# Fitchburg State University NSSE 2017 Major Field Report, Part II Comparisons to Other Institutions Health & Natural Sci

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 'Health & Natural Sci' includes the following majors: Biology (general); Biomedical science; Chemistry; Healthcare administration and policy; Kinesiology; Mathematics; Other biological sciences; Parks, recreation, leisure studies, sports mgmt.; Psychology.



Note:

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



## **NSSE 2017 Major Field Report, Part II**

#### **About This Report**

#### About Your Major Field Report, Part II

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

#### 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 (Els) 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 High-Impact Practices 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.



**Overview of Engagement Indicators: Health & Natural Sci Fitchburg State University** 

#### **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 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.



Vour students' average was significantly lower (p<.05) with an effect size less than .3 in magnitude.

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

		First-Year	Students in Health &	Natural Sci	Seni	ors in Health & Natura	l Sci
		Your first-year students compared with	Your first-year students compared with	Your first-year students compared with	Your seniors compared with	Your seniors compared with	Your seniors compared with
Theme	Engagement Indicator	New England Public	Nat. Public Masters	All Nat. Public	New England Public	Nat. Public Masters	All Nat. Public
	Higher-Order Learning						
Academic	Reflective & Integrative Learning						
Challenge	Learning Strategies						
	Quantitative Reasoning						
Learning with	Collaborative Learning						
Peers	Discussions with Diverse Others						
Experiences	Student-Faculty Interaction						
with Faculty	Effective Teaching Practices						
Campus	Quality of Interactions						
Environment	Supportive Environment						



**Engagement Indicators: Health & Natural Sci** 

**Fitchburg State University** 

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

Health & Natural Sci	Mea	n statistics			Percer	ntile <sup>d</sup> scores			(	Comparison re	sults	
	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>9</sup>
Academic Challenge	ivieuri	30	SEIVI	501	25(11	30111	73(11	<i>95</i> (II	Deg. of freedom	uijj.	sig.	3126
Higher-Order Learning												
Fitchburg State (N = 38)	36.2	12.3	1.99	15	25	40	45	60				
New England Public	38.8	13.6	.69	15	30	40	50	60	427	-2.6		195
Nat. Public Masters	40.3	13.6	.14	20	30	40	50	60	9,018	-2.0 -4.1		301
All Nat. Public	39.6	13.6	.08	20	30	40	50	60	30,878	-3.4		251
	39.0	13.0	.08	20	30	40	30		30,676	-5.4		231
Reflective & Integrative Learning												
Fitchburg State $(N = 38)$	35.0	11.7	1.90	11	29	37	43	57				
New England Public	36.4	12.2	.61	17	29	37	46	57	430	-1.4		114
Nat. Public Masters	38.1	12.2	.13	20	29	37	46	60	9,109	-3.2		260
All Nat. Public	37.7	12.2	.07	17	29	37	46	60	31,199	-2.7		224
Learning Strategies												
Fitchburg State $(N = 38)$	35.4	12.0	1.95	13	27	33	40	60				
New England Public	40.0	14.5	.73	13	27	40	53	60	427	-4.5		317
Nat. Public Masters	39.6	14.1	.15	13	27	40	53	60	9,031	-4.2		299
All Nat. Public	39.4	14.1	.08	20	27	40	53	60	30,942	-4.0		284
<b>Quantitative Reasoning</b>												
Fitchburg State $(N = 38)$	23.9	15.2	2.47	0	13	20	40	53				
New England Public	29.1	15.7	.80	7	20	27	40	60	423	-5.3	*	337
Nat. Public Masters	31.3	15.9	.17	7	20	33	40	60	9,036	-7.4	**	466
All Nat. Public	31.1	15.8	.09	7	20	33	40	60	30,911	-7.3	**	460
Learning with Peers												
Collaborative Learning												
Fitchburg State $(N = 38)$	32.6	13.5	2.20	5	25	35	40	55				
New England Public	31.0	12.8	.65	15	20	30	40	55	424	1.6		.124
Nat. Public Masters	34.2	14.1	.15	10	25	35	45	60	9,040	-1.6		113
All Nat. Public	33.5	14.3	.08	10	25	35	45	60	30,962	9		060
<b>Discussions with Diverse Others</b>												
Fitchburg State $(N = 37)$	37.2	17.1	2.82	0	25	40	50	60				
New England Public	40.2	16.2	.83	15	30	40	55	60	422	-3.1		188
Nat. Public Masters	41.0	15.7	.17	15	30	40	55	60	9,023	-3.9		247
All Nat. Public	41.2	15.6	.09	15	30	40	55	60	30,940	-4.0		259



**Engagement Indicators: Health & Natural Sci** 

**Fitchburg State University** 

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

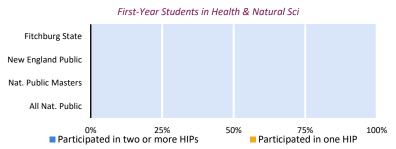
Health & Natural Sci	Mea	n statistics			Percei	ntile <sup>d</sup> scores	i		C	Comparison re	sults	
										Mean	4	Effect
	Mean	SD <sup>b</sup>	SEM <sup>c</sup>	5th	25th	50th	75th	95th	Deg. of freedom <sup>e</sup>	diff.	Sig. <sup>f</sup>	size <sup>g</sup>
Experiences with Faculty												
Student-Faculty Interaction												
Fitchburg State $(N = 38)$	26.4	14.8	2.40	0	15	25	40	55				
New England Public	26.2	15.9	.80	0	15	25	40	60	427	.3		.017
Nat. Public Masters	26.2	16.3	.17	0	15	25	40	60	9,028	.3		.017
All Nat. Public	25.0	16.0	.09	0	15	20	35	60	30,910	1.5		.091
<b>Effective Teaching Practices</b>												
Fitchburg State $(N = 38)$	40.5	13.5	2.18	12	32	40	52	60				
New England Public	41.0	13.7	.69	16	32	40	52	60	427	5		036
Nat. Public Masters	41.2	13.1	.14	20	32	40	52	60	9,114	7		051
All Nat. Public	40.1	13.1	.07	20	32	40	52	60	31,221	.4		.034
Campus Environment												
Quality of Interactions												
Fitchburg State $(N = 38)$	43.7	11.0	1.79	22	38	45	50	60				
New England Public	40.7	12.4	.64	16	33	42	50	60	409	3.0		.245
Nat. Public Masters	42.0	11.7	.13	20	35	44	50	60	8,718	1.7		.142
All Nat. Public	41.2	11.9	.07	20	34	42	50	60	29,919	2.5		.208
Supportive Environment												
Fitchburg State $(N = 38)$	30.2	14.5	2.36	8	18	30	40	60				
New England Public	32.1	14.5	.73	8	23	33	40	60	428	-1.9		134
Nat. Public Masters	33.5	13.8	.14	10	23	33	43	60	9,086	-3.3		237
All Nat. Public	33.2	13.7	.08	10	23	33	43	60	31,116	-3.0		221

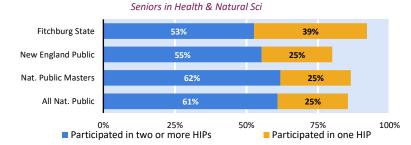


High-Impact Practices: Health & Natural Sci Fitchburg State University

#### 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.

			3	Your students' participation comp	pared with:		
	Fitchburg State	New England Public		Nat. Public Masters		All Nat. Public	
First-Year Students in Health & Natural Sci	%	Difference <sup>i</sup>	ES <sup>j</sup>	Difference <sup>i</sup>	ES <sup>j</sup>	Difference <sup>i</sup>	ES <sup>j</sup>
12. Service-Learning							
11c. Learning Community							
11e. Research with Faculty							
Participated in at least one							
Participated in two or more							
Seniors in Health & Natural Sci							
12. Service-Learning	42	-10	19	-19	*39	-15	29
11c. Learning Community	16	-4	12	-6	15	-6	16
11e. Research with Faculty	21	-11	25	-11	26	-14	31
11a. Internship or Field Exp.	47	+5 📜	.10	+2	.03	+1	.01
11d. Study Abroad	8	+1	.02	-2	07	-4	12
11f. Culminating Senior Exp.	50	+15	.31	+8	.16	+10	.20
Participated in at least one	92	+12	.36	+6	.18	+7	.21
Participated in two or more	53	-3	05	-9	19	-8	17



Frequencies and Statistical Comparisons: Health & Natural Sci

	Variable name <sup>1</sup>	1 2 3	Response options ften have you done th	Fitchburg S	tate	New Engla	and	Nat. Publ Masters				-	New En		irst-year stud	ents compare	d with	
a. Asked questions or contributed to course discussions in other ways  b. Prepared two or more drafts of a paper or assignment before turning it in	name' ool year, about	1 2 3	·		tate			Masters						_				
a. Asked questions or contributed to course discussions in other ways  b. Prepared two or more drafts of a paper or assignment before turning it in	name' ool year, about	1 2 3	·	Count						All Nat. Pub	olic	Fitchburg State	Pub	lic	Nat. Public	Masters	All Nat.	Public
a. Asked questions or contributed to course discussions in other ways  b. Prepared two or more drafts of a paper or assignment before turning it in  c. Come to class without	ool year, about	1 2 3	·	Count	%	Count	%	Count	%	Count	 %	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
a. Asked questions or contributed to course discussions in other ways  b. Prepared two or more drafts of a paper or assignment before turning it in  c. Come to class without		1 2 3	rten nave you done tr	. f. 11	/0	Count	/0	Count	/0	Count		ivieuri	Weum	3126	Weun	3126	ivieuri	3126
contributed to course discussions in other ways  b. Prepared two or more drafts of a paper or assignment before turning it in  c. Come to class without	askquest	2	Never	ie following?	6	5	2	201	3	874	4							
b. Prepared two or more drafts of a paper or assignment before turning it in		3	Sometimes	5	31	105	37	2,595	38	9,502	39							
b. Prepared two or more drafts of a paper or assignment before turning it in			Often	<i>3</i>	44	110	38	2,526	36 37	9,302 8,497	35							
drafts of a paper or assignment before turning it in  c. Come to class without		4	Very often	3	19	66	23	1,517	22	5,227	22							
drafts of a paper or assignment before turning it in  c. Come to class without		+	Total	16	100	286	100	6,839	100	24,100	100							
drafts of a paper or assignment before turning it in  c. Come to class without	drafts	1	Never	10	6	44	15	1,022	15	4,039	17							
assignment before turning it in  c. Come to class without	draits	2	Sometimes	12	75	107	38	2,398	35	8,361	35							
c. Come to class without		3	Often	2	13	83	36 29	2,398	30	7,210	30							
		4	Very often	1	6	51	18	1,339	20	4,391	18							
		+	Total	16	100	285	100	6,816	100	24,001	100							
	unpreparedr	1	Very often	10	6	8	3	290	4	1,057	4							
completing readings or		2	Often	1	6	31	11	764	11	2,910	12							
accionmente	(Reverse-coded version of	3	Sometimes	11	69	160	56	3,857	56	13,777	57							
	unprepared	4	Never	3	19	87	30	1,920	28	6,309	26							
crea	reated by NSSE.)		Total	16	100	286	100	6,831	100	24,053	100							
d. Attended an art exhibit,	attendart	1	Never	2	13	132	46	2,544	37	9,555	40							
play, or other arts	utteridari	2	Sometimes	10	63	103	36	2,803	41	9,535	40							
performance (dance,		3	Often	4	25	39	14	1,047	15	3,518	15							
music, etc.)		4	Very often	0	0	13	5	445	7	1,459	6							
		-	Total	16	100	287	100	6,839	100	24,067	100							
e. Asked another student	CLaskhelp	1	Never	0	0	29	10	498	7	1,655	7							
to help you understand		2	Sometimes	7	44	125	44	2,598	38	8,825	37							
course material		3	Often	7	44	99	34	2,502	37	8,864	37							
		4	Very often	2	13	34	12	1,237	18	4,732	20							
			Total	16	100	287	100	6,835	100	24,076	100							
f. Explained course	CLexplain	1	Never	1	7	11	4	250	4	839	3							
material to one or more		2	Sometimes	5	33	108	38	2,398	35	8,148	34							
students		3	Often	7	47	128	45	,	42	10,097	42							
				/	7/	120	+3	2,894	42	10.057	42							
		4	Very often	2	13	38	13	2,894 1,296	19	4,989	21							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	lents <sup>a</sup> in					Frequer	ıcy Di	stribution	S				Sta	itistical	Comparis	sons <sup>k</sup>		
Health & Natu	ral Sci			Fitchburg S	tate	New Engla Public	nd	Nat. Publi Masters	с	All Nat. Pul	blic	Fitchburg State	New En	gland	first-year stud Nat. Public		ed with  All Nat.	Public
Item wording	Variable name <sup>I</sup>	Values <sup>r</sup>	7	Count	0/	Count	0/	Count	0/	Count	9/	******		Effect size "	44	Effect size "		Effect
g. Prepared for exams by discussing or working	CLstudy	1 2	Never Sometimes	Count 1 6	6 38	40 114	% 14 40	855 2,460	13 36	2,893 8,335	12 35	Mean	Mean	size	Mean	size	Mean	size '
through course material with other students		3 4	Often Very often	5 4	31 25	98 33	34 12	2,244 1,275	33 19	7,892 4,960	33 21							
h. Worked with other students on course projects or assignments	CLproject	1 2 3	Total  Never  Sometimes  Often	16 1 6 6	6 38 38	285 12 128 112	4 45 39	6,834 420 2,669 2,572	6 39 38	24,080 1,650 9,229 8,970	100 7 38 37							
		4	Very often Total	3 16	19 100	35 287	12 100	1,182 6,843	17 100	4,247 24,096	18 100							
i. Given a course presentation	present	1 2 3 4	Never Sometimes Often Very often Total	2 11 3 0	13 69 19 0 100	33 132 98 24 287	11 46 34 8 100	1,242 2,990 1,898 707 6,837	18 44 28 10 100	5,251 10,823 5,801 2,204 24,079	22 45 24 9 100							
. During the current sch	hool year aho	ut how o						-,		,,,,,								
a. Combined ideas from different courses when completing assignments	RIintegrate	1 2 3 4	Never Sometimes Often Very often Total	1 8 4 3	6 50 25 19 100	26 119 111 28 284	9 42 39 10 100	505 2,686 2,666 979 6,836	7 39 39 14 100	1,798 9,622 9,148 3,503 24,071	7 40 38 15 100							
b. Connected your learning to societal problems or issues	RIsocietal	1 2 3 4	Never Sometimes Often Very often Total	1 8 6 1	6 50 38 6 100	24 108 121 33 286	8 38 42 12 100	522 2,630 2,607 1,069 6,828	8 39 38 16 100	2,049 9,331 8,960 3,710 24,050	9 39 37 15 100							
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1 2 3 4	Never Sometimes Often Very often Total	0 9 6 1 16	0 56 38 6 100	33 109 102 42 286	12 38 36 15 100	629 2,621 2,424 1,160 6,834	9 38 35 17 100	2,311 9,444 8,318 3,983 24,056	10 39 35 17 100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	dents <sup>a</sup> in					Frequer	ncy Di	stribution	ıs				Sta	itistical	Comparis	sons <sup>k</sup>		
Health & Natu	ral Sci					New Engla	nd	Nat. Publ					New Er	ngland	irst-year stud			
				Fitchburg S	tate	Public		Masters	; 	All Nat. Pul	blic	Fitchburg State	Pub		Nat. Public		All Nat.	
Item wording or description	Variable name <sup>I</sup>	Values	n Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
d. Examined the strengths	RIownview	1	Never	0	0	11	4	298	4	1,117	5							
and weaknesses of		2	Sometimes	4	25	96	33	2,172	32	7,883	33							
your own views on a topic or issue		3	Often	10	63	136	47	3,159	46	10,797	45							
topic of issue		4	Very often	2	13	44	15	1,199	18	4,270	18							
			Total	16	100	287	100	6,828	100	24,067	100							
e. Tried to better	RIperspect	1	Never	0	0	8	3	158	2	676	3							-
understand someone		2	Sometimes	5	31	80	28	1,834	27	6,447	27							
else's views by imagining how an issue		3	Often	4	25	145	51	3,191	47	11,038	46							
looks from their		4	Very often	7	44	54	19	1,653	24	5,892	24							
perspective			Total	16	100	287	100	6,836	100	24,053	100							
f. Learned something that	RInewview	1	Never	0	0	7	2	154	2	614	3							
changed the way you		2	Sometimes	6	38	87	30	1,939	28	6,963	29							
understand an issue or concept		3	Often	7	44	142	49	3,261	48	11,160	46							
сонсері		4	Very often	3	19	51	18	1,479	22	5,318	22							
			Total	16	100	287	100	6,833	100	24,055	100							
g. Connected ideas from	RIconnect	1	Never	0	0	2	1	58	1	250	1							
your courses to your		2	Sometimes	4	25	71	25	1,363	20	4,872	20							
prior experiences and knowledge		3	Often	8	50	146	51	3,519	52	12,173	51							
knowiedge		4	Very often	4	25	68	24	1,881	28	6,723	28							
			Total	16	100	287	100	6,821	100	24,018	100							
3. During the current scl	hool year, abo	ut how	often have you done th	e following?														
a. Talked about career	SFcareer	1	Never	2	13	56	20	1,227	18	4,466	19							
plans with a faculty member		2	Sometimes	7	44	134	47	3,063	45	10,654	44							
member		3	Often	7	44	67	23	1,704	25	5,881	24							
		4	Very often	0	0	29	10	836	12	3,059	13							
			Total	16	100	286	100	6,830	100	24,060	100							
b. Worked with a faculty	SFotherwork	1	Never	10	63	146	51	3,397	50	11,851	49							
member on activities other than coursework		2	Sometimes	3	19	82	29	2,075	30	7,470	31							
(committees, student		3	Often	3	19	44	15	960	14	3,251	14							
groups, etc.)		4	Very often	0	0	13	5	389	6	1,471	6							
			Total	16	100	285	100	6,821	100	24,043	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

									O	Juic C		0.0.0						
First-Year Stud	dents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	atistical	Compari	sons <sup>k</sup>		
Health & Natu	ral Sci			Fitchburg S	tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State	New E	ngland	first-year stud Nat. Public	· · ·	ed with  All Nat.	Public
Item wording	Variable													Effect		Effect		Effec
or description	name '	Values'		Count	%	Count	%	Count	%	Count	<u>%</u>	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size '
c. Discussed course topics, ideas, or	SFdiscuss	1	Never	7	44	103	36	2,197	32	7,904	33							
concepts with a faculty		2	Sometimes	6	38	118	41	2,933	43	10,214	43							
member outside of		3	Often	3	19	51	18	1,261	18	4,310	18							
class		4	Very often	0	0	15	5	436	6	1,600	7							
			Total	16	100	287	100	6,827	100	24,028	100							
d. Discussed your	SFperform	1	Never	2	13	57	20	1,683	25	6,067	25							
academic performance with a faculty member		2	Sometimes	11	69	134	47	3,190	47	11,164	47							
with a faculty member		3	Often	3	19	72	25	1,398	21	4,903	20							
		4	Very often	0	0	21	7	532	8	1,866	8							
			Total	16	100	284	100	6,803	100	24,000	100							
I. During the current scl	hool vear, how	much l	nas vour coursework e	mphasized th	e follo	wing?												
a. Memorizing course	memorize	1	•	0	0	10	3	188	3	623	3							
material		2	Some	5	31	62	22	1,458	21	5,153	21							
		3	Quite a bit	9	56	152	53	3,317	49	11,250	47							
		4	Very much	2	13	63	22	1,866	27	7,031	29							
			Total	16	100	287	100	6,829	100	24,057	100							
b. Applying facts,	HOapply	1	Very little	0	0	16	6	173	3	632	3							
theories, or methods to	11.5	2	Some	2	13	74	26	1,569	23	5,247	22							
practical problems or		3	Ouite a bit	10	63	144	51	3,327	49	11,549	48							
new situations		4	Very much	4	25	50	18	1,761	26	6,621	28							
			Total	16	100	284	100	6,830	100	24,049	100							
c. Analyzing an idea,	HOanalyze	1	Very little	0	0	13	5	216	3	750	3							
experience, or line of	,	2	Some	1	6	87	31	1,722	25	5,946	25							
reasoning in depth by		3	Ouite a bit	11	69	129	45	3,155	46	10,923	46							
examining its parts		4	Very much	4	25	56	20	1,726	25	6,382	27							
			Total	16	100	285	100	6,819	100	24,001	100							
d. Evaluating a point of	HOevaluate	1	Very little	1	6	9	3	244	4	884	4							
view, decision, or		2	Some	2	13	80	28	1,720	25	6,320	26							
information source		3	Quite a bit	9	56	139	49	3,199	47	10,997	46							
		4	Very much	4	25	56	20	1,656	24	5,809	24							
		4	Total	16	100	284	100	6,819	100	24,010	100							
			Total	10	100	204	100	0,019	100	24,010	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	lents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Natu	ral Sci					New Engla	nd	Nat. Publi	С				New Er		first-year stua	ents compare	ed with	
				Fitchburg S	tate	Public		Masters		All Nat. Pub	olic	Fitchburg State	Pub		Nat. Publi	Masters	All Nat.	Public
Item wording	Variable													Effect		Effect		Effect
e. Forming a new idea or	name <sup>1</sup> HOform	Values <sup>n</sup>	Response options Very little	Count	6	Count 6	2	Count 270	% 4	Count 950	4	Mean	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
understanding from	поющ	2	Some	3	19	83	29	1,806	26	6,474	27							
various pieces of		3	Ouite a bit	8	50	142	50	3,155	46	10,968	46							
information		3 4	•	4	25	54	19	1,593	23	5,616	23							
		4	Very much Total	16	100	285	100	6,824	100	24,008	100							
		_					100	0,824	100	24,008	100							
. During the current sch	•	hat exte	•			_												
Clearly explained course goals and	ETgoals	1	Very little	0	0	3	1	85	1	383	2							
requirements		2	Some	6	38	58	20	1,297	19	4,590	19							
•		3	Quite a bit	6	38	139	49	3,257	48	11,379	47							
		4	Very much	4	25	86	30	2,195	32	7,722	32							
			Total	16	100	286	100	6,834	100	24,074	100							
b. Taught course sessions in an organized way	ETorganize	1	Very little	0	0	13	5	191	3	667	3							
iii aii organized way		2	Some	3	19	70	24	1,398	20	4,857	20							
		3	Quite a bit	8	50	130	45	3,220	47	11,406	47							
		4	Very much	5	31	73	26	2,017	30	7,122	30							
			Total	16	100	286	100	6,826	100	24,052	100							
c. Used examples or illustrations to explain	ETexample	1	Very little	1	6	11	4	157	2	637	3							
difficult points		2	Some	2	13	66	23	1,394	20	4,894	20							
1		3	Quite a bit	9	56	121	43	3,023	44	10,592	44							
		4	Very much	4	25	86	30	2,250	33	7,916	33							
			Total	16	100	284	100	6,824	100	24,039	100							
d. Provided feedback on a draft or work in	ETdraftfb	1	Very little	1	6	9	3	453	7	1,847	8							
progress		2	Some	6	38	83	29	1,963	29	7,296	30							
		3	Quite a bit	8	50	125	44	2,667	39	9,000	37							
		4	Very much	1	6	70	24	1,748	26	5,902	25							
	TOTAL 11 1		Total	16	100	287	100	6,831	100	24,045	100							
e. Provided prompt and detailed feedback on	ETfeedback	1	Very little	2	13	23	8	554	8	2,182	9							
tests or completed		2	Some	7	44	94	33	2,227	33	7,979	33							
assignments		3	Quite a bit	5	31	108	38	2,622	38	9,038	38							
		4	Very much	2	13	60	21	1,415	21	4,784	20							
			Total	16	100	285	100	6,818	100	23,983	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stu	udents <sup>a</sup> in					Frequer	cy Di	stribution	S				Sta	atistica	Compari	sons <sup>k</sup>		
Health & Nat	ural Sci													Your	first-year stua	ents compar	ed with	
icultii & ivat	arar sci					New Engla	nd	Nat. Publ	ic				New E	ngland				
				Fitchburg S	tate	Public		Masters		All Nat. Pub	olic	Fitchburg State	Pul	olic	Nat. Publi	Masters	All Nat.	Public
Item wording	Variable '		m .		%		2/		۰,		٥,			Effect		Effect . n		Effe
or description	name'		" Response options often have you done th	Count	%	Count	%	Count	%	Count	<u>%</u>	Mean	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>	Mean	size
a. Reached conclusions	QRconclude	. <b>now (</b> 1	Never	e following:	0	35	12	701	10	2,313	10							
based on your own	QReonclude	2	Sometimes	6	38	110	38			2,513 8,588	36							
analysis of numerical		3	Often	9	56	98	34	2,451	36 38		38							
information (numbers,				9				2,604		9,196								
graphs, statistics, etc.)		4	Very often	1	6	43	15	1,061	16	3,913	16							
1 TT 1 1 1	OD 11		Total	16	100	286	100	6,817	100	24,010	100							
<ul> <li>Used numerical information to examine</li> </ul>	QRproblem	1	Never	4	25	63	22	1,426	21	4,984	21							
a real-world problem or		2	Sometimes	7	44	119	42	2,835	42	9,991	42							
issue (unemployment,		3	Often	4	25	73	26	1,864	27	6,523	27							
climate change, public		4	Very often	1	6	30	11	696	10	2,512	10							
health, etc.)			Total	16	100	285	100	6,821	100	24,010	100							
c. Evaluated what others	QRevaluate	1	Never	4	25	44	15	1,243	18	4,232	18							
have concluded from		2	Sometimes	6	38	128	45	2,985	44	10,408	43							
numerical information		3	Often	5	31	95	33	1,978	29	7,077	29							
		4	Very often	1	6	19	7	615	9	2,313	10							
			Total	16	100	286	100	6,821	100	24,030	100							
During the current s	school vear, about	how i	many papers, reports,	or other writ	ing ta	sks of the fol	lowing	lengths ha	ve voi	ı heen assior	 ned? ()	Include those not y	et compl	eted.)				
a. Up to 5 pages	wrshortnum	0	None	0	0	4	1	373	5	1,425	6	include those not j	et compi	ctcu.)				
a. op to a pages		1.5	1-2	3	19	57	20	1,425	21	5,119	21							
	(Recoded version of wrshort created	4	3-5	8	50	85	30	2,223	33	7,935	33							
	by NSSE. Values	8	6-10	2	13	86	30	1,616	24	5,504	23							
	are estimated	13	11-15	0	0	23	8	650	10	2,136	9							
	number of papers,	18	16-20	3	19	17	6	249	4	881	4							
	reports, etc.)	23	More than 20	0	0	12	4	261	4	961	4							
		43	Total	16	100	284	100	6,797	100	23,961	100							
b. Between 6 and 10	wrmednum	0	None	4	25	76	27	2,449	36	8,725	37							
pages		1.5	1-2	7	44	119	42	2,654	39	9,145	38							
. 0	(Recoded version of wrmed created	4		4	25	58	21	1,152	17	3,931	17							
	by NSSE. Values	8	6-10	1	6	22	8	362	5	1,399	6							
	are estimated	13	11-15	0	0	3	0	79	3 1	342	1							
		13	11-13	U	Ů		-		0	112	0							
	number of papers,	19	16.20	0	(1	1												
	number of papers, reports, etc.)	18 23	16-20 More than 20	0	0	4	1	31 21	0	105	0							



Frequencies and Statistical Comparisons: Health & Natural Sci

								TICCID	uig	Juane C	JIIIV	CISILY						
First-Year Stu	udents <sup>a</sup> in					Frequer	ncy Dia	stribution	S				Sta	atistical	l Comparis	sons <sup>k</sup>		
Health & Nat	ural Sci			Fitchburg S	tate	New Engla Public	nd	Nat. Publi Masters		All Nat. Pub	hlic	Fitchburg State	New En	ngland	first-year stud Nat. Public	<u> </u>	ed with  All Nat.	Public
Item wording	Variable			Titeribuig 5	.utc	- T dbile		IVIUSTCIS		All IVac. I ac				Effect	- IVat. I abilt	Effect	- All IVat.	Effect
or description	name <sup>1</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
c. 11 pages or more	wrlongnum	0	None	11	69	224	80	5,407	80	18,490	78					*		
	(Recoded version	1.5	1-2	5	31	39	14	923	14	3,607	15							
	of wrlong created	4	3-5	0	0	9	3	192	3	750	3							
	by NSSE. Values	8	6-10	0	0	3	1	110	2	428	2							
	are estimated	13	11-15	0	0	4	1	59	1	203	1							
	number of papers, reports, etc.)	18	16-20	0	0	1	0	15	0	65	0							
	reports, erety	23	More than 20	0	0	0	0	20	0	92	0							
			Total	16	100	280	100	6,726	100	23,635	100							
Estimated number of assigned pages of student writing.	wrpages	,																
student writing.	from wrshort, wrme estimated pages of	ed, and	-															
. During the current	school year, abou	t how o	often have you had disc	cussions with	peopl	e from the f	ollowir	ig groups?										
a. People of a race or	DDrace	1	Never	0	0	11	4	269	4	951	4							
ethnicity other than		2	Sometimes	6	38	69	24	1,735	25	5,738	24							
your own		3	Often	7	44	100	35	2,227	33	7,840	33							
		4	Very often	3	19	105	37	2,602	38	9,561	40							
			Total	16	100	285	100	6,833	100	24,090	100							
People from an	DDeconomic	1	Never	0	0	12	4	264	4	974	4							
economic background		2	Sometimes	4	27	85	30	1,683	25	5,626	23							
other than your own		3	Often	7	47	99	35	2,527	37	8,870	37							
		4	Very often	4	27	88	31	2,355	34	8,595	36							
			Total	15	100	284	100	6,829	100	24,065	100							
People with religious	DDreligion	1	Never	1	6	22	8	397	6	1,337	6							
beliefs other than your		2	Sometimes	6	38	88	31	1,726	25	5,893	24							
own		3	Often	5	31	91	32	2,323	34	8,061	33							
		4	Very often	4	25	84	29	2,383	35	8,780	36							
		7	Total	16	100	285	100	6,829	100	24,071	100							
. People with political	DDpolitical	1		0	0	14	5	396	6	1,299	5							
views other than your	DDpontical	2	Sometimes	4	25	89	31	1,759	26	6,316	26							
own			Often	7	44	98	35	2,312	34	8,047	33							
		3		,							35							
		4	Very often	5	31	83	29	2,360	35	8,403	33							
			Total	16	100	284	100	6,827	100	24,065	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stu	dents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	atistica	Compari	sons <sup>k</sup>		
Health & Natu	ural Sci					New Engla	and	Nat. Publ	ic				New Er		first-year stud	ents compare	ed with	
				Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg State	Pub	olic	Nat. Publi	c Masters	All Nat.	Public
Item wording or description	Variable name <sup>l</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
9. During the current so	chool vear, abou	ut how o	often have you done th	e following?														
a. Identified key	LSreading	1	Never	0	0	6	2	84	1	338	1							
information from		2	Sometimes	4	25	56	20	1,414	21	4,983	21							
reading assignments		3	Often	6	38	151	53	3,359	49	11,724	49							
		4	Very often	6	38	72	25	1,968	29	7,020	29							
			Total	16	100	285	100	6,825	100	24,065	100							
b. Reviewed your notes	LSnotes	1	Never	2	13	7	2	259	4	931	4							
after class		2	Sometimes	5	31	93	33	1,890	28	6,701	28							
		3	Often	5	31	111	39	2,433	36	8,567	36							
		4	Very often	4	25	73	26	2,243	33	7,866	33							
			Total	16	100	284	100	6,825	100	24,065	100							
c. Summarized what you	LSsummary	1	Never	2	13	20	7	383	6	1,374	6							
learned in class or from		2	Sometimes	5	31	98	34	2,056	30	7,220	30							
course materials		3	Often	8	50	118	41	2,713	40	9,348	39							
		4	Very often	1	6	50	17	1,658	24	6,060	25							
			Total	16	100	286	100	6,810	100	24,002	100							
10. During the current	school year, to	what ext	tent have your courses	s challenged y	ou to	do your bes	t work	?										
	challenge	1	Not at all	0	0	0	0	42	1	162	1							
		2		0	0	3	1	66	1	238	1							
		3		2	13	18	6	269	4	948	4							
		4		0	0	43	15	762	11	2,632	11							
		5		6	38	93	33	2,311	34	8,080	34							
		6		5	31	73	26	1,874	27	6,492	27							
		7	Very much	3	19	53	19	1,494	22	5,471	23							
			Total	16	100	283	100	6,818	100	24,023	100							
11. Which of the follow	ing have you do	one or d	o you plan to do befor	e you gradua	te?°													
a. Participate in an	intern		Have not decided	2	13	22	8	747	11	2,569	11							
internship, co-op, field	(Means indicate		Do not plan to do	1	6	11	4	217	3	798	3							
experience, student teaching, or clinical	the percentage		Plan to do	13	81	239	84	5,466	80	19,091	79							
placement	who responded		Done or in progress	0	0	12	4	403	6	1,617	7							
•	"Done or in progress.")		Total	16	100	284	100	6,833	100	24,075	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	dents <sup>a</sup> in					Freque	ncy Di	stribution	S				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Natu	ıral Sci														first-year stud	lents compare	ed with	
ricaitii & ivatt	irai Sci			Fitchburg S	itate	New Engla Public	and	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State	New Er Pub		Nat. Publi	c Masters	All Nat.	Public
Item wording	Variable											-		Effect		Effect		Effect
or description  b. Hold a formal	name leader	Values <sup>r</sup>	Response options Have not decided	Count	25		30	Count 1,899	28	6,318	26	Mean	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
leadership role in a				4				,										
student organization or	(Means indicate the percentage		Do not plan to do Plan to do	5	31 38		25 37	1,556 2,687	23 39	5,202 10,056	22 42							
group	who responded		Done or in progress	1	6		8	680	10	2,473	10							
	"Done or in progress.")		Total	16	100		100	6,822	100	24,049	100							
c. Participate in a learning	learncom		Have not decided	8	50	101	36	2,337	34	7,498	31							
community or some	(Means indicate		Do not plan to do	5	31	65	23	1,648	24	6,119	25							
other formal program where groups of	the percentage		Plan to do	2	13	90	32	1,999	29	7,018	29							
students take two or	who responded		Done or in progress	1	6	27	10	828	12	3,375	14							
more classes together	"Done or in progress.")		Total	16	100	283	100	6,812	100	24,010	100							
d. Participate in a study	abroad		Have not decided	7	44	82	29	2,035	30	6,735	28							
abroad program	(Means indicate		Do not plan to do	4	25	59	21	1,771	26	5,998	25							
	the percentage		Plan to do	5	31	137	48	2,857	42	10,713	45							
	who responded "Done or in		Done or in progress	0	0	6	2	164	2	603	3							
	progress.")		Total	16	100	284	100	6,827	100	24,049	100							
e. Work with a faculty	research		Have not decided	9	56	107	38	2,431	36	7,893	33							
member on a research	(Means indicate		Do not plan to do	1	6	42	15	1,105	16	3,729	16							
project	the percentage		Plan to do	6	38	123	43	2,958	43	11,057	46							
	who responded		Done or in progress	0	0	12	4	322	5	1,323	6							
	"Done or in progress.")		Total	16	100	284	100	6,816	100	24,002	100							
f. Complete a culminating	capstone		Have not decided	5	31	97	34	2,282	33	7,777	32							
senior experience	(Means indicate		Do not plan to do	0	0	23	8	538	8	2,067	9							
(capstone course, senior project or thesis,	the percentage		Plan to do	10	63	160	56	3,896	57	13,719	57							
comprehensive exam,	who responded		Done or in progress	1	6	5	2	101	1	459	2							
portfolio, etc.)	"Done or in progress.")		Total	16	100	285	100	6,817	100	24,022	100							
12. About how many of	your courses a	this in	stitution have included	a communit	y-bas	sed project (s	ervice-	learning)?										
	servcourse	1	None	10	63	123	43	3,165	46	12,062	50							
		2	Some	6	38	134	47	3,069	45	10,120	42							
		3	Most	0	0	21	7	488	7	1,536	6							
		4	All	0	0	5	2	91	1	297	1							
			Total	16	100	283	100	6,813	100	24,015	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stu	ıdents <sup>a</sup> in					Frequer	ncy Di	stribution	ıs				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Nat	ural Sci			Fitchburg S	tate	New Engla	ınd	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State	New Er	ngland	first-year stud Nat. Publi	•	ed with  All Nat.	Public
Item wording or description	Variable name <sup>I</sup>	Values	<sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
13. Indicate the quality	y of your interac	ctions w	ith the following peopl	e at your inst	itutior	1.												
a. Students	QIstudent	1	Poor	0	0	3	1	110	2	374	2							
		2		1	6	9	3	141	2	498	2							
		3		1	6	19	7	382	6	1,329	6							
		4		1	6	50	17	915	13	3,183	13							
		5		7	44	83	29	1,890	28	6,571	27							
		6		5	31	52	18	1,721	25	6,192	26							
		7	Excellent	1	6	68	24	1,629	24	5,781	24							
		_	Not applicable	0	0	2	1	44	1	153	1							
			Total	16	100	286	100	6,832	100	24,081	100							
b. Academic advisors	QIadvisor	1	Poor	0	0	9	3	267	4	851	4							
		2		3	19	8	3	364	5	1,199	5							
		3		0	0	27	9	575	8	1,990	8							
		4		1	6	50	18	1,014	15	3,520	15							
		5		4	25	72	25	1,385	20	4,994	21							
		6		5	31	54	19	1,365	20	4,905	20							
		7	Excellent	3	19	63	22	1,694	25	6,158	26							
		_	Not applicable	0	0	2	1	170	2	464	2							
			Total	16	100	285	100	6,834	100	24,081	100							
c. Faculty	QIfaculty	1	Poor	0	0	3	1	136	2	503	2							
		2		1	6	3	1	207	3	786	3							
		3		3	19	20	7	472	7	1,630	7							
		4		3	19	49	17	1,027	15	3,692	15							
		5		2	13	90	32	1,826	27	6,472	27							
		6		4	25	75	26	1,756	26	6,143	26							
		7	Excellent	3	19	42	15	1,320	19	4,554	19							
		_	Not applicable	0	0	2	1	63	1	230	1							
			Total	16	100	284	100	6,807	100	24,010	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	dents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	itistica	Compari	sons <sup>k</sup>		
Health & Natu	ral Sci					New Engla	nd	Nat. Publ				Firelih an Grata	New Er	ngland	first-year stud	· ·		
the are seemed to a	Variable			Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg State	Pub	olic Effect	Nat. Publi	Effect	All Nat.	Public Effect
Item wording or description	name <sup>l</sup>	Values '	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size"	Mean	size "	Mean	size "
d. Student services staff	QIstaff	1	Poor	0	0	21	7	298	4	957	4			_				
(career services,		2		0	0	9	3	289	4	1,046	4							
student activities, housing, etc.)		3		0	0	23	8	538	8	1,790	7							
nousing, etc.)		4		2	13	45	16	914	13	3,421	14							
		5		6	38	70	25	1,483	22	5,282	22							
		6		6	38	49	17	1,479	22	5,040	21							
		7	Excellent	1	6	48	17	1,237	18	4,441	18							
		_	Not applicable	1	6	20	7	579	8	2,034	8							
			Total	16	100	285	100	6,817	100	24,011	100							
e. Other administrative	QIadmin	1	Poor	0	0	8	3	305	4	1,085	5							
staff and offices		2		0	0	14	5	365	5	1,280	5							
(registrar, financial aid,		3		1	6	32	11	562	8	2,013	8							
etc.)		4		3	19	51	18	1,074	16	3,836	16							
		5		3	19	70	25	1,505	22	5,425	23							
		6		6	38	47	16	1,390	20	4,658	19							
		7	Excellent	3	19	42	15	1,219	18	4,119	17							
		_	Not applicable	0	0	21	7	405	6	1,641	7							
			Total	16	100	285	100	6,825	100	24,057	100							
14. How much does your	r institution en	phasiz	e the following?															
a. Spending significant	empstudy	1	_	0	0	1	0	87	1	339	1							
amounts of time		2	Some	5	31	62	22	1,103	16	3,778	16							
studying and on		3	Quite a bit	9	56	160	56	3,258	48	11,174	46							
academic work		4	Very much	2	13	62	22	2,379	35	8,757	36							
			Total	16	100	285	100	6,827	100	24,048	100							
b. Providing support to	SEacademic	1	Very little	1	6	8	3	226	3	727	3							
help students succeed		2	Some	6	38	65	23	1,349	20	4,580	19							
academically		3	Quite a bit	7	44	140	49	2,977	44	10,396	43							
		4	Very much	2	13	73	26	2,241	33	8,235	34							
			Total	16	100	286	100	6,793	100	23,938	100							
c. Using learning support	SElearnsup	1	Very little	0	0	20	7	318	5	1,170	5							
services (tutoring	•	2	Some	3	19	55	19	1,117	16	3,887	16							
services, writing		3	Quite a bit	9	56	117	41	2,616	38	9,154	38							
center, etc.)		4	Very much	4	25	92	32	2,766	41	9,797	41							
			Total	16	100	284	100	6,817	100	24,008	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	dents <sup>a</sup> in					Frequer	ncy Di	istribution	S				Sta	atistica	l Compari:	sons <sup>k</sup>		
Health & Natu	ral Sci													Your	first-year stud	ents compare	ed with	
ricaitii a riata	141 501					New Engla	nd	Nat. Publ	ic				New Er	•				
				Fitchburg S	tate	Public		Masters		All Nat. Pul	olic	Fitchburg State	Puk		Nat. Public		All Nat.	
Item wording or description	Variable name <sup>I</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
d. Encouraging contact	SEdiverse	1	Very little	2	13	23	8	643	9	2,278	9	Wear	Wican	3120	Wicum	3/20	Wicum	
among students from		2	Some	6	38	76	27	1,889	28	6,553	27							
different backgrounds (social, racial/ethnic,		3	Quite a bit	7	44	114	40	2,550	37	8,697	36							
religious, etc.)		4	Very much	1	6	72	25	1,731	25	6,471	27							
rengious, etc.)			Total	16	100	285	100	6,813	100	23,999	100							
e. Providing opportunities	SEsocial	1	Very little	1	7	20	7	355	5	1,186	5							
to be involved socially		2	Some	5	33	67	23	1,528	22	5,217	22							
		3	Quite a bit	8	53	119	42	2,829	41	9,799	41							
		4	Very much	1	7	80	28	2,107	31	7,792	32							
			Total	15	100	286	100	6,819	100	23,994	100							
f. Providing support for	SEwellness	1	Very little	2	13	18	6	352	5	1,204	5							
your overall well-being		2	Some	6	38	80	28	1,508	22	5,124	21							
(recreation, health care, counseling, etc.)		3	Quite a bit	7	44	111	39	2,816	41	9,813	41							
counseinig, etc.)		4	Very much	1	6	76	27	2,141	31	7,844	33							
			Total	16	100	285	100	6,817	100	23,985	100							
g. Helping you manage	SEnonacad	1	Very little	5	31	70	24	1,351	20	4,771	20							
your non-academic		2	Some	9	56	95	33	2,496	37	8,656	36							
responsibilities (work, family, etc.)		3	Quite a bit	2	13	74	26	1,961	29	6,939	29							
raining, etc.)		4	Very much	0	0	47	16	1,007	15	3,628	15							
			Total	16	100	286	100	6,815	100	23,994	100							
h. Attending campus	SEactivities	1	Very little	1	6	30	11	539	8	1,667	7							
activities and events (performing arts,		2	Some	7	44	83	29	1,825	27	6,066	25							
athletic events, etc.)		3	Quite a bit	6	38	103	36	2,643	39	9,562	40							
umene events, etc.)		4	Very much	2	13	68	24	1,804	26	6,694	28							
			Total	16	100	284	100	6,811	100	23,989	100							
i. Attending events that	SEevents	1	Very little	2	13	32	11	885	13	3,020	13							
address important social, economic, or		2	Some	9	56	91	32	2,326	34	8,243	34							
political issues		3	Quite a bit	4	25	102	36	2,324	34	8,187	34							
r shired houses		4	Very much	1	6	57	20	1,278	19	4,532	19							
			Total	16	100	282	100	6,813	100	23,982	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stu	dents <sup>a</sup> in					Frequer	ncy D	istribution	S				Sta	itistica	l Compari	sons <sup>k</sup>		
Health & Nat	ural Sci			Fitchburg S	tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State	New En	gland	first-year stud Nat. Publi	· · · · · ·	ed with  All Nat.	Public
Item wording	Variable													Effect		Effect		Effect
or description  15. About how many he			Response options	Count	% ing?	Count	%	Count	%	Count	<u>%</u>	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
a. Preparing for class	tmprephrs	0	0 hrs	0	0	0	0	26	0	83	0							
(studying, reading,		3	1-5 hrs	3	19	32	11	849	12	2,792	12							
writing, doing	(Recoded version of tmprep created	8	6-10 hrs	3	19	69	24	1,573	23	5,313	22							
homework or lab work,	by NSSE. Values	13		3	19	85	30	1,602	23	5,418	23							
analyzing data, rehearsing, and other	are estimated	18	16-20 hrs	3	19	59	21	1,349	20	4,802	20							
academic activities)	number of hours	23	21-25 hrs	2	13	20	7	746	11	2,876	12							
deddeniae ded (Mes)	per week.)	28	26-30 hrs	2	13	9	3	347	5	1,376	6							
		33	More than 30 hrs	0	0	12	4	352	5	1,398	6							
			Total	16	100	286	100	6,844	100	24,058	100							
b. Participating in co-	tmcocurrhrs	0	0 hrs	5	31	108	38	2,213	33	7,390	31							
curricular activities	(Recoded version	3	1-5 hrs	9	56	84	30	2,279	33	8,203	34							
(organizations, campus	of tmcocurr	8	6-10 hrs	1	6	45	16	1,098	16	3,970	17							
publications, student government, fraternity	created by NSSE.	13	11-15 hrs	1	6	21	7	558	8	2,091	9							
or sorority,	Values are	18	16-20 hrs	0	0	10	4	357	5	1,246	5							
intercollegiate or	estimated number of hours per	23	21-25 hrs	0	0	8	3	156	2	582	2							
intramural sports, etc.)	week.)	28	26-30 hrs	0	0	0	0	61	1	199	1							
	,	33	More than 30 hrs	0	0	7	2	83	1	283	1							
			Total	16	100	283	100	6,805	100	23,964	100							
c. Working for pay	tmworkonhrs	0	0 hrs	13	81	217	77	5,607	82	19,592	82							
on campus	(Recoded version	3	1-5 hrs	0	0	7	2	190	3	701	3							
	of tmworkon	8	6-10 hrs	2	13	23	8	373	5	1,375	6							
	created by NSSE.	13	11-15 hrs	1	6	21	7	339	5	1,144	5							
	Values are	18	16-20 hrs	0	0	13	5	199	3	774	3							
	estimated number of hours per	23	21-25 hrs	0	0	2	1	65	1	253	1							
	week.)	28	26-30 hrs	0	0	0	0	23	0	68	0							
	,	33	More than 30 hrs	0	0	0	0	25	0	102	0							
			Total	16	100	283	100	6,821	100	24,009	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

									··· 0	otate t		,						
irst-Year Stu	idents <sup>a</sup> in					Frequer	ıcy Di	stribution	S				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Nat	ural Sci			Fitchburg St	tate	New Engla Public	nd	Nat. Publi Masters		All Nat. Pul	blic	Fitchburg State	New E	ngland	first-year stua Nat. Publi	· · ·	ed with  All Nat.	Public
Item wording	Variable													Effect		Effect		Effec
or description	name <sup>1</sup>	Values <sup>n</sup>		Count	%	Count	%	Count	%	Count	%	Mean	Mean	size n	Mean	size <sup>n</sup>	Mean	size '
d. Working for pay	tmworkoffhrs	0	0 hrs	6	38	142	50	4,563	67	16,775	70							
off campus	(Recoded version	3	1-5 hrs	1	6	16	6	308	5	1,021	4							
	of tmworkoff	8	6-10 hrs	3	19	35	12	413	6	1,228	5							
	created by NSSE.	13	11-15 hrs	1	6	21	7	406	6	1,285	5							
	Values are estimated number	18	16-20 hrs	2	13	39	14	487	7	1,474	6							
	of hours per	23	21-25 hrs	2	13	18	6	285	4	981	4							
	week.)	28	26-30 hrs	1	6	4	1	163	2	558	2							
		33	More than 30 hrs	0	0	8	3	201	3	676	3							
Estimated number of			Total	16	100	283	100	6,826	100	23,998	100							
hours working for pay	(Continuous variable created by NSSE)																	
e. Doing community	tmservicehrs	0	0 hrs	10	63	188	66	3,812	56	13,206	55							
service or volunteer	(Recoded version	3	1-5 hrs	4	25	61	22	2,119	31	7,689	32							
work	of tmservice	8	6-10 hrs	1	6	15	5	504	7	1,719	7							
	created by NSSE.	13	11-15 hrs	1	6	11	4	191	3	698	3							
	Values are	18	16-20 hrs	0	0	6	2	121	2	398	2							
	estimated number	23	21-25 hrs	0	0	2	1	29	0	149	1							
	of hours per week.)	28	26-30 hrs	0	0	0	0	17	0	52	0							
	week.)	33	More than 30 hrs	0	0	0	0	30	0	94	0							
			Total	16	100	283	100	6,823	100	24,005	100							
f. Relaxing and	tmrelaxhrs	0	0 hrs	0	0	5	2	152	2	442	2							
socializing (time with	(Recoded version	3	1-5 hrs	4	25	53	19	1,520	22	5,216	22							
friends, video games,	of tmrelax created	8	6-10 hrs	5	31	72	26	1,829	27	6,721	28							
TV or videos, keeping up with friends online,	by NSSE. Values	13	11-15 hrs	5	31	57	20	1,418	21	5,009	21							
etc.)	are estimated	18	16-20 hrs	1	6	44	16	879	13	3,105	13							
	number of hours	23	21-25 hrs	0	0	19	7	411	6	1,433	6							
	per week.)	28	26-30 hrs	1	6	10	4	200	3	675	3							
		33	More than 30 hrs	0	0	22	8	413	6	1,405	6							
			Total	16	100	282	100	6,822	100	24,006	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stu	udents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	atistical	Compari	sons <sup>k</sup>		
Health & Nat	ural Sci					New Engla	ınd	Nat. Publ				Ethalaharan Grada	New Er	ngland	first-year stua			
				Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg State	Puk		Nat. Publi		All Nat.	
Item wording or description	Variable name <sup>I</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effec size
g. Providing care for	tmcarehrs	0	0 hrs	13	81	199	70	5,225	77	18,831	79							
dependents (children,	(Recoded version	3	1-5 hrs	2	13	35	12	745	11	2,415	10							
parents, etc.)	of tmcare created	8	6-10 hrs	0	0	26	9	347	5	1,040	4							
	by NSSE. Values	13	11-15 hrs	1	6	9	3	204	3	642	3							
	are estimated	18	16-20 hrs	0	0	7	2	116	2	400	2							
	number of hours	23	21-25 hrs	0	0	5	2	54	1	200	1							
	per week.)	28	26-30 hrs	0	0	1	0	14	0	63	0							
		33	More than 30 hrs	0	0	2	1	115	2	384	2							
			Total	16	100	284	100	6,820	100	23,975	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	8	50	119	42	2,699	40	9,374	39							
(driving, walking, etc.)	(Recoded version	3	1-5 hrs	6	38	83	29	2,460	36	9,053	38							
	of tmcommute	8	6-10 hrs	1	6	52	18	882	13	3,064	13							
	created by NSSE.	13	11-15 hrs	1	6	8	3	379	6	1,217	5							
	Values are	18	16-20 hrs	0	0	12	4	186	3	612	3							
	estimated number of hours per	23	21-25 hrs	0	0	5	2	71	1	268	1							
	week.)	28	26-30 hrs	0	0	0	0	38	1	121	1							
		33	More than 30 hrs	0	0	7	2	116	2	324	1							
			Total	16	100	286	100	6,831	100	24,033	100							
16. Of the time you sp	end preparing for	class i	n a typical 7-day week	k, about how	much	is on assigne	ed read	ing?										
	reading	1	Very little	1	6	13	5	839	12	3,098	13							
	_	2	Some	5	31	108	38	2,334	34	8,405	35							
		3	About half	4	25	83	29	1,923	28	6,783	28							
		4	Most	5	31	59	21	1,261	18	4,281	18							
		5	Almost all	1	6	21	7	469	7	1,466	6							
			Total	16	100	284	100	6,826	100	24,033	100							
	tmreadinghrs																	
of tmprephrs ba	iable created by NSSE sed on reading, where at half=.50; Most=.75	e Very li	ttle=.10; Some=.25;															



Frequencies and Statistical Comparisons: Health & Natural Sci

Eirst-Vaar St									0	State t		0.0.0						
i ii st-Tear St	udents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	tistical	Comparis	sons <sup>k</sup>		
Health & Na	tural Sci			Fitchburg St	tate	New Engla	ınd	Nat. Publ Masters	С	All Nat. Put	olic	Fitchburg State	New En	gland	irst-year stud Nat. Public		All Nat.	Public
Item wording	Variable													Effect		Effect		Effe
or description	name <sup>1</sup>	Values "	· · · · · · · · · · · · · · · · · · ·	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size
	tmreadinghrscol	1	0 hrs	0	0	0	0	26	0	82	0							
	(Collapsed version of tmreadinghrs	2	More than zero, up to 5 hrs	8	50	146	51	3,532	52	12,294	51							
	created by NSSE.)	3	More than 5, up to 10 hrs	4	25	86	30	1,929	28	6,902	29							
		4	More than 10, up to 15 hrs	2	13	32	11	654	10	2,398	10							
		5	More than 15, up to 20 hrs	0	0	9	3	343	5	1,192	5							
		6	More than 20, up to 25 hrs	2	13	7	2	241	4	804	3							
		7	More than 25 hrs	0	0	4	1	92	1	292	1							
			Total	16	100	284	100	6,817	100	23,964	100							
7. How much has ve	our experience at th	is insti	tution contributed to	vour knowled	ge, sk	ills, and ner	sonal d	evelopmen	in th	e following a	areas?	•						
a. Writing clearly and	pgwrite	1		3	19	9	3	423	6	1,780	7							
effectively	18"	2	Some	4	25	82	29	1,834	27	6,795	28							
		3	Ouite a bit	9	56	144	50	3.099	45	10.397	43							
		3	Quite a bit Very much	9	56 0	144 52	50 18	3,099 1,465	45 21	10,397 5,054	43 21							
			Very much	0	0	52	18	1,465	21	5,054	21							
b. Speaking clearly and	pgspeak		Very much Total		0 100			1,465 6,821	21 100	5,054 24,026	21 100							
b. Speaking clearly and effectively	pgspeak		Very much	0 16	0	52 287	18 100	1,465 6,821 659	21 100 10	5,054 24,026 2,838	21 100 12							
	pgspeak	1	Very much Total Very little	0 16 5	0 100 31	52 287 25	18 100 9	1,465 6,821	21 100	5,054 24,026	21 100							
	pgspeak	1 2	Very much Total Very little Some	0 16 5 4	0 100 31 25	52 287 25 97	18 100 9 34	1,465 6,821 659 2,102	21 100 10 31	5,054 24,026 2,838 7,799	21 100 12 32							
	pgspeak	1 2 3	Very much Total Very little Some Quite a bit	0 16 5 4	0 100 31 25 38	52 287 25 97 120	18 100 9 34 42	1,465 6,821 659 2,102 2,726	21 100 10 31 40	5,054 24,026 2,838 7,799 8,926	21 100 12 32 37							
effectively		1 2 3	Very much Total Very little Some Quite a bit Very much	0 16 5 4 6	0 100 31 25 38 6	52 287 25 97 120 45	18 100 9 34 42 16	1,465 6,821 659 2,102 2,726 1,337	21 100 10 31 40 20	5,054 24,026 2,838 7,799 8,926 4,464	21 100 12 32 37 19							
		1 2 3	Very much Total Very little Some Quite a bit Very much Total	0 16 5 4 6 1	0 100 31 25 38 6 100	52 287 25 97 120 45 287	18 100 9 34 42 16 100	1,465 6,821 659 2,102 2,726 1,337 6,824	21 100 10 31 40 20 100	5,054 24,026 2,838 7,799 8,926 4,464 24,027	21 100 12 32 37 19 100							
effectively  c. Thinking critically ar		1 2 3 4	Very much Total  Very little Some Quite a bit Very much Total  Very little	0 16 5 4 6 1 16	0 100 31 25 38 6 100	52 287 25 97 120 45 287	18 100 9 34 42 16 100 3	1,465 6,821 659 2,102 2,726 1,337 6,824	21 100 10 31 40 20 100	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547	21 100 12 32 37 19 100							
effectively  c. Thinking critically ar		1 2 3 4	Very much Total  Very little Some Quite a bit Very much Total  Very little Some Quite a bit	0 16 5 4 6 1 16 3 2	0 100 31 25 38 6 100 19 13 50	52 287 25 97 120 45 287 9 65	18 100 9 34 42 16 100 3 23	1,465 6,821 659 2,102 2,726 1,337 6,824 180 1,312 3,108	21 100 10 31 40 20 100 3 19 45	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547 10,909	21 100 12 32 37 19 100 3 19 45							
effectively  c. Thinking critically ar		1 2 3 4 1 2 3	Very much Total  Very little Some Quite a bit Very much Total  Very little Some	0 16 5 4 6 1 16 3 2	0 100 31 25 38 6 100 19	52 287 25 97 120 45 287 9 65	18 100 9 34 42 16 100 3 23 48	1,465 6,821 659 2,102 2,726 1,337 6,824 180 1,312	21 100 10 31 40 20 100 3 19	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547	21 100 12 32 37 19 100 3							
c. Thinking critically ar analytically	nd pgthink	1 2 3 4 1 2 3	Very much Total  Very little Some Quite a bit Very much Total  Very little Some Quite a bit Very much	0 16 5 4 6 1 16 3 2 8 3	0 100 31 25 38 6 100 19 13 50	52 287 25 97 120 45 287 9 65 137	18 100 9 34 42 16 100 3 23 48 26	1,465 6,821 659 2,102 2,726 1,337 6,824 180 1,312 3,108 2,233	21 100 10 31 40 20 100 3 19 45 33	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547 10,909 7,890	21 100 12 32 37 19 100 3 19 45 33							
c. Thinking critically ar analytically	nd pgthink	1 2 3 4 1 2 3 4	Very much Total  Very little Some Quite a bit Very much Total  Very little Some Quite a bit Very much Total  Total	0 16 5 4 6 1 16 3 2 8 3 16	0 100 31 25 38 6 100 19 13 50 19	52 287 25 97 120 45 287 9 65 137 76 287	18 100 9 34 42 16 100 3 23 48 26 100	1,465 6,821 659 2,102 2,726 1,337 6,824 180 1,312 3,108 2,233 6,833	21 100 10 31 40 20 100 3 19 45 33 100	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547 10,909 7,890 24,036	21 100 12 32 37 19 100 3 19 45 33 100							
c. Thinking critically ar analytically d. Analyzing numerical	nd pgthink	1 2 3 4 1 2 3 4	Very much Total  Very little Some Quite a bit Very much Total  Very little Some Quite a bit Very much Total  Very much Total  Very much Total  Very little	0 16 5 4 6 1 16 3 2 8 3 16	0 100 31 25 38 6 100 19 13 50 19 100	52 287 25 97 120 45 287 9 65 137 76 287	18 100 9 34 42 16 100 3 23 48 26 100 8	1,465 6,821 659 2,102 2,726 1,337 6,824 180 1,312 3,108 2,233 6,833 619	21 100 31 40 20 100 3 19 45 33 100	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547 10,909 7,890 24,036 2,082 7,176	21 100 12 32 37 19 100 3 19 45 33 100							
c. Thinking critically ar analytically  d. Analyzing numerical and statistical	nd pgthink	1 2 3 4 1 2 3 4 1 2 2	Very much Total  Very little Some Quite a bit Very much Total  Very little Some Quite a bit Very much Total  Very much Total  Very much Total  Very little Some	0 16 5 4 6 1 16 3 2 8 3 16	0 100 31 25 38 6 100 19 13 50 19 100	52 287 25 97 120 45 287 9 65 137 76 287 22 105	18 100 9 34 42 16 100 3 23 48 26 100 8 37	1,465 6,821 659 2,102 2,726 1,337 6,824 180 1,312 3,108 2,233 6,833 619 2,111	21 100 10 31 40 20 100 3 19 45 33 100 9	5,054 24,026 2,838 7,799 8,926 4,464 24,027 690 4,547 10,909 7,890 24,036 2,082	21 100 12 32 37 19 100 3 19 45 33 100 9							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year Stud	dents <sup>a</sup> in					Frequer	ncy Di	stribution	ıS				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Natu	ıral Sci					New Engla	nd	Nat. Publ	ic				New E	ngland	first-year stud	ents compare	ed with	
				Fitchburg S	tate	Public		Masters	;	All Nat. Pul	blic	Fitchburg State	Pul	olic	Nat. Publi		All Nat.	
Item wording or description	Variable name <sup>l</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size "	Mean	Effect size "
e. Acquiring job- or work-	pgwork	1	Very little	5	31	53	19	994	15	3,752	16							
related knowledge and		2	Some	5	31	105	37	2,444	36	8,300	35							
skills		3	Quite a bit	4	25	89	31	2,238	33	7,904	33							
		4	Very much	2	13	39	14	1,157	17	4,090	17							
			Total	16	100	286	100	6,833	100	24,046	100							
f. Working effectively	pgothers	1	Very little	3	19	20	7	408	6	1,631	7							
with others		2	Some	5	31	84	29	1,885	28	6,811	28							
		3	Quite a bit	5	31	129	45	2,926	43	9,971	41							
		4	Very much	3	19	54	19	1,615	24	5,649	23							
			Total	16	100	287	100	6,834	100	24,062	100							
g. Developing or	pgvalues	1	Very little	5	31	32	11	731	11	2,834	12							
clarifying a personal		2	Some	4	25	86	30	2,059	30	7,125	30							
code of values and ethics		3	Quite a bit	6	38	118	41	2,637	39	9,073	38							
ethics		4	Very much	1	6	50	17	1,408	21	5,020	21							
			Total	16	100	286	100	6,835	100	24,052	100							
h. Understanding people	pgdiverse	1	Very little	1	6	31	11	580	8	2,104	9							
of other backgrounds		2	Some	6	38	67	24	1,886	28	6,639	28							
(economic, racial/ethnic, political,		3	Quite a bit	7	44	124	44	2,572	38	9,056	38							
religious, nationality,		4	Very much	2	13	63	22	1,790	26	6,254	26							
etc.)			Total	16	100	285	100	6,828	100	24,053	100							
i. Solving complex real-	pgprobsolve	1	Very little	3	19	38	13	734	11	2,731	11							
world problems		2	Some	6	38	100	35	2,363	35	8,181	34							
		3	Quite a bit	6	38	114	40	2,514	37	8,593	36							
		4	Very much	1	6	33	12	1,221	18	4,541	19							
			Total	16	100	285	100	6,832	100	24,046	100							
j. Being an informed and	pgcitizen	1	Very little	3	19	26	9	734	11	2,692	11							
active citizen		2	Some	6	38	92	32	2,189	32	7,589	32							
		3	Quite a bit	5	31	111	39	2,562	38	8,816	37							
		4	Very much	2	13	56	20	1,340	20	4,915	20							
			Total	16	100	285	100	6,825	100	24,012	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

First-Year St	udents <sup>a</sup> in					Frequer	ncy Di	stribution	S				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Na	tural Sci													Your	first-year stud	ents compar	ed with	
ileaith & iva	turar 5ci					New Engla	nd	Nat. Publ	c				New E	ngland				
				Fitchburg S	tate	Public		Masters		All Nat. Pul	olic	Fitchburg State	Pul	olic	Nat. Publi	Masters	All Nat.	. Public
Item wording	Variable		_											Effect		Effect		Effect
or description	name'	Values'	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	<u>%</u>	Mean	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
18. How would you ev	valuate your enti	re educa	tional experience at th	is institution	?													
	evalexp	1	Poor	2	13	5	2	95	1	394	2							
		2	Fair	3	19	56	20	887	13	3,069	13							
		3	Good	8	50	160	56	3,630	53	12,264	51							
		4	Excellent	3	19	65	23	2,226	33	8,340	35							
			Total	16	100	286	100	6,838	100	24,067	100							
19. If you could start	over again, woul	d you go	to the same institution	you are nov	v atte	ending?												
	sameinst	1	Definitely no	2	13	17	6	262	4	848	4							
		2	Probably no	3	19	43	15	878	13	3,028	13							
		3	Probably yes	5	31	141	49	3,089	45	10,526	44							
		4	Definitely yes	6	38	86	30	2,615	38	9,697	40							
			Total	16	100	287	100	6,844	100	24,099	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Freque	ncy Di	stribution	S				Sta	atistical	Comparis	sons <sup>k</sup>		
Health & Nat	ural Sci					New Engla	nd	Nat. Publ	ic			-	New E		Your seniors c	ompared wit	h	
				Fitchburg St	ate	Public		Masters		All Nat. Pu	blic	Fitchburg State	Pul	olic	Nat. Public	Masters	All Nat.	Public
Item wording or description	Variable name <sup>I</sup>	Values "	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size "
1. During the current s	chool year, abou	t how o	ften have you done th	e following?														
a. Asked questions or	askquest	1	Never	0	0	10	3	212	2	926	3							
contributed to course		2	Sometimes	10	26	91	23	2,547	28	9,262	30							
discussions in other ways		3	Often	13	34	120	30	2,893	32	9,893	32	3.1	3.2	03	3.1	.09	3.0	.15
ways		4	Very often	15	39	173	44	3,430	38	11,093	36							
			Total	38	100	394	100	9,082	100	31,174	100							
b. Prepared two or more	drafts	1	Never	10	26	64	16	1,848	20	6,828	22							
drafts of a paper or		2	Sometimes	12	32	145	37	3,290	36	11,248	36							
assignment before turning it in		3	Often	9	24	107	27	2,321	26	7,935	26	2.3	2.5	16	2.4	06	2.4	02
turning it in		4	Very often	7	18	76	19	1,587	18	5,067	16							
			Total	38	100	392	100	9,046	100	31,078	100							
c. Come to class without	unpreparedr	1	Very often	1	3	12	3	488	5	1,812	6							
completing readings or	(Reverse-coded	2	Often	3	8	67	17	1,245	14	4,644	15							
assignments	version of	3	Sometimes	24	63	209	53	5,114	56	17,507	56	3.1	3.0	.13	3.0	.17	3.0	.21
	unprepared	4	Never	10	26	105	27	2,212	24	7,186	23							
	created by NSSE.)		Total	38	100	393	100	9,059	100	31,149	100							
d. Attended an art exhibit,	attendart	1	Never	15	39	217	55	4,316	48	14,398	46							
play, or other arts		2	Sometimes	16	42	133	34	3,434	38	12,014	39							
performance (dance, music, etc.)		3	Often	5	13	33	8	940	10	3,337	11	1.8	1.6 *	.34	1.7	.16	1.7	.13
music, etc.)		4	Very often	2	5	10	3	382	4	1,428	5							
			Total	38	100	393	100	9,072	100	31,177	100		_					
e. Asked another student	CLaskhelp	1	Never	5	13	48	12	962	11	3,501	11							
to help you understand		2	Sometimes	14	37	193	49	3,846	42	13,273	43							
course material		3	Often	14	37	112	29	2,776	31	9,457	30	2.5	2.4	.17	2.5	03	2.5	01
		4	Very often	5	13	39	10	1,482	16	4,927	16							
			Total	38	100	392	100	9,066	100	31,158	100							
f. Explained course	CLexplain	1	Never	2	5	12	3	301	3	1,143	4							
material to one or more		2	Sometimes	14	37	143	36	2,904	32	10,140	33							
students		3	Often	16	42	153	39	3,554	39	12,240	39	2.7	2.8	14	2.9	22	2.8	20
		4	Very often	6	16	86	22	2,308	25	7,646	25							
			Total	38	100	394	100	9,067	100	31,169	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						_							C.			k		
seniors in						Frequer	icy Di	stribution	S				Sta		Comparis			
Health & Natu	description name Values Response options			Fitchburg St	ate	New Engla Public	nd	Nat. Publi Masters		All Nat. Pul	olic	Fitchburg State	New Er	ngland	Your seniors co		All Nat. F	 Public
Item wording														Effect		Effect		Effect
g. Prepared for exams by discussing or working		1	Never	Count 4	11	Count 66	17	1,279	14	4,623	15	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
through course material with other students		2	Sometimes Often	12 14	32 37	150 122	38 31	3,139 2,719	35 30	11,048 9,114	35 29	2.7	2.4	.29	2.6	.10	2.6	.13
with other students		4	Very often Total	8 38	21 100	54 392	14 100	1,934 9,071	21 100	6,389 31,174	20 100							
h. Worked with other students on course projects or assignments	CLproject	1 2	Never Sometimes	2 15	5 39	19 173	5 44	437 2,747	5 30	1,820 10,347	6 33	2.7						
		3 4	Often Very often Total	15 6 38	39 16 100	138 62 392	35 16 100	3,538 2,355 9,077	39 26 100	11,661 7,350 31,178	37 24 100	2.7	2.6	.05	2.9	24	2.8	15
i. Given a course presentation	present	1 2 3 4	Never Sometimes Often Very often	6 11 14 7	16 29 37 18	42 154 132 65	11 39 34 17	894 3,077 3,089 2,020	10 34 34 22	3,786 11,566 9,849 6,003	12 37 32 19	2.6	2.6	.02	2.7	12	2.6	.00
. During the current sch	nool year, aho	ut how a	Total	a following?	100	393	100	9,080	100	31,204	100							
Combined ideas from different courses when completing assignments	RIintegrate	1 2 3 4	Never Sometimes Often Very often Total	1 14 14 14 9 38	3 37 37 24 100	18 119 161 93 391	5 30 41 24 100	254 2,316 3,850 2,652 9,072	3 26 42 29 100	938 8,472 13,087 8,676 31,173	3 27 42 28 100	2.8	2.8	03	3.0	20	2.9	16
b. Connected your learning to societal problems or issues	RIsocietal	1 2 3 4	Never Sometimes Often Very often Total	3 13 15 7 38	8 34 39 18 100	32 120 151 89 392	8 31 39 23 100	584 2,844 3,398 2,241 9,067	6 31 37 25 100	2,228 10,055 11,526 7,338 31,147	7 32 37 24 100	2.7	2.8	08	2.8	14	2.8	10
c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments	RIdiverse	1 2 3 4	Never Sometimes Often Very often Total	9 18 9 2 38	24 47 24 5	62 148 112 71 393	16 38 28 18 100	1,164 3,340 2,776 1,788 9,068	13 37 31 20 100	4,218 11,621 9,472 5,832 31,143	14 37 30 19 100	2.1	2.5 *	40	2.6 **	49	2.5 **	46



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Freque	ncy Di	stribution	ıS				Sta	atistica	l Compari:	sons <sup>k</sup>		
Health & Natu	alth & Natural Sci														Your seniors o	compared wit	rh	
				Fitchburg S	tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pu	hlic	Fitchburg State	New E	•	Nat. Public	· Masters	All Nat.	Public
Item wording	Variable			Titeribuig 5		Tublic		Widsters		71111441.14			1 4,	Effect	Trutt T don	Effect	71111441	Effect
or description	name '	Values '		Count	%	Count	%	Count	%	Count	<u>%</u>	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
d. Examined the strengths and weaknesses of	RIownview	1	Never	4	11	25	6	431	5	1,508	5							
your own views on a		2	Sometimes	10	26 47	142	36 39	2,766	31 43	9,612	31 43	2.7	2.7	0.1	2.0	1.5	2.0	
topic or issue			Often Vary often	18		153 72	18	3,912 1,957	22	13,456 6,553	21	4.1	2.7	01	2.8	16	2.8	15
		4	Very often Total	6 38	16 100	392	100	,	100	31,129	100							
e. Tried to better	Dimonomo ot	1	Never	36	3			9,066	3	900	3							
understand someone	RIperspect	_		10		11	3 28											
else's views by		2	Sometimes Often	10	26 50	112 177	45	2,244	25 44	7,912 13,732	25 44	2.9	2.0	00	2.0	10	2.0	00
imagining how an issue		4	Very often	8	21	94	24	4,016 2,531	28	8,595	28	2.9	2.9	.00	3.0	10	3.0	09
looks from their		4	Total	38	100	394	100	9,060	100	31,139	100							
perspective			Total	36	100	374	100	9,000	100	31,139	100							
f. Learned something that	RInewview	1	Never	1	3	12	3	171	2	581	2							
changed the way you understand an issue or		2	Sometimes	12	32	100	26	2,309	25	8,153	26							
concept		3	Often	17	45	190	48	4,124	46	14,082	45	2.8	2.9	09	3.0	18	3.0	16
		4	Very often	8	21	90	23	2,457	27	8,289	27							
			Total	38	100	392	100	9,061	100	31,105	100							
g. Connected ideas from	RIconnect	1	Never	1	3	3	1	63	1	232	1							
your courses to your prior experiences and		2	Sometimes	5	13	66	17	1,277	14	4,753	15							
knowledge		3	Often	17	45	195	50	4,322	48	14,678	47	3.2	3.1	.09	3.2	01	3.2	.02
		4	Very often	15	39	128	33	3,385	37	11,424	37							
			Total	38	100	392	100	9,047	100	31,087	100							
3. During the current scl	hool year, abo	ut how o	often have you done th	e following?														
a. Talked about career	SFcareer	1	Never	5	13	49	12	1,238	14	4,636	15							
plans with a faculty		2	Sometimes	10	26	154	39	3,471	38	12,415	40							
member		3	Often	15	39	105	27	2,369	26	7,996	26	2.7	2.6	.11	2.6	.12	2.5	.19
		4	Very often	8	21	85	22	1,989	22	6,101	20							
			Total	38	100	393	100	9,067	100	31,148	100							
b. Worked with a faculty	SFotherwork	1	Never	16	42	165	42	3,454	38	12,101	39							
member on activities		2	Sometimes	11	29	112	28	2,694	30	9,498	31							
other than coursework (committees, student		3	Often	8	21	72	18	1,583	17	5,363	17	1.9	2.0	04	2.1	13	2.1	10
groups, etc.)		4	Very often	3	8	45	11	1,326	15	4,158	13							
5 1 / "/			Total	38	100	394	100	9,057	100	31,120	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in	eniors <sup>a</sup> in ealth & Natural Sci					Frequer	ncy Di	stribution	S				Sta	atistical	Comparis	ons <sup>k</sup>		
Health & Natu	ral Sci					New Engla	nd	Nat. Publi				- -	New E	ngland	Your seniors co			
	Mantalda			Fitchburg S	ate	Public		Masters		All Nat. Pul	olic	Fitchburg State	Pul		Nat. Public		All Nat.	
Item wording or description	Variable name <sup>l</sup>	Values '	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size "	Mean	Effect size "
c. Discussed course	SFdiscuss	1	Never	7	18	82	21	2,033	22	7,565	24							
topics, ideas, or		2	Sometimes	16	42	163	42	3,652	40	12,939	42							
concepts with a faculty member outside of		3	Often	14	37	95	24	2,122	23	6,818	22	2.2	2.3	07	2.3	05	2.2	.02
class		4	Very often	1	3	52	13	1,243	14	3,759	12							
			Total	38	100	392	100	9,050	100	31,081	100							
d. Discussed your	SFperform	1	Never	5	13	71	18	1,808	20	6,768	22							
academic performance		2	Sometimes	18	47	157	40	3,905	43	13,806	44							
with a faculty member		3	Often	9	24	112	28	2,145	24	6,993	22	2.4	2.4	.05	2.3	.13	2.2	.20
		4	Very often	6	16	53	13	1,187	13	3,518	11							
			Total	38	100	393	100	9,045	100	31,085	100							
. During the current scl	hool year, how	much l	nas your coursework e	mphasized th	e follo	wing?												
a. Memorizing course	memorize	1	Very little	0	0	24	6	365	4	1,236	4							
material		2	Some	11	29	93	24	2,087	23	7,263	23							
		3	Quite a bit	20	53	167	43	3,902	43	13,309	43	2.9	2.9	02	3.0	11	3.0	11
		4	Very much	7	18	107	27	2,708	30	9,331	30							
			Total	38	100	391	100	9,062	100	31,139	100							
b. Applying facts,	HOapply	1	Very little	0	0	10	3	214	2	775	2							
theories, or methods to		2	Some	8	21	73	19	1,527	17	5,625	18							
practical problems or new situations		3	Quite a bit	21	55	179	46	4,083	45	14,101	45	3.0	3.1	09	3.1	15	3.1	11
new situations		4	Very much	9	24	130	33	3,248	36	10,636	34							
			Total	38	100	392	100	9,072	100	31,137	100							
c. Analyzing an idea,	HOanalyze	1	Very little	1	3	20	5	304	3	1,069	3							
experience, or line of		2	Some	13	34	78	20	1,831	20	6,800	22							
reasoning in depth by examining its parts		3	Quite a bit	18	47	177	45	3,891	43	13,399	43	2.8	3.0	28	3.1 *	37	3.0 *	32
examining its parts		4	Very much	6	16	117	30	3,026	33	9,842	32							
			Total	38	100	392	100	9,052	100	31,110	100				•		•	
d. Evaluating a point of	HOevaluate	1	Very little	4	11	25	6	531	6	1,988	6							
view, decision, or		2	Some	9	24	110	28	2,212	24	8,068	26							
information source		3	Quite a bit	20	53	167	42	3,799	42	12,927	42	2.7	2.8	16	2.9	27	2.9	22
		4	Very much	5	13	91	23	2,512	28	8,105	26							
			Total	38	100	393	100	9,054	100	31,088	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ncy Di	stribution	s				St	atistica	l Compari:	sons <sup>k</sup>		
Health & Natu	alth & Natural Sci					New Engla	nd	Nat. Publ	С				New E		Your seniors o	compared wi	th	
				Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg State	Pul	blic	Nat. Public	Masters	All Nat.	Public
Item wording	Variable													Effect		Effect		Effect
or description  e. Forming a new idea or	name ' HOform	Values <sup>n</sup>	Very little	Count 3	8	Count 25	6	Count 423	<i>%</i>	1,507	5	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
understanding from	HOIOIIII	2	Some	9	24	99	25	2,259	25	8,034	26							
various pieces of		3	Ouite a bit	20	53	177	45	3,852	43	13,370	43	2.8	2.9	11	2.9	20	2.9	17
information		4	Very much	6	16	92	23	2,522	28	8,179	26	2.0	2.9	11	2.9	20	2.9	1/
		4	Total	38	100	393	100	9.056	100	31,090	100							
5 Dania - 4h							100	,,,,,,,	100	21,070								
<ol><li>During the current scl a. Clearly explained</li></ol>	ETgoals	nat exte	Very little	ors done the 1	3	<b>ng:</b> 7	2	141	2	470	2							
course goals and	Ligouis	2	Some	5	13	55	14	1,329	15	4,901	16							
requirements		3	Ouite a bit	18	47	165	42	3,946	43	13,818	44	3.2	3.2	08	3.2	06	3.2	02
		4	Very much	14	37	166	42	3,656	40	11,978	38	J. <u>H</u>	3.2	00	3.2	00	3.2	02
			Total	38	100	393	100	9,072	100	31,167	100							
b. Taught course sessions	ETorganize	1	Very little	1	3	7	2	213	2	769	2							
in an organized way	J	2	Some	6	16	75	19	1,458	16	5,416	17							
		3	Quite a bit	16	42	157	40	4,072	45	14,126	45	3.2	3.2	.03	3.2	.03	3.1	.08
		4	Very much	15	39	152	39	3,325	37	10,840	35							
			Total	38	100	391	100	9,068	100	31,151	100							
c. Used examples or	ETexample	1	Very little	0	0	8	2	174	2	712	2							
illustrations to explain		2	Some	6	16	76	19	1,414	16	5,227	17							
difficult points		3	Quite a bit	15	41	157	40	3,733	41	13,031	42	3.3	3.1	.16	3.2	.07	3.2	.12
		4	Very much	16	43	149	38	3,745	41	12,160	39							
			Total	37	100	390	100	9,066	100	31,130	100							
d. Provided feedback on a	ETdraftfb	1	Very little	4	11	36	9	827	9	3,367	11							
draft or work in		2	Some	9	24	97	25	2,524	28	9,445	30							
progress		3	Quite a bit	16	42	151	39	3,174	35	10,587	34	2.8	2.8	05	2.8	03	2.7	.06
		4	Very much	9	24	106	27	2,538	28	7,708	25							
			Total	38	100	390	100	9,063	100	31,107	100							
e. Provided prompt and	ETfeedback	1	Very little	4	11	28	7	590	7	2,378	8					<u> </u>	<u> </u>	<u> </u>
detailed feedback on tests or completed		2	Some	11	29	96	25	2,380	26	9,092	29							
assignments		3	Quite a bit	15	39	166	43	3,637	40	12,129	39	2.7	2.9	18	2.9	19	2.8	09
Ü		4	Very much	8	21	100	26	2,438	27	7,448	24							
			Total	38	100	390	100	9,045	100	31,047	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ncy Di	stribution	S				Sta		l Comparis			
Health & Nat	em wording Variable name' Values Response options varing the current school year, about how often have you don't			Fitchburg St	ate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pul	olic	Fitchburg State	New E		Your seniors co	·	All Nat. F	Public
Item wording		Values <sup>n</sup>	n Response antions	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
					70	count	70	count	,,,	count		Wedn	Wicum		Wicum	3120	Wicum	3/20
a. Reached conclusions	QRconclude	1	Never	5	13	40	10	718	8	2,544	8							
based on your own		2	Sometimes	15	39	127	32	2,958	33	10,157	33							
analysis of numerical		3	Often	15	39	148	38	3,363	37	11,600	37	2.4	2.7	27	2.7 *	36	2.7 *	34
information (numbers,		4	Very often	3	8	76	19	2,034	22	6,787	22							
graphs, statistics, etc.)			Total	38	100	391	100	9,073	100	31,088	100				•		•	
b. Used numerical	QRproblem	1	Never	15	39	83	21	1,570	17	5,442	18							
information to examine		2	Sometimes	12	32	151	39	3,458	38	11,987	39							
a real-world problem o	or	3	Often	9	24	108	28	2,563	28	8,781	28	1.9	2.3 *	38	2.4 **	51	2.4 **	50
issue (unemployment,		4	Very often	2	5	47	12	1,455	16	4,879	16	242	<b>—</b>	.50		.01		
climate change, public health, etc.)		•	Total	38	100	389	100	9,046	100	31,089	100		•		•		•	
nearii, etc.)			Total	36	100	307	100	2,040	100	31,007	100							
c. Evaluated what others	QRevaluate	1	Never	8	21	63	16	1,186	13	4,054	13							
have concluded from		2	Sometimes	16	42	161	41	3,451	38	11,885	38							
numerical information		3	Often	12	32	112	29	2,960	33	10,165	33	2.2	2.4	21	2.5 *	34	2.5 *	34
		4	Very often	2	5	55	14	1,458	16	5,008	16							
			Total	38	100	391	100	9,055	100	31,112	100				•		•	
. During the current	school year, about	how r	nany papers, reports,	or other writi	ng ta	sks of the fol	lowing	lengths ha	ve you	ı been assigı	ned? (	Include those not	yet compl	eted.)				
a. Up to 5 pages	wrshortnum	0	None	4	11	19	5	554	6	2,168	7							
	(Recoded version	1.5	1-2	8	21	54	14	1,744	19	6,331	20							
	of wrshort created	4	3-5	14	37	125	32	2,684	30	9,091	29							
	by NSSE. Values	8	6-10	5	13	94	24	1,963	22	6,456	21	6.3	7.7	22	7.2	14	7.0	11
	are estimated	13	11-15	2	5	49	13	877	10	3,030	10							
	number of papers, reports, etc.)	18	16-20	2	5	20	5	489	5	1,619	5							
	reports, etc.)	23	More than 20	3	8	29	7	674	8	2,203	7							
			Total	38	100	390	100	8,985	100	30,898	100							
b. Between 6 and 10	wrmednum	0	None	11	30	78	20	2,164	24	7,998	26							
pages	(Recoded version	1.5	1-2	14	38	154	39	3,348	37	11,281	37							
	of wrmed created	4	3-5	8	22	97	25	2,102	23	6,961	23							
	by NSSE. Values	8	6-10	2	5	42	11	871	10	2,909	9	2.7	3.3	15	3.1	11	3.0	09
	are estimated	13	11-15	1	3	10	3	266	3	920	3							
	number of papers, reports, etc.)	18	16-20	1	3	7	2	114	1	350	1							
	reports, etc.)	23	More than 20	0	0	3	1	93	1	316	1							
			Total	37	100	391	100	8,958	100	30,735	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

						Frequer	ncy Dis	tribution	S				Sta		Compari			
Health & Nat			Fitchburg St	tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State	New E	ngland olic	Your seniors o	c Masters	All Nat.		
Item wording or description	Variable name <sup>l</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effec size '
c. 11 pages or more	wrlongnum	0	None	25	66	175	45	4,579	51	16,049	52	cui	· · · · ·	- 5,20	,,,can	5,20	mean	5,20
	(Recoded version	1.5	1-2	8	21	155	40	3,074	34	10,318	34							
	of wrlong created	4	3-5	1	3	37	9	757	8	2,533	8							
	by NSSE. Values	8	6-10	3	8	13	3	280	3	925	3	1.5	1.6	03	1.6	01	1.5	.00
	are estimated number of papers,	13	11-15	0	0	7	2	126	1	421	1							
	reports, etc.)	18	16-20	1	3	3	1	58	1	190	1							
	1	23	More than 20	0	0	0	0	56	1	212	1							
			Total	38	100	390	100	8,930	100	30,648	100							
Estimated number of assigned pages of	wrpages											63.6	73.0	12	69.3	07	67.6	05
student writing.	(Continuous variab from wrshort, wrm estimated pages of	ed, and	~															
. During the current	school year, abou	t how o	often have you had disc	cussions with	peopl	le from the f	ollowin	g groups?										
a. People of a race or	DDrace	1	Never	4	11	21	5	426	5	1,408	5							
ethnicity other than		_	g .:	0	2.4	0.5	22											
		2	Sometimes	9	24	86	22	2,070	23	7,100	23							
your own		3	Often	13	34	86 128	32	2,070 2,711	23 30	7,100 9,354	23 30	2.9	3.1	23	3.1	26	3.1	20
your own												2.9	3.1	23	3.1	26	3.1	20
your own		3	Often	13	34	128	32	2,711	30	9,354	30	2.9	3.1	23	3.1	26	3.1	20
	DDeconomic	3	Often Very often	13 12	34 32	128 159	32 40	2,711 3,861	30 43	9,354 13,300	30 43	2.9	3.1	23	3.1	26	3.1	26
b. People from an economic background		3 4	Often Very often Total	13 12 38	34 32 100	128 159 394	32 40 100	2,711 3,861 9,068	30 43 100	9,354 13,300 31,162	30 43 100	2.9	3.1	23	3.1	26	3.1	20
b. People from an		3 4	Often Very often Total Never	13 12 38 3	34 32 100 8	128 159 394 18	32 40 100 5	2,711 3,861 9,068 351	30 43 100 4	9,354 13,300 31,162 1,187	30 43 100 4	2.9	3.1	23	3.1	26	3.1	
b. People from an economic background		3 4 1 2	Often Very often Total Never Sometimes	13 12 38 3 10	34 32 100 8 27	128 159 394 18 91	32 40 100 5 23	2,711 3,861 9,068 351 2,080	30 43 100 4 23	9,354 13,300 31,162 1,187 6,983	30 43 100 4 22							
b. People from an economic background		3 4 1 2 3	Often Very often Total Never Sometimes Often	13 12 38 3 10 15	34 32 100 8 27 41	128 159 394 18 91 138	32 40 100 5 23 35	2,711 3,861 9,068 351 2,080 3,180	30 43 100 4 23 35	9,354 13,300 31,162 1,187 6,983 10,907	30 43 100 4 22 35							
b. People from an economic background other than your own		3 4 1 2 3	Often Very often Total Never Sometimes Often Very often	13 12 38 3 10 15 9	34 32 100 8 27 41 24	128 159 394 18 91 138 143	32 40 100 5 23 35 37	2,711 3,861 9,068 351 2,080 3,180 3,438	30 43 100 4 23 35 38	9,354 13,300 31,162 1,187 6,983 10,907 12,038	30 43 100 4 22 35 39							
b. People from an economic background other than your own  c. People with religious beliefs other than your	DDreligion	1 2 3 4	Often Very often Total Never Sometimes Often Very often Total	13 12 38 3 10 15 9 37	34 32 100 8 27 41 24 100	128 159 394 18 91 138 143 390	32 40 100 5 23 35 37 100	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049	30 43 100 4 23 35 38 100	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115	30 43 100 4 22 35 39 100	2.8						
b. People from an economic background other than your own c. People with religious	DDreligion	3 4 1 2 3 4	Often Very often Total Never Sometimes Often Very often Total Never	13 12 38 3 10 15 9 37	34 32 100 8 27 41 24 100	128 159 394 18 91 138 143 390	32 40 100 5 23 35 37 100 6	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511	30 43 100 4 23 35 38 100	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115	30 43 100 4 22 35 39 100							32
b. People from an economic background other than your own  c. People with religious beliefs other than your	DDreligion	3 4 1 2 3 4	Often Very often Total Never Sometimes Often Very often Total Never Sometimes	13 12 38 3 10 15 9 37	34 32 100 8 27 41 24 100 8 24	128 159 394 18 91 138 143 390 23	32 40 100 5 23 35 37 100 6 28	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511 2,142	30 43 100 4 23 35 38 100 6 24	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115 1,584 7,304	30 43 100 4 22 35 39 100 5 23	2.8	3.0	26	3.1	30	3.1	32
b. People from an economic background other than your own  c. People with religious beliefs other than your	DDreligion	3 4 1 2 3 4	Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often	13 12 38 3 10 15 9 37 3 9	34 32 100 8 27 41 24 100 8 24 42	128 159 394 18 91 138 143 390 23 110	32 40 100 5 23 35 37 100 6 28 28	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511 2,142 2,909	30 43 100 4 23 35 38 100 6 24 32	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115 1,584 7,304 10,094	30 43 100 4 22 35 39 100 5 23	2.8	3.0	26	3.1	30	3.1	32
b. People from an economic background other than your own  c. People with religious beliefs other than your own  d. People with political	DDreligion	3 4 1 2 3 4	Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Very often Very often	13 12 38 3 10 15 9 37 3 9 16	34 32 100 8 27 41 24 100 8 24 42 26	128 159 394 18 91 138 143 390 23 110 110	32 40 100 5 23 35 37 100 6 28 28 38	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511 2,142 2,909 3,495	30 43 100 4 23 35 38 100 6 24 32 39	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115 1,584 7,304 10,094 12,134	30 43 100 4 22 35 39 100 5 23 32 39	2.8	3.0	26	3.1	30	3.1	32
b. People from an economic background other than your own  c. People with religious beliefs other than your own  d. People with political views other than your	DDreligion	1 2 3 4	Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Very often Total Total Total Very often Total Total	13 12 38 3 10 15 9 37 3 9 16 10 38	34 32 100 8 27 41 24 100 8 24 42 26 100	128 159 394 18 91 138 143 390 23 110 110 148 391	32 40 100 5 23 35 37 100 6 28 28 38 100	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511 2,142 2,909 3,495 9,057	30 43 100 4 23 35 38 100 6 24 32 39 100	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115 1,584 7,304 10,094 12,134 31,116	30 43 100 4 22 35 39 100 5 23 32 39 100	2.8	3.0	26	3.1	30	3.1	32
b. People from an economic background other than your own  c. People with religious beliefs other than your own  d. People with political	DDreligion	1 2 3 4 1 2 3 4 1 1	Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never Sometimes Often Very often Total Never	13 12 38 3 10 15 9 37 3 9 16 10 38	34 32 100 8 27 41 24 100 8 24 42 26 100	128 159 394 18 91 138 143 390 23 110 110 148 391	32 40 100 5 23 35 37 100 6 28 28 38 100	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511 2,142 2,909 3,495 9,057 518	30 43 100 4 23 35 38 100 6 24 32 39 100	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115 1,584 7,304 10,094 12,134 31,116 1,692	30 43 100 4 22 35 39 100 5 23 32 39 100 5	2.8	3.0	26	3.1	30	3.1	32
b. People from an economic background other than your own  c. People with religious beliefs other than your own  d. People with political views other than your	DDreligion	1 2 3 4 1 2 3 4 1 2 2 3 4	Often Very often Total Never Sometimes Sometimes	13 12 38 3 10 15 9 37 3 9 16 10 38	34 32 100 8 27 41 24 100 8 24 42 26 100 8 24	128 159 394 18 91 138 143 390 23 110 110 148 391	32 40 100 5 23 35 37 100 6 28 28 38 100 8 27	2,711 3,861 9,068 351 2,080 3,180 3,438 9,049 511 2,142 2,909 3,495 9,057 518 2,334	30 43 100 4 23 35 38 100 6 24 32 39 100 6 26	9,354 13,300 31,162 1,187 6,983 10,907 12,038 31,115 1,584 7,304 10,094 12,134 31,116 1,692 8,216	30 43 100 4 22 35 39 100 5 23 32 39 100 5 26	2.8	3.0	26	3.1	30	3.1	32



Frequencies and Statistical Comparisons: Health & Natural Sci

2									- 0			Civity						
Seniors <sup>a</sup> in						Frequer	ncy Di	stribution	S				Sta	atistica	l Comparis	ons <sup>k</sup>		
Health & Natu				Fitchburg S	ate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pu	blic	Fitchburg State	New Er	-	Your seniors co	<u> </u>	h All Nat. P	Public
Item wording	Variable									7				Effect		Effect	7	Effec
or description	name <sup>1</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size '
). During the current so	chool year, abo	ut how o	often have you done th	e following?														
a. Identified key	LSreading	1	Never	1	3	7	2	168	2	641	2							
information from		2	Sometimes	11	29	66	17	1,633	18	5,548	18							
reading assignments		3	Often	20	53	176	45	4,006	44	13,685	44	2.8	3.2 **	46	3.1 **	42	3.1 **	42
		4	Very often	6	16	145	37	3,258	36	11,265	36							
			Total	38	100	394	100	9,065	100	31,139	100		·		•		,	
b. Reviewed your notes	LSnotes	1	Never	3	8	28	7	528	6	1,893	6							
after class		2	Sometimes	15	39	105	27	2,561	28	9,021	29							
		3	Often	13	34	130	33	3,006	33	10,297	33	2.6	2.9	31	2.9 *	32	2.9	30
		4	Very often	7	18	130	33	2,956	33	9,918	32							
			Total	38	100	393	100	9,051	100	31,129	100							
c. Summarized what you	LSsummary	1	Never	2	5	23	6	556	6	1,941	6							
learned in class or from		2	Sometimes	8	21	113	29	2,552	28	8,874	29							
course materials		3	Often	21	55	136	35	3,382	37	11,582	37	2.9	2.9	03	2.9	01	2.9	.00
		4	Very often	7	18	119	30	2,552	28	8,661	28							
			Total	38	100	391	100	9,042	100	31,058	100							
10. During the current s	school year, to	what ex	tent have your courses	challenged y	ou to o	do your best	work	?										
	challenge	1	Not at all	0	0	2	1	63	1	262	1							
		2		2	5	4	1	106	1	391	1							
		3		0	0	15	4	309	3	1,164	4							
		4		3	8	51	13	813	9	3,071	10	5.4	5.6	15	5.6	22	5.6	16
		5		17	45	116	29	2,603	29	9,221	30							
		6		9	24	93	24	2,592	29	8,663	28							
		7	Very much	7	18	113	29	2,556	28	8,307	27							
			Total	38	100	394	100	9,042	100	31,079	100							
11. Which of the follow	ing have you do	one or d	o you plan to do befor	e you gradua	te?°													
a. Participate in an	intern		Have not decided	2	5	51	13	911	10	3,155	10							
internship, co-op, field	(Means indicate		Do not plan to do	9	24	70	18	1,418	16	4,917	16							
experience, student	the percentage		Plan to do	9	24	104	27	2,585	28	8,558	27	47%	43%	.10	46%	.03	47%	.01
teaching or clinical	who responded		Done or in progress	18	47	167	43	4,159	46	14,525	47		,					.0.
pracement	"Done or in		Total	38	100	392	100	9,073	100	31,155	100							
	progress.")							,		,								



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in					Frequer	ncy Di	stribution	S				St	atistica	l Comparis			
Health & Natu	r description name <sup>1</sup> Values <sup>m</sup> Response options			tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State	New E Pul	ngland blic	Your seniors co	<u>'</u>	All Nat. F	Public
Item wording		, m -						_,					Effect		Effect		Effect
b. Hold a formal	leader	Have not decided	Count 1	3	Count 37	9	1,032	% 11	3,335	<del>%</del> 11	Mean	Mean	size <sup>n</sup>	Mean	size "	Mean	size <sup>n</sup>
leadership role in a		Do not plan to do	27	71	212	54	4,065	45	13,605	44							
student organization or	(Means indicate the percentage	Plan to do	4	11	31	8	744	8	2,593	8	16%	29%	31	36% *	46	37% **	50
group	who responded	Done or in progress	6	16	112	29	3,224	36	11,596	37	1070	2770	.51	<b>3</b> 070	.10	<b>3776</b>	.50
	"Done or in progress.")	Total	38	100	392	100	9,065	100	31,129	100				•		•	
c. Participate in a learning	learncom	Have not decided	4	11	62	16	1,407	16	4,376	14							
community or some	(Means indicate	Do not plan to do	26	68	219	56	4,763	53	16,834	54							
other formal program where groups of	the percentage	Plan to do	2	5	31	8	913	10	3,014	10	16%	20%	12	22%	15	22%	16
students take two or	who responded	Done or in progress	6	16	79	20	1,963	22	6,855	22							
more classes together	"Done or in progress.")	Total	38	100	391	100	9,046	100	31,079	100							
d. Participate in a study	abroad	Have not decided	5	13	50	13	1,223	14	3,980	13							
abroad program	(Means indicate	Do not plan to do	29	76	295	75	6,282	69	21,152	68							
	the percentage	Plan to do	1	3	20	5	667	7	2,403	8	8%	7%	.02	10%	07	12%	12
	who responded	Done or in progress	3	8	29	7	883	10	3,593	12							
	"Done or in progress.")	Total	38	100	394	100	9,055	100	31,128	100							
e. Work with a faculty	research	Have not decided	6	16	57	15	1,363	15	4,359	14							
member on a research	(Means indicate	Do not plan to do	19	50	163	41	3,354	37	11,221	36							
project	the percentage	Plan to do	5	13	48	12	1,402	15	4,707	15	21%	32%	25	32%	26	35%	31
	who responded	Done or in progress	8	21	125	32	2,939	32	10,817	35							
	"Done or in progress.")	Total	38	100	393	100	9,058	100	31,104	100							
f. Complete a culminating	capstone	Have not decided	2	5	52	13	1,043	12	3,533	11							
senior experience	(Means indicate	Do not plan to do	13	34	133	34	2,249	25	8,423	27							
(capstone course, senior project or thesis,	the percentage	Plan to do	4	11	72	18	1,941	21	6,639	21	50%	35%	.31	42%	.16	40%	.20
comprehensive exam,	who responded	Done or in progress	19	50	137	35	3,829	42	12,530	40							
portfolio, etc.)	"Done or in progress.")	Total	38	100	394	100	9,062	100	31,125	100							
2. About how many of	your courses at	this institution have included	l a community	y-base	d project (se	ervice-	learning)?										
•	servcourse	1 None	22	58	189	48	3,480	38	13,432	43							
		2 Some	15	39	177	45	4,645	51	15,168	49							
		3 Most	0	0	24	6	761	8	2,073	7	1.5	1.6	18	1.7 *	38	1.7	28
		4 All	1	3	1	0	161	2	416	1							
		Total	38	100	391	100	9,047	100	31,089	100				•			



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in					Frequer	ncy Di	stribution	ıs				Sta	atistica	l Compari	sons <sup>k</sup>		
Health & Nat				te	New Engla Public	nd	Nat. Publ Masters		All Nat. Pu	blic	Fitchburg State	New E		Your seniors o		All Nat.	Public
Item wording or description	Variable name <sup>I</sup>	Values <sup>m</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
<u> </u>	of your interac	ctions with the following pe	ople at your institu	ution.													
a. Students	QIstudent	1 Poor	0	0	6	2	95	1	390	1							
		2	1	3	5	1	137	2	525	2							
		3	1	3	14	4	369	4	1,369	4							
		4	4	11	56	14	986	11	3,537	11							
		5	14	37	103	26	2,371	26	8,125	26	5.5	5.5	.04	5.6	05	5.5	02
		6	8	21	114	29	2,504	28	8,539	27							
		7 Excellent	10	26	93	24	2,554	28	8,488	27							
		<ul> <li>Not applicable</li> </ul>	0	0	2	1	67	1	222	1							
		Total	38	100	393	100	9,083	100	31,195	100							
b. Academic advisors	QIadvisor	1 Poor	1	3	18	5	503	6	1,783	6							
		2	0	0	29	7	503	6	1,823	6							
		3	1	3	26	7	749	8	2,775	9							
		4	6	16	56	14	1,200	13	4,323	14							
		5	8	22	71	18	1,721	19	5,927	19	5.6	5.1	.28	5.1	.30	5.0 *	.34
		6	6	16	65	16	1,642	18	5,724	18							
		7 Excellent	14	38	124	31	2,598	29	8,372	27							
		<ul> <li>Not applicable</li> </ul>	1	3	5	1	155	2	424	1							
		Total	37	100	394	100	9,071	100	31,151	100							
c. Faculty	QIfaculty	1 Poor	0	0	5	1	110	1	494	2							
		2	1	3	8	2	181	2	705	2							
		3	1	3	31	8	432	5	1,640	5							
		4	5	13	32	8	986	11	3,774	12							
		5	4	11	83	21	2,166	24	7,734	25	5.8	5.5	.23	5.5	.21	5.4	.28
		6	13	34	126	32	2,594	29	8,790	28							
		7 Excellent	14	37	103	26	2,529	28	7,784	25							
		<ul> <li>Not applicable</li> </ul>	0	0	3	1	44	0	153	0							
		Total	38	100	391	100	9,042	100	31,074	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ncy Di	stribution	S				St	atistica	l Compari	sons <sup>k</sup>		
Health & Natu				Fitchburg S	tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pu	blic	Fitchburg State	New E	ngland	Your seniors o	•	All Nat.	Public
Item wording			_											Effect		Effect		Effect
or description  d. Student services staff	name' QIstaff	Values '	Response options Poor	Count	3	Count 20	% 5	Count 393	4	1,510	<del>%</del> 5	Mean	Mean	size "	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
(career services,	Qistan	2	F001	2	5	26	7	434	5	1,510	5							
student activities,		3		0	0	30	8	636	7	2,376	8							
housing, etc.)		4		7	18	59	15	1,265	14	4,393	14							
		5		11	29	65	17	1,714	19	6,119	20	5.1	4.7	.25	4.9	.12	4.8	.15
		6		6	16	59	15	1,611	18	5,462	18	J.1	4.7	.23	7.7	.12	4.0	.13
		7	Excellent	7	18	55	14	1,500	17	4,925	16							
		_	Not applicable	4	11	78	20	1,507	17	4,823	16							
			Total	38	100	392	100	9,060	100	31,109	100							
e. Other administrative	OIadmin	1		1	3	33	8	473	5	1,756	6							
staff and offices		2		4	11	25	6	460	5	1,752	6							
(registrar, financial aid,		3		1	3	45	11	760	8	2,819	9							
etc.)		4		5	13	64	16	1,357	15	5,050	16							
		5		14	37	85	22	2,090	23	7,090	23	4.9	4.5	.21	4.9	.01	4.8	.07
		6		7	18	69	18	1,833	20	5,855	19							
		7	Excellent	6	16	55	14	1,665	18	5,150	17							
		_	Not applicable	0	0	17	4	428	5	1,679	5							
			Total	38	100	393	100	9,066	100	31,151	100							
14. How much does your	institution en	nphasize	the following?															
a. Spending significant	empstudy	1	_	1	3	6	2	144	2	517	2							
amounts of time		2	Some	6	16	74	19	1,491	16	5,024	16							
studying and on		3	Quite a bit	18	47	174	44	4,117	45	14,147	45	3.1	3.1	.00	3.2	05	3.2	06
academic work		4	Very much	13	34	139	35	3,329	37	11,455	37							
			Total	38	100	393	100	9,081	100	31,143	100							
b. Providing support to	SEacademic	1	Very little	3	8	20	5	385	4	1,443	5							
help students succeed		2	Some	10	26	101	26	2,029	22	7,371	24							
academically		3	Quite a bit	17	45	153	39	3,911	43	13,383	43	2.8	2.9	17	3.0	24	3.0	20
		4	Very much	8	21	118	30	2,698	30	8,815	28							
			Total	38	100	392	100	9,023	100	31,012	100							
c. Using learning support	SElearnsup	1	Very little	6	16	36	9	708	8	2,404	8							
services (tutoring		2	Some	7	18	104	27	2,130	24	7,451	24							
services, writing		3	Quite a bit	16	42	126	32	3,409	38	11,915	38	2.7	2.9	14	2.9	20	2.9	18
center, etc.)		4	Very much	9	24	126	32	2,812	31	9,326	30							
			Total	38	100	392	100	9,059	100	31,096	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ncy Di	stribution	S				Sta	atistical	Comparis	sons <sup>k</sup>		
Health & Natu	<u> </u>					New Engla Public	nd	Nat. Publi		All Not Durk	-l:-	Fitchburg State	New Er	ngland	Your seniors c	,		Dublia
Itam warding	Variable			Fitchburg St	tate	Public		Masters		All Nat. Pul	OIIC	Titchburg State	Put	Effect	Nat. Public	Effect	All Nat.	Effect
or description		Values '	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
d. Encouraging contact	SEdiverse	1	Very little	10	26	62	16	1,269	14	4,634	15			_				
among students from		2	Some	8	21	107	27	2,760	30	9,772	31							
different backgrounds (social, racial/ethnic,		3	Quite a bit	16	42	133	34	2,993	33	9,804	32	2.4	2.6	27	2.6	28	2.6	24
religious, etc.)		4	Very much	4	11	90	23	2,041	23	6,901	22							
			Total	38	100	392	100	9,063	100	31,111	100							
e. Providing opportunities	SEsocial	1	Very little	3	8	32	8	635	7	2,209	7							
to be involved socially		2	Some	11	29	112	29	2,349	26	8,209	26							
		3	Quite a bit	17	45	148	38	3,599	40	12,287	40	2.7	2.8	07	2.9	15	2.9	14
		4	Very much	7	18	99	25	2,465	27	8,378	27							
			Total	38	100	391	100	9,048	100	31,083	100							
f. Providing support for	SEwellness	1	Very little	4	11	40	10	763	8	2,663	9							
your overall well-being		2	Some	10	26	123	31	2,233	25	7,954	26							
(recreation, health care, counseling, etc.)		3	Quite a bit	18	47	149	38	3,499	39	11,810	38	2.7	2.7	.00	2.9	20	2.9	18
counseinig, etc.)		4	Very much	6	16	80	20	2,563	28	8,659	28							
			Total	38	100	392	100	9,058	100	31,086	100							
g. Helping you manage	SEnonacad	1	Very little	14	37	142	36	2,982	33	10,453	34							
your non-academic		2	Some	12	32	139	35	3,248	36	11,206	36							
responsibilities (work, family, etc.)		3	Quite a bit	10	26	74	19	1,868	21	6,246	20	2.0	2.0	02	2.1	09	2.1	07
ranniy, etc.)		4	Very much	2	5	38	10	955	11	3,174	10							
			Total	38	100	393	100	9,053	100	31,079	100							
h. Attending campus	SEactivities	1	Very little	6	16	69	18	1,217	13	3,917	13							
activities and events		2	Some	10	26	131	34	2,905	32	9,638	31							
(performing arts, athletic events, etc.)		3	Quite a bit	15	39	123	32	3,127	35	10,912	35	2.6	2.5	.13	2.6	.00	2.6	05
atmetic events, etc.)		4	Very much	7	18	67	17	1,787	20	6,577	21							
			Total	38	100	390	100	9,036	100	31,044	100							
i. Attending events that	SEevents	1	Very little	12	32	71	18	1,649	18	5,633	18							
address important		2	Some	14	37	151	38	3,414	38	11,909	38							
social, economic, or political issues		3	Quite a bit	6	16	116	30	2,659	29	9,066	29	2.2	2.4	25	2.4	26	2.4	25
ponticai issues		4	Very much	6	16	55	14	1,322	15	4,429	14							
			Total	38	100	393	100	9,044	100	31,037	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ncy D	istribution	ıS				St	atistica	l Compari	sons <sup>k</sup>		
Health & Nat	ural Sci			Fitchburg S	tate	New Engla Public	nd	Nat. Publ Masters		All Nat. Pu	ıblic	Fitchburg State		ingland blic	Your seniors o	· · · · · · · · · · · · · · · · · · ·	All Nat.	Public
Item wording	Variable													Effect		Effect		Effect
or description  15. About how many he		Values"		Count	mg?	Count	%	Count	%	Count	<u>%</u>	Mean	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>	Mean	size <sup>n</sup>
a. Preparing for class	tmprephrs	0	0 hrs	0	0	1	0	38	0	129	0							
(studying, reading,		3	1-5 hrs	2	5	57	15	1,148	13	3,958	13							
writing, doing	(Recoded version of tmprep created	8	6-10 hrs	10	26	96	24	2,091	23	7,005	22							
homework or lab work,	by NSSE. Values		11-15 hrs	13	34	91	23	1,859	20	6,423	21							
analyzing data,	are estimated	18	16-20 hrs	6	16	66	17	1,676	18	5,711	18	14.7	14.0	.08	15.0	04	15.1	05
rehearsing, and other academic activities)	number of hours	23	21-25 hrs	2	5	40	10	991	11	3,483	11							
dedderine detryttes)	per week.)	28	26-30 hrs	3	8	17	4	533	6	1,912	6							
		33	More than 30 hrs	2	5	24	6	733	8	2,523	8							
			Total	38	100	392	100	9,069	100	31,144	100							
b. Participating in co-	tmcocurrhrs	0	0 hrs	21	55	205	53	3,713	41	11,949	38							
curricular activities	(Recoded version	3	1-5 hrs	8	21	90	23	2,697	30	9,462	30							
(organizations, campus	of tmcocurr	8	6-10 hrs	3	8	39	10	1,170	13	4,408	14							
publications, student	created by NSSE.	13	11-15 hrs	3	8	27	7	616	7	2,304	7							
government, fraternity or sorority,	Values are	18	16-20 hrs	2	5	18	5	395	4	1,472	5	3.8	4.0	02	5.0	16	5.2	19
intercollegiate or	estimated number	23	21-25 hrs	1	3	6	2	213	2	700	2							
intramural sports, etc.)	of hours per week.)	28	26-30 hrs	0	0	1	0	91	1	318	1							
	week.)	33	More than 30 hrs	0	0	4	1	148	2	452	1							
			Total	38	100	390	100	9,043	100	31,065	100							
c. Working for pay	tmworkonhrs	0	0 hrs	29	78	284	72	6,480	72	21,457	69							
on campus	(Recoded version	3	1-5 hrs	1	3	20	5	371	4	1,302	4							
	of tmworkon	8	6-10 hrs	5	14	30	8	656	7	2,585	8							
	created by NSSE.	13	11-15 hrs	1	3	24	6	613	7	2,229	7							
	Values are	18	16-20 hrs	1	3	27	7	616	7	2,167	7	2.0	3.3	21	3.7 *	25	4.1 **	29
	estimated number	23	21-25 hrs	0	0	1	0	170	2	751	2				$\nabla$		$\nabla$	
	of hours per week.)	28	26-30 hrs	0	0	4	1	65	1	292	1				•		•	
	week.)	33	More than 30 hrs	0	0	2	1	82	1	333	1							
			Total	37	100	392	100	9,053	100	31,116	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

in eniors						Frequer	ıcy Di	stribution	S				St	atistical	Comparis	sons <sup>k</sup>		
lealth & Nat	ural Sci			Fitchburg S	ate	New Engla Public	nd	Nat. Publi Masters		All Nat. Pul	hlic	Fitchburg State		ngland blic	Your seniors o	,	All Nat.	Public
ttanaadia a	Variable			Titchburg 5	ate	1 ublic		iviasters		All Nat. 1 ul		· itemaa. B otate	ı u	Effect	ivat. i ubiit	Effect	All IVat.	Effec
Item wording or description	name <sup>I</sup>	Values '	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size
d. Working for pay	tmworkoffhrs	0	0 hrs	7	18	106	27	3,606	40	13,560	44	Wedn	wicum	3120	Wicum	3/20	Wicum	3/20
off campus		3	1-5 hrs	2	5	21	5	424	5	1,475	5							
	(Recoded version of tmworkoff	8	6-10 hrs	4	11	28	7	628	7	2,063	7							
	created by NSSE.	13	11-15 hrs	5	13	27	7	683	8	2,282	7							
	Values are	18	16-20 hrs	8	21	48	12	991	11	3,181	10	16.0	15.7	.02	12.3	.30	11.4 *	.37
	estimated number	23	21-25 hrs	2	5	54	14	869	10	2,613	8							
	of hours per	28	26-30 hrs	3	8	30	8	615	7	1,902	6							
	week.)	33	More than 30 hrs	7	18	78	20	1,235	14	4,010	13							
			Total	38	100	392	100	9,051	100	31,086	100							
Estimated number of	tmworkhrs																	
hours working for pay	(Continuous variable created by NSSE)											18.2	19.0	06	16.0	.18	15.5	.2
e. Doing community	tmservicehrs	0	0 hrs	19	50	223	57	4,171	46	13,900	45							
service or volunteer	(Recoded version	3	1-5 hrs	11	29	111	28	3,114	34	11,137	36							
work	of tmservice	8	6-10 hrs	7	18	24	6	921	10	3,256	10							
	created by NSSE.	13	11-15 hrs	1	3	14	4	393	4	1,302	4							
	Values are	18	16-20 hrs	0	0	8	2	212	2	705	2	2.7	3.1	06	3.6	15	3.6	1
	estimated number	23	21-25 hrs	0	0	4	1	90	1	304	1							
	of hours per week.)	28	26-30 hrs	0	0	2	1	31	0	132	0							
	week.)	33	More than 30 hrs	0	0	6	2	107	1	318	1							
			Total	38	100	392	100	9,039	100	31,054	100							
f. Relaxing and	tmrelaxhrs	0	0 hrs	0	0	9	2	242	3	795	3							
socializing (time with	(Recoded version	3	1-5 hrs	13	34	109	28	2,627	29	8,707	28							
friends, video games,	of tmrelax created	8	6-10 hrs	11	29	109	28	2,583	29	8,873	29							
TV or videos, keeping up with friends online,	by NSSE. Values	13	11-15 hrs	5	13	79	20	1,631	18	5,769	19							
etc.)	are estimated	18	16-20 hrs	5	13	46	12	987	11	3,481	11	10.4	10.6	03	10.5	01	10.7	0
,	number of hours	23	21-25 hrs	2	5	15	4	417	5	1,454	5							
	per week.)	28	26-30 hrs	0	0	10	3	176	2	659	2							
		33	More than 30 hrs	2	5	14	4	391	4	1,361	4							
			Total	38	100	391	100	9,054	100	31,099	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ncy Di	stribution	S				St	atistical	Comparis	ons <sup>k</sup>		
Health & Nat	ural Sci			5"h.h 61		New Engla	nd	Nat. Publi		All No.	1.11.	Fitchburg State	New E	ngland	Your seniors co	<u> </u>		D 1-11-
the are consider a	Variable			Fitchburg St	ate	Public		Masters		All Nat. Pu	DIIC	Fitchburg State	Pu	olic Effect	Nat. Public	Effect	All Nat.	PUDIIC Effect
Item wording or description	name <sup>l</sup>	Values <sup>n</sup>	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size "
g. Providing care for	tmcarehrs	0	0 hrs	26	68	240	62	6,107	68	21,568	70							
dependents (children,	(Recoded version	3	1-5 hrs	2	5	53	14	1,015	11	3,329	11							
parents, etc.)	of tmcare created	8	6-10 hrs	0	0	25	6	500	6	1,524	5							
	by NSSE. Values	13	11-15 hrs	5	13	16	4	261	3	905	3							
	are estimated	18	16-20 hrs	1	3	10	3	209	2	700	2	5.6	5.6	01	4.8	.07	4.5	.11
	number of hours	23	21-25 hrs	1	3	5	1	99	1	371	1							
	per week.)	28	26-30 hrs	0	0	3	1	69	1	275	1							
		33	More than 30 hrs	3	8	38	10	761	8	2,361	8							
			Total	38	100	390	100	9,021	100	31,033	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	8	21	38	10	1,129	12	4,075	13							
(driving, walking, etc.)	(Recoded version	3	1-5 hrs	19	50	188	48	5,013	55	17,267	55							
	of tmcommute	8	6-10 hrs	8	21	107	27	1,769	20	5,946	19							
	created by NSSE.	13	11-15 hrs	2	5	36	9	591	7	2,017	6							
	Values are estimated number	18	16-20 hrs	1	3	10	3	249	3	762	2	4.3	6.3	33	5.6	20	5.5	19
	of hours per	23	21-25 hrs	0	0	2	1	89	1	317	1							
	week.)	28	26-30 hrs	0	0	4	1	45	0	167	1							
		33	More than 30 hrs	0	0	7	2	178	2	572	2							
			Total	38	100	392	100	9,063	100	31,123	100							
16. Of the time you spe	end preparing for	class i	n a typical 7-day week	, about how r	nuch	is on assigne	d read	ing?										
•	reading	1	Very little	5	13	59	15	1,335	15	4,802	15							
	S	2	Some	13	34	103	26	2,755	30	9,394	30							
		3	About half	10	26	117	30	2,476	27	8,362	27	2.7	2.8	06	2.8	02	2.7	01
		4	Most	7	18	82	21	1,767	19	6,071	19	2.,	2.0	00	2.0	02	2.1	01
		5	Almost all	3	8	31	8	741	8	2,506	8							
		3	Total	38	100	392	100	9,074	100	31,135	100							
								-,		,								
	tmreadinghrs																	
of tmprephrs bas	able created by NSSE sed on reading, where t half=.50; Most=.75	e Very li	ttle=.10; Some=.25;									7.0	6.7	.05	7.0	.00	6.9	.00



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ıcy Di	stribution	S				St	atistica	l Compari:	sons <sup>k</sup>		
Health & Nat	ural Sci			Fitchburg St	ato	New Engla Public	nd	Nat. Publ Masters		All Nat. Pul	blic	Fitchburg State		ngland blic	Your seniors o	,	h All Nat.	Dublic
Item wording	Variable			Fitchburg 3	ale	Public		iviasters		All INdt. Pui	DIIC	Titelibuig State	Pu	Effect	Nat. Public	Effect	All Nat.	Effec
or description	name <sup>1</sup>	Values <sup>r</sup>	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size "	Mean	size "	Mean	size
	tmreadinghrscol	1	0 hrs	0	0	1	0	38	0	129	0							
	(Collapsed version of tmreadinghrs	2	More than zero, up to 5 hrs	19	50	200	51	4,468	49	15,351	49							
	created by NSSE.)	3	More than 5, up to 10 hrs	11	29	110	28	2,586	29	8,858	29							
		4	More than 10, up to 15 hrs	3	8	42	11	904	10	3,130	10							
		5	More than 15, up to 20 hrs	2	5	19	5	523	6	1,822	6							
		6	More than 20, up to 25 hrs	3	8	16	4	356	4	1,171	4							
		7	More than 25 hrs	0	0	3	1	172	2	576	2							
			Total	38	100	391	100	9,047	100	31,037	100							
7. How much has you	ır experience at th	is inst	itution contributed to	your knowled	ge, sk	ills, and per	sonal d	levelopmen	in th	e following	areas?							
a. Writing clearly and	pgwrite	1	Very little	3	8	22	6	468	5	1,855	6							
effectively		2	Some	8	22	87	22	1,996	22	7,242	23							
		3	Quite a bit	16	43	161	41	3,659	40	12,352	40	2.9	3.0	10	3.0	12	3.0	0
		4	Very much	10	27	122	31	2,925	32	9,645	31							
			Total	37	100	392	100	9,048	100	31,094	100							
<ul> <li>Speaking clearly and effectively</li> </ul>	pgspeak	1	Very little	4	11	30	8	611	7	2,591	8							
enectively		2	Some	8	21	100	25	2,234	25	8,140	26	2.0						
		3	Quite a bit	19	50	159	40	3,532	39	11,472	37	2.8	2.9	11	2.9	17	2.9	1
		4	Very much Total	7 38	18 100	104	26	2,688	30 100	8,920	29							
c. Thinking critically and	pgthink	1	Very little	2	5	393 8	100	9,065	2	31,123 708	100							
analytically	pguink	2	Some	5	13	50	13	1,081	12	3,998	13							
		3	Quite a bit	17	45	162	41	3,472	38	11,884	38	3.1	3.3	18	3.3	25	3.3	2
		4	Very much	14	37	172	44	4,332	48	14,546	47	3.1	3.3	10	3.3	23	3.3	2
			Total	38	100	392	100	9,067	100	31,136	100							
d. Analyzing numerical	pganalyze	1	Very little	3	8	16	4	464	5	1,666	5							
and statistical	10	2	Some	11	29	97	25	1,991	22	6,993	22							
information		3	Quite a bit	16	42	153	39	3,271	36	11,348	36	2.8	3.0	27	3.0	32	3.0	2
		4	Very much	8	21	127	32	3,340	37	11,138	36		5.0	.2,	5.0	.52	5.0	.2
			Total	38	100	393	100	9,066	100	31,145	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Frequer	ıcy Di	stribution	S				St	atistica	l Compari	sons <sup>k</sup>		
Health & Natu	ıral Sci														Your seniors of	ompared wit	th	
aaa						New Engla	nd	Nat. Publ					New E					
				Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg State	Pul	blic	Nat. Publi		All Nat.	
Item wording or description	Variable name <sup>l</sup>	Values '	Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size "	Mean	Effect size <sup>n</sup>	Mean	Effect size "
e. Acquiring job- or work-	pgwork	1	Very little	6	16	44	11	927	10	3,449	11							
related knowledge and		2	Some	8	21	98	25	2,438	27	8,789	28							
skills		3	Quite a bit	15	39	144	37	3,122	34	10,407	33	2.7	2.8	09	2.8	11	2.8	06
		4	Very much	9	24	107	27	2,587	29	8,503	27							
			Total	38	100	393	100	9,074	100	31,148	100							
f. Working effectively	pgothers	1	Very little	5	13	18	5	417	5	1,677	5							
with others		2	Some	6	16	98	25	1,981	22	7,324	24							
		3	Quite a bit	19	50	157	40	3,497	39	12,049	39	2.8	3.0	20	3.0	29	3.0	22
		4	Very much	8	21	118	30	3,156	35	10,062	32							
			Total	38	100	391	100	9,051	100	31,112	100							
g. Developing or	pgvalues	1	Very little	7	18	50	13	1,000	11	3,801	12							
clarifying a personal code of values and		2	Some	8	21	102	26	2,381	26	8,413	27							
ethics		3	Quite a bit	14	37	142	36	3,153	35	10,473	34	2.7	2.7	08	2.8	14	2.8	10
		4	Very much	9	24	99	25	2,527	28	8,449	27							
			Total	38	100	393	100	9,061	100	31,136	100							
h. Understanding people	pgdiverse	1	Very little	9	24	49	13	894	10	3,211	10							
of other backgrounds (economic,		2	Some	9	24	95	24	2,479	27	8,531	27							
racial/ethnic, political,		3	Quite a bit	11	29	139	35	3,012	33	10,328	33	2.5	2.8	26	2.8	31	2.8	29
religious, nationality,		4	Very much	9	24	109	28	2,679	30	9,065	29							
etc.)			Total	38	100	392	100	9,064	100	31,135	100							
i. Solving complex real-	pgprobsolve	1	Very little	7	18	43	11	876	10	3,228	10							
world problems		2	Some	11	29	114	29	2,623	29	9,266	30							
		3	Quite a bit	11	29	140	36	3,203	35	10,873	35	2.6	2.7	16	2.8	21	2.7	17
		4	Very much	9	24	95	24	2,360	26	7,747	25							
_			Total	38	100	392	100	9,062	100	31,114	100							
<li>j. Being an informed and active citizen</li>	pgcitizen	1	,	8	21	62	16	1,168	13	4,259	14							
active citizen		2	Some	10	26	109	28	2,787	31	9,621	31	2.5						
		3	Quite a bit	13	34	124	32	2,958	33	9,961	32	2.5	2.6	15	2.7	17	2.6	15
		4	Very much	7	18	96	25	2,126	24	7,189	23							
			Total	38	100	391	100	9,039	100	31,030	100							



Frequencies and Statistical Comparisons: Health & Natural Sci

Seniors <sup>a</sup> in						Freque	ncy D	istribution	ıs				Sta	atistica	l Comparis	sons <sup>k</sup>		
Health & Nat	ural Sci														Your seniors c	ompared wit	h	
ileaith & Nat	urar Sci					New Engla	and	Nat. Publ	ic				New E	ngland				
				Fitchburg S	tate	Public		Masters	6	All Nat. Pu	blic	Fitchburg State	Pul	blic	Nat. Public	Masters	All Nat.	Public
Item wording or description	Variable name <sup>I</sup>	Values'	<sup>n</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>	Mean	Effect size <sup>n</sup>
18. How would you ev	aluate your enti	re educa	tional experience at th	is institution	?													
	evalexp	1	Poor	2	5	13	3	193	2	712	2							
		2	Fair	5	13	59	15	1,101	12	3,851	12							
		3	Good	11	29	197	50	4,065	45	14,089	45	3.3	3.1	.24	3.2	.06	3.2	.08
		4	Excellent	20	53	124	32	3,720	41	12,509	40							
			Total	38	100	393	100	9,079	100	31,161	100							
19. If you could start of	over again, woul	d you go	to the same institution	you are nov	v atte	nding?												
	sameinst	1	Definitely no	3	8	22	6	403	4	1,441	5							
		2	Probably no	6	16	69	18	1,219	13	4,138	13							
		3	Probably yes	9	24	162	41	3,553	39	12,135	39	3.2	3.1	.16	3.2	.00	3.2	.00
		4	Definitely yes	20	53	139	35	3,904	43	13,493	43							
			Total	38	100	392	100	9,079	100	31,207	100							



**Respondent Profile: Health & Natural Sci** 

ealth & Natura	al Sci				First-Y	ear S	Students	1						Senic	ors <sup>a</sup>			
					New Engla	nd	Nat. Publi	С					New Engla	nd	Nat. Publ	ic		
			Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg St	ate	Public		Masters	;	All Nat. Pu	ıblic
Item wording	Variable																	
or description	name	Response options	Count	%	Count	%	Count	%	Count	<u>%</u>	Count	%	Count	%	Count	%	Count	%
. How many majors do you plan to complete?	MAJnum	One	14	88	243	85	5,747	84	19,536	81	36	95	320	81	7,569	83	25,065	80
(Do not count minors.)		More than one	2	13	44	15	1,111	16	4,633	19	2	5	74	19	1,534	17	6,213	20
<u> </u>	27.176	Total	16	100	287	100	6,858	100	24,169	100	38	100	394	100	9,103	100	31,278	10
First major or expected first major, in NSSE's	MAJfirstcol	Arts & Humanities	2	13	0	0	43	1	188	1	0	0	5	1	50	1	240	
default related-major	$(Recoded\ from$	Biological Sci., Agriculture, & Natural Resources	6	38	92	32	2,410	35	9,265	38	11	29	106	27	2,351	26	9,382	3
categories.	MAJfirst.)	Physical Sci., Mathematics,				_												
_		& Computer Science	1	6	19	7	718	10	2,926	12	0	0	43	11	1,060	12	3,884	1
(This does not reflect any customization		Social Sciences	3	19	109	38	1,892	28	6,167	26	9	24	149	38	3,053	34	9,814	3
made for the Major		Business	0	0	1	0	37	1	190	1	1	3	1	0	37	0	174	
Field Report.)		Communications, Media,	0	0	0	0	5	0	35	0	0	0	1	0	14	0	60	
• /		& Public Relations	0	0	1.4	_	50			1	0	0	1.5				100	
		Education	0	0	14 0	5 0	53 24	1	139 140	1	0	0	15	4	65 28	1	198 206	
		Engineering Health Professions	4	25	38	-	1,371	20		17	17	45	1 52	13	1,992	22	5,994	1
		Social Service Professions	0	0	2	13	67	1	4,176 206		0	43	53	13	73	1	268	1
			0	0	=	4		3		1 3	0	0		4		_		
		All Other	0	0	11 0	0	235 2	0	729 5	0	0	0	17 0	0	380	4	1,055	
		Undecided, Undeclared Total		_	•	100		100		-	38	100	•	100		100		10
Second major or	MAJsecondcol	Arts & Humanities	16	100	286 5	11	6,857	100	24,166	100	0	0	394	100	9,103 138	9	31,275 547	10
expected second major,		Biological Sci., Agriculture,	U	U	3	11			444		U	U	3	4			347	
in NSSE's default	(Recoded from	& Natural Resources	0	0	4	9	119	11	576	12	0	0	3	4	200	13	866	1
related-major	MAJsecond.)	Physical Sci., Mathematics,	1	50	5	11	182	16	910	20	0	0	12	16	241	16	1,124	1
categories.		& Computer Science			-						o o						,	
(This does not reflect		Social Sciences	1	50	23	52	313	28	1,287	28	1	50	40	55	451	30	1,923	3
any customization		Business	0	0	1	2	44	4	237	5	1	50	0	0	44	3	187	
made for the Major		Communications, Media, & Public Relations	0	0	0	0	17	2	56	1	0	0	1	1	17	1	76	
Field Report.)		Education	0	0	1	2	33	3	124	3	0	0	3	4	67	4	154	
		Engineering	0	0	0	0	13	1	39	1	0	0	1	1	7	0	54	
		Health Professions	0	0	3	7	149	13	514	11	0	0	8	11	219	14	763	1
		Social Service Professions	0	0	2	5	77	7	241	5	0	0	1	1	72	5	244	1
		All Other	0	0	0	0	30	3	126	3	0	0	1	1	54	4	196	
		Undecided, Undeclared	0	0	0	0	19	2	68	1	0	0	0	0	17	1	62	
		Total	2	100	44	100	1,108	100	4,622	100	2	100	73	100	1,527	100	6,196	



**Respondent Profile: Health & Natural Sci** 

He	alth & Natur	al Sci				First-Y	ear S	Students <sup>®</sup>	ì						Senio	ors <sup>a</sup>			
						New Engla		Nat. Publi						New Engla		Nat. Publ	ic		
				Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg Sta	ate	Public		Masters		All Nat. Pul	blic
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
21.	What is your class	class	Freshman/First-year	16	100	271	94	5,918	87	20,835	87	0	0	1	0	7	0	41	0
	level?		Sophomore	0	0	15	5	795	12	2,657	11	0	0	1	0	32	0	194	1
			Junior	0	0	0	0	78	1	394	2	0	0	16	4	454	5	2.187	7
			Senior	0	0	1	0	23	0	99	0	34	89	360	92	8,376	93	28,079	90
			Unclassified	0	0	0	0	17	0	67	0	4	11	13	3	185	2	608	2
			Total	16	100	287	100	6,831	100	24,052	100	38	100	391	100	9,054	100	31,109	100
22.	Thinking about this	fulltime	No	0	0	9	3	162	2	672	3	8	21	99	25	1,627	18	5,486	18
	current academic term,		Yes	15	100	275	97	6,627	98	23,232	97	30	79	292	75	7,371	82	25,419	82
	are you a full-time student?		Total	15	100	284	100	6,789	100	23,904	100	38	100	391	100	8,998	100	30,905	100
23a.	How many courses are	coursenum	0	0	0	1	0	24	0	73	0	3	8	11	3	235	3	640	2
254.	you taking for credit	compenum	1	0	0	0	0	25	0	83	0	1	3	27	7	340	4	1,089	3
	this current academic		2	0	0	6	2	54	1	197	1	4	11	37	9	685	8	2,193	7
	term?		3	0	0	11	4	319	5	862	4	6	16	65	17	1,145	13	3,569	11
			4	3	19	81	28	1,950	29	6,720	28	14	37	132	34	2,706	30	9,374	30
			5	12	75	133	46	2,787	41	9,577	40	7	18	78	20	2,700	24	8,076	26
			6	1	6	39	14	1,010	15	3,977	17	1	3	25	6	868	10	3,298	11
			7 or more	0	0	16	6	663	10	2,578	11	2	5	17	4	871	10	2,892	9
			Total	16	100	287	100	6,832	100	24,067	100	38	100	392	100	9,067	100	31,131	100
ŀ	Of these, how many are	onlinenum	0	16	100	248	87	5,584	82	19,245	80	29	76	284	73	6,304	70	20,732	67
	entirely online?		1	0	0	27	9	895	13	3,369	14	5	13	76	19	1,655	18	5,886	19
			2	0	0	5	2	199	3	800	3	1	3	23	6	613	7	2,375	8
			3	0	0	3	1	67	1	304	1	2	5	4	1	235	3	981	3
			4	0	0	1	0	31	0	112	0	1	3	2	1	119	1	554	2
			5	0	0	0	0	9	0	57	0	0	0	1	0	41	0	212	1
			6	0	0	0	0	6	0	22	0	0	0	1	0	29	0	134	0
			7 or more	0	0	1	0	5	0	25	0	0	0	0	0	30	0	112	0
			Total	16	100	285	100	6,796	100	23,934	100	38	100	391	100	9,026	100	30,986	100
	Collapsed recode of	onlinecrscol	No courses taken online	16	100	248	87	5,583	82	19,242	80	29	76	284	73	6,304	70	20,732	67
	courses taken online		Some courses taken online	0	0	35	12	1,151	17	4,388	18	8	21	96	25	2,295	25	8,587	28
	(Based on responses to		All courses taken online	0	0	2	1	61	1	301	1	1	3	11	3	427	5	1,667	5
	coursenum <i>and</i> onlinenum.)		Total	16	100	285	100	6,795	100	23,931	100	38	100	391	100	9,026	100	30,986	100



**Respondent Profile: Health & Natural Sci** 

H	ealth & Natur	al Sci				First-Y	ear S	Students	9						Senio	ors <sup>a</sup>			
				Fitchburg S	tate	New Engla Public	nd	Nat. Publi Masters		All Nat. Pu	blic	Fitchburg St	ate	New Engla Public	nd	Nat. Publi Masters		All Nat. Pu	ıblic
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
24.	What have most of your	grades	C- or lower	0	0	9	3	134	2	459	2	0	0	2	1	41	0	147	0
	grades been up to now		С	0	0	15	5	200	3	654	3	0	0	7	2	226	2	712	2
	at this institution?		C+	0	0	16	6	320	5	1,186	5	1	3	11	3	454	5	1,417	5
			B-	3	19	14	5	449	7	1,592	7	3	8	29	7	659	7	2,228	7
			В	3	19	55	19	1,306	19	4,241	18	3	8	51	13	1,732	19	5,848	19
			B+	8	50	71	25	1,391	20	4,515	19	18	47	93	24	1,726	19	5,802	19
			A-	0	0	59	21	1,304	19	4,713	20	8	21	100	26	1,665	18	5,799	19
			A	2	13	47	16	1,716	25	6,653	28	5	13	98	25	2,545	28	9,125	29
			Total	16	100	286	100	6,820	100	24,013	100	38	100	391	100	9,048	100	31,078	100
25.	Did you begin college	begincol	Started here	16	100	272	95	6,324	93	22,087	92	23	61	182	47	4,542	50	16,973	55
	at this institution or		Started elsewhere	0	0	14	5	486	7	1,917	8	15	39	209	53	4,496	50	14,063	45
	elsewhere?		Total	16	100	286	100	6,810	100	24,004	100	38	100	391	100	9,038	100	31,036	100
26.	Since graduating from	attend_voc	Vocational or technical school	1	6	9	3	137	2	531	2	4	11	17	4	545	6	1,731	6
	high school, which of	attend_com	Community or junior college	0	0	14	5	511	8	1,958	8	8	22	156	40	4,250	47	12,841	41
	the following types of schools have you	attend_col	4-year college or university other than this one	1	6	24	8	566	8	2,045	9	10	27	131	34	2,270	25	8,121	26
	attended <i>other than</i> the one you are now	attend_none	None	14	88	238	83	5,508	81	19,153	80	18	49	138	36	3,293	37	12,474	40
	attending? (Select all that apply.)	attend_other	Other	0	0	3	1	161	2	599	3	1	3	17	4	268	3	892	3
27.	What is the highest level of education you	edaspire	Some college but less than a bachelor's degree	2	13	11	4	419	6	1,352	6	1	3	19	5	488	5	1,562	5
	ever expect to		Bachelor's degree (B.A., B.S., etc.)	1	6	72	25	1,207	18	4,030	17	7	18	87	22	1,835	20	5,937	19
	complete?		Master's degree (M.A., M.S., etc.)	10	63	105	37	2,240	33	7,183	30	21	55	156	40	3,400	38	10,867	35
			Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	3	19	98	34	2,925	43	11,387	48	9	24	128	33	3,308	37	12,660	41
			Total	16	100	286	100	6,791	100	23,952	100	38	100	390	100	9,031	100	31,026	100



**Respondent Profile: Health & Natural Sci** 

He	alth & Natur	al Sci				First-Y	ear S	Students	Э					!	Senio	ors <sup>a</sup>			
						New Engla	nd	Nat. Publ	ic					New Engla	nd	Nat. Publ	ic		
				Fitchburg S	State	Public		Masters		All Nat. Pul	olic	Fitchburg St	ate	Public		Masters	;	All Nat. Pul	olic
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
28.	What is the highest	parented	Did not finish high school	1	6	19	7	495	7	1,445	6	0	0	17	4	653	7	1,913	6
	level of education	-	High school diploma or G.E.D.	4	25	73	26	1,279	19	4,061	17	14	38	107	28	1,799	20	5,638	18
	completed by either of your parents (or those		Attended college, but did not complete degree	3	19	46	16	869	13	2,728	11	3	8	52	13	1,166	13	3,543	11
	who raised you)?		Associate's degree (A.A., A.S., etc.)	4	25	37	13	768	11	2,442	10	6	16	51	13	1,091	12	3,405	11
			Bachelor's degree (B.A., B.S., etc.)	3	19	77	27	1,802	27	6,583	28	9	24	94	24	2,396	27	8,431	27
			Master's degree (M.A., M.S., etc.)	1	6	22	8	1,216	18	4,800	20	5	14	55	14	1,418	16	5,584	18
			Doctoral or professional degree (Ph.D., J.D., M.D., etc.)	0	0	11	4	349	5	1,806	8	0	0	11	3	480	5	2,422	8
			Total	16	100	285	100	6,778	100	23,865	100	37	100	387	100	9,003	100	30,936	100
	First-generation status (Neither parent holds a	firstgen	Not first-generation	4	25	110	39	3,367	50	13,189	55	14	38	160	41	4,294	48	16,437	53
	bachelor's degree.)	(Recoded from parented.)	First-generation	12	75	175	61	3,411	50	10,676	45	23	62	227	59	4,709	52	14,499	47
		purched.)	Total	16	100	285	100	6,778	100	23,865	100	37	100	387	100	9,003	100	30,936	100
29.	What is your gender	genderid	Man	4	25	66	23	1,684	25	6,438	27	9	24	103	27	2,646	29	9,298	30
	identity?		Woman	12	75	218	76	5,020	74	17,157	72	29	76	276	71	6,231	69	21,175	68
			Another gender identity	0	0	0	0	44	1	181	1	0	0	5	1	59	1	216	1
			I prefer not to respond	0	0	2	1	54	1	192	1	0	0	4	1	98	1	346	1
			Total	16	100	286	100	6,802	100	23,968	100	38	100	388	100	9,034	100	31,035	100
30.	Enter your year of birth	agecat	19 or younger	15	94	269	95	6,265	93	21,956	92	0	0	1	0	54	1	301	1
	(e.g., 1994):	(Recoded	20-23	1	6	10	4	357	5	1,363	6	29	76	233	61	5,961	67	21,338	69
		from the	24-29	0	0	2	1	71	1	253	1	4	11	89	23	1,745	19	5,404	18
		information	30-39	0	0	2	1	41	1	165	1	2	5	37	10	755	8	2,347	8
		entered in	40-55	0	0	1	0	21	0	74	0	2	5	18	5	381	4	1,219	4
		birthyear.)	Over 55	0	0	0	0	2	0	13	0	1	3	4	1	54	1	182	1
			Total	16	100	284	100	6,757	100	23,824	100	38	100	382	100	8,950	100	30,791	100
31a.	Are you an	internat	No	16	100	279	98	6,604	98	22,955	97	38	100	377	97	8,780	98	30,020	98
	international student?		Yes	0	0	6	2	169	2	832	3	0	0	10	3	171	2	716	2
			Total	16	100	285	100	6,773	100	23,787	100	38	100	387	100	8,951	100	30,736	100
	[If answered "yes"]	countrycol	Africa Sub-Saharan	0	0	0	0	12	8	60	8	0	0	0	0	10	6	55	8
	Country of citizenship,	(D I. I.C	Asia	0	0	2	40	67	45	440	57	0	0	2	22	62	39	312	46
	collapsed into regions by NSSE. Responses to	(Recoded from country.)	Canada	0	0	0	0	6	4	23	3	0	0	0	0	14	9	47	7
	country are in the data	country.)	Europe	0	0	2	40	29	19	89	11	0	0	4	44	31	19	86	13
	file.		Latin America and Caribbean	0	0	0	0	18	12	108	14	0	0	2	22	28	17	119	18
			Middle East and North Africa	0	0	1	20	16	11	51	7	0	0	1	11	12	7	40	6
			Oceania	0	0	0	0	2	1	7	1	0	0	0	0	4	2	13	2
			Unknown region/uncoded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Total	0	0	5	100	150	100	778	100	0	0	9	100	161	100	672	100



**Respondent Profile: Health & Natural Sci** 

Не	ealth & Natur	al Sci				First-Y	ear s	Students	a						Senio	ors <sup>a</sup>			
						New Engla	nd	Nat. Publ	ic					New Engla	ınd	Nat. Publ	ic		
				Fitchburg S	tate	Public		Masters	;	All Nat. Pul	olic	Fitchburg St	ate	Public		Masters	;	All Nat. Pu	ıblic
	Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
32.	What is your racial or	re_amind	American Indian or Alaska Native	0	0	6	2	140	2	543	2	1	3	5	1	216	2	718	2
	ethnic identification?	re_asian	Asian	0	0	10	3	645	10	2,764	12	1	3	11	3	809	9	2,971	10
	(Select all that apply.)	re_black	Black or African American	2	13	38	13	830	12	3,204	13	2	5	33	8	828	9	3,139	10
		re_latino	Hispanic or Latino	2	13	40	14	1,168	17	3,865	16	4	11	33	8	1,207	13	4,253	14
		re_pacific	Native Hawaiian or Other Pacific Islander	0	0	0	0	97	1	279	1	0	0	3	1	113	1	300	1
		re_white	White	11	69	196	69	4,278	63	14,801	62	28	74	304	78	6,126	68	20,609	67
		re_other	Other	1	6	6	2	155	2	552	2	1	3	11	3	249	3	845	3
		re_pnr	I prefer not to respond	0	0	9	3	156	2	543	2	3	8	14	4	302	3	1,090	4
	Racial or ethnic	re_all	American Indian or Alaska Native	0	0	1	0	36	1	121	1	0	0	0	0	45	0	164	1
	identification	(Recoded from	Asian	0	0	9	3	505	7	2,211	9	1	3	9	2	632	7	2,361	8
		re_amind to	Black or African American	2	13	35	12	640	9	2,513	11	1	3	26	7	652	7	2,531	8
		re_pnr	Hispanic or Latino	2	13	29	10	911	13	2,818	12	4	11	23	6	914	10	3,106	10
		where each	Native Hawaiian/Other Pac. Islander	0	0	0	0	34	1	77	0	0	0	2	1	34	0	88	0
		student is represented only	White	11	69	180	63	3,826	56	13,008	54	27	71	287	74	5,528	61	18,487	60
		once.)	Other	1	6	5	2	95	1	315	1	0	0	5	1	162	2	510	2
		,	Multiracial	0	0	18	6	580	9	2,272	10	2	5	23	6	734	8	2,583	8
			I prefer not to respond	0	0	9	3	156	2	543	2	3	8	14	4	302	3	1,090	4
			Total	16	100	286	100	6,783	100	23,878	100	38	100	389	100	9,003	100	30,920	100
33.	Are you a member of a	greek	No	15	94	276	97	6,222	92	21,756	91	37	97	358	92	8,156	90	27,767	90
	social fraternity or		Yes	1	6	10	3	564	8	2,145	9	1	3	30	8	872	10	3,196	10
	sorority?		Total	16	100	286	100	6,786	100	23,901	100	38	100	388	100	9,028	100	30,963	100
34.	Which of the following best describes where	living	Residence hall, dormitory or other camp.	13	81	176	63	4,237	63	15,632	66	11	29	60	15	878	10	3,488	11
	you are living while		Fraternity or sorority house	0	0	0	0	22	0	118	0	0	0	0	0	60	1	322	1
	attending college?		Residence (house, apartment, etc.)																
			within walking distance to the institution	1	6	10	4	450	7	1,645	7	5	13	43	11	2,387	27	8,285	27
			Residence (house, apartment, etc.)	_															
			farther than walking distance to the institution	2	13	71	25	1,751	26	5,533	23	17	45	254	65	5,219	58	17,398	56
			None of the above	0	0	24	9	302	4	889	4	5	13	32	8	450	5	1,392	5
			Total	16	100	281	100	6,762	100	23,817	100	38	100	389	100	8,994	100	30,885	100
35.	Are you a student-	athlete	No	15	94	251	89	6,263	93	22,216	93	37	97	371	96	8,529	95	29,424	95
	athlete on a team		Yes	13	6	30	11	499	7	1,607	7	1	3	17	4	438	5	1,398	5
	sponsored by your institution's athletics		Total	16	100	281	100	6,762	100	23,823	100	38	100	388	100	8,967	100	30,822	100
	department?																		



Respondent Profile: Health & Natural Sci

He	alth & Natur	al Sci				First-Y	ear S	Students	Э					!	Senic	)rs <sup>a</sup>			
				Fitchburg S	tata	New Engla Public	nd	Nat. Publi Masters		All Nat. Pul	olic	Fitchburg St	ato	New Engla Public	nd	Nat. Publ Masters		All Nat. Pu	ıblic
	Item wording	Variable		Fitchburg 3	late	Public		iviasters		All Nat. Pul	JIIC	Fitchburg St	ale	Public		IVIdSLEIS	•	All Nat. Pu	DIIC
	or description	name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
36.	Are you a current or	veteran	No	16	100	278	99	6,675	99	23,472	99	36	95	376	96	8,656	96	29,732	96
	former member of the		Yes	0	0	2	1	84	1	354	1	2	5	14	4	323	4	1,138	4
	U.S. Armed Forces, Reserves, or National		Total	16	100	280	100	6,759	100	23,826	100	38	100	390	100	8,979	100	30,870	100
	Guard?																		
37a.	Have you been	disability	No	13	81	236	83	5,872	86	20,612	86	29	76	309	80	7,519	83	25,801	83
	diagnosed with any		Yes	2	13	32	11	694	10	2,569	11	7	18	60	16	1,196	13	4,110	13
	disability or		I prefer not to respond	1	6	15	5	223	3	731	3	2	5	18	5	300	3	1,033	3
	impairment?		Total	16	100	283	100	6,789	100	23,912	100	38	100	387	100	9,015	100	30,944	100
b	[If answered "yes"] Which of the following	dis_sense	A sensory impairment (vision or hearing)	0	0	2	6	101	15	356	14	0	0	5	8	124	10	418	10
	has been diagnosed?	dis_mobility	A mobility impairment	0	0	0	0	39	6	153	6	1	14	6	10	116	10	360	9
	(Select all that apply.)	dis_learning	A learning disability (e.g., ADHD, dyslexia)	1	50	12	38	249	36	938	37	4	57	30	50	528	44	1,752	43
		dis_mental	A mental health disorder	1	50	17	53	364	53	1,296	51	2	29	36	60	559	47	1,962	48
		dis_other	A disability or impairment not listed above	0	0	8	25	110	16	403	16	3	43	8	13	199	17	735	18
	Disability or	disability_all	A sensory impairment	0	0	2	1	69	1	238	1	0	0	1	0	72	1	227	1
	impairment	(Recoded from	A mobility impairment	0	0	0	0	14	0	77	0	0	0	4	1	53	1	175	1
		disability and	A learning disability	1	6	7	2	153	2	603	3	3	8	13	3	328	4	1,085	4
		dis_sense to	A mental health disorder	1	6	12	4	242	4	878	4	1	3	18	5	348	4	1,214	4
		dis_other where	A disability or impairment not listed	0	0	5	2	66	1	250	1	1	3	3	1	116	1	440	1
		each student is represented only	шраннен	0	0	6	2	146	2	508	2	2	5	21	5	275	3	954	3
		once.)	No disability or impairment	13	81	236	83	5,872	87	20,612	86	29	76	309	80	7,519	83	25,801	83
			Prefer not to respond	1	6	15	5	223	3	731	3	2	5	18	5	300	3	1,033	3
			Total	16	100	283	100	6,785	100	23,897	100	38	100	387	100	9,011	100	30,929	100
38.	Which of the following	sexorient17	Straight (heterosexual)	13	81	177	83	4,001	86	13,970	86	35	92	283	85	5,538	87	18,204	86
	best describes your		Bisexual	2	13	13	6	256	6	912	6	2	5	17	5	282	4	1,049	5
	sexual orientation?		Gay	0	0	2	1	54	1	193	1	0	0	6	2	101	2	342	2
			Lesbian	0	0	2	1	55	1	186	1	0	0	6	2	99	2	291	1
			Queer	0	0	2	1	25	1	100	1	0	0	2	1	39	1	150	1
			Questioning or unsure	0	0	3	1	59	1	211	1	0	0	2	1	36	1	182	1
			Another sexual orientation	1	6	4	2	65	1	244	1	0	0	8	2	82	1	276	1
			I prefer not to respond	0	0	10	5	129	3	454	3	1	3	10	3	224	3	740	3
			Total	16	100	213	100	4,644	100	16,270	100	38	100	334	100	6,401	100	21,234	100



**Respondent Profile: Health & Natural Sci** 

lealth & Natural Sci			First-Year Students <sup>a</sup>								<b>Seniors</b> <sup>a</sup>							
					New England		Nat. Public						New England		Nat. Public			
			Fitchburg S	tate	Public		Masters		All Nat. Pul	blic	Fitchburg Sta	ate	Public		Masters	5	All Nat. Pu	ablic
Item wording or description	Variable name	Response options	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
itution-reported in	formation																	
ables provided by your in	stitution in your NS	SE population file.)																
Institution-reported: Sex	IRsex	Female	12	75	221	77	5,131	75	17,550	73	30	79	287	73	6,383	70	21,711	69
		Male	4	25	66	23	1,727	25	6,619	27	8	21	107	27	2,717	30	9,563	31
		Total	16	100	287	100	6,858	100	24,169	100	38	100	394	100	9,100	100	31,274	100
Institution-reported: Race or ethnicity	IRrace	American Indian or Alaska Native	0	0	2	1	35	1	133	1	0	0	0	0	60	1	207	1
		Asian	0	0	9	3	355	6	1,559	7	1	3	9	2	502	6	1,882	7
		Black or African American	3	19	37	14	620	11	2,370	11	3	8	30	8	644	8	2,454	9
		Hispanic or Latino	2	13	35	13	982	17	3,267	15	4	11	30	8	1,010	13	3,658	13
		Native Hawaiian/Other Pac. Islander	0	0	0	0	19	0	44	0	0	0	0	0	12	0	56	(
		White	11	69	165	63	3,280	56	11,713	55	28	74	284	74	4,945	62	17,089	61
		Other	0	0	0	0	17	0	18	0	0	0	0	0	13	0	13	(
		Foreign or nonresident alien	0	0	3	1	140	2	657	3	0	0	5	1	153	2	592	2
		Two or more races/ethnicities	0	0	6	2	228	4	881	4	2	5	6	2	311	4	999	4
		Unknown	0	0	6	2	148	3	513	2	0	0	19	5	279	4	845	3
		Total	16	100	263	100	5,824	100	21,155	100	38	100	383	100	7,929	100	27,795	100
Institution-reported: Class level	IRclass	Freshman/First-Year	16	100	287	100	6,858	100	24,169	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	(
		Senior	0	0	0	0	0	0	0	0	38	100	394	100	9,103	100	31,278	100
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
		Total	16	100	287	100	6,858	100	24,169	100	38	100	394	100	9,103	100	31,278	100
Institution-reported: First-time first-year (FTFY) student	IRftfy	Not first-time first-year	0	0	19	7	693	10	2,557	11	38	100	394	100	8,988	99	31,021	99
		First-time first-year	16	100	268	93	6,165	90	21,612	89	0	0	0	0	115	1	257	1
		Total	16	100	287	100	6,858	100	24,169	100	38	100	394	100	9,103	100	31,278	100
Institution-reported: Enrollment status	IRenrollment	Not full-time	0	0	4	1	310	5	842	3	4	11	93	24	1,511	17	5,117	16
		Full-time	16	100	283	99	6,548	95	23,327	97	34	89	301	76	7,592	83	26,161	84
		Total	16	100	287	100	6,858	100	24,169	100	38	100	394	100	9,103	100	31,278	100



**Endnotes: Health & Natural Sci Fitchburg State University** 

#### **Endnotes**

- a. All results are unweighted.
- b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.
- c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean +/- 1.96 \* SEM.
- d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.
- e. Degrees of freedom used to compute the t-tests. Values differ from Ns due to whether equal variances were assumed.
- f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance: \*p < .05, \*\*p < .01, \*\*\*p < .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.
- 1. Items that make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective and Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.
- m. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook. For items estimating number of papers and hours per week, the values represent actual units using the midpoints of response option ranges and an estimate for unbounded options.
- n. Effect size for independent t-tests uses Cohen's d; z-tests use Cohen's h.
- o. Statistical comparison uses z -test to compare the percentage who responded "Done or in progress."

#### Key to symbols:



Your students' average was significantly higher (p < .05) with an effect size at least .3 in magnitude.



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.