachelor's degree (B.A., B.S., etc.)	16	32	67	29	156	33	905	29	27	28	81	30	196	33	947	30		
		Master's degree (M.A., M.S., etc.)	13	26	54	24	89	19	569	19	23	24	48	18	105	18	561	18		
		Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	2	4	19	8	24	5	205	7	8	8	18	7	39	7	256	8		
		Total	50	100	229	100	469	100	3,069	100	96	100	274	100	596	100	3,117	100		
First-generation status (Neither parent holds a bachelor's degree.)	firstgen (Recoded from parented.)	Not first-generation	31	62	140	61	269	57	1,679	55	58	60	147	54	340	57	1,764	57		
		First-generation	19	38	89	39	200	43	1,390	45	38	40	127	46	256	43	1,353	43		
		Total	50	100	229	100	469	100	3,069	100	96	100	274	100	596	100	3,117	100		
30. What is your gender identity?	genderid	Man	11	22	65	28	120	26	811	26	26	27	77	28	200	33	953	30		
		Woman	37	74	160	70	334	72	2,206	72	65	68	194	71	385	64	2,115	67		
		Another gender identity	1	2	3	1	6	1	33	1	2	2	3	1	6	1	22	1		
		I prefer not to respond	1	2	1	0	7	1	30	1	3	3	0	0	9	2	48	2		
		Total	50	100	229	100	467	100	3,080	100	96	100	274	100	600	100	3,138	100		
31. Enter your year of birth (e.g., 1994):	agecat (Recoded from the information entered in birthyear.)	19 or younger	44	88	221	98	436	94	2,869	94	1	1	2	1	1	0	27	1		
		20-23	4	8	3	1	22	5	145	5	82	87	199	74	472	80	2,500	81		
		24-29	2	4	0	0	3	1	20	1	7	7	43	16	78	13	374	12		
		30-39	0	0	1	0	5	1	8	0	3	3	19	7	32	5	137	4		
		40-55	0	0	1	0	0	0	5	0	1	1	4	1	7	1	53	2		
		Over 55	0	0	0	0	0	0	2	0	0	0	2	1	3	1	12	0		
		Total	50	100	226	100	466	100	3,049	100	94	100	269	100	593	100	3,103	100		
32a. Are you an international student?	internat	No	49	100	221	97	466	99	2,966	97	92	97	268	98	587	99	3,052	98		
		Yes	0	0	7	3	3	1	97	3	3	3	5	2	8	1	67	2		
		Total	49	100	228	100	469	100	3,063	100	95	100	273	100	595	100	3,119	100		
		[If answered "yes"] Country of citizenship, collapsed into regions by NSSE. Responses to country are in the data file.	countrycol (Recoded from country.)	Africa Sub-Saharan	0	0	0	0	0	0	12	13	1	50	1	20	1	13	6	11
				Asia	0	0	4	57	2	100	39	44	1	50	1	20	0	0	9	16
				Canada	0	0	2	29	0	0	2	2	0	0	0	0	2	25	10	18
				Europe	0	0	0	0	0	0	15	17	0	0	2	40	1	13	7	13
				Latin America and Caribbean	0	0	0	0	0	0	14	16	0	0	0	0	2	25	19	34
				Middle East and North Africa	0	0	1	14	0	0	6	7	0	0	1	20	2	25	2	4
				Oceania	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	5
Unknown region/uncoded	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total	0	0	7	100	2	100	89	100	2	100	5	100	8	100	56	100				

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Bio, Agric, & Nat Res

### Northern Michigan University

#### Bio, Agric, & Nat Res

			First-Year Students <sup>a</sup>								Seniors <sup>a</sup>								
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting		
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
33. What is your racial or ethnic identification? (Select all that apply.)	re_amind	American Indian or Alaska Native	1	2	5	2	5	1	86	3	5	5	7	3	12	2	74	2	
	re_asian	Asian	1	2	19	8	16	3	294	10	2	2	16	6	22	4	250	8	
	re_black	Black or African American	1	2	13	6	13	3	499	16	4	4	10	4	16	3	315	10	
	re_latino	Hispanic or Latino	0	0	12	5	26	6	388	13	4	4	5	2	36	6	306	10	
	re_pacific	Native Hawaiian or Other Pacific Islander	2	4	2	1	2	0	36	1	1	1	4	1	2	0	37	1	
	re_white	White	48	98	188	82	409	88	1,971	65	88	92	229	84	512	86	2,196	70	
	re_other	Other	0	0	8	4	8	2	73	2	1	1	17	6	13	2	78	2	
	re_pnr	I prefer not to respond	1	2	5	2	11	2	72	2	3	3	9	3	19	3	142	5	
	Racial or ethnic identification	re_all	American Indian or Alaska Native	0	0	1	0	1	0	19	1	1	1	0	0	4	1	26	1
		(Recoded from re_amind to re_pnr where each student is represented only once.)	Asian	0	0	15	7	13	3	208	7	1	1	13	5	17	3	187	6
		Black or African American	0	0	7	3	7	2	403	13	1	1	7	3	11	2	265	8	
		Hispanic or Latino	0	0	4	2	17	4	256	8	1	1	2	1	23	4	195	6	
		Native Hawaiian/Other Pac. Islander	0	0	0	0	0	0	7	0	0	0	2	1	1	0	19	1	
		White	44	90	170	75	394	85	1,738	57	80	83	212	77	487	81	2,013	64	
		Other	0	0	5	2	5	1	44	1	1	1	12	4	9	2	41	1	
		Multiracial	4	8	21	9	18	4	307	10	8	8	17	6	27	5	234	7	
		I prefer not to respond	1	2	5	2	11	2	72	2	3	3	9	3	19	3	142	5	
	Total	49	100	228	100	466	100	3,054	100	96	100	274	100	598	100	3,122	100		
34. Are you a member of a social fraternity or sorority?	greek	No	50	100	216	94	441	94	2,832	92	89	94	254	93	553	92	2,771	89	
		Yes	0	0	13	6	26	6	239	8	6	6	20	7	47	8	359	11	
		Total	50	100	229	100	467	100	3,071	100	95	100	274	100	600	100	3,130	100	
35. Which of the following best describes where you are living while attending college? (Revised for 2018. Data from 2017 & 2018 merged as appropriate. Labels shown are 2018 unless otherwise noted.)	living18	Campus housing (other than a fraternity or sorority house)	41	82	143	62	339	73	2,342	77	30	31	33	12	70	12	634	20	
		Fraternity or sorority house	0	0	0	0	0	0	14	0	0	0	1	0	8	1	33	1	
		House, apartment, or other residence within walking distance to campus	3	6	15	7	22	5	118	4	40	42	60	22	291	49	941	30	
		House, apartment, or other residence farther than walk. dist. to campus	5	10	67	29	99	21	546	18	25	26	171	64	217	36	1,440	46	
		None of the above (2017 only)	0	0	4	2	5	1	29	1	0	0	3	1	11	2	51	2	
		Not applicable: No campus, entirely online program, etc. (2018 only)	1	2	0	0	1	0	5	0	0	0	0	0	0	1	0	13	0
		Not applicable: Homeless or in transition (2018 only)	0	0	0	0	1	0	3	0	1	1	1	0	0	0	0	7	0
		Total	50	100	229	100	467	100	3,057	100	96	100	269	100	598	100	3,119	100	
36. Are you a student-athlete on a team sponsored by your institution's athletics department?	athlete	No	49	98	208	92	439	94	2,767	90	92	96	267	98	568	95	2,893	93	
		Yes	1	2	19	8	29	6	301	10	4	4	6	2	30	5	232	7	
		Total	50	100	227	100	468	100	3,068	100	96	100	273	100	598	100	3,125	100	

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Bio, Agric, & Nat Res

### Northern Michigan University

#### Bio, Agric, & Nat Res

			First-Year Students <sup>a</sup>								Seniors <sup>a</sup>							
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
37. Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard?	veteran	No	50	100	225	99	461	99	3,024	99	91	95	265	97	577	96	3,009	97
		Yes	0	0	2	1	6	1	40	1	5	5	9	3	22	4	107	3
		Total	50	100	227	100	467	100	3,064	100	96	100	274	100	599	100	3,116	100
38a. Have you been diagnosed with any disability or impairment?	disability	No	40	80	205	90	401	86	2,649	86	75	79	233	86	520	87	2,639	84
		Yes	7	14	22	10	57	12	312	10	16	17	35	13	66	11	380	12
		I prefer not to respond	3	6	2	1	9	2	110	4	4	4	4	1	13	2	108	3
		Total	50	100	229	100	467	100	3,071	100	95	100	272	100	599	100	3,127	100
b. <i>[If answered "yes"]</i> Which of the following has been diagnosed? (Select all that apply.)	dis_sense	A sensory impairment (vision or hearing)	0	0	2	9	7	12	36	12	2	13	4	11	3	5	32	8
	dis_mobility	A mobility impairment	0	0	2	9	5	9	10	3	2	13	2	6	1	2	21	6
	dis_learning	A learning disability (e.g., ADHD, dyslexia)	3	43	5	23	23	40	150	48	7	44	13	37	34	52	149	39
	dis_mental	A mental health disorder	5	71	11	50	28	49	143	46	10	63	21	60	37	56	186	49
	dis_other	A disability or impairment not listed above	2	29	7	32	6	11	45	14	2	13	3	9	8	12	80	21
Disability or impairment	disability_all	A sensory impairment	0	0	2	1	5	1	27	1	0	0	1	0	1	0	17	1
	(Recoded from disability and dis_sense to dis_other where each student is represented only once.)	A mobility impairment	0	0	1	0	2	0	2	0	1	1	1	0	0	0	14	0
		A learning disability	1	2	4	2	18	4	102	3	3	3	9	3	23	4	100	3
		A mental health disorder	3	6	7	3	19	4	84	3	5	5	16	6	23	4	127	4
		A disability or impairment not listed	1	2	3	1	2	0	30	1	0	0	2	1	4	1	47	2
		More than one disability or impairment	2	4	5	2	11	2	66	2	7	7	6	2	15	3	74	2
		No disability or impairment	40	80	205	90	401	86	2,649	86	75	79	233	86	520	87	2,639	84
		Prefer not to respond	3	6	2	1	9	2	110	4	4	4	4	1	13	2	108	3
	Total	50	100	229	100	467	100	3,070	100	95	100	272	100	599	100	3,126	100	
39. Which of the following best describes your sexual orientation?	sexorient17	Straight (heterosexual)	40	80	195	85	416	89	2,598	85	78	81	238	87	538	90	2,645	85
		Bisexual	5	10	17	7	20	4	195	6	4	4	13	5	21	4	164	5
		Gay	0	0	1	0	3	1	31	1	1	1	7	3	12	2	50	2
		Lesbian	0	0	2	1	3	1	28	1	2	2	1	0	0	0	27	1
		Queer	1	2	0	0	3	1	24	1	0	0	0	0	1	0	22	1
		Questioning or unsure	0	0	5	2	8	2	41	1	1	1	4	1	6	1	38	1
		Another sexual orientation	3	6	5	2	7	1	53	2	4	4	2	1	7	1	43	1
		I prefer not to respond	1	2	4	2	7	1	101	3	6	6	9	3	15	3	137	4
		Total	50	100	229	100	467	100	3,071	100	96	100	274	100	600	100	3,126	100

# NSSE 2018 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Bio, Agric, & Nat Res

### Northern Michigan University





#### Bio, Agric, & Nat Res

Item wording or description	Variable name	Response options	First-Year Students <sup>a</sup>								Seniors <sup>a</sup>							
			NMU		State Peers		State and Regional		Crngie Size/Setting		NMU		State Peers		State and Regional		Crngie Size/Setting	
			Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
<b>Institution-reported information</b>																		
(Variables provided by your institution in your NSSE population file.)																		
Institution-reported: Sex	IRsex	Female	38	76	167	72	349	73	2,287	73	70	72	196	71	395	66	2,189	69
		Male	12	24	66	28	126	27	841	27	27	28	79	29	206	34	989	31
		Total	50	100	233	100	475	100	3,128	100	97	100	275	100	601	100	3,178	100
Institution-reported: Race or ethnicity	IRrace	American Indian or Alaska Native	0	0	1	1	1	0	15	1	2	2	0	0	2	0	23	1
		Asian	0	0	10	5	13	3	138	5	1	1	13	6	15	2	146	5
		Black or African American	0	0	5	3	8	2	343	13	1	1	5	2	12	2	236	9
		Hispanic or Latino	0	0	8	4	25	5	280	11	2	2	3	1	34	6	225	8
		Native Hawaiian/Other Pac. Islander	0	0	0	0	0	0	7	0	0	0	1	0	0	0	16	1
		White	45	90	158	79	406	85	1,571	61	85	88	188	85	513	85	1,859	68
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Foreign or nonresident alien	0	0	6	3	3	1	61	2	0	0	4	2	8	1	49	2
		Two or more races/ethnicities	4	8	9	5	16	3	102	4	6	6	5	2	12	2	81	3
		Unknown	1	2	2	1	3	1	64	2	0	0	3	1	5	1	84	3
		Total	50	100	199	100	475	100	2,581	100	97	100	222	100	601	100	2,719	100
Institution-reported: Class level	IRclass	Freshman/First-Year	50	100	233	100	475	100	3,128	100	0	0	0	0	0	0	0	0
		Sophomore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Junior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Senior	0	0	0	0	0	0	0	0	97	100	275	100	601	100	3,178	100
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	50	100	233	100	475	100	3,128	100	97	100	275	100	601	100	3,178	100
Institution-reported: First-time first-year (FTFY) student	IRftfy	Not first-time first-year	5	10	13	6	41	9	228	7	97	100	275	100	601	100	3,173	100
		First-time first-year	45	90	220	94	434	91	2,900	93	0	0	0	0	0	0	5	0
		Total	50	100	233	100	475	100	3,128	100	97	100	275	100	601	100	3,178	100
Institution-reported: Enrollment status	IRenrollment	Not full-time	4	8	2	1	8	2	57	2	6	6	56	20	48	8	262	8
		Full-time	46	92	231	99	467	98	3,071	98	91	94	219	80	553	92	2,916	92
		Total	50	100	233	100	475	100	3,128	100	97	100	275	100	601	100	3,178	100

## Endnotes

- a. All results are unweighted.
- b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.
- c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean  $\pm 1.96 * SEM$ .
- d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.
- e. Degrees of freedom used to compute the  $t$ -tests. Values differ from Ns due to whether equal variances were assumed.
- f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance:  $*p < .05$ ,  $**p < .01$ ,  $***p < .001$  (2-tailed).
- g. Cohen's  $d$ : The mean difference divided by the pooled standard deviation. Effect size indicates the practical importance of an observed difference. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview.
- h. Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project.
- i. Percentage point differences (institution – comp. group) rounded to whole numbers. Values less than one may not display a bar and may be shown as +0 or -0.  
 $*p < .05$ ,  $**p < .01$ ,  $***p < .001$  ( $z$ -test comparing participation rates).
- j. Cohen's  $h$ : The standardized difference between two proportions. Effect size indicates the practical importance of an observed difference. NSSE research has found that interpretations vary by HIP: For service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large. For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).
- k. Means calculated from ordered response options (e.g., Very Often, Often, Sometimes, Never) assume equal intervals and should be interpreted with caution. Unless otherwise noted, statistical comparisons are two-tailed independent  $t$ -tests. Exceptions are the dichotomous high-impact practice items (11a to 11f) which are compared using a  $z$ -test.
- l. Items that make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective and Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.
- m. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook. For items estimating number of papers and hours per week, the values represent actual units using the midpoints of response option ranges and an estimate for unbounded options.
- n. Effect size for independent  $t$ -tests uses Cohen's  $d$ ;  $z$ -tests use Cohen's  $h$ .
- o. Statistical comparison uses  $z$ -test to compare the percentage who responded "Done or in progress."

### Key to symbols:

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

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

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