

University of Waterloo

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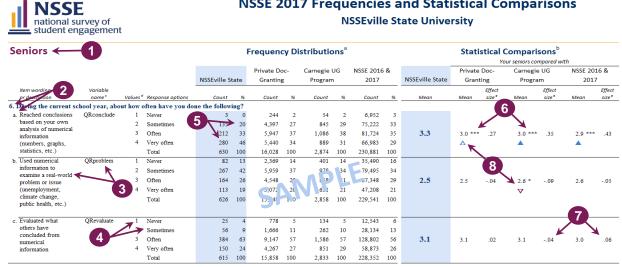
## **NSSE 2017 Frequencies and Statistical Comparisons About This Report**

The Frequencies and Statistical Comparisons report presents item-by-item student responses and statistical comparisons that allow you to examine patterns of similarity and difference between your students and those at your comparison group institutions. The report uses information from all randomly selected or census-administered students. The display below highlights important details in the report to keep in mind when interpreting your results. For more information please visit our website (nsse.indiana.edu) or contact a member of the NSSE team.

- 1. Class level: As reported by your institution.
- 2. Item numbers: Numbering corresponds to the survey facsimile included in your Institutional Report and available on the NSSE website.
- 3. Item wording and variable names: Survey items are in the same order and wording as they appear on the instrument. Variable names are included for easy reference to your data file and codebook.
- 4. Values and response options: Values are used to calculate means. Response options are worded as they appear on the instrument.
- 5. Count and column percentage (%): The Count column contains the number of students who selected the corresponding response option. The column percentage is the weighted percentage of students selecting the corresponding response option.

Note: Column percentages and statistics are weighted by institutionreported sex and enrollment status. Comparison group statistics are also weighted by institutional size. Counts are unweighted and cannot be used to replicate column percentages. For details visit: nsse.indiana.edu/html/weighting.cfm

6. Statistical comparisons: Items with mean differences that are larger than would be expected by chance are noted with asterisks referring to three significance levels (\*p < .05, \*\*p < .01, \*\*\*p < .001). Significance levels indicate the probability that an observed difference is due to chance. Statistical significance does not guarantee the result is substantive or important. Large sample sizes tend to generate more statistically significant results even though the magnitude of mean differences may be inconsequential. Consult effect sizes (see #7) to judge the practical meaning of differences. Unless otherwise noted, statistical comparisons are two-tailed independent t-tests. Exceptions are items 11 a-f which are compared using a z-test.



**NSSE 2017 Frequencies and Statistical Comparisons** 

7. Effect size: Effect size indicates practical significance. An effect size of .2 is often considered small, .5 moderate, and .8 large. A positive effect size indicates that your institution's mean was greater than that of the comparison group, thus showing a favorable result for your institution. A negative effect size indicates your institution lags behind the comparison group, suggesting that the student behavior or institutional practice represented by the item may warrant attention. Effect sizes for independent t-tests use Cohen's d; ztests use Cohen's h. Cohen's d is calculated by dividing the mean difference by the pooled standard deviation. Cohen's h is calculated by taking the difference in the proportion of students who responded "Done or in progress" after the proportion has been transformed using a non-linear (arcsine) transformation. See: Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd edition). New York: Psychology Press.

#### 8. Key to symbols:

- **A** Your students' average was significantly higher (p < .05) with an effect size at least .3 in magnitude.
- $\triangle$  Your students' average was significantly higher (p < .05) with an effect size less than .3 in magnitude.
- $\nabla$  Your students' average was significantly lower (p < .05) with an effect size less than .3 in magnitude.
- **Vour students' average** was significantly lower (p < .05) with an effect size at least .3 in magnitude.
- Note: It is important to interpret the direction of differences relative to item wording and your institutional context.



#### Ctudont 1st-V

1st-Year Stud	ents					Frequen	cy Dis	stributio	ns <sup>a</sup>				Stat		Comparis st-year studen		ed with	
				UWaterlo	0	U15		ON Instituti	ons	U6		UWaterloo	U1	5	ON Institu	itions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
. During the current s	chool year, abou	it how	often have you don	e the followin	ıg?													
a. Asked questions or	askquest	1	Never	495	13	4,358	15	3,595	12	1,541	13							
contributed to course discussions in other		2	Sometimes	1,974	52	14,908	52	14,922	50	6,012	51							
ways		3	Often	907	24	6,427	23	7,250	25	2,735	25	2.3	2.3	.03	2.4 ***	07	2.3	03
2		4	Very often	379	10	2,772	10	3,412	12	1,215	11				$\nabla$			
			Total	3,755	100	28,465	100	29,179	100	11,503	100							
b. Prepared two or more	drafts	1	Never	913	25	7,719	27	7,449	26	2,876	25							
drafts of a paper or assignment before		2	Sometimes	1,490	40	10,086	36	10,900	38	4,277	38							
turning it in		3	Often	949	25	7,067	25	7,291	25	2,895	25	2.2	2.2	01	2.2	02	2.2	03
		4	Very often	372	10	3,410	12	3,332	11	1,382	12							
			Total	3,724	100	28,282	100	28,972	100	11,430	100							
c. Come to class without	unpreparedr	1	Very often	421	11	2,775	10	3,047	11	1,316	12							
completing readings or	(Reverse-coded	2	Often	974	26	6,726	24	7,028	24	2,954	26							
assignments	version of	3	Sometimes	1,878	50	14,557	51	14,699	51	5,721	50	2.6	2.7 ***	08	2.7 ***	07	2.6	.00
	unprepared	4	Never	459	12	4,267	15	4,233	15	1,437	13		$\nabla$		$\nabla$			
	created by NSSE.)		Total	3,732	100	28,325	100	29,007	100	11,428	100							
d. Attended an art exhibit,	attendart	1	Never	2,035	55	15,156	53	16,524	57	5,997	53							
play, or other arts		2	Sometimes	1,232	33	9,069	32	8,351	29	3,696	32							
performance (dance, music, etc.)		3	Often	337	9	2,936	11	2,852	10	1,238	11	1.6	1.7 ***	06	1.6	01	1.7 ***	07
		4	Very often	120	3	1,134	4	1,227	4	487	4		$\nabla$				$\nabla$	
			Total	3,724	100	28,295	100	28,954	100	11,418	100							
e. Asked another student	CLaskhelp	1	Never	162	5	2,345	8	2,372	8	887	8							
to help you understand course material		2	Sometimes	1,152	31	10,260	36	10,520	36	3,928	34							
course material		3	Often	1,477	39	10,143	36	10,431	36	4,196	37	2.8	2.7 ***	.20	2.7 ***	.21	2.7 ***	.15
		4	Very often	940	25	5,523	20	5,634	19	2,405	21		Δ		Δ		Δ	
			Total	3,731	100	28,271	100	28,957	100	11,416	100							
f. Explained course	CLexplain	1	Never	102	3	1,447	5	1,354	5	506	4							
material to one or more students		2	Sometimes	1,161	31	10,313	36	10,275	35	3,936	34							
students		3	Often	1,667	45	11,453	41	11,731	40	4,697	41	2.9	2.7 ***	.15	2.8 ***	.12	2.8 ***	.08
		4	Very often	801	22	5,045	19	5,578	20	2,273	21		Δ		Δ		Δ	
			Total	3,731	100	28,258	100	28,938	100	11,412	100							



#### Statistical Comparisons<sup>b</sup> **1st-Year Students Frequency Distributions**<sup>a</sup> Your 1st-year students compared with UWaterloo UWaterloo U15 **ON** Institutions U6 U15 **ON** Institutions U6 Variable Effect Effect Effect Item wording or description name <sup>c</sup> Values<sup>d</sup> Response options Count % % Count % Mean Mean size <sup>e</sup> Mean size <sup>e</sup> size <sup>e</sup> Count Count % Mean g. Prepared for exams by CLstudy Never 342 9 3,705 13 3,754 13 1,395 12 discussing or working 2 Sometimes 1,127 30 9,255 33 9,401 32 3,798 33 through course material 3 Often 1.416 38 9,402 33 9.610 33 3.765 33 2.7 2.6 \*\*\* .12 26 \*\*\* .11 \*\*\* .10 2.6 with other students 22 22 837 21 21 Δ 4 Very often 5,815 6,098 2,423 Δ Δ Total 3.722 100 100 100 100 28,177 28.863 11.381 h. Worked with other CLproject 1 Never 215 6 3,279 11 3,337 11 1,411 12 students on course 32 33 34 34 2 1,181 9,323 10,050 3,969 Sometimes projects or assignments 2.8 3 Often 1.423 38 9.637 34 9.886 34 3.762 33 2.7 \*\*\* .16 2.6 \*\*\* .20 2.6 \*\*\* .20 4 Very often 903 24 5,917 21 5,539 20 2,220 20 Δ Δ Δ Total 3,722 100 28,156 100 28,812 100 11,362 100 i. Given a course Never 1.004 27 12,710 44 12.012 41 5.355 45 present 1 presentation 47 2 Sometimes 1,749 10,807 39 10,958 38 4,316 39 3 19 13 15 12 2.1 Often 693 3,465 4,184 1,281 1.8 \*\*\* .35 1.9 \*\*\* .24 1.7 \*\*\* .39 4 Very often 276 7 1.177 4 1.658 6 418 4 Δ Total 3,722 100 28,159 100 28,812 100 11,370 100 2. During the current school year, about how often have you done the following? a. Combined ideas from RIintegrate 1 Never 217 2.274 8 2,187 8 861 8 6 different courses when 2 Sometimes 1,613 43 11,082 40 11,331 40 4,611 41 completing assignments 2.6 3 Often 1,412 38 10,972 39 11,042 38 4,318 38 2.6 .00 2.6 -.02 2.6 .00 12 13 14 13 4 465 3,667 4,077 1,506 Very often 100 27,995 100 100 Total 3,707 28,637 100 11,296 b. Connected your RIsocietal 12 1 Never 619 17 3.211 12 3,193 12 1,278 learning to societal 47 41 2 1,727 11,252 40 11,258 40 4,569 Sometimes problems or issues 3 Often 1,003 27 9,663 34 10,059 35 3,860 34 2.3 2.5 \*\*\* 2.5 \*\*\* -.25 2.5 \*\*\* -.26 -.25 344 9 14 14 14 4 Very often 3.795 4.034 1.553 $\nabla$ $\nabla$ $\nabla$ Total 100 100 100 100 3,693 27,921 28,544 11,260 c. Included diverse RIdiverse Never 1.043 29 6.522 24 5.370 20 2.417 22 1 perspectives (political, 40 38 38 2 Sometimes 1,489 10,886 39 10,647 4,216 religious, racial/ethnic, 2.1 3 Often 856 23 7,465 27 8,568 29 3,190 28 2.2 \*\*\* 2.4 \*\*\* -.28 2.3 \*\*\* -.22 -.16 gender, etc.) in course 4 Very often 302 8 2.983 11 3.863 13 1.410 12 $\nabla$ $\nabla$ $\nabla$ discussions or assignments Total 3,690 100 27,856 100 28,448 100 11.233 100



#### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Compa	risons <sup>b</sup>
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Your 1st year students compared with

														Your 1	st-year studen	ts compare	d with	
				UWaterlo	0	U15		ON Instituti	ons	U6		UWaterloo	U1!	5	ON Institu	itions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
d. Examined the strengths	RIownview	1	Never	298	8	2,321	8	2,195	8	913	8							
and weaknesses of		2	Sometimes	1,416	38	10,317	37	10,200	36	4,008	35							
your own views on a topic or issue		3	Often	1,557	42	11,523	42	12,032	42	4,721	42	2.6	2.6 **	04	2.6 ***	08	2.6 ***	07
topic of issue		4	Very often	410	11	3,570	13	3,904	14	1,541	14		$\nabla$		$\nabla$		$\nabla$	
			Total	3,681	100	27,731	100	28,331	100	11,183	100							
e. Tried to better	RIperspect	1	Never	181	5	1,388	5	1,212	4	490	4							
understand someone		2	Sometimes	1,203	33	8,391	30	8,363	30	3,285	30							
else's views by		3	Often	1,688	46	12,569	45	12,831	45	5,052	45	2.7	2.8 ***	07	2.8 ***	10	2.8 ***	11
imagining how an issue looks from their		4	Very often	603	16	5,246	19	5,784	20	2,293	21		V		V		V	
perspective			Total	3,675	100	27,594	100	28,190	100	11,120	100		•		•		·	
f. Learned something that	RInewview	1	Never	104	3	649	2	710	3	267	2							
changed the way you		2	Sometimes	1,125	31	7,611	28	7,896	28	3,048	28							
understand an issue or		3	Often	1,773	48	13,426	48	13,513	48	5,305	48	2.8	2.9 ***	09	2.9 ***	07	2.9 ***	10
concept		4	Very often	670	18	5,789	21	5,969	21	2,473	22		V	107	V	107	V	
			Total	3,672	100	27,475	100	28,088	100	11,093	100		¥		v		•	
g. Connected ideas from	RIconnect	1	Never	61	2	389	2	387	2	142	1							
your courses to your	Turonnoor	2	Sometimes	855	23	5,576	20	5,791	21	2,218	20							
prior experiences and		- 3	Often	1,933	53	14,060	51	14,396	51	5,616	51	3.0	3.0 ***	12	3.0 ***	10	3.0 ***	13
knowledge		4	Very often	808	22	7,371	27	7,424	26	3,076	28	5.0	.0	12	.0	10	▼	15
		-	Total	3,657	100	27,396	100	27,998	100	11,052	100		v		v		v	
						21,390	100	21,00	100	11,052	100							
3. During the current scl	•		•		0													
a. Talked about career	SFcareer	1	Never	1,507	41	13,710	49	13,745	48	5,485	48							
plans with a faculty member		2	Sometimes	1,329	36	9,055	33	9,033	33	3,618	33							
momoor		3	Often	587	16	3,274	12	3,645	13	1,362	13	1.9	1.7 ***	.17	1.8 ***	.14	1.8 ***	.15
		4	Very often	239	7	1,354	5	1,569	6	575	5		Δ		Δ		Δ	
			Total	3,662	100	27,393	100	27,992	100	11,040	100							
b. Worked with a faculty	SFotherwork	1	Never	2,055	56	19,043	68	18,478	65	7,155	64							
member on activities other than coursework		2	Sometimes	1,032	28	5,573	21	6,203	23	2,563	24							
(committees, student		3	Often	429	12	2,032	8	2,432	9	978	9	1.6	1.5 ***	.24	1.5 ***	.17	1.5 ***	.15
groups, etc.)		4	Very often	135	4	694	3	823	3	322	3		Δ		Δ		Δ	
			Total	3,651	100	27,342	100	27,936	100	11,018	100							



1st-Year Stude	Year Students					Frequen	cy Dis	tributio	ns <sup>a</sup>				Stati		Comparis st-year student		ed with	
				UWaterlo	0	U15		ON Instituti	ions	U6		UWaterloo	U15	5	ON Institu	tions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
c. Discussed course	SFdiscuss	1	Never	1,313	36	12,688	45	12,727	45	4,881	43							
topics, ideas, or concepts with a faculty		2	Sometimes	1,503	41	10,099	37	10,105	37	4,065	38							
member outside of		3	Often	644	18	3,409	13	3,813	14	1,537	14	1.9	1.8 ***	.19	1.8 ***	.17	1.8 ***	.14
class		4	Very often	185	5	1,070	4	1,216	4	504	5		Δ		Δ		Δ	
			Total	3,645	100	27,266	100	27,861	100	10,987	100							
d. Discussed your	SFperform	1	Never	1,656	45	15,077	54	13,922	50	5,741	52							
academic performance		2	Sometimes	1,333	36	8,817	33	9,636	35	3,677	34							
with a faculty member		3	Often	520	14	2,582	10	3,285	12	1,180	11	1.8	1.6 ***	.20	1.7 ***	.10	1.7 ***	.13
		4	Very often	143	4	769	3	974	4	373	4		Δ		Δ		Δ	
			Total	3,652	100	27,245	100	27,817	100	10,971	100							
4. During the current scl	hool year, how	much	has your coursewor	·k emphasize	d the f	ollowing?												
a. Memorizing course	memorize	1	Very little	220	6	852	3	1,004	4	348	3							
material		2	Some	1,106	31	5,753	22	6,422	24	2,536	24							
		3	Quite a bit	1,518	41	11,784	43	12,122	44	4,662	43	2.8	3.0 ***	29	3.0 ***	23	3.0 ***	25
		4	Very much	802	21	8,837	31	8,256	28	3,422	30		V		V		V	
			Total	3,646	100	27,226	100	27,804	100	10,968	100							
b. Applying facts,	HOapply	1	Very little	94	3	976	3	1,027	4	362	3							
theories, or methods to		2	Some	727	20	6,179	22	6,443	23	2,359	21							
practical problems or		3	Quite a bit	1,651	45	12,282	45	12,354	45	4,737	43	3.1	3.0 ***	.09	3.0 ***	.11	3.1	.02
new situations		4	Very much	1,184	32	7,755	29	7,931	29	3,504	33		Δ		Δ			
			Total	3,656	100	27,192	100	27,755	100	10,962	100							
c. Analyzing an idea,	HOanalyze	1	Very little	144	4	1,393	5	1,342	5	539	5							
experience, or line of		2	Some	955	26	7,624	28	7,878	28	2,956	27							
reasoning in depth by		3	Quite a bit	1,644	45	11,838	43	11,899	43	4,639	42	2.9	2.9 ***	.06	2.9 ***	.06	2.9	.01
examining its parts		4	Very much	902	25	6,268	24	6,565	24	2,798	26		Δ		Δ			
			Total	3,645	100	27,123	100	27,684	100	10,932	100							
d. Evaluating a point of	HOevaluate	1	Very little	403	11	2,828	11	2,277	8	1,030	9							
view, decision, or		2	Some	1,276	35	9,092	33	8,767	32	3,551	33							
information source		3	Quite a bit	1,394	38	10,599	39	11,423	41	4,256	39	2.6	2.6 **	05	2.7 ***	14	2.7 ***	12
		4	Very much	575	16	4,575	17	5,202	19	2,087	19		▽		V		V	
			Total	3,648	100	27,094	100	27,669	100	10,924	100		·		*		*	

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



1st-Year Stude	nts					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat		Comparis st-year studen		d with	
				UWaterlo	0	U15		ON Instituti	ons	U6		UWaterloo	U1	5	ON Institu	tions	U6	
Item wording	Variable				-									- Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
e. Forming a new idea or	HOform	1	Very little	210	6	2,082	8	1,861	7	784	7							
understanding from various pieces of		2	Some	1,146	32	8,658	32	8,583	31	3,345	30							
information		3	Quite a bit	1,650	45	11,501	43	11,858	43	4,638	43	2.7	2.7 *	.04	2.7	.00	2.8	02
		4	Very much	636	18	4,824	18	5,347	19	2,154	20		Δ					
			Total	3,642	100	27,065	100	27,649	100	10,921	100							
5. During the current sch	nool year, to v	vhat ext	ent have your instr	uctors done t	he foll	lowing?												
a. Clearly explained	ETgoals	1	Very little	77	2	651	3	888	3	323	3							
course goals and		2	Some	869	24	6,147	23	6,845	25	2,767	25							
requirements		3	Quite a bit	1,870	51	13,593	50	13,193	48	5,297	48	2.9	3.0	03	2.9	.03	2.9 *	.04
		4	Very much	824	23	6,672	25	6,709	24	2,525	23						Δ	
			Total	3,640	100	27,063	100	27,635	100	10,912	100							
b. Taught course sessions	ETorganize	1	Very little	86	2	701	3	957	4	336	3							
in an organized way		2	Some	873	24	5,984	22	6,860	25	2,618	24							
		3	Quite a bit	1,883	52	14,398	53	13,421	49	5,480	50	2.9	2.9	02	2.9	.03	2.9	.00
		4	Very much	795	22	5,970	23	6,372	23	2,477	23							
			Total	3,637	100	27,053	100	27,610	100	10,911	100							
c. Used examples or	ETexample	1	Very little	90	3	800	3	1,115	4	386	4							
illustrations to explain		2	Some	789	22	5,758	21	6,723	25	2,511	23							
difficult points		3	Quite a bit	1,777	49	13,210	48	12,376	45	5,098	47	3.0	3.0	.01	2.9 ***	.08	3.0 *	.04
		4	Very much	982	27	7,259	27	7,369	27	2,902	27				Δ		Δ	
			Total	3,638	100	27,027	100	27,583	100	10,897	100							
d. Provided feedback on a	ETdraftfb	1	Very little	661	18	5,943	22	6,081	22	2,552	23							
draft or work in		2	Some	1,470	40	10,837	40	10,628	39	4,383	40							
progress		3	Quite a bit	1,112	31	7,494	28	7,572	27	2,853	26	2.3	2.3 ***	.09	2.3 ***	.06	2.2 ***	.11
		4	Very much	382	11	2,733	10	3,262	12	1,096	10		Δ		Δ		Δ	
			Total	3,625	100	27,007	100	27,543	100	10,884	100							
e. Provided prompt and	ETfeedback	1	Very little	446	12	4,464	17	4,642	17	1,925	18							
detailed feedback on		2	Some	1,492	41	11,312	42	11,217	41	4,576	42							
tests or completed		3	Quite a bit	1,286	36	8,598	32	8,709	32	3,316	31	2.5	2.4 ***	.12	2.4 ***	.11	2.3 ***	.14
assignments		4	Very much	402	11	2,591	10	2,963	11	1,062	10		Δ		Δ		Δ	
			Total	3,626	100	26,965	100	27,531	100	10,879	100							

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#### **1st-Year Students**

## **Frequency Distributions**<sup>a</sup>

1st-Year Stud	lents					Frequen	cy Dis	stributio	ns <sup>a</sup>				Stati		<b>Comparis</b> st-year studen		ed with	
				UWaterlo	0	U15		ON Institut	ions	U6		UWaterloo	U15		ON Institu	tions	U6	
Item wording	Variable			Owateric	0	015		ON Institut	10113	00		e traterioo	013	, Effect	ON Institu	Effect	00	Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
6. During the current s	school year, abou	it how	often have you don	e the followi	ng?									-				
a. Reached conclusions	QRconclude	1	Never	352	9	4,632	16	5,054	17	1,789	15							
based on your own		2	Sometimes	1,325	36	10,372	38	10,589	38	4,197	38							
analysis of numerical		3	Often	1,451	40	8,858	34	8,771	33	3,595	34	2.6	2.4 ***	.19	2.4 ***	.22	2.4 ***	.17
information (numbers,		4	Very often	499	14	3,062	12	3,068	12	1,276	12		Δ		Δ		Δ	
graphs, statistics, etc.)			Total	3,627	100	26,924	100	27,482	100	10,857	100		-		-		-	
b. Used numerical	QRproblem	1	Never	895	25	8,203	29	7,536	26	2,930	26							
information to examine		2	Sometimes	1,486	41	10,841	40	11,177	41	4,433	41							
a real-world problem or	r	3	Often	931	26	6,034	23	6,664	25	2,643	25	2.2	0.1 ***	10	0.1 **	05	2.2.*	0.4
issue (unemployment,												2.2	2.1 ***	.12	2.1 **	.05	2.2 *	.04
climate change, public		4	Very often	304	9	1,821	7	2,067	8	830	8		Δ		Δ		Δ	
health, etc.)			Total	3,616	100	26,899	100	27,444	100	10,836	100							
c. Evaluated what others	QRevaluate	1	Never	666	18	6,975	24	6,742	23	2,455	21							
have concluded from		2	Sometimes	1,561	43	11,445	43	11,754	43	4,644	43							
numerical information		3	Often	1,096	31	6,795	26	7,081	27	2,966	28	2.3	2.2 ***	.16	2.2 ***	.13	2.2 ***	.08
		4	Very often	298	8	1,707	7	1,904	7	788	8		Δ		Δ		Δ	
			Total	3,621	100	26,922	100	27,481	100	10,853	100							
7. During the current s	school year, abor	it how	many papers, repo	rts, or other	writing	tasks of th	e follov	ving length	s have	vou been a	ssigne	d? (Include those	not vet con	npleted.)	)			
a. Up to 5 pages	wrshortnum	0	None	311	9	1,986	8	1,493	6	733	8			protout)				
		1.5	1-2	654	19	5,646	22	5,144	20	2,144	21							
	(Recoded version of wrshort created		3-5	981	28	7,790	31	8,161	32	3,113	31							
	by NSSE. Values	8	6-10	824	23	5,648	22	6,114	24	2,312	23	6.8	6.0 ***	.14	6.4 ***	.08	6.3 ***	.10
	are estimated	13	11-15	379	11	2,188	9	2,487	10	2,312 946	23 9	0.0	Δ	.14	0.4 · · · ·	.08	Δ	.10
	number of papers,		16-20		4	2,188	4	1,056	4	362	4		Δ		Δ		Δ	
	reports, etc.)	18		146					-									
		23	More than 20	216	6	937	4	1,021	4	443	5							
1 D ( 110		0	Total	3,511	100	25,066	100	25,476	100	10,053	100							
b. Between 6 and 10	wrmednum	0	None	982	29	8,087	33	6,680	27	2,976	31							
pages	(Recoded version	1.5	1-2	1,069	30	8,642	34	8,858	35	3,424	34							
	of wrmed created	4	3-5	752	21	4,970	20	5,615	22	2,104	21	2 5						
	by NSSE. Values are estimated	8	6-10	430	12	2,248	9	2,817	11	995	10	3.5	2.7 ***	.22	3.1 ***	.10	2.9 ***	.16
	number of papers,	13	11-15	146	4	614	3	837	3	291	3		Δ		Δ		Δ	
	reports, etc.)	18	16-20	45	1	180	1	254	1	91	1							
	- ,	23	More than 20	65	2	189	1	246	1	101	1							
			Total	3,489	100	24,930	100	25,307	100	9,982	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



## 1st-Year Students

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

Your 1st-year students compared with

														YOUF 1	st-year studen	is compare	u with	
				UWaterlo	0	U15		ON Instituti	ions	U6		UWaterloo	U15	5	ON Institu	itions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
c. 11 pages or more	wrlongnum	0	None	1,682	48	16,221	65	15,946	63	6,269	63							
	(Recoded version	1.5	1-2	1,036	29	5,559	22	5,671	22	2,233	22							
	of wrlong created	4	3-5	393	11	1,671	7	1,721	7	735	7							
	by NSSE. Values	8	6-10	204	6	802	3	1,036	4	401	4	2.3	1.4 ***	.28	1.6 ***	.20	1.5 ***	.20
	are estimated number of papers,	13	11-15	100	3	394	2	565	2	207	2		Δ		Δ		Δ	
	reports, etc.)	18	16-20	31	1	130	1	160	1	56	1							
	1 , ,	23	More than 20	58	2	186	1	226	1	102	1							
			Total	3,504	100	24,963	100	25,325	100	10,003	100							
Estimated number of assigned pages of	wrpages											82.0	59.2 ***	.29	67.0 ***	.17	64.2 ***	.21
student writing.		t, wrmed	ded and summed by d, and wrlong. Values igned writing.)									02.0	∆	.29	Δ	.17	Δ	.21
8. During the current	school vear, abou	t how	often have vou had	discussions v	vith p	eople from t	he follo	owing grou	ns?									
a. People of a race or	DDrace	1	-	142	4	1.275	5	1,166	5	402	4							
ethnicity other than		2	Sometimes	643	18	5,882	23	5,318	21	2,019	20							
your own		3	Often	1,133	32	7,678	31	7,997	32	3,052	31	3.2	3.1 ***	.10	3.1 ***	.08	3.2	.03
		4	Very often	1,613	46	10,252	42	10,950	43	4,562	45	0.1	Δ	.10	Δ	.00	5.2	.05
			Total	3,531	100	25,087	100	25,431	100	10,035	100		-		4			
b. People from an	DDeconomic	1		163	5	1,581	6	1,367	5	508	5							
economic background	Deconomic	2	Sometimes	852	24	7,099	28	6,482	26	2,604	26							
other than your own		3	Often	1,285	37	8,762	35	9,131	36	3,523	35	3.0	2.9 ***	.10	3.0 **	.05	3.0 *	.04
		4	Very often	1,205	35	7,574	31	8,376	33	3,378	34	5.0	Δ	.10	3.0 · ·	.05	∆ 3.0 ·	.04
		-	Total	3,514	100	25,016	100	25,356	100	10,013	100		Δ		Δ		Δ	
c. People with religious	DDreligion	1	Never	189	5	1,812	7	1,476	6	533	5							
beliefs other than your	DDieligion	2	Sometimes	732	21	6,780	26	5,844	23	2,284	23							
own		3	Often	1,194	34	7,930	32	8,502	33	3,269	33	3.1	20 ***	14	20 ***	07	2.0	02
				1,194	54 40	7,930 8,526	32 35	8,302 9,550	35 37	3,209	35 39	5.1	3.0 ***	.14	3.0 ***	.07	3.0	.03
		4	Very often	· · · · · · · · · · · · · · · · · · ·		,		<i>,</i>		,			Δ		Δ			
d Design with a stirl of	DD - litie 1	•	Total	3,515	100	25,048	100	25,372	100	10,024	100							
d. People with political views other than your	DDpolitical	1	Never	271	8	1,934	8	1,956	8	736	7							
own		2	Sometimes	1,208	34	8,609	34	8,318	33	3,415	34	2.0						
		3	Often	1,115	32	8,198	33	8,271	33	3,215	32	2.8	2.8	.00	2.8	02	2.8	02
		4	Very often	913	26	6,286	26	6,830	27	2,648	27							
			Total	3,507	100	25,027	100	25,375	100	10,014	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### Statistical Comparisons<sup>b</sup> **1st-Year Students Frequency Distributions**<sup>a</sup> Your 1st-year students compared with UWaterloo UWaterloo U15 **ON** Institutions U6 U15 **ON** Institutions U6 Variable Effect Effect Effect Item wording or description name <sup>c</sup> Values<sup>d</sup> Response options Count % % % % Mean Mean size <sup>e</sup> Mean size <sup>e</sup> Mean size <sup>e</sup> Count Count Count 9. During the current school year, about how often have you done the following? a. Identified key LSreading 1 Never 123 4 600 3 595 2 213 2 information from 2 Sometimes 928 26 5,795 24 6,074 24 2,355 24 reading assignments 3 Often 1.700 48 11,947 48 12.413 49 4,828 49 2.9 \*\*\* 3.0 \*\*\* -.12 2.9 \*\*\* -.09 3.0 -.11 22 4 Very often 757 6,592 26 6,187 24 2,574 25 $\nabla$ $\nabla$ $\nabla$ Total 3.508 100 24.934 100 100 100 25,269 9,970 b. Reviewed your notes LSnotes 1 Never 261 7 2,069 9 2,212 9 869 9 after class 2 43 39 41 41 Sometimes 1.508 9,573 10.398 4.055 32 31 2.6 3 Often 1,136 7,855 31 7,880 3,070 31 2.7 \*\*\* -.07 2.6 .01 2.6 -.01 4 Very often 606 17 5,447 21 4,772 18 1,975 19 $\nabla$ Total 3,511 100 24,944 100 100 100 25,262 9,969 c. Summarized what you LSsummary 263 1,893 780 8 Never 8 8 2,089 8 1 learned in class or from 37 33 2 Sometimes 1,288 8,210 9,022 36 3,509 36 course materials 2.7 1,301 37 37 3 Often 8,994 36 9,201 3,571 36 2.7 \*\*\* -.08 2.7 .00 2.7 -.03 Very often 4 647 18 5,789 23 4,895 19 2,081 20 $\nabla$ Total 3.499 100 24.886 100 25.207 100 9.941 100 10. During the current school year, to what extent have your courses challenged you to do your best work? challenge 1 Not at all 47 213 1 282 1 76 1 2 54 2 402 2 449 2 169 2 3 247 7 1,210 5 1,437 6 519 6 4 439 13 3,174 13 3,585 14 1,327 13 5.3 .01 5.4 \*\*\* -.07 5.3 5.3 \*\* -.05 5 1.103 31 8.040 32 8.374 33 3.206 32 $\nabla$ $\nabla$ 6 924 26 6,456 26 6,144 24 2,504 25 7 Very much 681 19 5,342 21 4,855 19 2,113 21 Total 3.495 100 24.837 100 25.126 100 9,914 100 11. Which of the following have you done or do you plan to do before you graduate? Have not decided 197 4.393 17 4.536 18 17 a. Participate in an intern 6 1.690 internship, co-op, field 195 1,632 7 8 6 Do not plan to do 6 1,879 620 (Means indicate experience, student 22% the percentage Plan to do 2,361 67 17,062 69 17,229 69 7,152 72 4% \*\*\* 7% \*\*\* .45 \*\*\* .50 .55 6% teaching, or clinical who responded Done or in progress 750 22 1.753 7 1.479 449 4 6 placement "Done or in Total 3.503 100 24,840 100 25,123 100 9.911 100 progress.")

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

					•								Your 1	st-year studen	ts compare	ed with	
			UWaterlo	00	U15		ON Institut	ions	U6		UWaterloo	U15	5	ON Institu	tions	U6	
Item wording	Variable												Effect		Effect		Effect
or description	name <sup>c</sup>	Values <sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
b. Hold a formal	leader	Have not decided	778	22	7,037	28	7,192	28	2,695	27							
leadership role in a student organization or	(Means indicate	Do not plan to do	741	22	7,556	29	6,933	27	2,378	24							
group	the percentage	Plan to do	1,503	43	7,987	34	8,956	36	3,945	40	13%	9% ***	.13	8% ***	.17	9% ***	.13
0 1	who responded "Done or in	Done or in progress	468	13	2,191	9	1,990	8	865	9		Δ		Δ		Δ	
	progress.")	Total	3,490	100	24,771	100	25,071	100	9,883	100							
c. Participate in a learning	learncom	Have not decided	921	26	8,442	34	8,683	34	3,349	33							-
community or some	(Means indicate	Do not plan to do	1,024	30	7,522	30	7,174	29	2,767	28							
other formal program	the percentage	Plan to do	1,030	30	6,185	26	7,172	29	2,872	29	14%	10% ***	.13	8% ***	.20	9% ***	.17
where groups of students take two or	who responded	Done or in progress	497	14	2,523	10	1,942	8	853	9		Δ		Δ		Δ	
more classes together	"Done or in progress.")	Total	3,472	100	24,672	100	24,971	100	9,841	100							
d. Participate in a study	abroad	Have not decided	1,011	29	7,450	30	7,593	30	2,894	29							
abroad program	(Means indicate	Do not plan to do	995	29	7,020	29	7,298	30	2,607	28							
	the percentage	Plan to do	1,382	39	9,713	39	9,555	37	4,132	40	3%	2%	.02	2%	.02	2%	.02
	who responded	Done or in progress	92	3	534	2	557	2	221	2							
	"Done or in progress.")	Total	3,480	100	24,717	100	25,003	100	9,854	100							
e. Work with a faculty	research	Have not decided	1,161	33	8,929	36	9,113	36	3,354	34							
member on a research	(Means indicate	Do not plan to do	738	21	5,704	22	5,710	23	1,912	19							
project	the percentage	Plan to do	1,448	42	9,342	39	9,552	39	4,344	44	4%	3% **	.05	3% ***	.08	3% ***	.07
	who responded	Done or in progress		4	744	3	609	3	248	3	.,.	Δ	100	Δ	.00	Δ	
	"Done or in	Total	3,481	100	24,719	100	24,984	100	9,858	100		-		-		-	
f Complete e mlminstine	progress.")			33	· · · ·												
f. Complete a culminating senior experience	capstone	Have not decided	1,148		10,190	41	10,113	40	4,011	40							
(capstone course,	(Means indicate	Do not plan to do	575	17	4,592	18	4,539	18	1,627	17	20/						
senior project or thesis,	the percentage who responded	Plan to do	1,667	48	9,489	39	9,873	40	4,094	42	3%	2% **	.05	2% ***	.06	1% ***	.09
comprehensive exam,	"Done or in	Done or in progress		3	427	2	442	2	126	1		Δ		Δ		Δ	
portfolio, etc.)	progress.")	Total	3,476	100	24,698	100	24,967	100	9,858	100							
2. About how many of	your courses at	t this institution have inc	luded a comm	unity-l	pased proje	ct (serv	ice-learnin	g)?									
	servcourse	1 None	1,933	56	15,163	61	13,914	55	5,714	57							
		2 Some	1,187	34	7,884	33	8,839	36	3,463	36							
		3 Most	253	7	1,313	5	1,775	7	540	6	1.6	1.5 ***	.13	1.5	.00	1.5 **	.06
		4 All	66	2	236	1	353	1	99	1		Δ				Δ	
		Total	3,439	100	24,596	100	24,881	100	9,816	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### **1st-Year Students** Statistical Comparisons<sup>b</sup> **Frequency Distributions**<sup>a</sup> Your 1st-year students compared with UWaterloo UWaterloo U15 **ON** Institutions U6 U15 **ON** Institutions U6 Variable Effect Effect Effect Item wording name <sup>c</sup> Values<sup>d</sup> Response options % Count % % Mean Mean size <sup>e</sup> Mean size <sup>e</sup> size <sup>e</sup> or description Count Count Count % Mean 13. Indicate the quality of your interactions with the following people at your institution. 2 a. Students QIstudent 1 Poor 74 2 418 2 518 2 176 2 3 85 2 627 2 705 3 271 3 178 5 1,381 6 1,481 6 591 6 4 437 13 13 3.258 13 13 3.112 1,310 5 27 27 5.3 957 6,519 26 26 2,686 -.02 .02 .02 6,661 5.4 5.3 5.3 6 946 27 6,499 27 6,456 26 2,563 26 7 Excellent 22 5,844 24 5,640 23 2,155 22 778 1 Not applicable 25 1 262 1 229 - 1 79 Total 3,480 100 100 24,948 100 100 24,662 9,831 b. Academic advisors QIadvisor Poor 5 1,250 5 5 5 1 162 1,407 559 2 226 1.308 5 1.511 564 6 6 6 3 354 10 2,088 8 2,349 9 956 10 4 561 16 3,332 14 3,705 15 1,431 14 5 676 19 4.510 19 5,004 20 1,974 20 4.6 4.6 -.03 -.02 .00 4.6 4.6 6 3,496 15 1,422 15 561 16 15 3,711 7 Excellent 405 12 2,916 12 3,125 13 1,085 11 Not applicable 530 16 5,721 23 4,102 17 1,826 19 Total 3,475 100 24,621 100 24,914 100 9,817 100 QIfaculty Poor 112 4 1,182 435 4 c. Faculty 1 3 909 5 2 5 5 154 4 1,134 1,371 5 531 3 295 2.116 9 2.335 9 957 9 8 17 17 4 583 17 4,036 16 4,274 1,650 4.9 5 27 985 28 6,539 6,327 26 2,494 26 4.8 .01 4.8 \*\*\* .06 4.8 \*\*\* .07 6 22 5,329 22 21 1,973 21 761 5,024 Δ Δ 12 13 13 12 7 Excellent 419 3,045 3,147 1,149 156 5 1.475 6 1.192 5 604 6 Not applicable

Total

3,465

100

24,583

100

24,852

100

9,793

100



#### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

														Your 1	st-year studen	ts compare	d with	
				UWaterlo	00	U15		ON Instituti	ions	U6		UWaterloo	U1	5	ON Institu	itions	U6	j
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
d. Student services staff	QIstaff	1	Poor	143	4	1,156	5	1,513	6	539	5							
(career services,		2		178	5	1,180	5	1,449	6	553	5							
student activities, housing, etc.)		3		299	9	1,828	7	2,051	8	819	8							
nousing, etc.)		4		542	16	3,085	13	3,403	14	1,348	13							
		5		805	23	4,704	20	4,803	19	2,018	21	4.8	4.7	.02	4.7 **	.06	4.7 *	.05
		6		635	18	3,868	16	4,002	17	1,633	17				Δ		Δ	
		7	Excellent	445	13	2,764	12	3,071	13	1,142	12							
		_	Not applicable	407	12	5,966	23	4,541	18	1,730	18							
			Total	3,454	100	24,551	100	24,833	100	9,782	100							
e. Other administrative	QIadmin	1	Poor	174	5	1,160	5	1,490	6	513	5							
staff and offices		2		230	7	1,285	5	1,627	6	588	6							
(registrar, financial aid,		3		291	8	1,902	8	2,201	8	861	8							
etc.)		4		565	16	3,368	14	3,756	15	1,480	15							
		5		794	23	4,891	20	5,226	21	2,103	21	4.6	4.7 ***	10	4.6 **	05	4.7 ***	09
		6		539	16	3,994	17	4,151	17	1,661	17		$\nabla$		$\nabla$		$\nabla$	
		7	Excellent	332	10	2,908	12	3,048	13	1,205	13							
		_	Not applicable	546	16	5,092	20	3,392	14	1,394	14							
			Total	3,471	100	24,600	100	24,891	100	9,805	100							
14. How much does you	r institution en	ıphasiz	e the following?															
a. Spending significant	empstudy	1	Very little	33	1	354	2	449	2	157	2							
amounts of time		2	Some	468	14	3,474	15	4,276	18	1,415	15							
studying and on		3	Quite a bit	1,388	40	11,090	46	11,450	47	4,280	45	3.3	3.2 ***	.12	3.1 ***	.24	3.2 ***	.12
academic work		4	Very much	1,542	45	8,967	38	7,992	33	3,643	38		Δ		Δ		Δ	
			Total	3,431	100	23,885	100	24,167	100	9,495	100							
b. Providing support to	SEacademic	1	Very little	127	4	1,138	5	1,233	5	453	5							
help students succeed		2	Some	944	28	6,581	28	6,414	27	2,621	28							
academically		3	Quite a bit	1,620	47	11,274	47	10,969	46	4,327	46	2.9	2.8 *	.03	2.8	.01	2.8	.01
		4	Very much	722	21	4,807	20	5,433	22	2,064	22		Δ					
			Total	3,413	100	23,800	100	24,049	100	9,465	100							
c. Using learning support	SElearnsup	1	Very little	259	8	2,194	9	2,182	9	747	8							
services (tutoring	-	2	Some	956	28	6,763	29	6,040	26	2,469	26							
services, writing		3	Quite a bit	1,475	43	9,816	41	9,978	41	3,985	42	2.8	2.7 *	.04	2.8	03	2.8 *	04
center, etc.)		4	Very much	726	21	5,036	21	5,892	24	2,271	24		Δ				$\nabla$	



#### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

							-,							Vour 1	lst-year studen	ts compare	d with	
														1001 1	st year staden	ts compare	u with	
				UWaterlo	00	U15		ON Institut	ions	U6		UWaterloo	U1	5	ON Institu	utions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values		Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
d. Encouraging contact	SEdiverse	1	Very little	543	16	4,292	18	3,965	17	1,659	17							
among students from different backgrounds		2	Some	1,141	34	8,120	34	7,655	32	3,161	33							
(social, racial/ethnic,		3	Quite a bit	1,158	34	7,662	32	8,218	34	3,083	33	2.5	2.5 *	.04	2.5	01	2.5	.02
religious, etc.)		4	Very much	565	16	3,700	16	4,196	17	1,554	17		Δ					
			Total	3,407	100	23,774	100	24,034	100	9,457	100							
e. Providing opportunities	SEsocial	1	Very little	398	12	2,297	10	2,358	10	959	10							-
to be involved socially		2	Some	1,197	35	7,146	30	7,345	31	2,946	31							
		3	Quite a bit	1,299	38	9,827	41	9,524	40	3,753	40	2.6	2.7 ***	16	2.7 ***	16	2.7 ***	15
		4	Very much	510	15	4,470	19	4,781	20	1,782	19		V		V		V	
			Total	3,404	100	23,740	100	24,008	100	9,440	100							
f. Providing support for	SEwellness	1	Very little	373	11	2,478	10	2,534	10	980	10							
your overall well-being		2	Some	1,187	35	6,951	29	6,982	29	2,715	28							
(recreation, health care,		3	Quite a bit	1,296	38	9,653	41	9,562	40	3,776	40	2.6	2.7 ***	13	2.7 ***	13	2.7 ***	16
counseling, etc.)		4	Very much	547	16	4,643	20	4,906	20	1,967	21		$\nabla$		$\nabla$		$\nabla$	
			Total	3,403	100	23,725	100	23,984	100	9,438	100		•		•		•	
g. Helping you manage	SEnonacad	1	Very little	887	26	7,218	30	7,281	30	2,900	30							
your non-academic		2	Some	1,402	41	9,379	40	8,910	37	3,645	39							
responsibilities (work,		3	Quite a bit	854	25	5,449	23	5,781	24	2,168	24	2.1	2.1 ***	.08	2.1 *	.04	2.1 **	.06
family, etc.)		4	Very much	261	8	1,639	7	1,989	8	711	8		Δ		Δ		Δ	100
			Total	3,404	100	23,685	100	23,961	100	9,424	100		-		-		-	
h. Attending campus	SEactivities	1	Very little	691	20	3,234	14	3,766	16	1,422	15							
activities and events		2	Some	1,385	41	8,260	35	8,501	36	3,466	37							
(performing arts,		3	Quite a bit	1,004	29	8,780	37	8,280	35	3,266	35	2.3	2.5 ***	27	2.5 ***	21	2.5 ***	21
athletic events, etc.)		4	Very much	317	9	3,408	14	3,404	14	1,265	13	200	▼	27	▼	21	▼	21
		-	Total	3,397	100	23,682	100	23,951	100	9,419	100		v		v		v	
i. Attending events that	SEevents	1	Very little	762	23	4,543	100	4,780	20	1,845	100							
address important	SECVENTS	2	Some	1.447	43	4,543 9,560	40	4,780 9,447	20 40	3,855	41							
social, economic, or		2	Quite a bit	918	43 27	9,360 7,261	40 31	9,447 7,159	40 30	2,798	30	2.2	0.0 ***	12	0.0 ****	10	0.0 ****	10
political issues		5 4	-	265	27	2,296	10	2,527	30 10	2,798	30 10	2.2	2.3 ***	13	2.3 ***	12	2.3 ***	12
		4	Very much			,		,					V		$\nabla$		$\nabla$	
			Total	3,392	100	23,660	100	23,913	100	9,412	100							

Statistical Comparisons<sup>b</sup>



#### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

	Statistical Comparisons <sup>b</sup>
	Your 1st-year students compared with

				UWaterlo	00	U15	(	ON Instituti	ions	U6		UWaterloo	U15	5	ON Institu	tions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
15. About how many h	ours do you spen	d in a	typical 7-day week	doing the fol	lowin	g?												
a. Preparing for class	tmprephrs	0	0 hrs	20	1	106	0	141	1	45	1							
(studying, reading,	(Recoded version	3	1-5 hrs	265	8	2,324	10	2,788	11	869	9							
writing, doing homework or lab work,	of tmprep created	8	6-10 hrs	451	13	4,013	17	4,412	18	1,488	16							
analyzing data,	by NSSE. Values	13	11-15 hrs	565	17	4,372	19	4,745	20	1,758	19							
rehearsing, and other	are estimated	18	16-20 hrs	648	19	4,478	19	4,480	19	1,790	19	18.8	17.3 ***	.16	16.2 ***	.28	17.5 ***	.14
academic activities)	number of hours per week.)	23	21-25 hrs	561	16	3,425	15	3,210	14	1,411	15		Δ		Δ		Δ	
	per week.)	28	26-30 hrs	358	10	2,116	9	1,805	7	875	9							
		33	More than 30 hrs	531	16	2,778	12	2,317	10	1,144	12							
			Total	3,399	100	23,612	100	23,898	100	9,380	100							
b. Participating in co-	tmcocurrhrs	0	0 hrs	926	27	10,172	41	10,044	40	3,445	35							
curricular activities	(Recoded version	3	1-5 hrs	1,385	40	7,962	34	7,801	33	3,419	37							
(organizations, campus	of tmcocurr	8	6-10 hrs	550	16	2,772	12	2,832	12	1,268	14							
publications, student government, fraternity	created by NSSE.	13	11-15 hrs	262	8	1,319	6	1,558	7	610	7							
or sorority,	Values are	18	16-20 hrs	122	4	732	3	891	4	351	4	5.4	4.2 ***	.20	4.5 ***	.15	4.7 ***	.11
intercollegiate or	estimated number	23	21-25 hrs	101	3	358	2	444	2	171	2		Δ		Δ		Δ	
intramural sports, etc.)	of hours per week.)	28	26-30 hrs	17	1	117	1	134	1	56	1							
	week.)	33	More than 30 hrs	31	1	149	1	158	1	59	1							
			Total	3,394	100	23,581	100	23,862	100	9,379	100							
c. Working for pay	tmworkonhrs	0	0 hrs	2,952	87	21,643	91	21,504	90	8,507	90							
on campus	(Recoded version	3	1-5 hrs	94	3	423	2	424	2	166	2							
	of tmworkon	8	6-10 hrs	75	2	503	2	579	2	223	2							
	created by NSSE.	13	11-15 hrs	96	3	486	2	586	3	213	2							
	Values are	18	16-20 hrs	70	2	268	1	385	2	131	2	1.9	1.1 ***	.18	1.4 ***	.10	1.3 ***	.13
	estimated number	23	21-25 hrs	67	2	162	1	251	1	85	1		Δ		Δ		Δ	
	of hours per week.)	28	26-30 hrs	11	0	39	0	52	0	23	0							
	ween.j	33	More than 30 hrs	28	1	61	0	83	0	31	0							
			Total	3,393	100	23,585	100	23,864	100	9,379	100							



### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

						-,								st-year studer		d with		
															,			
			_	UWaterlo	00	U15		ON Instituti	ions	U6		UWaterloo	U15		ON Institu		U6	
Item wording	Variable		d											Effect		Effect		Effect
or description	name <sup>c</sup>	Values 0	<sup>d</sup> Response options 0 hrs	Count 2,735	%	Count 14,418	%	Count 14,927	% 64	Count	<u>%</u> 71	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
<ol> <li>Working for pay off campus</li> </ol>	tmworkoffhrs			· · · · · · · · · · · · · · · · · · ·	80 4	· ·	63	,		6,580								
on campus	(Recoded version	3 8	1-5 hrs 6-10 hrs	130 134	4	1,587 2,223	6 9	1,401 1,995	6 8	550 670	6 7							
	of tmworkoff created by NSSE.	8 13		154	4	2,225	9	2,098	8 8		7							
	Values are	15	16-20 hrs	100	4	2,280 1,766	9 7	2,098	8 7	684 500	5	2.8	4.8 ***	26	5.0 ***	28	3.7 ***	13
	estimated number	23	21-25 hrs		3				4		3	2.0		20		28		13
	of hours per		21-25 hrs 26-30 hrs	86	5 0	745	3	957	4	244			V		$\nabla$		$\nabla$	
	week.)	28 33	More than 30 hrs	16 48	2	282 312	1	331 405	2	80 87	1							
		33	Total		100		100		100									
Estimated number of	tmworkhrs		Totai	3,400	100	23,613	100	23,891	100	9,395	100							
hours working for pay																		
nours working for pay	(Continuous											4.6	5.9 ***	13	6.4 ***	17	4.9	04
	variable created by NSSE)																,	
	Dy NSSE)												V		$\nabla$			
e. Doing community	tmservicehrs	0	0 hrs	2,342	70	15,310	65	15,639	66	6,151	66							
service or volunteer	(Recoded version	3	1-5 hrs	657	19	5,787	24	5,185	21	2,150	22							
work	of tmservice	8	6-10 hrs	139	4	1,316	6	1,442	6	541	6							
	created by NSSE.	13	11-15 hrs	101	3	580	3	742	3	236	3							
	Values are	18	16-20 hrs	67	2	336	2	446	2	155	2	2.4	2.1 **	.06	2.4	.00	2.2	.03
	estimated number	23	21-25 hrs	64	2	167	1	274	1	102	1		Δ					
	of hours per week.)	28	26-30 hrs	7	0	38	0	54	0	24	0							
	week.)	33	More than 30 hrs	19	1	54	0	84	0	24	0							
			Total	3,396	100	23,588	100	23,866	100	9,383	100							
f. Relaxing and	tmrelaxhrs	0	0 hrs	57	2	401	2	461	2	172	2							
socializing (time with	(Recoded version	3	1-5 hrs	534	15	4,478	18	4,308	17	1,632	17							
friends, video games,	of tmrelax created	8	6-10 hrs	906	26	6,363	27	6,165	25	2,456	26							
TV or videos, keeping up with friends online,	by NSSE. Values	13	11-15 hrs	793	23	5,228	22	5,098	21	2,123	23							
etc.)	are estimated	18	16-20 hrs	528	16	3,378	15	3,591	15	1,402	15	13.2	12.8 **	.05	13.3	02	13.2	01
	number of hours	23	21-25 hrs	288	9	1,557	7	1,678	7	629	7		Δ					
	per week.)	28	26-30 hrs	90	3	723	3	804	4	315	4							
		33	More than 30 hrs	203	6	1,449	6	1,779	8	658	7							
			Total	3,399	100	23,577	100	23,884	100	9,387	100							



### **1st-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

							•,								lst-year studer		ed with	
				UWaterlo	0	U15		ON Institut	ions	U6		UWaterloo	U1	5	ON Institu	utions	U6	
Item wording	Variable				-									- Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
g. Providing care for	tmcarehrs	0	0 hrs	2,633	78	17,108	73	16,105	68	6,686	72							
dependents (children,	(Recoded version	3	1-5 hrs	362	11	3,322	14	3,627	15	1,318	14							
parents, etc.)	of tmcare created	8	6-10 hrs	116	3	1,203	5	1,565	6	530	6							
	by NSSE. Values	13	11-15 hrs	115	3	775	3	1,049	4	351	4							
	are estimated	18	16-20 hrs	73	2	455	2	682	3	237	3	2.2	2.5 **	05	3.0 ***	13	2.5 ***	06
	number of hours	23	21-25 hrs	61	2	223	1	316	1	109	1		$\nabla$		V		$\nabla$	
	per week.)	28	26-30 hrs	8	0	81	0	104	0	34	0							
		33	More than 30 hrs	23	1	371	2	359	2	101	1							
			Total	3,391	100	23,538	100	23,807	100	9,366	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	713	21	3,756	17	4,979	21	2,032	22							
(driving, walking, etc.)	(Recoded version	3	1-5 hrs	1,816	53	9,383	39	8,690	36	3,504	38							
	of tmcommute	8	6-10 hrs	463	14	5,676	23	4,990	20	1,920	20							
	created by NSSE.	13	11-15 hrs	177	5	2,987	13	2,889	12	1,153	12							
	Values are	18	16-20 hrs	106	3	998	4	1,238	5	422	4	4.9	6.4 ***	24	6.5 ***	23	6.1 ***	19
	estimated number of hours per	23	21-25 hrs	69	2	417	2	533	2	201	2		V	.2 .	V	.20	V	,
	week.)	28	26-30 hrs	14	0	134	1	195	- 1	61	- 1		v		v		v	
		33	More than 30 hrs	40	1	252	1	372	2	103	1							
		55	Total	3,398	100	23,603	100	23,886	100	9,396	100							
									100	9,390	100							
16. Of the time you spen	nd preparing for	· class					signed	reading?										
	reading	1	Very little	847	26	3,547	16	3,639	16	1,400	16							
		2	Some	1,213	36	7,180	30	6,805	29	2,646	28							
		3	About half	706	21	5,989	25	6,180	26	2,415	26	2.4	2.8 ***	33	2.8 ***	36	2.8 ***	36
		4	Most	435	13	4,758	20	5,003	21	2,033	21		▼		▼		▼	
		5	Almost all	180	5	2,104	9	2,209	9	883	9							
			Total	3,381	100	23,578	100	23,836	100	9,377	100							
	tmreadinghrs																	
(Continuous variable	0	Calaul-	ad as a proportion															
of tmprephrs based		/ery littl	e=.10; Some=.25;									6.7	7.8 *** ▼	17	7.5 *** ▼	13	8.1 *** ▼	21



#### Statistical Comparisons<sup>b</sup> **1st-Year Students Frequency Distributions**<sup>a</sup> Your 1st-year students compared with UWaterloo UWaterloo U15 **ON** Institutions U6 U15 **ON** Institutions U6 Variable Effect Effect Effect Item wording Values<sup>d</sup> Response options % % % Mean Mean size <sup>e</sup> Mean size <sup>e</sup> size <sup>e</sup> or description name Count Count Count Count % Mean tmreadinghrscol 20 0 141 45 1 0 hrs 1 106 1 1 More than zero, (Collapsed version 2 1,689 51 10,081 43 10,650 45 3,780 41 of tmreadinghrs up to 5 hrs created by NSSE.) More than 5, 3 987 29 7,160 30 6,977 30 2,840 30 up to 10 hrs More than 10, 4 302 9 2,697 11 2,653 11 1,152 12 up to 15 hrs More than 15, 5 204 1.660 7 7 719 8 6 1.643 up to 20 hrs More than 20, 6 118 3 1,246 5 1,181 5 567 6 up to 25 hrs More than 25 hrs 47 2 492 2 223 2 7 1 535 Total 3,367 100 23,485 100 23,737 100 9,326 100 17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas? a. Writing clearly and pgwrite Very little 14 3.049 13 11 12 1 459 2.644 1.150 effectively 34 35 34 35 2 Some 1,162 8,182 7,945 3,272 8,974 2.5 3 Quite a bit 1.330 39 38 9.679 40 3.566 38 2.5 -.02 2.6 \*\*\* -.08 -.04 2.5 4 Very much 436 13 3,265 14 3,510 15 1,364 15 $\nabla$ $\nabla$ Total 3,387 100 23,470 100 23,778 100 9,352 100 b. Speaking clearly and pgspeak Very little 654 19 5.501 23 4.864 21 2.248 24 1 effectively 2 Some 1,176 35 8,552 36 8,365 35 3,322 35 2.4 3 Quite a bit 1,125 33 7,030 30 7,680 32 2,794 30 .13 .04 2.3 \*\*\* 2.4 \* 2.3 \*\*\* .12 4 Verv much 431 13 2.435 10 2.885 12 987 11 Δ Δ Δ Total 100 23,518 100 23,794 100 9,351 100 3,386 c. Thinking critically and 103 3 977 343 4 pgthink Very little 4 877 4 1 analytically 2 Some 656 19 5,116 22 4,969 21 1,979 21 3.1 3 Quite a bit 1,548 45 10,728 45 10,819 45 4,096 43 3.0 \*\*\* .09 3.0 \*\*\* .06 3.0 .03 29 1.085 32 6,702 7.114 30 2.933 32 4 Very much Δ Δ Total 100 100 3,392 100 23,523 23,779 9,351 100 9 19 d. Analyzing numerical pganalyze 1 Very little 303 4,269 17 4,880 1,666 16 and statistical 2 Some 846 25 7,152 30 7,108 30 2.814 29 information 3 Quite a bit 1,283 38 7,800 34 7,528 32 3,062 33 2.9 .32 2.6 \*\*\* 2.5 \*\*\* .36 2.6 \*\*\* .29 4 Very much 955 29 4,296 20 4,265 19 21 1,812 Δ Total 3.387 100 100 100 9.354 100 23.517 23.781

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



## 1st-Year Students

#### Distributions<sup>a</sup> -

1st-Year Stude	ents					Frequen	cy Di	stributio	ns <sup>a</sup>				Stati		<b>Comparis</b> st-year studen		ed with	
				UWaterlo	00	U15		ON Instituti	ions	U6		UWaterloo	U1!	5	ON Institu	itions	U6	
Item wording	Variable													- Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
e. Acquiring job- or work-	pgwork	1	Very little	370	11	5,155	22	5,250	22	2,326	24							
related knowledge and		2	Some	1,066	31	8,317	36	8,564	36	3,455	37							
skills		3	Quite a bit	1,200	36	6,957	29	7,051	30	2,597	28	2.7	2.3 ***	.38	2.3 ***	.39	2.3 ***	.47
		4	Very much	747	22	3,082	13	2,926	12	980	11							
			Total	3,383	100	23,511	100	23,791	100	9,358	100							
f. Working effectively	pgothers	1	Very little	285	8	3,141	13	2,892	12	1,335	14							
with others		2	Some	1,033	30	8,051	34	7,736	32	3,181	33							
		3	Quite a bit	1,363	40	8,487	36	8,887	37	3,286	36	2.7	2.6 ***	.19	2.6 ***	.13	2.6 ***	.19
		4	Very much	709	21	3,831	17	4,264	18	1,551	17		Δ		Δ		Δ	
			Total	3,390	100	23,510	100	23,779	100	9,353	100							
g. Developing or	pgvalues	1	Very little	523	16	4,364	19	3,824	16	1,707	18							
clarifying a personal		2	Some	1,137	34	8,159	34	7,757	33	3,181	34							
code of values and		3	Quite a bit	1,218	36	7,855	33	8,614	36	3,167	34	2.5	2.4 ***	.09	2.5	.01	2.4 ***	.06
ethics		4	Very much	502	15	3,121	14	3,559	15	1,292	14		Δ				Δ	
			Total	3,380	100	23,499	100	23,754	100	9,347	100							
h. Understanding people	pgdiverse	1	Very little	527	16	4,055	17	3,430	15	1,518	16							
of other backgrounds		2	Some	1,102	33	7,688	32	7,096	30	2,928	32							
(economic, racial/ethnic, political,		3	Quite a bit	1,165	34	7,765	33	8,486	36	3,188	34	2.5	2.5	.03	2.6 ***	07	2.5	01
religious, nationality,		4	Very much	583	17	3,977	17	4,740	19	1,704	18				$\nabla$			
etc.)			Total	3,377	100	23,485	100	23,752	100	9,338	100							
i. Solving complex real-	pgprobsolve	1	Very little	359	11	3,801	16	3,645	15	1,484	15							
world problems		2	Some	1,142	34	8,410	35	8,243	35	3,315	35							
		3	Quite a bit	1,239	37	7,720	33	8,099	34	3,044	33	2.6	2.5 ***	.17	2.5 ***	.15	2.5 ***	.14
		4	Very much	638	19	3,546	16	3,764	16	1,497	17		Δ		Δ		Δ	
			Total	3,378	100	23,477	100	23,751	100	9,340	100							
j. Being an informed and	pgcitizen	1	Very little	594	18	4,156	18	3,887	17	1,697	18							
active citizen		2	Some	1,247	37	8,431	36	8,011	34	3,266	35							
		3	Quite a bit	1,073	32	7,485	32	7,985	34	2,950	32	2.4	2.4	02	2.5 ***	08	2.4	03
		4	Very much	456	14	3,379	15	3,799	16	1,413	15				$\nabla$			
															•			

23,682 100

9,326 100

Total

3,370 100

23,451 100



1st-Year Stud	dents					Frequen	cy Dis	tributio	ns <sup>a</sup>				Stat		Comparis		ed with	
				UWaterlo	00	U15		ON Instituti	ions	U6		UWaterloo	U1	15	ON Institu	itions	U6	j
Item wording	Variable		d -											Effect		Effect		Effect
or description	name <sup>c</sup>		<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
18. How would you ev	valuate your ent	ire educ	ational experience a	at this institu	tion?													
	evalexp	1	Poor	113	3	651	3	769	3	296	3							
		2	Fair	554	16	4,000	17	4,344	18	1,732	18							
		3	Good	1,735	51	12,739	53	12,623	52	4,843	51	3.1	3.0	.02	3.0 ***	.07	3.0 *	.04
		4	Excellent	981	29	6,070	27	5,997	26	2,465	28				Δ		Δ	
			Total	3,383	100	23,460	100	23,733	100	9,336	100							
19. If you could start	over again, wou	ld you g	o to the same institu	<i>ution</i> you are	e now a	attending?												
	sameinst	1	Definitely no	111	3	551	2	788	3	278	3							
		2	Probably no	356	10	2,713	12	3,153	13	1,237	13							
		3	Probably yes	1,546	45	10,876	46	11,193	47	4,347	46	3.2	3.2	.00	3.2 ***	.09	3.2 **	.06
		Definitely yes	1,374	41	9,338	40	8,610	37	3,472	38				Δ		Δ		
			Total	3,387	100	23,478	100	23,744	100	9,334	100							



#### **4th-Year Students**

4th-Year Stuc	lents					Frequen	cy Di	stributio	ns <sup>a</sup>				Stati		Compari Ith-year stude		ed with	
				UWaterlo	00	U15		ON Instituti	ons	U6		UWaterloo	U1!	5	ON Instit	utions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
1. During the current s	chool year, abou	t how	often have you don	e the followin	ıg?													
a. Asked questions or	askquest	1	Never	279	11	2,164	8	1,700	6	810	7							
contributed to course		2	Sometimes	1,150	46	11,530	42	10,262	39	4,884	40							
discussions in other ways		3	Often	676	27	7,551	28	7,632	29	3,351	28	2.5	2.6 ***	18	2.7 ***	30	2.7 ***	26
ways		4	Very often	406	16	5,744	22	6,613	26	2,828	24		$\nabla$		$\nabla$		$\nabla$	
			Total	2,511	100	26,989	100	26,207	100	11,873	100							
b. Prepared two or more	drafts	1	Never	791	32	7,568	28	6,926	26	3,164	26							
drafts of a paper or		2	Sometimes	952	38	9,143	34	8,962	35	4,109	35							
assignment before turning it in		3	Often	513	20	6,142	23	6,168	24	2,740	23	2.1	2.2 ***	16	2.3 ***	20	2.3 ***	20
turning it in		4	Very often	240	9	4,011	15	4,012	15	1,805	15		$\nabla$		$\nabla$		$\nabla$	
			Total	2,496	100	26,864	100	26,068	100	11,818	100							
c. Come to class without	unpreparedr	1	Very often	390	16	3,311	13	3,187	12	1,547	13							
completing readings or	(Reverse-coded	2	Often	719	29	6,802	26	6,530	25	3,240	27							
assignments	version of	3	Sometimes	1,121	44	13,193	49	12,949	49	5,687	48	2.5	2.6 ***	14	2.6 ***	15	2.6 ***	09
	unprepared	4	Never	271	11	3,571	13	3,416	13	1,351	12		$\nabla$		$\nabla$		$\nabla$	
	created by NSSE.)		Total	2,501	100	26,877	100	26,082	100	11,825	100							
d. Attended an art exhibit,	attendart	1	Never	1,262	51	12,555	46	13,396	51	5,477	46							
play, or other arts		2	Sometimes	915	36	9,921	37	8,488	33	4,273	36							
performance (dance, music, etc.)		3	Often	241	10	3,037	12	2,788	11	1,407	12	1.6	1.8 ***	12	1.7 **	06	1.8 ***	14
masie, etc.)		4	Very often	79	3	1,303	5	1,340	5	633	5		$\nabla$		$\nabla$		$\nabla$	
			Total	2,497	100	26,816	100	26,012	100	11,790	100							
e. Asked another student	CLaskhelp	1	Never	222	9	3,088	11	3,138	12	1,468	12							
to help you understand course material		2	Sometimes	1,059	42	11,736	43	11,369	43	5,101	42							
course material		3	Often	801	32	8,072	30	7,766	30	3,460	30	2.6	2.5 ***	.08	2.5 ***	.10	2.5 ***	.09
		4	Very often	417	17	3,943	15	3,768	15	1,777	16		Δ		Δ		Δ	
			Total	2,499	100	26,839	100	26,041	100	11,806	100							
f. Explained course	CLexplain	1	Never	111	5	1,309	5	1,171	4	600	5							
material to one or more		2	Sometimes	935	37	10,230	37	9,402	36	4,405	36							
students		3	Often	1,024	41	10,429	39	10,233	39	4,475	38	2.7	2.7	.00	2.8 *	05	2.7	03
		4	Very often	424	17	4,825	19	5,189	20	2,293	20				$\nabla$			
			Total	2,494	100	26,793	100	25,995	100	11,773	100							



#### **4th-Year Students**

#### **Frequency Distributions**<sup>a</sup>

4th-Year Stude	ents					Frequen	cy Di	stributio	ns <sup>a</sup>				Stat		<b>Comparis</b> th-year studen		ed with	
				UWaterlo	00	U15		ON Instituti	ons	U6		UWaterloo	U1	5	ON Institu	tions	U6	
Item wording	Variable												-	Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
g. Prepared for exams by	CLstudy	1	Never	328	13	4,072	15	3,853	15	1,790	15							
discussing or working		2	Sometimes	906	36	9,694	36	9,240	35	4,298	36							
through course material		3	Often	829	33	8,004	30	7,882	30	3,443	30	2.6	2.5	.02	2.5	.01	2.5	.01
with other students		4	Very often	432	18	4,992	19	4,980	20	2,231	20							
			Total	2,495	100	26,762	100	25,955	100	11,762	100							
h. Worked with other	CLproject	1	Never	144	6	1,785	7	1,723	7	857	7							
students on course	1 5	2	Sometimes	681	27	7,572	28	7,421	28	3,509	29							
projects or assignments		- 3	Often	972	39	9,123	34	9,141	35	3,987	34	2.9	2.9	01	2.9	.00	2.9	.03
		4	Very often	691	28	8,250	31	7,633	30	3,401	30	<b>2</b> ./	2.9	01	2.9	.00	2.9	.05
		-	Total	2,488	100	26,730	100	25,918	100	11,754	100							
i. Given a course	macont	1		2,488	100	2,830	100	2,198	9	1,015	9							
presentation	present	1	Never			,		,		<i>,</i>								
presentation		2	Sometimes	952	39	10,183	38	9,050	35	4,573	38	2.5						
		3	Often	789	31	8,388	31	8,549	33	3,765	32	2.5	2.6 ***	07	2.7 ***	19	2.7 ***	13
		4	Very often	456	18	5,328	20	6,118	24	2,394	21		$\nabla$		$\nabla$		$\mathbf{\nabla}$	
			Total	2,494	100	26,729	100	25,915	100	11,747	100							
2. During the current sch	100l year, abo	ut how	often have you don	e the followi	ng?													
a. Combined ideas from	RIintegrate	1	Never	106	4	861	3	757	3	347	3							
different courses when		2	Sometimes	909	37	7,825	30	7,056	28	3,423	29							
completing assignments		3	Often	1,021	41	11,680	44	11,382	44	5,113	44	2.7	2.9 ***	18	2.9 ***	24	2.9 ***	20
		4	Very often	449	18	6,271	23	6,619	25	2,819	24		V		V		V	
			Total	2,485	100	26,637	100	25,814	100	11,702	100		*		•		•	
b. Connected your	RIsocietal	1	Never	341	14	2,006	8	1,903	8	853	8							
learning to societal	Tubbeletai	2	Sometimes	1,035	42	9,208	35	8,604	34	4,033	35							
problems or issues		3	Often	774	30	9,200 9,844	36	9,452	36	4,055	36	2.4	2.7 ***	20	2.7 ***	22	27 ***	22
		4			13	5,531	20	5,809	22	2,527	21	2.4		30		33	2.7 ***	32
		4	Very often	338				,					▼		▼		▼	
	~~ //		Total	2,488	100	26,589	100	25,768	100	11,685	100							
<ul> <li>c. Included diverse perspectives (political,</li> </ul>	RIdiverse	1	Never	723	31	5,107	20	4,278	18	2,079	19							
religious, racial/ethnic,		2	Sometimes	941	38	9,885	37	8,942	35	4,157	36							
gender, etc.) in course		3	Often	544	21	7,306	27	7,574	29	3,348	28	2.1	2.4 ***	27	2.5 ***	38	2.4 ***	33
discussions or		4	Very often	268	10	4,215	16	4,909	18	2,072	17		$\nabla$		V		V	
assignments			Total	2,476	100	26,513	100	25,703	100	11,656	100							



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

	circo					requen	cy Di						otati		th-year studen		ed with	
				UWaterlo	00	U15		ON Instituti	ions	U6		UWaterloo	U1!	5	ON Institu	tions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
d. Examined the strengths	RIownview	1	Never	229	10	1,750	7	1,501	6	749	6							
and weaknesses of		2	Sometimes	982	40	9,286	35	8,491	33	3,966	34							
your own views on a topic or issue		3	Often	953	38	11,215	42	11,188	43	5,002	43	2.5	2.7 ***	17	2.7 ***	23	2.7 ***	20
topic of issue		4	Very often	306	13	4,172	16	4,467	18	1,915	17		$\nabla$		$\nabla$		$\nabla$	
			Total	2,470	100	26,423	100	25,647	100	11,632	100							
e. Tried to better	RIperspect	1	Never	145	6	1,098	4	950	4	481	4							
understand someone		2	Sometimes	852	35	7,549	29	6,858	27	3,220	28							
else's views by imagining how an issue		3	Often	1,029	41	12,082	46	11,825	46	5,307	45	2.7	2.8 ***	16	2.9 ***	21	2.9 ***	18
looks from their		4	Very often	442	18	5,579	21	5,893	23	2,574	22		$\nabla$		$\nabla$		V	
perspective			Total	2,468	100	26,308	100	25,526	100	11,582	100							
f. Learned something that	RInewview	1	Never	48	2	441	2	449	2	212	2							
changed the way you		2	Sometimes	796	33	6,842	26	6,436	26	2,878	25							
understand an issue or		3	Often	1,188	48	12,865	49	12,288	48	5,597	48	2.8	2.9 ***	17	3.0 ***	20	3.0 ***	21
concept		4	Very often	428	17	6,079	23	6,253	25	2,855	25		V		V		V	
			Total	2,460	100	26,227	100	25,426	100	11,542	100		•		•		•	
g. Connected ideas from	RIconnect	1	Never	50	2	283	1	292	1	135	1							
your courses to your		2	Sometimes	577	24	4,680	18	4,459	18	2,050	18							
prior experiences and		3	Often	1,263	51	13,365	51	12,751	50	5,811	50	2.9	3.1 ***	21	3.1 ***	23	3.1 ***	22
knowledge		4	Very often	564	23	7,843	30	7,863	31	3,520	31		V		V		V	
			Total	2,454	100	26,171	100	25,365	100	11,516	100		•		•		•	
3. During the current sc	hool vear, abo	ut how	often have vou don	e the followi	1g?													
a. Talked about career	SFcareer	1	-	836	34	8,510	32	7,651	30	3,743	32							
plans with a faculty		2	Sometimes	1,039	42	11,036	42	10,550	42	4,859	42							
member		3	Often	406	16	4,438	17	4,579	18	1,931	17	2.0	2.0 *	05	2.1 ***	12	2.0 **	07
		4	Very often	180	7	2,211	9	2,612	10	999	9		V	100	V		V	
			Total	2,461	100	26,195	100	25,392	100	11,532	100		•		•		•	
b. Worked with a faculty	SFotherwork	1	Never	1,264	51	14,257	54	13,498	53	6,209	53							
member on activities		2	Sometimes	773	32	7,252	28	6,956	28	3,186	28							
other than coursework		3	Often	288	12	3,019	12	3,106	12	1,383	12	1.7	1.7	.00	1.7	03	1.7	02
(committees, student groups, etc.)		4	Very often	129	5	1,611	6	1,785	7	737	7							
groups, etc.)			Total	2,454	100	26,139	100	25,345	100	11,515	100							
				_,						,0								



#### Statistical Comparisons<sup>b</sup> 4th-Year Students **Frequency Distributions**<sup>a</sup> Your 4th-year students compared with UWaterloo UWaterloo U15 **ON** Institutions U6 U15 **ON** Institutions U6 Variable Effect Effect Effect Item wording or description name <sup>c</sup> Values<sup>d</sup> Response options Count % % Count % Mean Mean size <sup>e</sup> Mean size <sup>e</sup> size <sup>e</sup> Count Count % Mean c. Discussed course SFdiscuss Never 786 32 8,333 31 7,754 30 3,465 29 topics, ideas, or 2 Sometimes 1,116 46 11,642 45 10,883 43 5,111 45 concepts with a faculty 3 Often 424 17 4,488 17 4.772 19 2.111 19 2.0 2.0 - 04 20 \*\*\* - 09 2.0 \*\*\* -.10 member outside of 7 4 119 5 1,629 6 1,898 8 810 Very often $\nabla$ $\nabla$ class Total 2.445 100 100 25.307 100 100 26.092 11.497 d. Discussed your SFperform 1 Never 1,014 42 10,934 42 8,813 35 4,396 38 academic performance 41 43 42 2 1,025 41 10,975 4,902 Sometimes 10,664 with a faculty member 1.8 3 Often 308 13 3.346 13 4.052 16 1.603 14 1.9 \*\*\* 1.8 -.01 1.9 \*\*\* -.15 -.09 4 Very often 101 4 1,139 4 1,439 6 582 5 $\nabla$ $\nabla$ 100 100 Total 2,448 26,083 25,279 100 11,483 100 4. During the current school year, how much has your coursework emphasized the following? 1,625 1,735 7 700 a. Memorizing course memorize 1 Very little 166 7 6 6 material 32 27 2 Some 764 6,919 6,876 28 3,036 28 2.8 988 40 40 39 3 Quite a bit 10,376 9,997 4,509 39 2.9 \*\*\* -.11 2.8 \*\*\* -.08 2.9 \*\*\* -.11 Very much 6,657 4 537 22 7,133 27 26 3,231 27 $\nabla$ $\nabla$ $\nabla$ Total 2.455 100 26.053 100 25.265 100 11.476 100 b. Applying facts, HOapply 1 Very little 86 4 954 4 916 4 458 4 theories, or methods to 2 Some 573 23 5,769 22 5,619 22 2,571 22 practical problems or 3.0 3 Quite a bit 1,133 46 12.225 47 11,547 46 5,272 46 3.0 -.02 3.0 -.03 3.0 -.02 new situations 27 28 29 28 4 Very much 660 7,083 7,159 3,163 Total 100 100 2,452 26,031 25,241 100 11,464 100 c. Analyzing an idea, Very little 544 5 HOanalyze 1 130 5 1.320 5 1,198 5 experience, or line of 29 27 2 Some 719 6,949 6,569 26 3,040 26 reasoning in depth by 3 Quite a bit 1,061 44 11,302 43 10,742 43 4,869 42 2.8 2.9 \*\*\* -.08 2.9 \*\*\* -.11 2.9 \*\*\* -.10 examining its parts 22 25 27 26 4 Very much 530 6.396 6.693 2.985 $\nabla$ $\nabla$ $\nabla$ 100 100 11,438 Total 2,440 100 25,967 25,202 100 d. Evaluating a point of HOevaluate Very little 245 10 2.269 9 1.848 918 8 1 8 view, decision, or 30 2 Some 841 35 7,880 31 7,095 28 3,364 information source 2.6 3 Quite a bit 944 38 10,548 40 10,438 41 4,633 40 2.7 -.11 2.8 \*\*\* -.20 2.8 \*\*\* \*\*\* -.16 4 Very much 410 17 5.250 20 5.765 23 2.515 22 $\nabla$ $\nabla$ $\nabla$ Total 2,440 100 25,947 100 25,146 100 11.430 100

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### Statistical Comparisons<sup>b</sup> 4th-Year Students **Frequency Distributions**<sup>a</sup> Your 4th-year students compared with UWaterloo UWaterloo U15 **ON** Institutions U6 U15 **ON** Institutions U6 Variable Effect Effect Effect Item wording Values<sup>d</sup> Response options or description name <sup>c</sup> Count % Count % Count % Mean Mean size <sup>e</sup> Mean size <sup>e</sup> Mean size <sup>e</sup> Count % 7 e. Forming a new idea or HOform 1 Very little 178 7 1,818 7 1,633 7 790 understanding from 2 Some 823 34 7,985 31 7,265 29 3,451 30 various pieces of 3 1.033 42 11.116 43 10.830 43 4.809 42 2.7 Ouite a bit 27 \*\*\* - 07 2.8 \*\*\* - 13 2.8 \*\*\* -.11 information 19 4 Very much 404 17 4,994 21 21 5,407 2,373 $\nabla$ $\nabla$ $\nabla$ 2.438 100 100 100 11.423 100 Total 25,913 25,135 5. During the current school year, to what extent have your instructors done the following? a. Clearly explained ETgoals 1 Very little 67 3 654 3 753 3 281 3 course goals and 2 Some 640 26 22 23 23 5.642 5.789 2.615 requirements 2.9 51 49 51 3 Quite a bit 1,241 51 13,305 12,347 5,841 3.0 \*\*\* -.12 3.0 \*\*\* -.09 3.0 \*\*\* -.10 4 Very much 494 20 6,304 24 6,232 25 2,671 24 $\nabla$ $\nabla$ $\nabla$ Total 2,442 100 25,905 100 100 100 25,121 11,408 b. Taught course sessions Very little 67 3 673 3 830 3 292 3 ETorganize 1 in an organized way 2 25 22 Some 613 5,727 5,961 24 2,599 23 2.9 3 53 54 50 53 Quite a bit 1,280 13,926 12,626 6,070 2.9 \*\*\* -.07 2.9 \* -.04 2.9 \*\* -.06 22 22 4 Very much 474 19 5,566 5,688 23 2,442 $\nabla$ $\nabla$ $\nabla$ Total 2.434 100 25.892 100 25.105 100 11.403 100 c. Used examples or ETexample Very little 60 2 780 3 979 4 399 4 1 illustrations to explain 2 Some 582 24 5,804 22 6,139 24 2,746 24 difficult points 2.9 50 3 Quite a bit 1,221 12,801 49 11,624 46 5,417 47 3.0 -.03 2.9 .02 2.9 .00 23 25 25 25 4 Very much 576 6,495 6,360 2,842 Total 100 100 2,439 25,880 25,102 100 11,404 100 d. Provided feedback on a ETdraftfb Very little 543 23 21 21 1 5,513 4,892 20 2.365 draft or work in 37 39 2 Some 929 38 10,026 39 9,335 4,463 progress 2.4 \*\*\* 3 Quite a bit 685 28 7,454 28 7,514 30 3,268 29 2.3 -.02 2.3 -.10 2.3 -.04 270 11 2.875 11 3.334 13 12 4 Very much 1.304 $\nabla$ $\nabla$ 100 100 100 11,400 100 Total 2,427 25,868 25,075 e. Provided prompt and ETfeedback Very little 221 9 3.413 13 3.262 13 1.556 13 1 detailed feedback on 43 39 41 2 Some 1,043 10,590 41 9,922 4,772 tests or completed 2.5 3 Quite a bit 902 37 9,048 35 8,784 35 3,843 34 2.4 .07 2.5 .03 2.4 \*\*\* .08 \*\*\* assignments 4 Very much 258 11 2.757 11 3.049 12 1.199 11 Δ Δ 100 100 Total 2.424 25,808 25.017 100 11.370 100

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### **4th-Year Students**

4th-Year Stud	lents					Frequen	cy Dis	tributio	ns <sup>a</sup>				Stati		Comparis		ed with	
				UWaterlo		U15		ON Instituti	onc	U6		UWaterloo	U15	:	ON Institu	tions	U6	
the second is a	Variable			Owateric	0	015			0115	00		owaterioo	01.	, Effect	ON Institu	Effect	00	Effect
Item wording or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
6. During the current s	chool vear, abou				ng?													
a. Reached conclusions	QRconclude	1	Never	253	10	4,125	15	4,094	15	1,791	15							
based on your own		2	Sometimes	807	32	9,413	36	8,935	35	4,040	35							
analysis of numerical		3	Often	899	38	8,328	33	8,151	33	3,693	33	2.7	2.5 ***	.19	2.5 ***	.19	2.5 ***	.16
information (numbers,		4	Very often	459	20	3,905	16	3,824	16	1,831	17		Δ	,	Δ	,	Δ	
graphs, statistics, etc.)			Total	2,418	100	25,771	100	25,004	100	11,355	100		-		-		-	
b. Used numerical	QRproblem	1	Never	537	22	6,465	25	6,044	23	2,725	23							
information to examine		2	Sometimes	971	40	10,258	39	9,898	39	4,506	39							
a real-world problem or	:	3	Often	649	27	6,437	25	6,377	26	2,900	26	2.3	2.2 **	.06	2.3	.02	2.3	.02
issue (unemployment,		4	Very often	261	11	2,594	11	2,672	11	1,223	12	4.J	Δ	.00	2.5	.02	2.5	.02
climate change, public		4	Total		100				100				Δ					
health, etc.)			Total	2,418	100	25,754	100	24,991	100	11,354	100							
c. Evaluated what others	QRevaluate	1	Never	348	14	5,110	19	4,785	18	2,074	18							
have concluded from	Qite initiate	2	Sometimes	1,044	43	10,367	40	10,138	40	4,526	39							
numerical information		3	Often	780	32	7,626	30	7,360	30	3,451	31	2.4	2.3 ***	.08	2.3 **	.06	2.4	.03
		4	Very often	256	11	2,713	11	2,772	12	1,339	12	2	Δ	.00	Δ	.00	2.4	.05
		-	Total	2,428	100	25,816	100	25,055	100	11,390	100		4		-			
7. During the current s	chool year, abou	it how	many papers, repo	rts, or other	writing	tasks of th	e follov	ving length	s have y	you been a	ssigne	d? (Include those)	not vet con	nleted.)				
a. Up to 5 pages	wrshortnum	0	None	129	6	1,400	6	957	4	466	4			-protoal)				
		1.5	1-2	402	17	4,412	18	3,669	16	1,757	16							
	(Recoded version of wrshort created		3-5	692	29	7,128	29	6,915	30	3,157	29							
	by NSSE. Values	8	6-10	546	23	5,766	24	6,052	26	2,760	26	7.5	7.2 *	.05	7.7	04	7.6	01
	are estimated	13	11-15	283	12	2,660	11	2,755	12	1,239	12	7.0	Δ	.05	1.1	04	7.0	01
	number of papers,	18	16-20	122	5	1,239	5	1,327	6	574	5		4					
	reports, etc.)	23	More than 20	179	8	1,239	7	1,809	8	755	7							
		23	Total	2,353	100	24,183	100	23,484	100	10,708	100							
b. Between 6 and 10	wrmednum	0	None	364	16	3,581	15	2,599	11	1,240	12							
pages		1.5	1-2	696	30	7,417	31	6,549	28	3,125	30							
	(Recoded version of wrmed created	4	3-5	704	30	7,417	30	7,472	32	3,125	31							
	by NSSE. Values	8	6-10	338	15	3,871	30 16	4,336	18	1,899	17	4.4	4.2	.04	4.8 ***	08	4.6	04
	are estimated	13	11-15	139	6	1,254	5	4,330	6	647	6	1.1	7.2	.04	4.8 ****	00	4.0	04
	number of papers,	15	16-20	48	2	408	2	460	2	047 176	2				v			
	reports, etc.)	23	More than 20	48 47	2	408 375	2	460 494	2		2							
		23								198								
			Total	2,336	100	24,083	100	23,383	100	10,660	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

							-,											
													_	Your 4	th-year stude	nts compar	ed with	
				UWaterlo	00	U15		ON Instituti	ions	U6		UWaterloo	U1	5	ON Instit	utions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size "
c. 11 pages or more	wrlongnum	0	None	670	28	7,414	31	6,407	28	2,926	28							
	(Recoded version	1.5	1-2	875	37	9,401	39	9,185	39	4,253	40							
	of wrlong created	4	3-5	465	20	4,385	18	4,519	19	2,042	19							
	by NSSE. Values	8	6-10	193	8	1,752	7	1,855	8	871	8	3.1	2.7 ***	.09	3.0	.02	2.9 *	.05
	are estimated number of papers,	13	11-15	67	3	651	3	779	3	305	3		Δ				Δ	
	reports, etc.)	18	16-20	34	1	257	1	287	1	116	1							
	1 / /	23	More than 20	45	2	322	1	401	2	163	2							
			Total	2,349	100	24,182	100	23,433	100	10,676	100							
Estimated number of assigned pages of	wrpages											102.0	05.0 44	07	10.50	0.2	102.2	
student writing.	(Continuous variabl NSSE from wrshort, are estimated pages	wrmed	1, and wrlong. Values									103.0	95.8 **	.07	106.2	03	102.3	.01
. During the current	school year, about	how	often have you had	discussions v	with p	eople from t	the foll	owing grou	ıps?									
a. People of a race or	DDrace	1	Never	107	5	943	4	883	4	338	3							
ethnicity other than		2	Sometimes	470	20	5,316	21	4,688	20	1,996	19							
your own		3	Often	738	31	7,415	30	7,211	30	3,173	30	3.1	3.2	01	3.2 *	04	3.2 ***	09
		4	Very often	1,045	44	10,605	45	10,731	46	5,201	48				$\nabla$		$\nabla$	
			Total	2,360	100	24,279	100	23,513	100	10,708	100							
b. People from an	DDeconomic	1	Never	112	5	1,062	4	958	4	411	4							
economic background		2	Sometimes	633	27	6,722	27	5,779	24	2,696	25							
other than your own		3	Often	830	35	8,602	35	8,471	36	3,720	35	3.0	3.0	01	3.0 ***	08	3.0 ***	08
		4	Very often	770	33	7,850	33	8,250	36	3,861	36				V		$\nabla$	
			Total	2,345	100	24,236	100	23,458	100	10,688	100							
c. People with religious	DDreligion	1	Never	131	6	1,321	5	1,073	5	457	4							
beliefs other than your		2	Sometimes	550	24	6,440	26	5,416	23	2,438	23							
own		3	Often	789	34	8,035	33	7,907	33	3,546	33	3.0	3.0	.04	3.1 *	05	3.1 **	07
		4	Very often	878	37	8,436	35	9,075	39	4,245	40				V		V	
			Total	2,348	100	24,232	100	23,471	100	10,686	100				•		•	
d. People with political	DDpolitical	1	Never	167	7	1,473	6	1,418	6	647	6							
views other than your		2	Sometimes	879	37	8,489	35	7,839	33	3,699	34							
own		3	Often	713	30	8,015	33	7,645	32	3,397	32	2.7	2.8 **	06	2.8 ***	10	2.8 ***	09
		4	Very often	582	25	6,262	26	6,552	28	2,947	28		▽		V		V	

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### 4th-

4th-Year Stude	ents					Frequen	cy Di	stributio	ns <sup>a</sup>				Stati		Comparis		ed with	
				UWaterlo	0	U15		ON Instituti	ons	U6		UWaterloo	U15		ON Institu	itions	U6	
Item wording	Variable			ovaterio	.0	015		On motifue	0115	00			015	Effect	On institu	Effect	00	Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
9. During the current sch	ool year, abo	ut how	often have you don	e the followir	ng?													
a. Identified key	LSreading	1	Never	80	4	714	3	620	3	276	3							
information from		2	Sometimes	614	27	5,093	21	4,750	20	2,145	20							
reading assignments		3	Often	1,082	46	10,937	45	10,724	46	4,771	45	2.9	3.0 ***	16	3.0 ***	19	3.1 ***	20
		4	Very often	572	24	7,424	30	7,291	31	3,473	32		$\nabla$		$\nabla$		$\nabla$	
			Total	2,348	100	24,168	100	23,385	100	10,665	100							
b. Reviewed your notes	LSnotes	1	Never	326	14	3,307	14	3,372	14	1,574	15							
after class		2	Sometimes	1,100	47	9,621	40	9,539	41	4,344	41							
		3	Often	600	26	6,732	28	6,458	27	2,891	27	2.4	2.5 ***	13	2.5 ***	09	2.5 ***	08
		4	Very often	324	14	4,513	18	4,016	17	1,856	17		$\nabla$		$\nabla$		$\nabla$	
			Total	2,350	100	24,173	100	23,385	100	10,665	100							
c. Summarized what you	LSsummary	1	Never	259	11	2,403	10	2,451	11	1,133	11							
learned in class or from		2	Sometimes	894	38	8,245	34	8,341	36	3,704	35							
course materials		3	Often	773	33	8,348	34	7,957	34	3,554	33	2.6	2.7 ***	10	2.6 **	06	2.6 ***	08
		4	Very often	420	18	5,123	21	4,580	20	2,238	21		$\nabla$		$\nabla$		$\nabla$	
			Total	2,346	100	24,119	100	23,329	100	10,629	100							
10. During the current sc	hool year, to	what ex	tent have your cou	rses challeng	ed you	ı to do your	best w	vork?										
-	challenge	1	Not at all	34	2	260	1	278	1	110	1							
		2		58	3	431	2	428	2	173	2							
		3		161	7	1,310	6	1,363	6	578	6							
		4		381	16	3,255	14	3,164	14	1,442	14	5.0	5.2 ***	16	5.2 ***	15	5.2 ***	16
		5		846	36	8,532	35	8,137	35	3,794	36		$\nabla$		$\nabla$		$\nabla$	
		6		570	24	6,147	26	5,844	25	2,748	26							
		7	Very much	295	12	4,135	17	4,069	17	1,778	16							
			Total	2,345	100	24,070	100	23,283	100	10,623	100							
11. Which of the followin	g have you d	one or d	lo you plan to do be	efore you gra	duate	? <sup>f</sup>												
a. Participate in an	intern		Have not decided	169	7	2,527	10	2,750	12	1,231	11							
internship, co-op, field	(Means indicate		Do not plan to do	365	15	5,957	25	6,195	27	2,765	26							
experience student	the percentage		Plan to do	310	13	3,968	16	3,971	17	1,800	17	65%	49% ***	.32	45% ***	.41	46% ***	.38
placement	who responded		Done or in progress	1,505	65	11,603	49	10,378	45	4,815	46							
1	"Done or in		<b>T</b> 1	2.240	100	21055	100	22.201	100	10 (11	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.

Total

2,349

100

24,055

100

23,294 100

10,611 100

progress.")



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

							•							Your A	th-year studen	ts comnar	ed with	
														10014	an year staden	is compute		
				UWaterlo	0	U15		ON Instituti	ons	U6		UWaterloo	U1	5	ON Institu	tions	U6	1
Item wording	Variable		-											Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
b. Hold a formal	leader		Have not decided	207	9	2,339	9	2,478	11	1,037	10							
leadership role in a student organization or	(Means indicate		Do not plan to do	1,046	45	11,646	47	11,206	47	4,839	44							
group	the percentage		Plan to do	209	9	1,866	8	1,922	8	825	8	37%	35%	.03	34% **	.06	38%	03
Broup	who responded		Done or in progress	877	37	8,178	35	7,665	34	3,911	38				Δ			
	"Done or in progress.")		Total	2,339	100	24,029	100	23,271	100	10,612	100							
c. Participate in a learning	learncom		Have not decided	258	11	3,236	13	3,383	14	1,505	14							
community or some	(Means indicate		Do not plan to do	1,364	58	14,181	59	13,307	57	6,204	58							
other formal program	the percentage		Plan to do	236	10	2,160	9	2,404	11	995	10	20%	18% *	.05	18% **	.07	18% **	.06
where groups of students take two or	who responded		Done or in progress	479	20	4,372	18	4,074	18	1,856	18		Δ		Δ		Δ	
more classes together	"Done or in progress.")		Total	2,337	100	23,949	100	23,168	100	10,560	100							
d. Participate in a study	abroad		Have not decided	245	11	2,875	12	3,106	13	1,295	12							
abroad program	(Means indicate		Do not plan to do	1,594	69	16,314	68	15,734	68	7,085	68							
	the percentage		Plan to do	202	9	2,051	8	2,184	9	967	9	12%	12%	.01	9% ***	.08	12%	.01
	who responded		Done or in progress	297	12	2,753	12	2,193	9	1,237	12				Δ			
	"Done or in progress.")		Total	2,338	100	23,993	100	23,217	100	10,584	100							
e. Work with a faculty	research		Have not decided	257	11	3,265	13	3,379	15	1,411	13							
member on a research	(Means indicate		Do not plan to do	1,146	49	11,438	47	11,248	48	4,847	45							
project	the percentage		Plan to do	343	15	3,398	14	3,310	15	1,607	15	26%	25%	.01	23% **	.07	26%	01
	who responded		Done or in progress	591	26	5,876	25	5,264	23	2,711	26				Δ			
	"Done or in progress.")		Total	2,337	100	23,977	100	23,201	100	10,576	100							
f. Complete a culminating	capstone		Have not decided	215	9	2,968	12	2,801	12	1,312	12							
senior experience	-		Do not plan to do	821	34	2,988 9,932	40	9,294	39	4,388	40							
(capstone course,	(Means indicate the percentage		Plan to do	339	14	3,716	40 16	3,514	16	4,588	40 16	42%	220/ ***	20	33% ***	10	33% ***	. 10
senior project or thesis,	who responded			960	42	7,346	32	7,567	33		33	4270	32% ***	.20	5570	.18	5570	.18
comprehensive exam,	"Done or in		Done or in progress							3,289			Δ		Δ		Δ	
portfolio, etc.)	progress.")		Total	2,335	100	23,962	100	23,176	100	10,569	100							
12. About how many of	your courses at	t this in	stitution have inclu	ded a comm	ınity-l	based proje	et (serv	ice-learnin	g)?									
	servcourse	1	None	1,394	60	13,123	55	11,864	52	5,787	55							
		2	Some	773	33	9,291	38	9,498	41	4,201	40							
		3	Most	129	6	1,253	5	1,443	6	475	5	1.5	1.5 **	06	1.6 ***	14	1.5 **	06
		4	All	28	1	261	1	313	1	90	1		$\nabla$		$\nabla$		$\nabla$	
			Total	2,324	100	23,928	100	23,118	100	10,553	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### . 4tł

13. a.

b.

c.

th-Year Stud				Frequen	cy Dis	stributio	ns <sup>a</sup>				Stati		Comparis		ed with			
				UWaterlo	0	U15		ON Instituti	ons	U6		UWaterloo	U15	5	ON Institu	utions	U6	
Item wording or description	Variable name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	Effect size <sup>e</sup>	Mean	Effect size <sup>e</sup>	Mean	Effect size <sup>e</sup>
3. Indicate the quality	of your interac			eople at your	institu	tion.												
a. Students	QIstudent		Poor	35	2	319	1	367	2	173	2							
		2		51	2	506	2	498	2	252	2							
		3		113	5	1,149	5	1,142	5	582	5							
		4		290	12	2,699	11	2,752	12	1,246	12							
		5		694	30	6,459	27	6,141	26	2,887	27	5.3	5.4 ***	09	5.4 ***	07	5.4	04
		6		661	28	6,914	29	6,504	28	3,018	29		$\nabla$		$\nabla$			
		7	Excellent	476	20	5,785	24	5,650	25	2,365	23							
		—	Not applicable	17	1	143	1	130	1	48	0							
			Total	2,337	100	23,974	100	23,184	100	10,571	100							
<ol> <li>Academic advisors</li> </ol>	QIadvisor	1	Poor	145	6	1,593	7	1,624	7	798	7							
		2		175	7	1,677	7	1,643	7	837	8							
		3		241	10	2,401	10	2,386	10	1,186	11							
		4		408	18	3,712	16	3,639	16	1,716	16							
		5		504	22	4,770	20	4,656	20	2,148	20	4.5	4.5	.02	4.6	02	4.4 **	.06
		6		385	17	3,565	15	3,568	16	1,512	15						Δ	
		7	Excellent	284	12	2,970	12	3,354	15	1,159	12							
		_	Not applicable	191	9	3,263	14	2,294	10	1,202	11							
			Total	2,333	100	23,951	100	23,164	100	10,558	100							
c. Faculty	QIfaculty	1	Poor	64	3	655	3	730	3	352	3							
		2		98	4	953	4	993	4	471	4							
		3		189	8	1,811	7	1,924	8	905	8							
		4		402	17	3,889	16	3,808	16	1,788	16	4.0						
		5		673	29	6,908	29	6,326	27	2,972	28	4.9	5.0 **	06	5.0 *	04	4.9	02
		6		565	24	5,956	25	5,508	24	2,467	24		$\nabla$		$\nabla$			
		7	Excellent	274	12	3,373	14	3,533	16	1,421	14							
		_	Not applicable	60	3	365	2	298	1	166	1							
			Total	2,325	100	23,910	100	23,120	100	10,542	100							

1.



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

Your 4th-year students compared with

														YOUT 4	th-year stude	ns compan	eu with	
				UWaterlo	00	U15	(	ON Instituti	ons	U6		UWaterloo	U1	.5	ON Instit	utions	U6	
Item wording	Variable													Effect		Effect		Effec
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
d. Student services staff	QIstaff	1	Poor	133	6	1,364	6	1,534	6	705	6							
(career services,		2		145	6	1,452	6	1,524	6	732	7							
student activities, housing, etc.)		3		232	10	2,066	9	2,134	9	1,000	9							
nousing, etc.)		4		433	19	3,569	15	3,450	15	1,681	16							
		5		494	21	4,537	19	4,374	19	2,053	20	4.4	4.5 *	06	4.5	04	4.4	.00
		6		325	14	3,399	14	3,280	15	1,404	14		$\nabla$					
		7	Excellent	197	8	2,266	10	2,343	10	915	9							
		_	Not applicable	358	16	5,254	21	4,466	19	2,058	19							
			Total	2,317	100	23,907	100	23,105	100	10,548	100							
e. Other administrative	QIadmin	1	Poor	116	5	1,399	6	1,621	7	740	6							
staff and offices		2		161	7	1,581	6	1,730	7	793	7							
(registrar, financial aid,		3		230	10	2,219	9	2,409	10	1,147	10							
etc.)		4		496	21	3,986	17	4,003	17	1,844	17							
		5		567	24	5,266	22	5,249	23	2,441	23	4.5	4.5 *	05	4.5	02	4.5	02
		6		366	16	3,910	16	3,873	17	1,720	17		V					
		7	Excellent	196	8	2,539	11	2,564	11	1,076	11							
			Not applicable	202	9	3,030	13	1,697	8	793	7							
			Total	2,334	100	23,930	100	23,146	100	10,554	100							
4. How much does you	r institution en	nphasiz	e the following?															
a. Spending significant	empstudy	1	Very little	30	1	353	1	444	2	150	1							
amounts of time		2	Some	282	13	3,590	15	3,987	18	1,486	15							
studying and on		3	Quite a bit	869	38	10,578	45	10,246	45	4,448	43	3.3	3.2 ***	.17	3.1 ***	.26	3.2 ***	.13
academic work		4	Very much	1,128	48	8,896	39	7,908	35	4,219	41	010	Δ	.17	Δ	.20	Δ	.10
		-	Total	2,309	100	23,417	100	22,585	100	10,303	100				4		4	
b. Providing support to	SEacademic	1		184	8	1,911	8	1,839	8	912	9							
help students succeed	SLacadenne	2	Some	968	42	8,813	38	8,065	36	3,891	37							
academically		3	Quite a bit	908 898	39	9,922	42	9,400	42	4,228	42	2.5	2.6 **	07	2.6 ***	13	2.6 ***	08
		4	Very much	256	11	2,699	12	3,191	42 14	4,228	13	4.0	2.0 ₩	07	<b>∑</b> .0 · · · ·	15	2.0 ····	00
		4	Total										v		V		V	
a Using loarning suggest	SElearnsup	1		2,306	100 16	23,345	100	22,495	100	10,272	100							
c. Using learning support services (tutoring	SElearnsup	1	Very little	362		3,442		3,090		1,448								
services, writing		2	Some	986 740	43	8,991	39 26	7,926	35	3,790	37	2.3	2.4.	11		20		
center, etc.)		3	Quite a bit	740	32	8,360	36	8,287	37	3,804	37	2.3	2.4 ***	11	2.5 ***	20	2.5 ***	16
		4	Very much	209	9	2,568	11	3,241	14	1,250	12		V		$\nabla$		$\nabla$	
			Total	2,297	100	23,361	100	22,544	100	10,292	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### **4th-Year Students**

#### **Frequency Distributions**<sup>a</sup>

4th-Year Stude	h-Year Students					Frequen	cy Dis	stributio	ns <sup>a</sup>				Stat		<b>Comparis</b> Ith-year studen		ed with	
				UWaterlo	00	U15		ON Instituti	ons	U6		UWaterloo	U1	5	ON Institu	tions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
d. Encouraging contact	SEdiverse	1	Very little	585	25	5,639	24	5,119	23	2,653	25							
among students from		2	Some	873	38	8,640	37	7,877	35	3,624	35							
different backgrounds (social, racial/ethnic,		3	Quite a bit	599	26	6,530	28	6,507	29	2,803	28	2.2	2.3 *	05	2.3 ***	12	2.3 *	05
religious, etc.)		4	Very much	241	10	2,522	11	2,983	13	1,186	12		$\nabla$		$\nabla$		$\nabla$	
0			Total	2,298	100	23,331	100	22,486	100	10,266	100							
e. Providing opportunities	SEsocial	1	Very little	370	17	2,749	12	2,795	12	1,342	12							
to be involved socially		2	Some	922	40	8,133	34	7,662	34	3,624	34							
		3	Quite a bit	764	33	9,162	39	8,496	38	3,825	38	2.4	2.6 ***	24	2.6 ***	24	2.6 ***	22
		4	Very much	237	10	3,303	15	3,547	16	1,486	16		V		$\nabla$		V	
			Total	2,293	100	23,347	100	22,500	100	10,277	100							
f. Providing support for	SEwellness	1	Very little	422	19	3,364	14	3,390	15	1,634	15							
your overall well-being		2	Some	894	39	7,965	34	7,630	33	3,521	33							
(recreation, health care,		3	Quite a bit	736	32	8,725	37	8,129	36	3,696	37	2.3	2.5 ***	19	2.5 ***	19	2.5 ***	19
counseling, etc.)		4	Very much	247	11	3,241	14	3,318	15	1,412	15		$\nabla$		$\nabla$		V	
			Total	2,299	100	23,295	100	22,467	100	10,263	100		·		•		•	
g. Helping you manage	SEnonacad	1	Very little	972	42	9,637	41	9,410	41	4,454	42							
your non-academic		2	Some	870	38	8,792	38	8,109	36	3,740	37							
responsibilities (work,		3	Quite a bit	347	15	3,907	17	3,768	17	1,635	17	1.8	1.8	02	1.9 *	05	1.8	01
family, etc.)		4	Very much	106	5	952	4	1,177	5	428	4				$\nabla$			
			Total	2,295	100	23,288	100	22,464	100	10,257	100				•			
h. Attending campus	SEactivities	1	Very little	641	28	4,287	18	4,600	20	2,018	19							
activities and events		2	Some	1,015	44	9,387	40	9,025	40	4,305	42							
(performing arts,		3	Ouite a bit	505	22	7,543	32	6,711	30	3,078	30	2.1	2.3 ***	31	2.3 ***	27	2.3 ***	28
athletic events, etc.)		4	Very much	133	6	2,064	9	2,115	10	860	9				V		V	
			Total	2,294	100	23,281	100	22,451	100	10,261	100		•		•		•	
i. Attending events that	SEevents	1	Very little	616	27	5,218	22	5,225	23	2,416	23							
address important		2	Some	1.034	45	10,210	44	9,618	43	4,502	44							
social, economic, or		3	Quite a bit	522	23	6,312	27	5,901	27	2,680	26	2.1	2.2 ***	14	2.2 ***	14	2.2 ***	12
political issues		4	Very much	119	5	1,506	7	1,665	8	643	7	211	▼	.14	▽		▼	.12
			Total	2,291	100	23,246	100	22,409	100	10,241	100		•		•		•	



Variable

name <sup>c</sup>

Values<sup>d</sup> Response options

## **NSSE 2017 Frequencies and Statistical Comparisons University of Waterloo**

#### **4th-Year Students**

Item wording

or description

#### **Frequency Distributions**<sup>a</sup>

		Frequence	cy Di	stributior	าร <sup>ล</sup>				Stat		<b>Compar</b> i <sup>th-year stude</sup>		ed with	
UWaterlo	0	U15		ON Institutio	ons	U6		UWaterloo	U1	.5	ON Instit	tutions	U6	i
								-		Effect		Effect		Effect
Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
oing the foll	lowin	ıg?												
25	1	159	1	153	1	70	1							
234	10	2,713	11	2,728	12	1,070	10							
374	16	4 137	18	4 226	19	1 760	17							

(studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	tmprephrs coded version mprep created NSSE. Values re estimated nber of hours per week.)	0 3 8 13 18 23 28 33	0 hrs 1-5 hrs 6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs Total	25 234 374 397 442 327 178 318	1 10 16 17 19 14 8	159 2,713 4,137 4,183 4,135 2,971	1 11 18 18 18	153 2,728 4,226 4,142 3,924	1 12 19 18 17	70 1,070 1,760 1,895 1,842	1 10 17 19							
writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	mprep created NSSE. Values re estimated nber of hours per week.)	8 13 18 23 28 33	6-10 hrs 11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	374 397 442 327 178 318	16 17 19 14	4,137 4,183 4,135 2,971	18 18 18	4,226 4,142	19 18	1,760 1,895	17 19							
writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	mprep created NSSE. Values re estimated nber of hours per week.)	13 18 23 28 33	11-15 hrs 16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	397 442 327 178 318	17 19 14	4,183 4,135 2,971	18 18	4,142	18	1,895	19							
analyzing data, rehearsing, and other academic activities)	re estimated nber of hours per week.)	18 23 28 33	16-20 hrs 21-25 hrs 26-30 hrs More than 30 hrs	442 327 178 318	19 14	4,135 2,971	18	<i>'</i>		,								
rehearsing, and other academic activities)	nber of hours per week.)	23 28 33	21-25 hrs 26-30 hrs More than 30 hrs	327 178 318	14	2,971		3,924	17	1.842								
academic activities) numi	per week.)	28 33	26-30 hrs More than 30 hrs	178 318			12		- /	1,042	18	17.3	17.0	.04	16.5 ***	.09	17.2	.01
		33	More than 30 hrs	318	8		13	2,821	13	1,384	13				Δ			
h Participating in co. tr	mcocurrhrs					1,936	8	1,737	8	869	8							
h Participating in co-	meocurrhrs	0	Total		14	3,022	13	2,712	12	1,365	13							
h Participating in co-	mcocurrhrs	0		2,295	100	23,256	100	22,443	100	10,255	100							
o. rancipating in co- th		0	0 hrs	678	29	8,931	37	8,857	38	3,513	33							
curricular activities (Reco	coded version	3	1-5 hrs	834	37	7,481	32	6,935	31	3,327	33							
(organizations, campus of	of tmcocurr	8	6-10 hrs	350	15	3,216	14	2,982	14	1,568	16							
publications, student government, fraternity	ated by NSSE.	13	11-15 hrs	213	9	1,642	7	1,635	8	823	8							
or sorority Ve	Values are	18	16-20 hrs	101	4	1,005	5	1,022	5	513	5	5.7	5.1 ***	.09	5.1 ***	.08	5.7	.00
estim	mated number	23	21-25 hrs	67	3	488	2	471	2	247	3		Δ		Δ			
intramural sports etc.)	of hours per week.)	28	26-30 hrs	13	1	186	1	217	1	101	1							
	week.)	33	More than 30 hrs	29	1	246	1	272	1	131	1							
			Total	2,285	100	23,195	100	22,391	100	10,223	100							
c. Working for pay tm	mworkonhrs	0	0 hrs	1,706	75	18,388	78	17,180	76	7,767	75							
on campus (Reco	coded version	3	1-5 hrs	167	7	1,218	6	1,120	5	561	6							
	f tmworkon	8	6-10 hrs	160	7	1,505	7	1,729	8	813	8							
creat	ated by NSSE.	13	11-15 hrs	104	4	958	4	1,135	5	523	5							
	Values are	18	16-20 hrs	72	3	554	2	616	3	279	3	2.9	2.5 **	.07	2.7	.02	2.9	.00
	mated number	23	21-25 hrs	44	2	293	1	312	1	144	2		Δ					
0	of hours per week.)	28	26-30 hrs	11	0	97	0	125	1	49	0							
	ween.j	33	More than 30 hrs	26	1	208	1	189	1	105	1							
			Total	2,290	100	23,221	100	22,406	100	10,241	100							



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

							•, =							o er o ar	ee in partie			
														Your 4	th-year stude	nts compar	ed with	
				UWaterlo	0	U15		ON Instituti	ions	U6		UWaterloo	U1	5	ON Instit	utions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
l. Working for pay	tmworkoffhrs	0	0 hrs	1,648	73	11,276	51	10,515	49	5,320	55							
off campus	(Recoded version	3	1-5 hrs	114	5	1,598	7	1,395	6	651	6							
	of tmworkoff	8	6-10 hrs	142	6	2,278	10	2,009	9	883	8							
	created by NSSE.	13	11-15 hrs	120	5	2,558	10	2,357	10	1,091	10							
	Values are	18	16-20 hrs	109	5	2,405	10	2,421	10	981	9	4.0	7.6 ***	36	8.5 ***	43	7.1 ***	32
	estimated number	23	21-25 hrs	76	3	1,369	6	1,516	6	558	5		V		▼		▼	
	of hours per week.)	28	26-30 hrs	29	1	604	2	819	3	270	2							
	week.)	33	More than 30 hrs	52	2	1,139	5	1,370	6	489	5							
			Total	2,290	100	23,227	100	22,402	100	10,243	100							
Estimated number of	tmworkhrs																	
hours working for pay	(Continuous																	
	variable created											6.8	10.0 ***	28	11.2 ***	37	9.9 ***	27
	by NSSE)												$\nabla$		▼		$\nabla$	
e. Doing community	tmservicehrs	0	0 hrs	1,381	61	11,989	52	11,296	51	5,139	51							
service or volunteer	(Recoded version	3	1-5 hrs	547	23	7,170	30	6,676	29	3,171	31							
work	of tmservice	8	6-10 hrs	148	6	2,200	9	2,323	10	1,048	10							
	created by NSSE.	13	11-15 hrs	95	4	928	4	990	4	441	4							
	Values are	18	16-20 hrs	56	3	478	2	540	2	221	2	2.9	3.1	03	3.4 ***	08	3.2 **	06
	estimated number of hours per	23	21-25 hrs	38	2	232	1	306	1	113	1				$\nabla$		$\nabla$	
	week.)	28	26-30 hrs	8	0	76	0	84	0	34	0							
	,	33	More than 30 hrs	13	1	136	1	182	1	71	1							
			Total	2,286	100	23,209	100	22,397	100	10,238	100							
f. Relaxing and	tmrelaxhrs	0	0 hrs	32	2	361	2	408	2	184	2							
socializing (time with	(Recoded version	3	1-5 hrs	312	13	4,638	19	4,628	20	1,964	18							
friends, video games, TV or videos, keeping	of tmrelax created	8	6-10 hrs	589	25	6,539	28	6,072	27	2,798	27							
up with friends online,	by NSSE. Values	13	11-15 hrs	510	22	5,105	22	4,806	22	2,311	23							
etc.)	are estimated	18	16-20 hrs	383	17	3,278	15	3,091	14	1,434	14	14.3	12.4 ***	.23	12.5 ***	.22	12.6 ***	.20
	number of hours per week.)	23	21-25 hrs	179	8	1,414	6	1,417	7	654	7		Δ		Δ		Δ	
	per week.)	28	26-30 hrs	86	4	636	3	603	3	282	3							
		33	More than 30 hrs	196	9	1,241	6	1,356	6	604	6							
			Total	2,287	100	23,212	100	22,381	100	10,231	100							



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

	CIICS					ricqueil	<b>c</b> , <b>b</b>						Jui	Sticul	company	0115		
														Your 4	th-year studer	its compare	ed with	
				UWaterlo	0	U15		ON Institut	ions	U6		UWaterloo	U1	5	ON Institu	utions	U6	
Item wording	Variable												-	Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
g. Providing care for	tmcarehrs	0	0 hrs	1,792	78	17,026	74	15,502	70	7,454	74							
dependents (children,	(Recoded version	3	1-5 hrs	207	9	3,017	13	3,144	14	1,352	13							
parents, etc.)	of tmcare created	8	6-10 hrs	98	4	1,084	5	1,257	6	537	5							
	by NSSE. Values	13	11-15 hrs	75	3	653	3	817	4	319	3							
	are estimated	18	16-20 hrs	48	2	439	2	517	2	213	2	2.3	2.6 *	05	3.2 ***	13	2.5	04
	number of hours	23	21-25 hrs	31	1	241	1	310	1	120	1		$\nabla$		$\nabla$			
	per week.)	28	26-30 hrs	6	0	121	1	135	1	46	0							
		33	More than 30 hrs	31	1	585	2	681	3	172	2							
			Total	2,288	100	23,166	100	22,363	100	10,213	100							
h. Commuting to campus	tmcommutehrs	0	0 hrs	130	6	1,263	6	1,499	7	605	6							
(driving, walking, etc.)	(Recoded version	3	1-5 hrs	1,472	64	10,905	47	10,278	46	4,718	48							
	of tmcommute	8	6-10 hrs	427	18	6,400	27	5,763	25	2,624	25							
	created by NSSE.	13	11-15 hrs	130	6	2,880	12	2,777	12	1,359	12							
	Values are	18	16-20 hrs	64	3	990	4	1,109	5	529	5	5.5	6.9 ***	23	7.1 ***	25	6.9 ***	23
	estimated number of hours per	23	21-25 hrs	36	2	360	2	440	2	185	2		$\nabla$		V		V	
	week.)	28	26-30 hrs	11	1	132	1	170	1	75	1		•		•		•	
		33	More than 30 hrs	23	1	282	1	370	2	141	1							
			Total	2,293	100	23,212	100	22,406	100	10,236	100							
16. Of the time you spe	nd preparing for	· class																
ior of the third jou spe	reading	1		567	26	4,209	19	3,863	18	1,732	18							
	6	2	Some	748	33	6,576	29	5,983	27	2,752	28							
		- 3	About half	454	19	5,260	22	5,175	23	2,283	22	2.4	2.7 ***	25	2.8 ***	30	2.8 ***	30
		4	Most	350	15	4,817	20	4,850	21	2,285	22	2.7	▼	23	2.8	50	2.8 <b>V</b>	50
		- 5	Almost all	163	7	2,333	10	2,499	11	1,173	11		v		v		v	
		5	Total	2,282	100	2,555	100	2,499	100	1,173	100							
			Totai	2,282	100	25,195	100	22,370	100	10,225	100							
	tmreadinghrs																	
(Continuous variable	e created by NSSE	Calcula	ted as a proportion									"					= 0	10
of tmprephrs based												6.6	7.5 ***	14	7.6 ***	15	7.8 ***	19
	ulf=.50; Most=.75; A												$\mathbf{\nabla}$		$\nabla$		$\nabla$	



#### **4th-Year Students**

#### **Frequency Distributions**<sup>a</sup>

4th-Year St	udents					Frequen	cy Dis	tributio	ns <sup>a</sup>				Stat	istical	Compari	isons <sup>b</sup>		
														Your 4	th-year stude	ents compar	ed with	
				UWaterlo	0	U15		ON Institut	ions	U6		UWaterloo	U1	15	ON Insti	tutions	Ue	5
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
	tmreadinghrscol	1	0 hrs	25	1	157	1	153	1	70	1							
	(Collapsed version of tmreadinghrs	2	More than zero, up to 5 hrs	1,169	53	10,516	46	9,959	45	4,326	44							
	created by NSSE.)	3	More than 5, up to 10 hrs	613	27	6,664	29	6,470	29	3,001	29							
		4	More than 10, up to 15 hrs	203	8	2,434	10	2,351	10	1,137	11							
		5	More than 15, up to 20 hrs	137	6	1,596	7	1,595	7	780	7							
		6	More than 20, up to 25 hrs	88	4	1,207	5	1,213	5	600	6							
		7	More than 25 hrs	42	2	566	2	566	2	285	3							
			Total	2,277	100	23,140	100	22,307	100	10,199	100							
17. How much has	your experience at th	nis inst	titution contributed	to your know	vledg	e, skills, and	persor	al develop	ment i	n the follow	ving ar	eas?						
a. Writing clearly and	• •	1	Very little	176	8	1,457	6	1,305	6	571	6							

<ol> <li>Writing clearly and</li> </ol>	pgwrite	1	Very little	176	8	1,457	6	1,305	6	571	6							
effectively		2	Some	628	28	5,637	25	5,160	23	2,313	23							
		3	Quite a bit	973	42	9,721	42	9,516	42	4,335	42	2.8	2.9 ***	13	2.9 ***	18	3.0 ***	20
		4	Very much	508	22	6,311	27	6,348	29	2,982	30		$\nabla$		$\nabla$		$\nabla$	
			Total	2,285	100	23,126	100	22,329	100	10,201	100							
b. Speaking clearly and	pgspeak	1	Very little	254	11	2,392	10	2,217	10	1,034	10							
effectively		2	Some	734	32	6,952	30	6,315	28	2,987	29							
		3	Quite a bit	869	38	8,929	38	8,761	39	3,944	39	2.6	2.7 ***	09	2.8 ***	13	2.7 ***	12
		4	Very much	425	18	4,903	21	5,078	23	2,248	23		$\nabla$		$\nabla$		$\nabla$	
			Total	2,282	100	23,176	100	22,371	100	10,213	100							
c. Thinking critically and	pgthink	1	Very little	52	2	499	2	527	2	212	2							
analytically		2	Some	319	14	3,135	13	3,040	14	1,322	13							
		3	Quite a bit	937	41	9,540	40	9,130	40	4,084	39	3.2	3.3	03	3.3	02	3.3 **	07
		4	Very much	976	43	10,007	44	9,670	44	4,610	46						$\nabla$	
			Total	2,284	100	23,181	100	22,367	100	10,228	100							
d. Analyzing numerical	pganalyze	1	Very little	161	7	3,115	13	3,303	14	1,343	12							
and statistical		2	Some	520	22	6,461	27	6,385	28	2,869	27							
information		3	Quite a bit	809	36	7,559	33	7,153	32	3,284	32	3.0	2.7 ***	.26	2.7 ***	.30	2.8 ***	.24
		4	Very much	790	36	6,017	27	5,494	26	2,704	28		Δ				Δ	
			Total	2,280	100	23,152	100	22,335	100	10,200	100							

\*p<.05, \*\*p<.01, \*\*\*p<.001 (2-tailed); Refer to p. 2 for key to triangle symbols. See the endnotes on the last page of this report.



#### **4th-Year Students**

#### Frequency Distributions<sup>a</sup>

Statistical Comparisons<sup>b</sup>

														Your 4	th-year studen	ts compare	ed with	
				UWaterlo	0	U15		ON Instituti	ions	U6		UWaterloo	U15	5	ON Institu	tions	U6	
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
e. Acquiring job- or work-	pgwork	1	Very little	218	9	3,825	17	3,915	18	1,996	19							
related knowledge and skills		2	Some	589	26	7,460	32	7,469	33	3,602	35							
SKIIIS		3	Quite a bit	766	33	7,232	31	6,817	30	2,856	28	2.9	2.5 ***	.33	2.5 ***	.38	2.4 ***	.44
		4	Very much	712	32	4,651	20	4,155	19	1,757	18							
			Total	2,285	100	23,168	100	22,356	100	10,211	100							
f. Working effectively	pgothers	1	Very little	139	6	1,720	8	1,674	8	862	8							
with others		2	Some	596	26	6,666	29	6,305	28	3,074	29							
		3	Quite a bit	984	43	9,363	40	8,960	40	3,944	39	2.9	2.8 **	.07	2.8 *	.05	2.8 ***	.08
		4	Very much	567	25	5,407	24	5,415	25	2,327	24		Δ		Δ		Δ	
			Total	2,286	100	23,156	100	22,354	100	10,207	100							
g. Developing or	pgvalues	1	Very little	348	16	3,319	15	3,098	14	1,551	15							
clarifying a personal		2	Some	753	33	7,286	32	6,794	30	3,221	31							
code of values and ethics		3	Quite a bit	827	36	8,233	35	7,966	35	3,546	35	2.5	2.6 ***	07	2.6 ***	11	2.6 **	07
eulles		4	Very much	354	15	4,320	19	4,493	20	1,890	19		$\nabla$		$\nabla$		$\nabla$	
			Total	2,282	100	23,158	100	22,351	100	10,208	100							
h. Understanding people	pgdiverse	1	Very little	365	17	3,301	15	2,837	13	1,426	14							-
of other backgrounds		2	Some	741	33	7,267	31	6,619	30	3,076	30							
(economic, racial/ethnic, political,		3	Quite a bit	771	34	7,774	33	7,678	34	3,449	34	2.5	2.6 ***	09	2.7 ***	17	2.6 ***	13
religious, nationality,		4	Very much	397	17	4,809	21	5,195	23	2,249	22		$\nabla$		$\nabla$		$\nabla$	
etc.)			Total	2,274	100	23,151	100	22,329	100	10,200	100							
i. Solving complex real-	pgprobsolve	1	Very little	229	10	2,886	12	2,992	13	1,385	13							-
world problems		2	Some	709	31	7,769	33	7,489	33	3,528	34							
		3	Quite a bit	856	38	8,015	34	7,475	33	3,340	33	2.7	2.6 ***	.10	2.6 ***	.11	2.6 ***	.12
		4	Very much	486	22	4,485	20	4,389	20	1,953	20		Δ		Δ		Δ	
			Total	2,280	100	23,155	100	22,345	100	10,206	100							
j. Being an informed and	pgcitizen	1	Very little	435	20	3,610	16	3,464	16	1,651	16							
active citizen		2	Some	831	37	7,872	34	7,328	33	3,427	34							
		3	Quite a bit	703	31	7,482	32	7,257	32	3,252	32	2.4	2.5 ***	15	2.5 ***	18	2.5 ***	15
		4	Very much	300	13	4,131	18	4,236	19	1,850	18		V		V		V	
			Total	2,269	100	23,095	100	22,285	100	10,180	100		*		Ŧ		*	



4th-Year Stu	dents					Frequen	cy Dis	stributio	ns <sup>a</sup>				Stat		Comparis		ed with	
				UWaterlo	0	U15		ON Instituti	ions	U6		UWaterloo	U1	5	ON Institu	itions	U6	5
Item wording	Variable													Effect		Effect		Effect
or description	name <sup>c</sup>	Values	<sup>d</sup> Response options	Count	%	Count	%	Count	%	Count	%	Mean	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>	Mean	size <sup>e</sup>
18. How would you ev	aluate your ent	ire educ	ational experience a	at this institut	tion?													
	evalexp	1	Poor	75	3	891	4	981	5	444	4							
		2	Fair	313	14	4,065	17	4,204	18	1,912	18							
		3	Good	1,194	52	12,237	52	11,298	50	5,179	49	3.1	3.0 ***	.10	3.0 ***	.12	3.0 ***	* .11
		4	Excellent	698	31	5,946	27	5,845	27	2,665	28		Δ		Δ		Δ	
			Total	2,280	100	23,139	100	22,328	100	10,200	100							
19. If you could start	over again, wou	ld you g	o to the same institu	<i>ution</i> you are	now a	attending?												
	sameinst	1	Definitely no	100	4	1,204	5	1,393	6	639	6							
		2	Probably no	282	12	3,811	16	3,999	17	1,853	17							
		3	Probably yes	1,056	46	10,426	44	9,798	43	4,454	43	3.2	3.1 ***	.10	3.0 ***	.15	3.0 ***	* .14
		4	Definitely yes	846	37	7,710	34	7,158	33	3,259	34		Δ		Δ		Δ	
			Total	2,284	100	23,151	100	22,348	100	10,205	100							



### Detailed Statistics<sup>g</sup> University of Waterloo

#### **1st-Year Students**

	N		Mea	in		S	tandard	error <sup>h</sup>		Sta	ndard de	eviation <sup>i</sup>		Degree	es of free	dom <sup>j</sup>	Sign	ificance	<	Eff	ect size <sup>e</sup>	
														Com	parisons wi	th:	Compo	arisons with	:	Comp	arisons with	1:
Variable Name	UWaterloo	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	U15	ON Institutions	UG	U15	ON Institutions	UG	U15	ON Institutions	U6
1 a. askquest	3,755	2.32	2.29	2.38	2.34	.014	.004	.004	.006	.83	.84	.85	.84	54,668	4,327	5,104	.091	.000	.102	.03	07	03
b. drafts	3,723	2.20	2.21	2.22	2.23	.015	.004	.004	.006	.93	.97	.96	.96	4,350	4,300	5,119	.755	.355	.067	01	02	03
c. unpreparedr	3,730	2.64	2.71	2.70	2.64	.014	.004	.004	.006	.84	.84	.85	.85	4,298	56,609	26,500	.000	.000	.995	08	07	.00
d. attendart	3,723	1.61	1.66	1.61	1.67	.013	.004	.004	.006	.78	.83	.83	.83	4,354	4,329	5,194	.000	.722	.000	06	01	07
e. CLaskhelp	3,729	2.85	2.67	2.66	2.72	.014	.004	.004	.006	.85	.89	.88	.89	4,352	4,322	5,156	.000	.000	.000	.20	.21	.15
f. CLexplain	3,729	2.85	2.73	2.75	2.79	.013	.004	.004	.005	.78	.82	.82	.82	4,351	4,329	5,153	.000	.000	.000	.15	.12	.08
g. CLstudy	3,720	2.73	2.62	2.63	2.64	.015	.004	.004	.006	.91	.96	.96	.95	4,346	4,323	5,139	.000	.000	.000	.12	.11	.10
h. CLproject	3,720	2.81	2.66	2.63	2.62	.014	.004	.004	.006	.87	.93	.93	.94	4,376	4,336	5,237	.000	.000	.000	.16	.20	.20
i. present	3,720	2.06	1.77	1.85	1.74	.014	.004	.004	.005	.87	.83	.88	.82	4,240	4,276	4,864	.000	.000	.000	.35	.24	.39
2 a. RIintegrate	3,705	2.57	2.57	2.59	2.57	.013	.004	.004	.005	.78	.82	.83	.82	4,328	4,309	5,118	.960	.217	.877	.00	02	.00
b. RIsocietal	3,691	2.28	2.49	2.51	2.49	.014	.004	.004	.006	.85	.87	.87	.87	4,279	4,254	5,030	.000	.000	.000	25	26	25
c. RIdiverse	3,687	2.10	2.24	2.36	2.31	.015	.004	.004	.006	.91	.94	.94	.95	4,286	4,267	5,096	.000	.000	.000	16	28	22
d. RIownview	3,680	2.56	2.60	2.62	2.62	.013	.004	.004	.006	.80	.82	.82	.82	4,281	55,222	5,070	.010	.000	.000	04	08	07
e. RIperspect	3,673	2.73	2.79	2.81	2.82	.013	.004	.004	.005	.79	.81	.80	.81	52,911	54,942	25,802	.000	.000	.000	07	10	11
f. RInewview	3,669	2.82	2.89	2.87	2.90	.012	.003	.003	.005	.76	.76	.77	.77	4,241	54,744	5,002	.000	.000	.000	09	07	10
g. RIconnect	3,654	2.95	3.04	3.02	3.05	.012	.003	.003	.005	.72	.73	.73	.73	52,524	54,549	25,644	.000	.000	.000	12	10	13
3 a. SFcareer	3,659	1.88	1.73	1.76	1.75	.015	.004	.004	.006	.91	.86	.89	.88	52,515	54,528	25,621	.000	.000	.000	.17	.14	.15
b. SFotherwork	3,647	1.63	1.45	1.50	1.52	.014	.003	.003	.005	.83	.75	.78	.79	4,105	4,123	4,794	.000	.000	.000	.24	.17	.15
c. SFdiscuss	3,641	1.92	1.76	1.78	1.80	.014	.004	.004	.006	.86	.83	.85	.85	4,173	4,170	4,922	.000	.000	.000	.19	.17	.14
d. SFperform	3,649	1.77	1.62	1.69	1.67	.014	.004	.004	.005	.84	.79	.82	.81	4,144	54,194	25,472	.000	.000	.000	.20	.10	.13
4 a. memorize	3,642	2.78	3.02	2.97	2.99	.014	.004	.004	.006	.85	.82	.82	.82	4,160	4,141	4,842	.000	.000	.000	29	23	25
b. HOapply	3,652	3.07	3.00	2.99	3.06	.013	.004	.004	.005	.79	.81	.81	.81	52,144	54,084	25,456	.000	.000	.217	.09	.11	.02
c. HOanalyze	3,641	2.91	2.86	2.86	2.90	.013	.004	.004	.006	.81	.84	.83	.84	4,240	4,212	5,040	.001	.001	.723	.06	.06	.01
d. HOevaluate	3,644	2.58	2.63	2.70	2.68	.015	.004	.004	.006	.88	.89	.86	.89	51,957	4,163	25,368	.002	.000	.000	05	14	12
e. HOform	3,638	2.74	2.71	2.74	2.76	.013	.004	.004	.006	.81	.85	.84	.85	4,260	4,221	5,070	.021	.998	.342	.04	.00	02
5 a. ETgoals	3,635	2.94	2.97	2.92	2.91	.012	.003	.004	.005	.74	.76	.79	.78	51,899	4,247	5,060	.092	.107	.032	03	.03	.04
b. ETorganize	3,632	2.93	2.95	2.91	2.93	.012	.003	.003	.005	.74	.74	.78	.77	51,870	4,237	5,019	.171	.108	.778	02	.03	.00
c. ETexample	3,633	3.00	3.00	2.94	2.97	.013	.004	.004	.005	.77	.78	.82	.80	51,831	4,255	5,048	.650	.000	.012	.01	.08	.04
d. ETdraftfb	3,619	2.34	2.26	2.28	2.23	.015	.004	.004	.006	.89	.92	.94	.92	51,772	4,215	25,270	.000	.000	.000	.09	.06	.11
e. ETfeedback	3,621	2.46	2.35	2.36	2.33	.014	.004	.004	.006	.85	.87	.88	.88	51,705	4,214	25,264	.000	.000	.000	.12	.11	.14



## Detailed Statistics<sup>g</sup> University of Waterloo

#### **1st-Year Students**

	N		Mea	in		:	Standard	error <sup>h</sup>		St	andard d	eviation		Degree	es of free	edom <sup>j</sup>	Sign	ificance	¢	Eff	ect size <sup>e</sup>	
														Com	parisons wi	th:	Compo	arisons with	:	Comp	arisons with	:
Variable Name	UWaterloo	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	U15	ON Institutions	UG	U15	ON Institutions	U6	U15	ON Institutions	U6
6 a. QRconclude	3,622	2.59	2.42	2.40	2.44	.014	.004	.004	.006	.84	.90	.90	.90	4,268	4,246	5,092	.000	.000	.000	.19	.22	.17
b. QRproblem	3,611	2.19	2.08	2.14	2.15	.015	.004	.004	.006	.90	.90	.90	.90	4,165	53,460	25,165	.000	.006	.036	.12	.05	.04
c. QRevaluate	3,616	2.29	2.16	2.18	2.22	.014	.004	.004	.006	.86	.87	.87	.87	4,194	53,536	25,207	.000	.000	.000	.16	.13	.08
7 a. wrshortnum	3,500	6.83	6.04	6.41	6.26	.104	.026	.026	.040	6.14	5.52	5.54	5.66	3,956	3,945	4,604	.000	.000	.000	.14	.08	.10
b. wrmednum	3,476	3.52	2.68	3.13	2.89	.078	.017	.019	.028	4.58	3.67	3.97	3.88	3,833	3,882	4,395	.000	.000	.000	.22	.10	.16
c. wrlongnum	3,494	2.29	1.36	1.57	1.55	.071	.015	.017	.025	4.21	3.24	3.55	3.53	3,827	3,881	4,399	.000	.000	.000	.28	.20	.20
- wrpages	3,435	81.99	59.21	67.05	64.21	1.713	.372	.397	.599	100.39	77.80	84.43	83.87	3,765	3,812	4,314	.000	.000	.000	.29	.17	.21
8 a. DDrace	3,519	3.19	3.10	3.12	3.17	.015	.004	.004	.006	.88	.91	.90	.89	4,142	49,501	23,417	.000	.000	.103	.10	.08	.03
b. DDeconomic	3,502	3.01	2.92	2.96	2.98	.015	.004	.004	.006	.88	.91	.89	.89	4,108	4,072	4,861	.000	.002	.046	.10	.05	.04
c. DDreligion	3,502	3.08	2.95	3.02	3.05	.015	.004	.004	.006	.90	.94	.92	.91	4,121	49,371	23,380	.000	.000	.084	.14	.07	.03
d. DDpolitical	3,495	2.77	2.77	2.79	2.78	.016	.004	.004	.007	.93	.92	.93	.92	47,960	49,369	23,355	.965	.166	.367	.00	02	02
9 a. LSreading	3,496	2.88	2.97	2.95	2.97	.013	.004	.004	.005	.78	.77	.76	.76	4,054	4,022	4,754	.000	.000	.000	12	09	11
b. LSnotes	3,499	2.59	2.66	2.59	2.61	.014	.004	.004	.006	.86	.91	.89	.90	4,144	4,097	4,963	.000	.759	.408	07	.01	01
c. LSsummary	3,485	2.66	2.74	2.66	2.69	.015	.004	.004	.006	.86	.90	.88	.89	4,104	4,060	4,881	.000	.936	.098	08	.00	03
10. challenge	3,483	5.28	5.36	5.26	5.34	.022	.006	.006	.009	1.32	1.27	1.30	1.28	47,597	48,889	23,146	.000	.484	.007	07	.01	05
11 a. intern <sup>1</sup>	3,489	.220	.069	.055	.045	.0070	.0012	.0011	.0015								.000	.000	.000	.45	.50	.55
b. leader <sup>1</sup>	3,477	.133	.093	.082	.092	.0058	.0014	.0013	.0021								.000	.000	.000	.13	.17	.13
c. learncom <sup>1</sup>	3,460	.142	.099	.079	.089	.0059	.0014	.0013	.0020								.000	.000	.000	.13	.20	.17
d. abroad <sup>1</sup>	3,467	.027	.023	.024	.024	.0027	.0007	.0007	.0011								.156	.334	.357	.02	.02	.02
e. research <sup>1</sup>	3,469	.040	.031	.025	.026	.0033	.0008	.0007	.0011								.005	.000	.000	.05	.08	.07
f. capstone <sup>1</sup>	3,462	.026	.018	.017	.014	.0027	.0006	.0006	.0008								.001	.000	.000	.05	.06	.09
12. servcourse	3,426	1.55	1.47	1.55	1.51	.012	.003	.003	.005	.72	.65	.69	.65	3,875	3,926	4,483	.000	.830	.001	.13	.00	.06
13 a. QIstudent	3,442	5.33	5.36	5.30	5.30	.024	.007	.007	.010	1.41	1.40	1.43	1.41	46,761	48,089	22,769	.229	.298	.263	02	.02	.02
b. QIadvisor	2,924	4.59	4.64	4.62	4.58	.031	.009	.009	.013	1.68	1.71	1.72	1.70	36,794	40,453	18,782	.103	.327	.854	03	02	.00
c. QIfaculty	3,296	4.86	4.85	4.77	4.76	.026	.008	.008	.012	1.48	1.53	1.59	1.57	3,877	3,903	4,727	.632	.000	.000	.01	.06	.07
d. QIstaff	3,033	4.77	4.73	4.67	4.68	.029	.009	.009	.013	1.61	1.68	1.74	1.70	3,662	3,642	4,416	.191	.001	.010	.02	.06	.05
e. QIadmin	2,910	4.56	4.73	4.65	4.70	.030	.009	.009	.013	1.64	1.67	1.71	1.67	37,828	3,405	19,558	.000	.004	.000	10	05	09
14 a. empstudy	3,417	3.29	3.20	3.11	3.20	.013	.004	.004	.005	.74	.74	.76	.75	3,991	4,002	4,797	.000	.000	.000	.12	.24	.12
b. SEacademic	3,398	2.85	2.83	2.85	2.85	.013	.004	.004	.006	.79	.81	.82	.82	3,994	4,006	4,827	.049	.579	.544	.03	.01	.01
c. SElearnsup	3,399	2.77	2.74	2.80	2.81	.015	.004	.004	.006	.86	.89	.90	.88	4,005	4,004	22,141	.028	.127	.019	.04	03	04



## Detailed Statistics<sup>g</sup> University of Waterloo

#### **1st-Year Students**

	N		Mea	an		S	Standard	error <sup>h</sup>		Sta	andard d	eviation <sup>i</sup>		Degree	es of free	edom <sup>j</sup>	Significance <sup>k</sup>			Effect size <sup>e</sup>			
														Com	parisons wi	th:	Compo	arisons with	:	Comparisons with:			
Variable Name	UWaterloo	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	U15	ON Institutions	UG	U15	ON Institutions	U6	U15	ON Institutions	<u>06</u>	
d. SEdiverse	3,391	2.51	2.47	2.52	2.49	.016	.005	.005	.007	.95	.96	.96	.96	45,545	46,706	22,106	.014	.418	.295	.04	01	.02	
e. SEsocial	3,389	2.56	2.70	2.70	2.69	.015	.004	.004	.007	.88	.89	.90	.89	3,954	46,656	22,071	.000	.000	.000	16	16	15	
f. SEwellness	3,388	2.59	2.71	2.71	2.73	.015	.004	.004	.007	.89	.90	.91	.91	45,450	46,609	22,063	.000	.000	.000	13	13	16	
g. SEnonacad	3,389	2.15	2.07	2.11	2.09	.015	.004	.004	.007	.89	.90	.93	.91	45,371	3,982	22,032	.000	.021	.002	.08	.04	.06	
h. SEactivities	3,382	2.28	2.52	2.47	2.47	.015	.004	.004	.007	.89	.90	.92	.90	3,955	3,963	4,722	.000	.000	.000	27	21	21	
i. SEevents	3,377	2.20	2.32	2.31	2.30	.015	.004	.004	.007	.88	.89	.90	.89	3,958	3,960	4,728	.000	.000	.000	13	12	12	
15 a. tmprephrs	3,384	18.77	17.28	16.23	17.51	.160	.045	.043	.067	9.29	9.16	8.99	9.13	45,224	3,898	4,654	.000	.000	.000	.16	.28	.14	
b. tmcocurrhrs	3,378	5.37	4.17	4.46	4.69	.111	.029	.030	.045	6.43	5.93	6.18	6.12	3,857	3,884	4,561	.000	.000	.000	.20	.15	.11	
c. tmworkonhrs	3,378	1.88	1.09	1.38	1.27	.099	.020	.023	.033	5.75	4.18	4.74	4.55	3,670	3,745	4,181	.000	.000	.000	.18	.10	.13	
d. tmworkoffhrs	3,385	2.75	4.79	5.01	3.68	.117	.038	.040	.052	6.79	7.83	8.27	7.14	4,148	4,216	4,848	.000	.000	.000	26	28	13	
- tmworkhrs	3,368	4.57	5.86	6.35	4.92	.192	.047	.051	.071	11.12	9.67	10.59	9.72	3,790	3,862	21,873	.000	.000	.061	13	17	04	
e. tmservicehrs	3,380	2.37	2.11	2.35	2.22	.093	.022	.024	.035	5.42	4.40	4.94	4.71	3,748	3,835	4,358	.008	.896	.135	.06	.00	.03	
f. tmrelaxhrs	3,383	13.18	12.79	13.32	13.23	.142	.041	.042	.063	8.25	8.46	8.78	8.61	45,150	4,009	4,824	.009	.372	.772	.05	02	01	
g. tmcarehrs	3,377	2.18	2.46	3.00	2.55	.096	.029	.031	.043	5.58	5.96	6.39	5.85	4,027	4,107	4,829	.006	.000	.000	05	13	06	
h. tmcommutehrs	3,383	4.92	6.42	6.46	6.10	.102	.030	.033	.047	5.96	6.23	6.82	6.44	4,004	4,112	4,930	.000	.000	.000	24	23	19	
16. reading	3,365	2.36	2.76	2.78	2.79	.020	.006	.006	.009	1.14	1.19	1.19	1.20	3,977	3,961	4,813	.000	.000	.000	33	36	36	
- tmreadinghrs	3,351	6.69	7.78	7.49	8.06	.103	.032	.031	.049	5.98	6.57	6.46	6.68	4,029	3,987	4,994	.000	.000	.000	17	13	21	
17 a. pgwrite	3,372	2.51	2.52	2.58	2.55	.015	.004	.004	.007	.88	.89	.87	.89	44,957	46,183	21,873	.351	.000	.018	02	08	04	
b. pgspeak	3,372	2.39	2.27	2.36	2.28	.016	.005	.005	.007	.94	.94	.94	.94	45,031	46,196	21,861	.000	.045	.000	.13	.04	.12	
c. pgthink	3,377	3.07	3.00	3.02	3.04	.014	.004	.004	.006	.80	.82	.81	.82	45,047	46,184	21,871	.000	.000	.073	.09	.06	.03	
d. pganalyze	3,372	2.87	2.56	2.51	2.58	.016	.005	.005	.007	.93	.99	1.01	.99	4,019	4,021	4,891	.000	.000	.000	.32	.36	.29	
e. pgwork	3,367	2.70	2.33	2.33	2.26	.016	.005	.005	.007	.94	.96	.95	.95	3,965	46,195	21,870	.000	.000	.000	.38	.39	.47	
f. pgothers	3,375	2.74	2.56	2.62	2.57	.015	.005	.004	.007	.89	.92	.92	.93	3,986	3,967	4,832	.000	.000	.000	.19	.13	.19	
g. pgvalues	3,364	2.50	2.42	2.49	2.44	.016	.005	.005	.007	.93	.94	.93	.94	44,997	46,130	21,851	.000	.691	.001	.09	.01	.06	
h. pgdiverse	3,362	2.53	2.50	2.59	2.54	.016	.005	.005	.007	.96	.97	.96	.97	44,969	46,115	21,827	.107	.000	.518	.03	07	01	
i. pgprobsolve	3,363	2.64	2.48	2.51	2.51	.016	.005	.005	.007	.91	.94	.94	.95	3,969	3,945	4,790	.000	.000	.000	.17	.15	.14	
j. pgcitizen	3,354	2.41	2.43	2.48	2.44	.016	.005	.005	.007	.93	.95	.95	.96	44,891	3,918	4,721	.183	.000	.061	02	08	03	
18. evalexp	3,367	3.06	3.04	3.01	3.03	.013	.004	.004	.006	.77	.74	.76	.77	3,897	3,909	21,832	.206	.000	.035	.02	.07	.04	
19. sameinst	3,372	3.24	3.24	3.17	3.19	.013	.004	.004	.006	.77	.75	.78	.77	44,970	46,115	21,835	.959	.000	.001	.00	.09	.06	

PSIS: 35017001



### Detailed Statistics<sup>g</sup> University of Waterloo

### **4th-Year Students**

	N Mean					Standard error <sup>h</sup>				Sta	ndard d	eviation <sup>i</sup>		Degree	es of free	dom <sup>j</sup>	Significance <sup>k</sup>			Effect size <sup>e</sup>		
									Com	parisons wit	h:	Compo	arisons with	:	Comparisons with:							
Variable Name	UWaterloo	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	UG	U15	ON Institutions	U6	U15	ON Institutions	UG	U15	ON Institutions	U6
1 a. askquest	2,511	2.47	2.64	2.74	2.71	.018	.005	.005	.007	.89	.91	.91	.91	2,871	2,895	3,323	.000	.000	.000	18	30	26
b. drafts	2,494	2.07	2.24	2.28	2.27	.019	.005	.005	.008	.95	1.02	1.02	1.02	2,896	2,916	3,388	.000	.000	.000	16	20	20
c. unpreparedr	2,500	2.50	2.62	2.63	2.58	.018	.004	.005	.007	.89	.87	.86	.86	2,828	2,844	3,224	.000	.000	.000	14	15	09
d. attendart	2,496	1.65	1.75	1.70	1.76	.016	.004	.005	.007	.78	.85	.86	.86	2,905	2,944	3,455	.000	.002	.000	12	06	14
e. CLaskhelp	2,498	2.56	2.49	2.47	2.49	.017	.005	.005	.007	.87	.88	.89	.90	39,650	37,681	19,583	.000	.000	.000	.08	.10	.09
f. CLexplain	2,492	2.72	2.72	2.76	2.74	.016	.004	.004	.006	.80	.82	.83	.84	2,854	37,605	3,333	.912	.011	.165	.00	05	03
g. CLstudy	2,495	2.55	2.53	2.54	2.54	.019	.005	.005	.007	.93	.97	.97	.97	2,870	2,894	3,346	.300	.676	.470	.02	.01	.01
h. CLproject	2,487	2.89	2.90	2.89	2.87	.018	.005	.005	.007	.88	.92	.92	.93	2,864	2,883	3,345	.490	.886	.225	01	.00	.03
i. present	2,494	2.54	2.61	2.72	2.65	.019	.005	.005	.007	.92	.92	.92	.90	39,483	37,486	3,228	.000	.000	.000	07	19	13
2 a. RIintegrate	2,484	2.72	2.87	2.92	2.88	.016	.004	.004	.006	.80	.81	.80	.80	2,829	2,848	3,249	.000	.000	.000	18	24	20
b. RIsocietal	2,488	2.42	2.69	2.72	2.71	.018	.005	.005	.007	.89	.88	.89	.89	39,265	37,270	19,382	.000	.000	.000	30	33	32
c. RIdiverse	2,474	2.11	2.38	2.48	2.44	.019	.005	.005	.008	.96	.98	.99	.98	2,828	2,857	3,281	.000	.000	.000	27	38	33
d. RIownview	2,468	2.54	2.68	2.73	2.70	.017	.004	.004	.006	.83	.82	.82	.82	2,801	2,820	3,217	.000	.000	.000	17	23	20
e. RIperspect	2,467	2.71	2.84	2.88	2.86	.017	.004	.004	.006	.83	.80	.80	.81	2,791	2,807	3,196	.000	.000	.000	16	21	18
f. RInewview	2,458	2.81	2.94	2.95	2.96	.015	.004	.004	.006	.74	.75	.75	.75	2,813	2,841	3,266	.000	.000	.000	17	20	21
g. RIconnect	2,452	2.94	3.10	3.11	3.10	.015	.004	.004	.006	.74	.72	.72	.72	38,623	36,652	19,086	.000	.000	.000	21	23	22
3 a. SFcareer	2,459	1.97	2.01	2.08	2.03	.018	.005	.005	.007	.89	.91	.94	.92	38,662	2,863	19,117	.013	.000	.001	05	12	07
b. SFotherwork	2,452	1.71	1.71	1.74	1.73	.018	.005	.005	.007	.87	.91	.93	.92	2,822	2,868	3,307	.834	.125	.283	.00	03	02
c. SFdiscuss	2,442	1.96	1.99	2.04	2.04	.017	.005	.005	.007	.83	.86	.89	.88	38,506	2,859	3,293	.061	.000	.000	04	09	10
d. SFperform	2,446	1.79	1.80	1.92	1.87	.017	.004	.005	.007	.82	.83	.86	.84	38,497	36,535	19,035	.759	.000	.000	01	15	09
4 a. memorize	2,453	2.77	2.86	2.84	2.86	.017	.005	.005	.007	.86	.88	.89	.89	38,463	36,526	19,033	.000	.000	.000	11	08	11
b. HOapply	2,450	2.97	2.98	2.99	2.98	.016	.004	.004	.006	.80	.80	.81	.81	38,424	36,480	19,010	.363	.143	.393	02	03	02
c. HOanalyze	2,437	2.82	2.88	2.91	2.90	.017	.004	.005	.007	.83	.84	.84	.84	38,319	36,416	18,957	.000	.000	.000	08	11	10
d. HOevaluate	2,437	2.61	2.71	2.79	2.75	.018	.005	.005	.007	.88	.89	.88	.89	38,295	2,799	18,947	.000	.000	.000	11	20	16
e. HOform	2,434	2.68	2.74	2.79	2.77	.017	.004	.005	.007	.83	.85	.85	.86	38,245	36,318	18,936	.000	.000	.000	07	13	11
5 a. ETgoals	2,439	2.88	2.98	2.95	2.96	.015	.004	.004	.006	.75	.75	.77	.75	2,779	36,304	3,203	.000	.000	.000	12	09	10
b. ETorganize	2,432	2.89	2.94	2.92	2.93	.015	.004	.004	.006	.74	.73	.77	.74	2,768	36,267	3,195	.001	.040	.003	07	04	06
c. ETexample	2,436	2.95	2.97	2.93	2.95	.015	.004	.004	.006	.75	.77	.81	.79	38,196	2,855	3,289	.223	.211	.816	03	.02	.00
d. ETdraftfb	2,423	2.27	2.29	2.36	2.31	.019	.005	.005	.007	.94	.93	.94	.93	38,163	2,786	18,883	.320	.000	.040	02	10	04
e. ETfeedback	2,419	2.49	2.43	2.47	2.43	.016	.005	.005	.007	.81	.85	.87	.85	2,797	2,837	3,272	.000	.107	.000	.07	.03	.08



## Detailed Statistics<sup>g</sup> University of Waterloo

#### **4th-Year Students**

	N Mean					9	Standard	error <sup>h</sup>		St	andard d	eviation	i	Degree	es of free	dom <sup>j</sup>	Significance <sup>k</sup>			Effect size <sup>e</sup>			
														Com	parisons wit	th:	Compo	arisons with		Comparisons with:			
Variable Name	UWaterloo	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	U6	U15	ON Institutions	U6	U15	ONInstitutions	U6	U15	ON Institutions	U6	
6 a. QRconclude	2,414	2.68	2.50	2.50	2.53	.018	.005	.005	.007	.90	.94	.94	.94	2,779	2,803	3,242	.000	.000	.000	.19	.19	.16	
b. QRproblem	2,415	2.27	2.22	2.25	2.26	.019	.005	.005	.007	.93	.94	.94	.94	37,995	36,090	18,815	.008	.302	.464	.06	.02	.02	
c. QRevaluate	2,425	2.40	2.33	2.35	2.38	.017	.005	.005	.007	.86	.91	.91	.91	2,804	2,826	3,279	.000	.002	.178	.08	.06	.03	
7 a. wrshortnum	2,347	7.51	7.21	7.73	7.58	.132	.034	.035	.050	6.38	6.20	6.28	6.20	35,692	33,903	3,059	.023	.101	.639	.05	04	01	
b. wrmednum	2,328	4.40	4.23	4.78	4.56	.099	.024	.027	.037	4.77	4.46	4.70	4.55	2,620	33,752	17,672	.094	.000	.108	.04	08	04	
c. wrlongnum	2,343	3.11	2.75	3.02	2.90	.091	.022	.024	.033	4.42	4.03	4.30	4.12	2,623	33,829	2,997	.000	.325	.031	.09	.02	.05	
- wrpages	2,302	102.98	95.81	106.22	102.33	2.177	.529	.580	.798	104.46	95.85	102.19	98.30	2,580	33,398	2,953	.001	.142	.781	.07	03	.01	
8 a. DDrace	2,352	3.15	3.16	3.19	3.23	.019	.005	.005	.007	.90	.88	.88	.86	35,823	33,933	17,761	.664	.043	.000	01	04	09	
b. DDeconomic	2,337	2.96	2.97	3.03	3.04	.018	.005	.005	.007	.89	.88	.87	.88	35,748	33,852	17,720	.680	.000	.000	01	08	08	
c. DDreligion	2,340	3.02	2.99	3.07	3.08	.019	.005	.005	.007	.91	.91	.89	.89	35,729	33,865	17,711	.061	.020	.002	.04	05	07	
d. DDpolitical	2,333	2.73	2.79	2.83	2.82	.019	.005	.005	.007	.92	.90	.91	.91	2,656	2,684	17,706	.005	.000	.000	06	10	09	
9 a. LSreading	2,339	2.90	3.03	3.05	3.06	.017	.004	.004	.006	.80	.80	.79	.79	2,676	2,686	17,681	.000	.000	.000	16	19	20	
b. LSnotes	2,341	2.39	2.51	2.47	2.47	.018	.005	.005	.008	.89	.95	.94	.94	2,727	2,743	3,199	.000	.000	.000	13	09	08	
c. LSsummary	2,338	2.57	2.66	2.62	2.64	.019	.005	.005	.007	.91	.92	.91	.93	35,581	33,669	17,628	.000	.004	.001	10	06	08	
10. challenge	2,337	5.04	5.24	5.23	5.24	.027	.007	.007	.010	1.29	1.26	1.28	1.24	35,512	2,689	17,622	.000	.000	.000	16	15	16	
11 a. intern <sup>1</sup>	2,341	.645	.488	.445	.456	.0099	.0027	.0028	.0040								.000	.000	.000	.32	.41	.38	
b. leader <sup>1</sup>	2,331	.368	.354	.337	.381	.0100	.0026	.0027	.0039								.180	.002	.206	.03	.06	03	
c. learncom <sup>1</sup>	2,329	.202	.183	.176	.179	.0083	.0021	.0022	.0031								.023	.001	.006	.05	.07	.06	
d. abroad <sup>1</sup>	2,330	.121	.116	.095	.116	.0067	.0018	.0017	.0026								.538	.000	.503	.01	.08	.01	
e. research <sup>1</sup>	2,328	.256	.253	.228	.261	.0090	.0024	.0024	.0036								.754	.002	.593	.01	.07	01	
f. capstone1	2,327	.419	.322	.334	.333	.0102	.0026	.0027	.0038								.000	.000	.000	.20	.18	.18	
12. servcourse	2,316	1.48	1.52	1.57	1.52	.014	.004	.004	.005	.66	.64	.67	.63	35,299	33,350	2,983	.005	.000	.008	06	14	06	
13 a. QIstudent	2,311	5.33	5.45	5.43	5.38	.028	.007	.008	.011	1.33	1.34	1.37	1.37	35,170	2,688	3,110	.000	.001	.105	09	07	04	
b. QIadvisor	2,122	4.53	4.50	4.56	4.42	.037	.010	.011	.015	1.71	1.76	1.78	1.76	2,468	2,486	2,876	.455	.464	.005	.02	02	.06	
c. QIfaculty	2,254	4.91	5.00	4.98	4.94	.030	.008	.009	.012	1.44	1.45	1.50	1.49	34,719	2,627	17,203	.003	.036	.319	06	04	02	
d. QIstaff	1,944	4.41	4.50	4.47	4.42	.037	.011	.011	.015	1.64	1.70	1.74	1.71	2,270	2,299	2,662	.015	.093	.840	06	04	.00	
e. QIadmin	2,121	4.46	4.55	4.50	4.50	.034	.010	.010	.014	1.57	1.68	1.71	1.69	2,488	2,504	2,904	.021	.285	.386	05	02	02	
14 a. empstudy	2,299	3.33	3.21	3.13	3.23	.016	.004	.004	.006	.75	.74	.77	.74	2,634	2,678	3,050	.000	.000	.000	.17	.26	.13	
b. SEacademic	2,296	2.52	2.57	2.62	2.59	.017	.004	.005	.007	.79	.80	.83	.82	34,463	2,688	17,080	.002	.000	.000	07	13	08	
c. SElearnsup	2,286	2.33	2.42	2.51	2.48	.018	.005	.005	.007	.85	.87	.90	.88	2,640	2,690	3,098	.000	.000	.000	11	20	16	



## Detailed Statistics<sup>g</sup> University of Waterloo

#### **4th-Year Students**

	N	Mean					standard		Sta	andard d	eviation	i	Degree	es of free	edom <sup>j</sup>	Sign	Significance <sup>k</sup>			Effect size <sup>e</sup>		
														Com	parisons wi	th:	Compo	arisons with		Comparisons with:		
Variable Name	UWaterloo	UWaterloo	U15	ON Institutions	U6	UWaterloo	U15	ON Institutions	UG	UWaterloo	U15	ON Institutions	U6	U15	ON Institutions	U6	U15	ON Institutions	U6	U15	ON Institutions	9
d. SEdiverse	2,287	2.21	2.26	2.33	2.26	.020	.005	.006	.008	.94	.95	.97	.97	34,425	2,669	3,084	.017	.000	.020	05	12	05
e. SEsocial	2,282	2.37	2.57	2.58	2.57	.018	.005	.005	.007	.87	.88	.90	.90	34,438	2,663	3,075	.000	.000	.000	24	24	22
f. SEwellness	2,288	2.34	2.52	2.52	2.51	.019	.005	.005	.008	.90	.91	.92	.92	34,373	2,666	3,078	.000	.000	.000	19	19	19
g. SEnonacad	2,284	1.83	1.85	1.87	1.84	.018	.005	.005	.007	.86	.85	.88	.86	34,361	32,409	17,037	.290	.024	.538	02	05	01
h. SEactivities	2,284	2.05	2.33	2.30	2.30	.018	.005	.005	.007	.85	.87	.90	.88	2,636	2,682	3,077	.000	.000	.000	31	27	28
i. SEevents	2,280	2.06	2.18	2.19	2.16	.018	.005	.005	.007	.84	.85	.87	.85	2,628	2,669	3,061	.000	.000	.000	14	14	12
15 a. tmprephrs	2,284	17.32	16.97	16.50	17.21	.199	.053	.054	.078	9.49	9.53	9.45	9.44	34,321	32,376	17,037	.092	.000	.604	.04	.09	.01
b. tmcocurrhrs	2,274	5.66	5.06	5.11	5.65	.144	.038	.040	.058	6.85	6.73	6.91	7.05	34,219	32,287	16,974	.000	.000	.972	.09	.08	.00
c. tmworkonhrs	2,278	2.87	2.46	2.74	2.87	.135	.033	.036	.052	6.44	5.92	6.15	6.30	2,559	32,317	17,005	.003	.307	.980	.07	.02	.00
d. tmworkoffhrs	2,278	3.99	7.57	8.48	7.07	.168	.055	.061	.081	8.01	9.92	10.60	9.86	2,800	2,919	3,443	.000	.000	.000	36	43	32
- tmworkhrs	2,269	6.77	9.99	11.18	9.90	.242	.063	.069	.095	11.54	11.32	11.94	11.57	2,588	2,649	3,015	.000	.000	.000	28	37	27
e. tmservicehrs	2,275	2.90	3.06	3.36	3.23	.118	.029	.032	.044	5.65	5.18	5.63	5.37	2,553	32,303	17,003	.198	.000	.006	03	08	06
f. tmrelaxhrs	2,275	14.33	12.42	12.50	12.65	.186	.046	.049	.069	8.85	8.22	8.47	8.36	2,561	2,600	2,935	.000	.000	.000	.23	.22	.20
g. tmcarehrs	2,277	2.30	2.60	3.23	2.53	.125	.037	.042	.051	5.95	6.53	7.26	6.18	2,683	2,818	16,964	.021	.000	.088	05	13	04
h. tmcommutehrs	2,283	5.51	6.89	7.07	6.93	.114	.033	.037	.051	5.46	5.90	6.40	6.15	2,676	2,780	3,246	.000	.000	.000	23	25	23
16. reading	2,270	2.42	2.73	2.80	2.79	.025	.007	.007	.010	1.21	1.25	1.26	1.27	2,628	2,657	3,095	.000	.000	.000	25	30	30
- tmreadinghrs	2,265	6.56	7.50	7.60	7.84	.130	.037	.039	.056	6.20	6.65	6.73	6.79	2,648	2,685	3,165	.000	.000	.000	14	15	19
17 a. pgwrite	2,275	2.78	2.90	2.93	2.96	.018	.005	.005	.007	.88	.88	.87	.86	2,608	2,623	2,998	.000	.000	.000	13	18	20
b. pgspeak	2,271	2.63	2.71	2.75	2.74	.019	.005	.005	.008	.91	.92	.92	.92	34,184	32,256	16,957	.000	.000	.000	09	13	12
c. pgthink	2,273	3.24	3.26	3.25	3.29	.016	.004	.005	.006	.78	.77	.78	.77	34,199	32,259	16,982	.216	.438	.002	03	02	07
d. pganalyze	2,269	3.01	2.75	2.71	2.77	.019	.006	.006	.008	.92	1.00	1.00	1.00	2,665	2,698	3,157	.000	.000	.000	.26	.30	.24
e. pgwork	2,274	2.87	2.55	2.50	2.44	.020	.006	.006	.008	.97	.99	.99	.99	2,626	2,648	3,065	.000	.000	.000	.33	.38	.44
f. pgothers	2,275	2.86	2.80	2.82	2.78	.018	.005	.005	.007	.86	.89	.89	.90	2,630	2,659	3,105	.002	.033	.000	.07	.05	.08
g. pgvalues	2,271	2.51	2.58	2.61	2.57	.020	.005	.006	.008	.93	.96	.96	.96	34,166	2,649	3,068	.001	.000	.002	07	11	07
h. pgdiverse	2,263	2.51	2.60	2.67	2.63	.020	.005	.006	.008	.96	.97	.97	.98	34,141	32,185	16,931	.000	.000	.000	09	17	13
i. pgprobsolve	2,269	2.71	2.62	2.61	2.60	.019	.005	.006	.008	.91	.94	.95	.95	2,620	2,655	3,079	.000	.000	.000	.10	.11	.12
j. pgcitizen	2,258	2.37	2.52	2.54	2.52	.020	.005	.006	.008	.94	.96	.97	.97	2,603	2,633	3,042	.000	.000	.000	15	18	15
18. evalexp	2,269	3.10	3.02	3.00	3.02	.016	.004	.005	.007	.76	.77	.80	.80	34,136	32,194	16,937	.000	.000	.000	.10	.12	.11
19. sameinst	2,274	3.16	3.08	3.03	3.04	.017	.005	.005	.007	.80	.84	.87	.87	34,155	32,231	16,954	.000	.000	.000	.10	.15	.14

PSIS: 35017001



#### Endnotes

- a. Column percentages are weighted by institution-reported sex and enrollment status (and institution size for comparison groups). Percentages may not sum to 100 due to rounding. Counts are unweighted; column percentages cannot be replicated from counts.
- b. All statistics are weighted by institution-reported sex and enrollment status (and institution size for comparison groups). 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.
- c. Items which make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective & Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.
- d. 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.
- e. Effect size for independent t-tests uses Cohen's d; z-tests use Cohen's h. See page 2 for more details.
- f. Statistical comparison uses *z*-test to compare the percentage who responded "Done or in progress."
- g. Statistics are weighted by institution-reported sex and enrollment status (and institution size for comparison groups).
- h. Standard error of the mean for ordered and continuous variables; standard error of the proportion for items indicating "Done or in progress" (High-Impact Practices). The 95% confidence interval is equal to the sample mean plus or minus 1.96 times the standard error of the mean.
- i. A measure of the amount individual scores deviate from the mean of all the scores in the distribution.
- j. Degrees of freedom used to compute the t-tests. Values differ from Ns due to weighting and whether equal variances were assumed.
- k. Statistical comparisons are two-tailed independent t-tests or z-tests. Statistical significance represents the probability that the difference between your students' mean and that of the comparison group is due to chance.
- 1. Mean represents the proportion who responded "Done or in progress."