



STUDENT EVALUATION OF TEACHING
2019W REPORT TO SENATE

EXECUTIVE SUMMARY

This report summarizes the results for 8,241 instructor ratings administered in 2019W. Due to low response rates in term 2, overall response rates in 2019 were lower than in previous years. Almost half of the instructor ratings in 2019W had an interpolated median for all 6 UMIs of 4.5 or higher (on a 5-point scale), with favourable ratings (sum of 'agree' and 'strongly agree' responses) greater than 75%. On the other hand, less than 10% of ratings had an interpolated median below 3.5 and with favourable rating of less than 50%. These results are similar to those obtained in previous years.

For most University Module Items (UMI) in 2019W, instructor ratings in term 2 were higher than in term 1. Though differences were statistically significant, they were of low magnitude (less than 0.1) and of little practical significance.

SECTION 1

SCOPE OF IMPLEMENTATION

A total of 8,241 instructor ratings were submitted to the University, for 6,892 course sections in which the University Module Items (UMI) were administered. This represents a 5.8% decrease in the number of instructor ratings compared to 2018W.

In 2019W, the number of evaluations overall and by Faculty, is more or less evenly split between the two winter terms, with 49% of the 2019W evaluations in term 1 and 51% in term 2. The only exceptions were Dentistry with significantly more evaluations in term 1 and Vantage College with significantly more evaluations in term 2.

A summary of the scope of implementation, by Faculty and year level, is shown in Table 1.

Table 1. Scope of 2019W Implementation¹

FACULTY	NUMBER OF INSTRUCTORS EVALUATED ²					
	100 Level	200 Level	300 Level	400 Level	Grad	Total
Applied Science	74	168	165	210	356	973
Arts	628	418	838	452	378	2,714
Commerce	19	145	252	157	168	741
Dentistry	4	29	23	166	41	263
Education	46	41	290	256	213	846
Forestry	11	32	41	41	40	165
Land & Food Systems	10	27	65	45	39	186
Law	0	42	78	95	29	244
Medicine ³	11	20	80	124	307	542
Pharmaceutical Sciences	41	30	29	29	7	136
Science	294	254	337	199	209	1,293
Vantage College	90	48	0	0	0	138
TOTAL	1,228	1,254	2,198	1,774	1,787	8,241

¹ In accordance with the Senate Policy, courses of an independent nature, sections with very small enrolments and those where other forms of evaluation are more appropriate are not included in this analysis.

² Unique course section/instructor combination.

³ Includes Medicine courses evaluated by Science.

SECTION 2

RESPONSE RATES

Overall response rates were lower in 2019W compared to previous years. Response rates meeting or exceeding those recommended are shown in Tables 2 and 3, respectively (including comparative data for 2018W).

In term 1 (2019W1), 57% of evaluations met the minimum recommended response rate. As could be seen in the last two columns of Table 2, these rates were similar to term 1 in 2018. However, in term 2 (2019W2), only 32% of evaluations met the recommended minimum response rate; this is significantly lower than term 2 in previous years. This could be attributed to the sudden pivot to remote instruction, due to the COVID-19 epidemic.

Table 2. Sections Meeting or Exceeding the Recommended Response Rate in 2019 Term 1

Class Size ¹	Course Sections	Number of Evaluations	Total Enrolment	Recommended Minimum Response Rate ¹	% meeting minimum recommended	
					2019W1	2018W1
≤ 10	239	301	1,828	75%	37%	28%
11 -19	579	658	8,683	65%	37%	36%
20 -34	862	999	22,784	55%	41%	47%
35 - 49	624	675	25,668	40%	63%	68%
50 -74	344	476	20,817	35%	57%	52%
75 -99	211	239	18,457	25%	92%	96%
100 -149	249	333	29,947	20%	93%	100%
150 - 299	218	323	44,232	15%	87%	96%
300 - 499	19	25	6,696	10%	100%	100%
> 500	1	1	766	5%	100%	
Overall	3,346	4,030	179,878		57%	57%

¹ Zumrawi, A., Bates, S. & Schroeder, M (2014). What response rates are needed to make reliable inferences from student evaluations of teaching? *Educational Research and Evaluation: An International Journal on Theory and Practice*, 20:7-8, 557-563

More than half of the sections in term 2 with 75 or less students did not meet the minimum recommended response rate. These sections accounted for 47% of the total enrollment in the term.

Table 3. Sections Meeting or Exceeding the Recommended Response Rate in 2019 Term 2

Class Size ¹	Course Sections	Number of Evaluations	Total Enrolment	Recommended Minimum Response Rate	% meeting minimum recommended	
					2019W2	2018W2
≤ 10	303	351	2,362	75%	19%	22%
11 -19	677	825	10,328	65%	11%	30%
20 -34	917	1,063	23,942	55%	16%	39%
35 - 49	599	694	24,414	40%	32%	57%
50 -74	388	436	23,007	35%	34%	65%
75 -99	210	247	18,162	25%	66%	84%
100 -149	236	294	28,309	20%	80%	94%
150 - 299	196	277	39,269	15%	88%	94%
300 - 499	19	23	6,678	10%	100%	100%
> 500	1	1	1,451	5%	100%	100%
Overall	3,546	4,211	177,922		32%	51%

Section 3

RESULTS

Statistics reported and used to summarize instructor ratings in this section include: The Interpolated Median (IM), Dispersion Index (DI), and Percent Favorable Rating (PFR).

The interpolated median (adjusted median) is an appropriate measure for the center of the data, and is computed by adjusting the median. The extent of the adjustment depends on the distribution of students' ratings relative to the customary median i.e., how many of the students' scores are greater than, equal to, or less than the customary median.

The dispersion index is a measure of variability in student scores. It ranges in value from zero to 1.0. A value of zero is obtained when all student respondents agree on the same instructor rating. A value of 1.0, on the other hand, occurs when respondents split 50/50 between scores of strongly disagree and strongly agree. (This rarely happens in practice; values for the dispersion index in 2019W range from 0-0.83, but dispersion was higher than 0.7 in only 45 of 3,666 evaluations meeting minimum expected response rates).

Percent favourable rating reflects the ratio of students who responded with 'Agree' or 'Strongly Agree' as a percentage of all respondents.

Term 1 interpolated median scores for the 6 UMI questions, by year level, are shown in Table 4. Average percent favourable rating (agree and strongly agree) is given in parenthesis. Results were comparable to those obtained in 2018. Term 2 is shown in Table 5.

The distribution of the six UMI median ratings are shown in Appendix A, and percentiles of the distributions are summarized, by academic term, in Appendix B.

For most UMI questions, 2019W term 2 instructor ratings were higher than those in term 1. Though differences were statistically significant, they were low in magnitude (less than 0.1) and of little practical significance, if any.

Table 4. 2019 Term 1 Median Score and (Percent Favourable Rating) by Year Level^{1, 2,3}

UMI	Year Levels						2018W Median
	100 Level	200 Level	300 Level	400 Level	Grad	Overall	
1. The instructor made it clear what students were expected to learn	4.3 (82%)	4.3 (80%)	4.3 (81%)	4.4 (82%)	4.4 (87%)	4.3 (83%)	4.3
2. The instructor communicated the subject matter effectively	4.2 (80%)	4.3 (78%)	4.3 (80%)	4.4 (81%)	4.5 (85%)	4.3 (81%)	4.3
3. The instructor helped inspire interest in learning the subject matter	4.2 (74%)	4.2 (75%)	4.4 (78%)	4.5 (80%)	4.5 (85%)	4.3 (79%)	4.3
4. Overall evaluation of student learning (through exams, essays, presentations, etc.) was fair	4.2 (80%)	4.2 (80%)	4.3 (81%)	4.5 (84%)	4.5 (86%)	4.3 (82%)	4.3
5. The instructor showed concern for student learning	4.2 (81%)	4.3 (82%)	4.4 (83%)	4.5 (85%)	4.5 (89%)	4.3 (84%)	4.3
6. Overall the instructor was an effective teacher	4.2 (80%)	4.3 (79%)	4.3 (80%)	4.4 (82%)	4.5 (86%)	4.3 (82%)	4.3

¹ Based on a 5-point scale, where 1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

² Interpolated Median

³ Percent favourable rating (in parenthesis) defined as the percentage of respondents who rated the instructor a 4 or 5.

Table 5. 2019 Term 2 Median Score and (Percent Favourable Rating) by Year Level

UMI	Year Levels						2018W Median
	100 Level	200 Level	300 Level	400 Level	Grad	Overall	
1. The instructor made it clear what students were expected to learn	4.3 (84%)	4.4 (82%)	4.4 (83%)	4.4 (83%)	4.5 (87%)	4.4 (84%)	4.3
2. The instructor communicated the subject matter effectively	4.3 (81%)	4.4 (80%)	4.4 (81%)	4.4 (82%)	4.5 (85%)	4.4 (82%)	4.3
3. The instructor helped inspire interest in learning the subject matter	4.2 (77%)	4.3 (76%)	4.4 (80%)	4.5 (80%)	4.6 (85%)	4.4 (80%)	4.3
4. Overall evaluation of student learning (through exams, essays, presentations, etc.) was fair	4.3 (83%)	4.4 (81%)	4.4 (83%)	4.5 (85%)	4.6 (87%)	4.4 (84%)	4.3
5. The instructor showed concern for student learning	4.3 (84%)	4.5 (84%)	4.5 (86%)	4.5 (87%)	4.6 (90%)	4.5 (86%)	4.3
6. Overall the instructor was an effective teacher	4.3 (82%)	4.4 (81%)	4.4 (82%)	4.4 (83%)	4.5 (86%)	4.4 (83%)	4.3

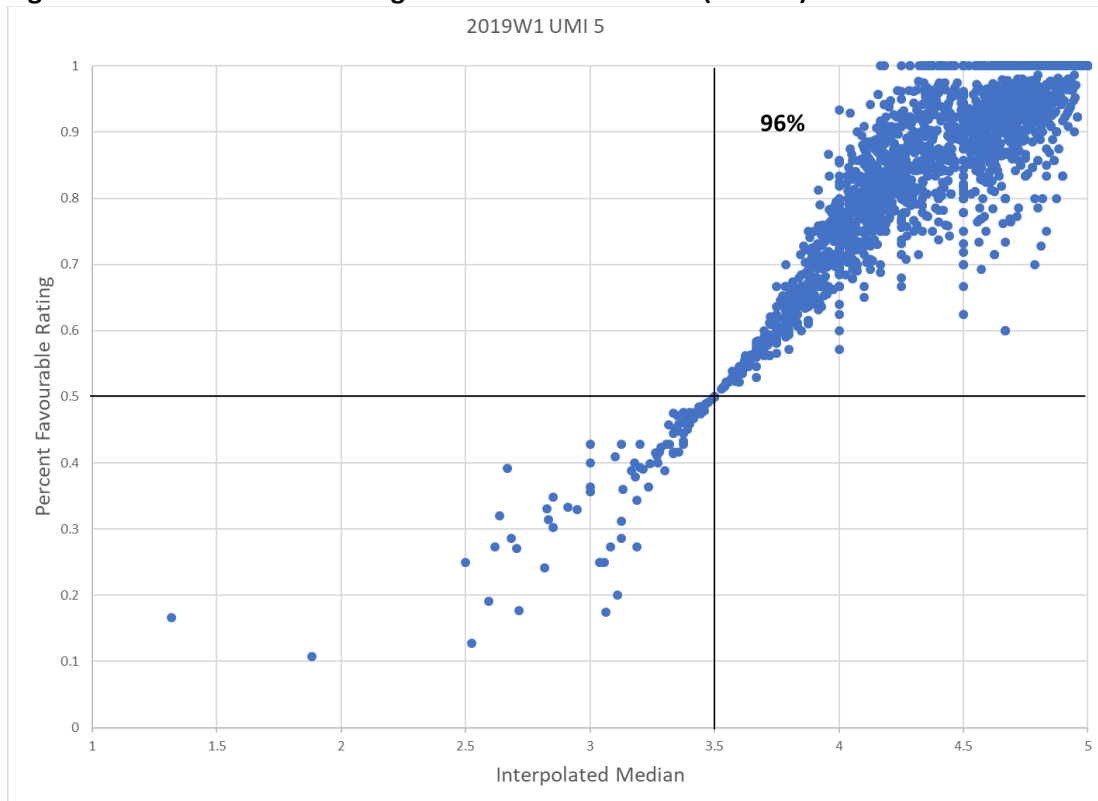
As evident in Table 6, most of the low ratings with low dispersion index (lower left cells of the table) are from surveys that did not meet the minimum recommended response rates, i.e., few or no evaluations that met the minimum recommended response rates are found in these cells.

Within this subset of the dataset, it would be plausible to find a median UMI score of e.g. 3.7, where more than two thirds of the student respondents rated the instructor favourably. This illustrates the additional insight gained from considering both the interpolated median of the UMI score and the variability in instructor rating that this measure of dispersion provides.

Low ratings with high dispersion should be interpreted within context, considering factors such as response rate, class size and the magnitude of the dispersion. Few, if any, instructor ratings with extreme dispersion index, met the minimum recommended response rate (last column in Table 6). It is worth noting that such extreme distributions, indicative of polarized ratings, are not common and mostly occur in smaller classes; often where the minimum recommended response rate is not met.

Figure 1 is a graphical depiction of the data in Table 6, plotting two of the key statistics – IM against PFR.

Figure 1: UMI 5 Instructor Ratings in 2019 Winter Term 1 (Table 6).



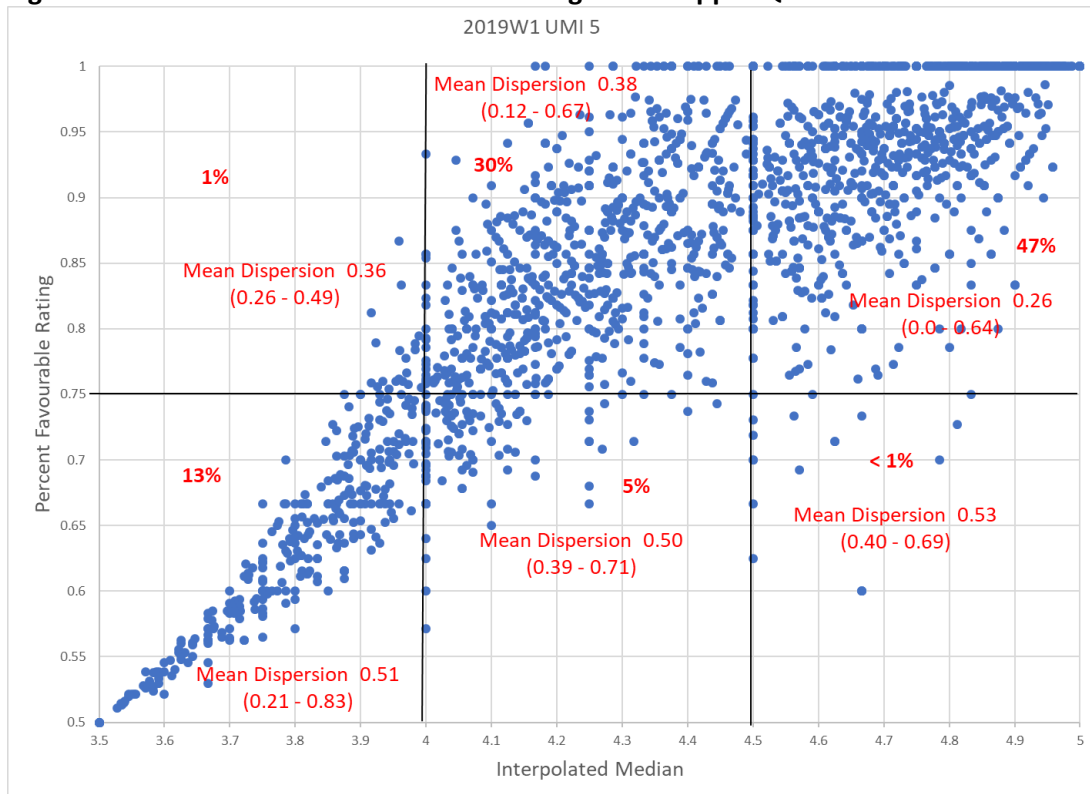
As evident in Figure 1, the pivot point in the relationship between the interpolated median and percent favourable rating, on a 5-point scale, is an interpolated median of 3.5 and 50% favourable rating. This relationship is such that, no instructor evaluation with an interpolated median below 3.5 would have a percent favourable rating above 50%, nor would evaluations with an interpolated median above 3.5 ever have favourable ratings below 50%.

As such, the upper right quadrant in Figure 1 corresponds to the first three rows in Table 5: 96% of all term 1 UMI 5 instructor ratings are in this quadrant. Likewise, the lower left quadrant corresponds to the bottom two rows in the table and includes evaluations with favourable ratings not exceeding 50%.

Figure 2 is a closer look at the instructor ratings in the upper right quadrant of Figure 1. More than 75% of ratings are in the two upper right sub-quadrants, with interpolated medians above 4.0 and over 75% favourable rating. Of these, almost half of instructor ratings are in the upper rightmost sub-quadrant (47% in term 1 and 52% in term 2), with low dispersions and interpolated medians above 4.5.

This visualization illustrates a remarkable feature that is often obscured in tables of data: in just over three-quarters of all evaluations in Winter Term 1, 75% or more student respondents ‘agree’ or ‘strongly agree’ that the instructor showed concern for student learning.

Figure 2: 2019 Winter Term 1- Instructor Ratings in the Upper Quadrant



Term 2 data for UMI question 5 is qualitatively equivalent; a summary and a graphical representation is shown in Appendix C. Graphical representation of instructor ratings for UMI questions 1, 2, 3 and 6 are shown in Appendix D. UMI question 4 has been consistently answered by fewer students and was not included in this analysis.

Section 4

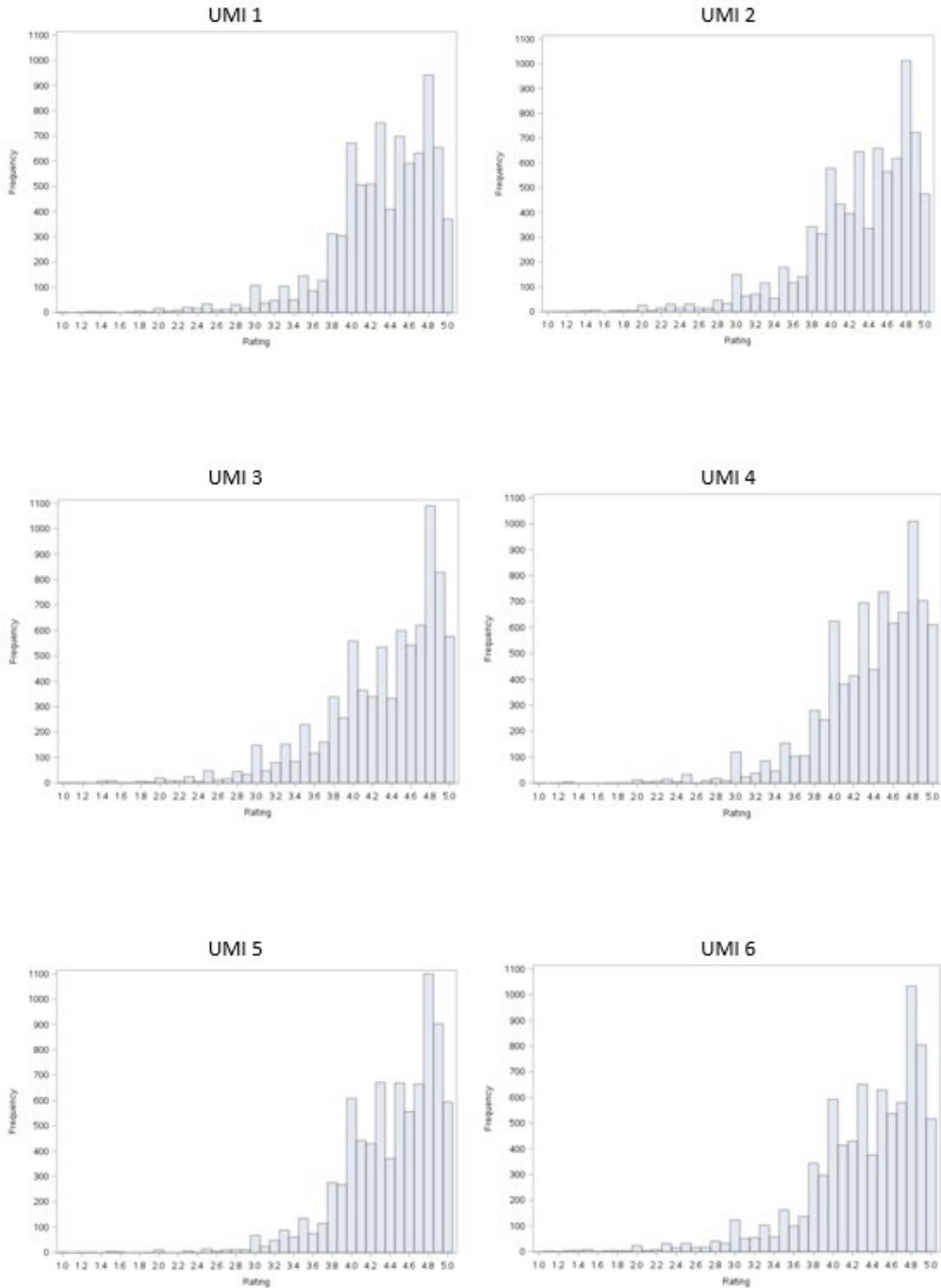
LOOKING FORWARDS

The Student Evaluation of Teaching Working Group Recommendations were endorsed by both UBC Vancouver and UBC Okanagan Senates in May 2020. A committee is currently planning for the implementation of the working group recommended changes. Both the UBC-Vancouver Senate Teaching and Learning Committee and the UBC-Okanagan Learning and Research Committee have agreed to defer the implementation of recommended changes to the summer of 2021.

Information about Student Evaluation of Teaching at UBC is available at <http://teacheval.ubc.ca>.

APPENDIX A

UMI Frequency Distribution of Median Ratings in 2019W



APPENDIX B

2019W UMI Interpolated Median Percentiles

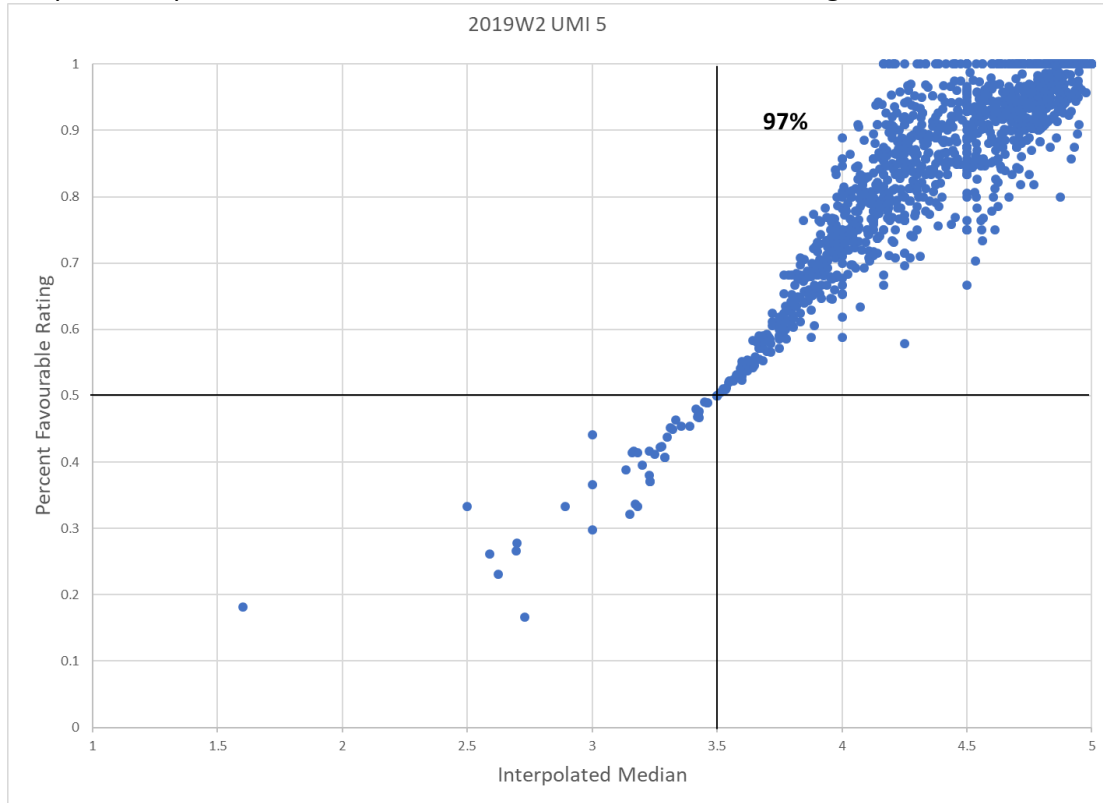
UMI	Term	5 th Percentile	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Interquartile Range
1	2019W1	3.3	4.0	4.4	4.7	4.9	0.7
	2019W2	3.3	4.0	4.4	4.8	5.0	0.7
2	2019W1	3.0	4.0	4.4	4.7	4.9	0.7
	2019W2	3.1	4.0	4.5	4.8	5.0	0.8
3	2019W1	3.1	4.0	4.5	4.8	5.0	0.8
	2019W2	3.1	4.0	4.5	4.8	5.0	0.8
4	2019W1	3.4	4.1	4.5	4.8	5.0	0.7
	2019W2	3.3	4.1	4.5	4.8	5.0	0.7
5	2019W1	3.5	4.1	4.5	4.8	5.0	0.7
	2019W2	3.5	4.1	4.5	4.8	5.0	0.7
6	2019W1	3.1	4.0	4.4	4.8	5.0	0.8
	2019W2	3.1	4.0	4.5	4.8	5.0	0.8

APPENDIX C

2019 Winter Term 2 - Distribution of Instructor Ratings for UMI Question 5 for Surveys Meeting the Recommended response Rate (% favourable rating in parenthesis).

	Variability in Instructor Rating (dispersion)							Total
	0	< 0.2	0.2 - 0.3	0.3 - 0.4	0.4 - 0.55	0.55-0.70	0.7-0.85	
IMedian	Number of Evaluations (% Favourable Rating in Parenthesis)							
< 5.0	33 (100%)	205 (99%)	241 (96%)	170 (91%)	56 (84%)	5 (76%)	1 (75%)	711
< 4.5		6 (98%)	55 (96%)	162 (87%)	177 (79%)	22 (73%)	4 (65%)	426
< 4.0			3 (77%)	28 (69%)	108 (65%)	42 (61%)	7 (56%)	188
< 3.5					12 (40%)	15 (44%)	7 (43%)	34
< 3.0					1 (28%)	5 (22%)	2 (33%)	8
								1,367

Graphical Depiction of the 2019 Winter Term 2 Instructor Ratings for UMI 5



APPENDIX D

Graphical depiction of the distribution of the 2019W (both terms) ratings for UMI question 1, 2, 3 and 6.

