



STUDENT EXPERIENCE OF INSTRUCTION

2022W REPORT TO SENATE

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EXECUTIVE SUMMARY

Student Experience of Instruction (SEI) surveys at UBC have undergone significant changes in the last 4 years. These include changes to the questions, reporting metrics and the interpretation of data.

With the approval of the Okanagan Senate Learning and Research Committee and Vancouver Senate Teaching and Learning Committee, the following six UMI questions were implemented in the Student Experience of Instruction (SEI) surveys across both UBC campuses starting in the Fall of 2021:

1. Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.
2. The instructor conducted this course in such a way that I was motivated to learn.
3. The instructor presented the course material in a way that I could understand.
4. Considering the type of class (e.g., large lecture, seminar, studio), the instructor provided useful feedback that helped me understand how my learning progressed during this course.
5. The instructor showed genuine interest in supporting my learning throughout this course.
6. Overall, I learned a great deal from this instructor.

This report provides the annual review of SEI data for the 2022W session. It summarizes the results for 8,487 SEI reports, for 7,294 course sections in which the University Module Items (UMI) were administered during the 2022 Winter session.

Overall, 44% of the surveys in Term 1, and 35% of surveys in Term 2 met or exceeded the university's recommended minimum response rate. These response rates were slightly lower compared to 2021W (46% and 38% in Terms 1 and 2, respectively). As in 2021W, the majority of surveys, that did not meet the minimum recommended response rate, were in sections with 75 students or less, with these sections accounting for about 45% of the total enrollment. The decline in response rates in the last two years is of great concern, particularly as more of the larger sections were not meeting the recommended minimum.

For all UMI questions, about 65% to 85% of SEI ratings had an interpolated median of 4.0 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 9% of the ratings had an

interpolated median below 3.5 and with favourable rating not exceeding 50%. These results indicate a slight improvement in SEI ratings compared to 2021; more so for UMI question 4 on instructors providing useful feedback.

1. SCOPE OF IMPLEMENTATION

8,487 Student Experience of Instruction (SEI) reports were submitted to the University, for 7,294 course sections in which the University Module Items (UMI) were administered in 2022. This represents a 3.2% increase in the number of submitted ratings, compared to the 2021.

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

Table 1. Scope of 2022W Implementation¹

FACULTY	NUMBER OF INSTRUCTORS EVALUATED ²					
	100 Level	200 Level	300 Level	400 Level	Grad	Total
Applied Science	101	203	220	287	315	1,126
Arts	669	412	814	421	368	2,684
Commerce	115	123	249	171	204	862
Dentistry	3	13	8	86	13	123
Education	14	34	278	273	240	839
Forestry	17	37	49	59	57	219
Land & Food Systems	14	24	59	52	50	199
Law	0	39	91	112	25	267
Medicine ³	19	22	83	136	328	588
Pharmaceutical Sciences	27	35	55	7	12	136
Science	390	246	344	218	170	1,368
Vantage College	46	30	0	0	0	76
TOTAL	1,415	1,218	2,250	1,822	1,782	8,487

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.

2. RESPONSE RATES

Percentage of SEI reports that met or exceeded the recommended minimum response rates are shown in Tables 2 and 3; including comparative data for 2021. Overall, response rates were slightly lower in 2022; where 44% and 35% of SEI surveys met or exceeded the recommended minimum response rates in terms 1 and 2, respectively, compared to 46% and 38% in terms 1 and 2 of 2021. However, response rates are comparable in sections with 150 or more students (last three columns of Table 2).

Table 2. Sections Meeting/Exceeding the Recommended Minimum Response Rate in 2022 Term 1

Class Size ¹	Course Sections	Number of SEI surveys	Total Enrolment	Recommended Minimum Response Rate ¹	% meeting minimum recommended	
					2022W1	2021W1
≤ 10	305	339	2,341	75%	23%	31%
11 -19	605	685	9,207	65%	24%	28%
20 -34	867	974	23,085	55%	30%	30%
35 - 49	633	686	25,844	40%	48%	45%
50 -74	416	488	24,774	35%	47%	49%
75 -99	186	203	16,271	25%	59%	70%
100 -149	240	300	29,368	20%	76%	79%
150 - 299	250	340	50,846	15%	92%	93%
300 - 499	24	26	8,806	10%	100%	100%
> 500	2	3	2,339	5%	100%	100%
Overall	3,528	4,044	192,881		44%	46%

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

Table 3. Sections Meeting/Exceeding the Recommended Minimum Response Rate in 2022 Term 2

Class Size ¹	Course Sections	Number of SEI surveys	Total Enrolment	Recommended Minimum Response Rate ¹	% meeting minimum recommended	
					2022W2	2021W2
≤ 10	420	488	3,256	75%	19%	23%
11 -19	701	827	10,664	65%	19%	22%
20 -34	890	1036	23,601	55%	27%	25%
35 - 49	652	732	26,715	40%	36%	40%
50 -74	403	472	23,682	35%	37%	39%
75 -99	182	214	15,829	25%	53%	60%
100 -149	293	378	35,661	20%	63%	66%
150 - 299	207	278	42,120	15%	78%	83%
300 - 499	18	18	6,407	10%	100%	94%
> 500				5%		100%
Overall	3,766	4,443	187,935		35%	38%

As evident in table 2, more than two-thirds of surveys, in sections with less than 35 students in 2022, did not meet the recommended minimum response rate. These sections accounted for about one-fifth of the total enrollment in the year. Furthermore, in both terms, the majority of surveys, that did not meet the minimum recommended response rate, were in sections with 75 students or less. These sections accounted for about 45% of the total enrollment. The decline in response rates is of great concern, particularly as more of the larger sections were not meeting the recommended minimum.

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 customary median (50% percentile). The extent of the adjustment depends on the distribution of SEI 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 rating. A value of 1.0, on the other hand, occurs when respondents split 50/50 between scores of strongly disagree and strongly agree.

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

The IM scores for the 6 UMI questions by year level, are shown in Tables 4 and 5, for 2022 winter term 1 and 2, respectively. Average percent favourable rating (agree and strongly agree) is given in parenthesis. Overall, the 2022 aggregates for the UMI questions were similar or slightly higher than those of 2021W.

The percentiles of the distributions, for term 1 and 2, are shown in Appendix A.

Table 4. 2022 Term 1 IM Score and (Percent Favourable Rating) by Year Level^{1, 2,3}

UMI	Year Levels						2021W1
	100 Level	200 Level	300 Level	400 Level	Grad	Overall	
1. Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	4.3 (82%)	4.4 (83%)	4.5 (84%)	4.5 (85%)	4.5 (86%)	4.4 (84%)	4.4 (83%)
2. The instructor conducted this course in such a way that I was motivated to learn.	4.2 (73%)	4.3 (75%)	4.4 (77%)	4.5 (82%)	4.5 (83%)	4.3 (77%)	4.3 (76%)
3. The instructor presented the course material in a way that I could understand.	4.3 (78%)	4.3 (80%)	4.4 (82%)	4.5 (85%)	4.5 (85%)	4.4 (81%)	4.4 (81%)
4. Considering the type of class, the instructor provided useful feedback that helped me understand how my learning progressed during this course	4.1 (70%)	4.1 (72%)	4.2 (74%)	4.4 (79%)	4.4 (78%)	4.2 (74%)	4.2 (72%)
5. The instructor showed genuine interest in supporting my learning throughout this course.	4.4 (80%)	4.5 (83%)	4.6 (85%)	4.7 (88%)	4.7 (88%)	4.6 (84%)	4.5 (83%)
6. Overall, I learned a great deal from this instructor.	4.3 (77%)	4.4 (80%)	4.5 (82%)	4.6 (85%)	4.6 (84%)	4.4 (81%)	4.3 (80%)

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. 2022 Term 2 IM Score and (Percent Favourable Rating) by Year Level^{1, 2,3}

UMI	Year Levels						2021W2
	100 Level	200 Level	300 Level	400 Level	Grad	Overall	
1. Throughout the term, the instructor explained course requirements so it was clear to me what I was expected to learn.	4.4 (84%)	4.4 (83%)	4.5 (85%)	4.5 (84%)	4.5 (85%)	4.5 (84%)	4.4 (83%)
2. The instructor conducted this course in such a way that I was motivated to learn.	4.2 (74%)	4.3 (75%)	4.4 (78%)	4.5 (80%)	4.6 (82%)	4.4 (78%)	4.3 (76%)
3. The instructor presented the course material in a way that I could understand.	4.3 (81%)	4.4 (81%)	4.5 (83%)	4.5 (83%)	4.5 (85%)	4.4 (82%)	4.4 (82%)
4. Considering the type of class, the instructor provided useful feedback that helped me understand how my learning progressed during this course	4.2 (73%)	4.2 (73%)	4.3 (76%)	4.4 (78%)	4.5 (80%)	4.3 (76%)	4.2 (74%)
5. The instructor showed genuine interest in supporting my learning throughout this course.	4.5 (82%)	4.6 (84%)	4.6 (85%)	4.6 (86%)	4.7 (88%)	4.6 (85%)	4.6 (84%)
6. Overall, I learned a great deal from this instructor.	4.3 (80%)	4.4 (80%)	4.5 (83%)	4.5 (83%)	4.6 (84%)	4.5 (82%)	4.4 (81%)

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.

4. MAGNITUDE AND VARIABILITY OF RATINGS

In this section we consider all 3 key statistics (IM, DI and PFR) in summarizing SEI ratings. Table 6 provides a summary of UMI question 5 ('The instructor showed genuine interest in supporting my learning throughout this course.') for all SEI surveys in 2022W term 1. Table 7 provides a similar summary of UMI question 5, but for SEI surveys that met or exceeded the recommended minimum response rate. Average percent favourable rating, within each cell in the tables, is given in parenthesis.

As an example of how to interpret the data in Table 6, consider the middle row in the Table. There are 368 SEI reports within this rating band of UMI 5 score between 3.5 and 4.0. Of these, 44 have a dispersion index between 0.3 and 0.4, and within these 44 reports, there is (on average) 65% of respondents who rated their experience of instruction favourably (the sum of 'agree' and 'strongly agree' categories on UMI 5). Thus, it would be plausible, within this subset of the dataset, to find a median UMI score of e.g. 3.7, where more than two thirds of the student respondents rated their experience favourably. This illustrates the additional insight gained from considering all 3 statistics, rather than relying on a single metric alone.

Table 6: 2022 Winter Term 1 - Distribution of SEI Ratings for UMI Question 5 (Instructor showed genuine interest in supporting my learning) for all SEI surveys.

	Variability in SEI 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	> 0.85	
IMedian	Number of SEI surveys (% Favourable Rating in Parenthesis)								
< 5.0	336 (100%)	641 (99%)	729 (97%)	489 (89%)	253 (82%)	56 (74%)	15 (73%)	5 (65%)	2,520
< 4.5	52 (100%)	19 (100%)	104 (98%)	261 (87%)	382 (76%)	105 (71%)	17 (66%)	4 (65%)	944
< 4.0		4 (76%)	29 (58%)	44 (65%)	132 (63%)	117 (59%)	40 (55%)	2 (55%)	368
< 3.5	22 (0%)	1 (17%)	8 (30%)	7 (32%)	28 (40%)	59 (40%)	16 (42%)	6 (47%)	147
< 3.0	1 (0%)	1 (0%)	7 (0%)	1 (0%)	6 (6%)	31 (24%)	15 (34%)	3 (37%)	65
									4,044

In tables 6 and 7, and as would be expected, favourable rating decreases – on average - as dispersion increases in the first three rows (IM of 3.5 or more), but increases with dispersion in the lower two rows (IM less than 3.5). Thus, SEI surveys in the upper left cells have high ratings, with low variability, resulting in higher percentages of favourable ratings. For example, in 336 SEI surveys, all student respondents scored UMI 5 'strongly agree' (upper left corner of table 6). On the other hand, the lower left cells (inset) show low ratings, with low variability in students' scores, resulting in low percentages of favourable ratings. Furthermore, SEI surveys in the

bottom two rows, corresponding to an IM of less than 3.5, have percent favourable ratings not exceeding 50%.

Most low ratings, with low dispersion (inset lower left cells of table 6) are from surveys that did not meet the minimum recommended response rates. For example, comparing tables 6 and 7, it is evident that of the 40 SEI surveys in the bottom left cells (inset), only 2 met the recommended minimum response rate. Furthermore, of the 212 SEI surveys in the bottom two rows of table 6, only 74 met the recommended minimum response rate (bottom 2 rows of table 7). This represents 35% as compared to 46% for all of term 1 SEI surveys (table 2); and indicates that SEI surveys, with low ratings and low dispersion, are more likely to be from surveys that did not meet the recommended minimum response rate.

Table 7: 2022 Winter Term 1 - Distribution of SEI Ratings for UMI Question 5 (SEI surveys that met or exceeded the recommended Minimum Response rate).

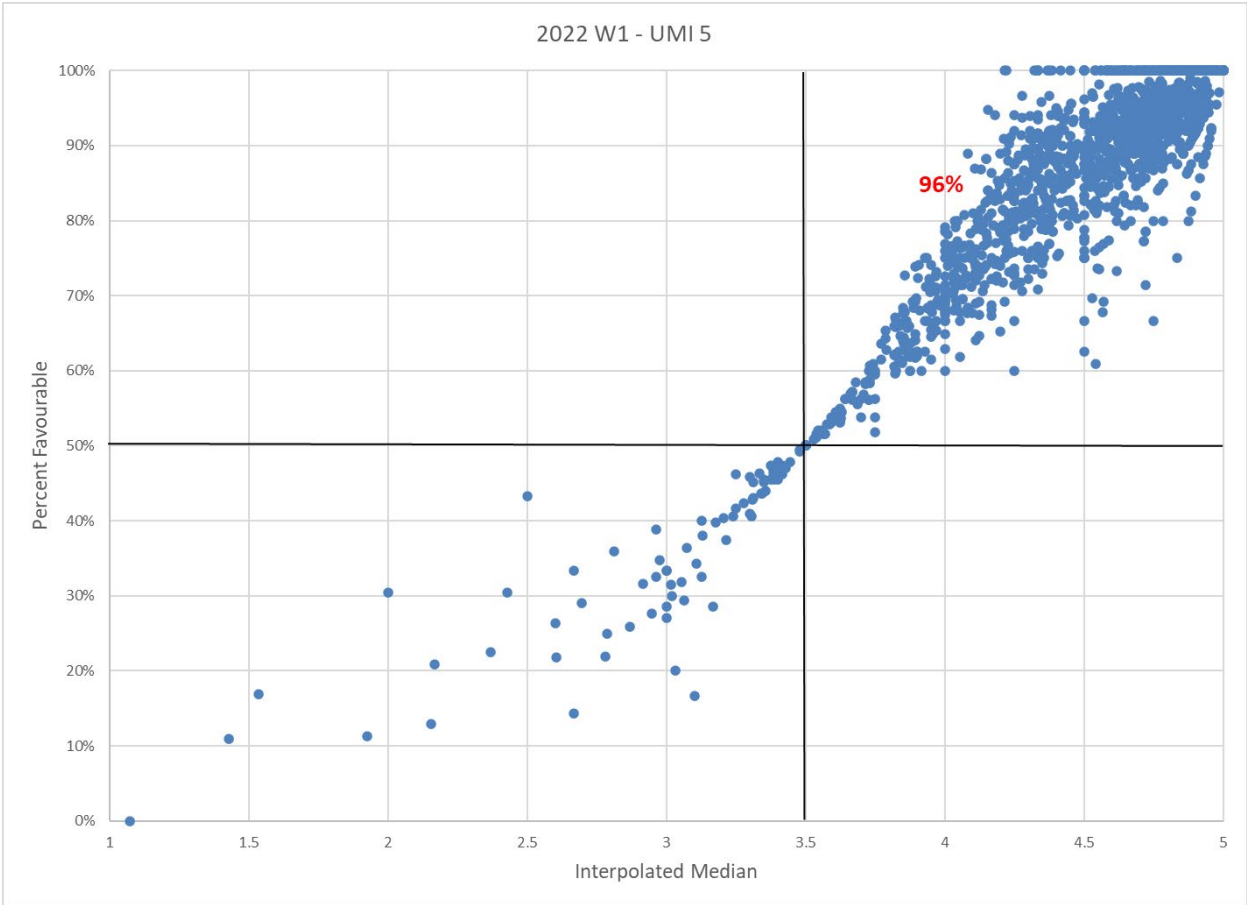
	Variability in SEI Rating (dispersion)							Total
	0	< 0.2	0.2 - 0.3	0.3 - 0.4	0.4 - 0.55	0.55-0.70	0.7-0.85	
IMedian	Number of SEI surveys (% Favourable Rating in Parenthesis)							
< 5.0	58 (100%)	334 (99%)	346 (96%)	281 (91%)	104 (84%)	9 (75%)	2 (70%)	1,134
< 4.5			22 (97%)	149 (88%)	212 (78%)	48 (71%)	3 (63%)	441
< 4.0			1 (73%)	8 (67%)	64 (64%)	57 (60%)	10 (58%)	140
< 3.5			1 (17%)	2 (24%)	10 (41%)	30 (41%)	7 (41%)	50
< 3.0		1 (0%)			1 (14%)	15 (23%)	7 (34%)	24
								1,782

Low ratings with high dispersion should be interpreted within context, considering factors such as response rate, class size and the magnitude of the dispersion. For example, all 20 SEI surveys with DI exceeding 0.85 (last column of table 6) did not meet the recommended minimum response rate (see last column of table 7). It is worth noting that such extreme distributions, indicative of polarized ratings, are not common and mostly occur in smaller classes; often where the recommended minimum response rate is not met.

For the rest of this report, only SEI surveys that met the recommended minimum response rate will be considered.

Figure 1 is a graphical depiction of the data in Table 7, plotting two of the key statistics – IM against PFR.

Figure 1: Graphical Depiction of the UMI 5 Ratings in 2022 Winter Term 1 (Table 7).



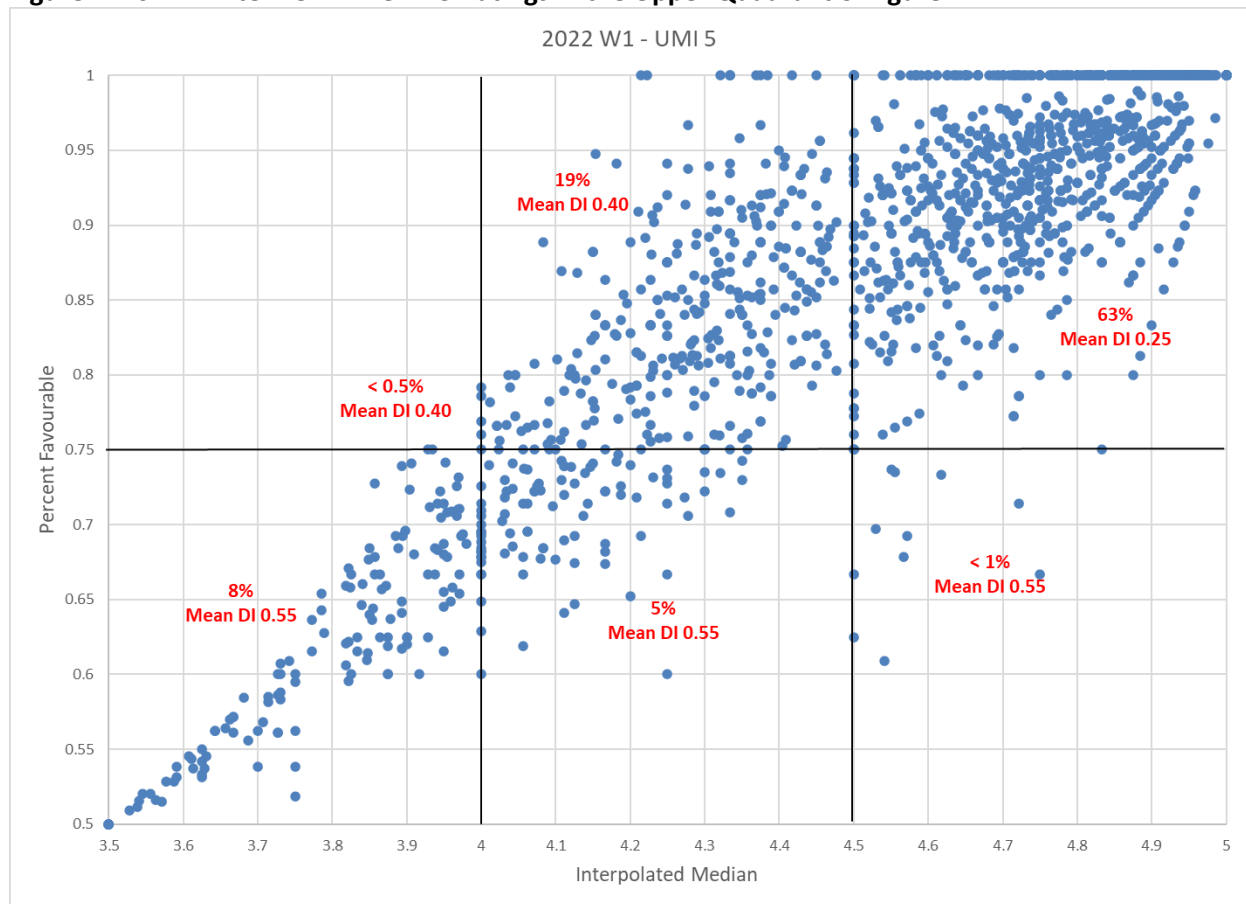
As evident in Figure 1, the pivot point in the relationship between IM and PFR, on a 5-point scale, is an IM of 3.5 and 50% favourable rating. The relationship between the two metrics is such that, no evaluation with an IM below 3.5 would have favourable ratings above 50%, nor would SEI surveys with an IM 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 7. 96% of Term 1 UMI 5 ratings are in this quadrant. Likewise, the lower left quadrant (with 4% of the ratings) corresponds to the bottom two rows in table 7, and includes SEI surveys with favourable ratings not exceeding 50%.

Figure 2 is a closer look at the SEI ratings in the upper right quadrant of Figure 1. Percentage of surveys in each sub-quadrant is given along with the mean dispersion index. For example, 63% of the UMI 5 SEI ratings in Term 1 are in the upper rightmost sub-quadrant of Figure 2, with low

dispersions and IM above 4.5. Furthermore, 82% of the UMI 5 ratings in Term 1 are in the two upper right sub-quadrants, with IM above 4.0 and over 75% favourable rating.

Figure 2: 2022 Winter Term 1- UMI 5 Ratings in the Upper Quadrant of figure 1.



The visualizations in figure 2 (and in Appendix B for term 2) illustrate a remarkable feature that is often obscured in tables of data: for both winter terms, in more than four-fifths of all SEI surveys, 75% or more student respondents ‘agree’ or ‘strongly agree’ that the instructor showed genuine interest in supporting their learning throughout the course.

A tabular view of figure 3 is shown in table 8, along with comparative data from winter term 1 of the previous three years (2019 - 2021). The table shows the distribution of SEI surveys based on UMI question 5 IM and PF scores.

Table 8: A tabular view of the data in figure 2 with comparative data from previous years.

Year	SEI Rating Category		
	Good (IM=3.5-4.0, PF=50-75%)	Excellent (IM=4.0-4.5, PF>75%)	Outstanding (IM>4.5, PF>75%)
2019	13%	30%	47%
2020	11%	27%	52%
2021	10%	18%	61%
2022	8%	19%	63%

For UMI question 5, in about four-fifths of all evaluations, 75% or more student respondents rated their experience favourably, for 4 consecutive years. There was a significant improvement towards higher ratings in 2021 and 2022 compared to 2019 and 2020. However, it is unclear if this improvement was a result of returning to in-person instruction or due to changes in the wording of the question.

Tabular and graphical presentation of the results for UMI question 5 in term 2 are shown in Appendix B. For UMI 5, the term 2 results were slightly higher than in term 1.

Finally, graphical representations of the results for UMI questions 1, 2, 3, 4 and 6 (for both terms combined) are shown in Appendix C. The percentage of SEI surveys, in which 75% or more student respondents 'agree' or 'strongly agree' with the statement in UMI questions 1, 2, 3, 4 and 6, were 82%, 70%, 78%, 65% and 77%, respectively. This represents slight improvement compared to 80%, 68%, 76%, 62% and 76%, in 2021, for the six UMI questions, respectively.

5. LOOKING FORWARDS

We will continue to seek community input and work on a plan to improve response rates, including email reminders to students, as well as encouraging faculty members to set aside time in class for students to complete online SEI surveys.

For more information on these changes see

Information about Student Experience of Instruction at UBC is available at <https://seoi.ubc.ca/>.

APPENDIX A

2022W UMI Interpolated Median Percentiles

UMI	Term	5 th Percentile	25 th Percentile	50 th Percentile	75 th Percentile	95 th Percentile	Interquartile Range
1	2022W1	3.1	4.0	4.5	4.8	4.9	0.8
	2022W2	3.2	4.0	4.5	4.8	5.0	0.8
2	2022W1	3.0	4.0	4.4	4.8	5.0	0.8
	2022W2	3.0	4.0	4.5	4.8	5.0	0.8
3	2022W1	3.1	4.0	4.5	4.8	5.0	0.8
	2022W2	3.1	4.0	4.5	4.8	5.0	0.8
4	2022W1	3.0	3.9	4.3	4.7	4.9	0.8
	2022W2	3.0	4.0	4.4	4.8	5.0	0.8
5	2022W1	3.4	4.2	4.6	4.9	5.0	0.7
	2022W2	3.4	4.2	4.7	4.9	5.0	0.7
6	2022W1	3.1	4.0	4.5	4.8	5.0	0.8
	2022W2	3.0	4.0	4.5	4.8	5.0	0.8

APPENDIX B

Table B.1: Table 4: 2022 Winter Term 2 - Distribution of Instructor Ratings for UMI Question 5:
Instructor showed genuine interest in supporting my learning.

Variability in SEI Rating (dispersion)									
	0	< 0.2	0.2 - 0.3	0.3 - 0.4	0.4 -0.55	0.55-0.70	0.7-0.85	> 0.85	Total
IMedian	Number of SEI surveys ¹ (% Favourable Rating in Parenthesis)								
< 5.0	57 (100%)	281 (99%)	331 (96%)	222 (90%)	123 (84%)	11 (80%)	1 (75%)		1026
< 4.5		1 (100%)	37 (96%)	108 (87%)	167 (78%)	42 (72%)	3 (64%)		358
< 4.0			1 (60%)	5 (64%)	61 (64%)	45 (59%)	11 (58%)		123
< 3.5			1 (40%)	1 (20%)	8 (41%)	20 (42%)	5 (41%)	1 (47%)	36
< 3.0					3 (16%)	5 (16%)	3 (32%)	1 (43%)	12
	1,555								

¹ SEI surveys meeting the recommended minimum response rate

Figure B.1: Graphical Depiction of the UMI 5 Ratings in 2022 Winter Term 2 (Table B.1)

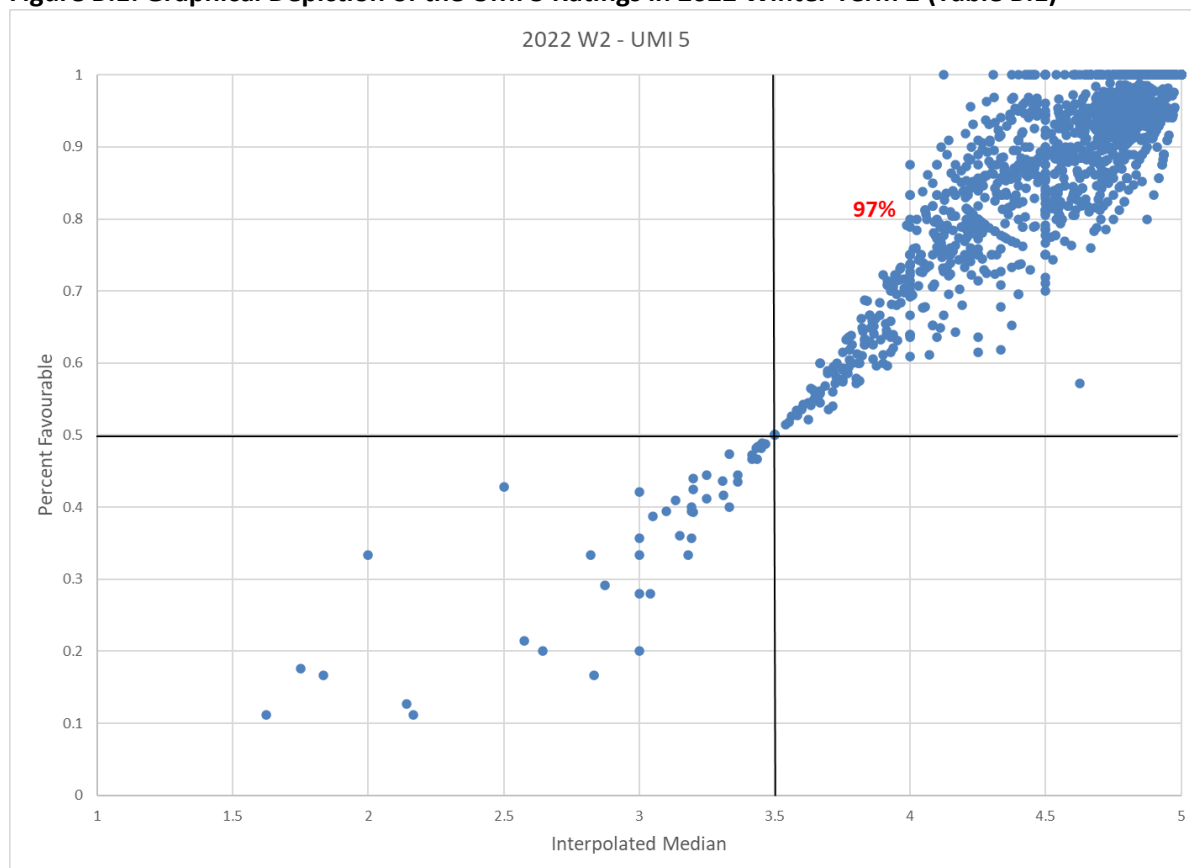
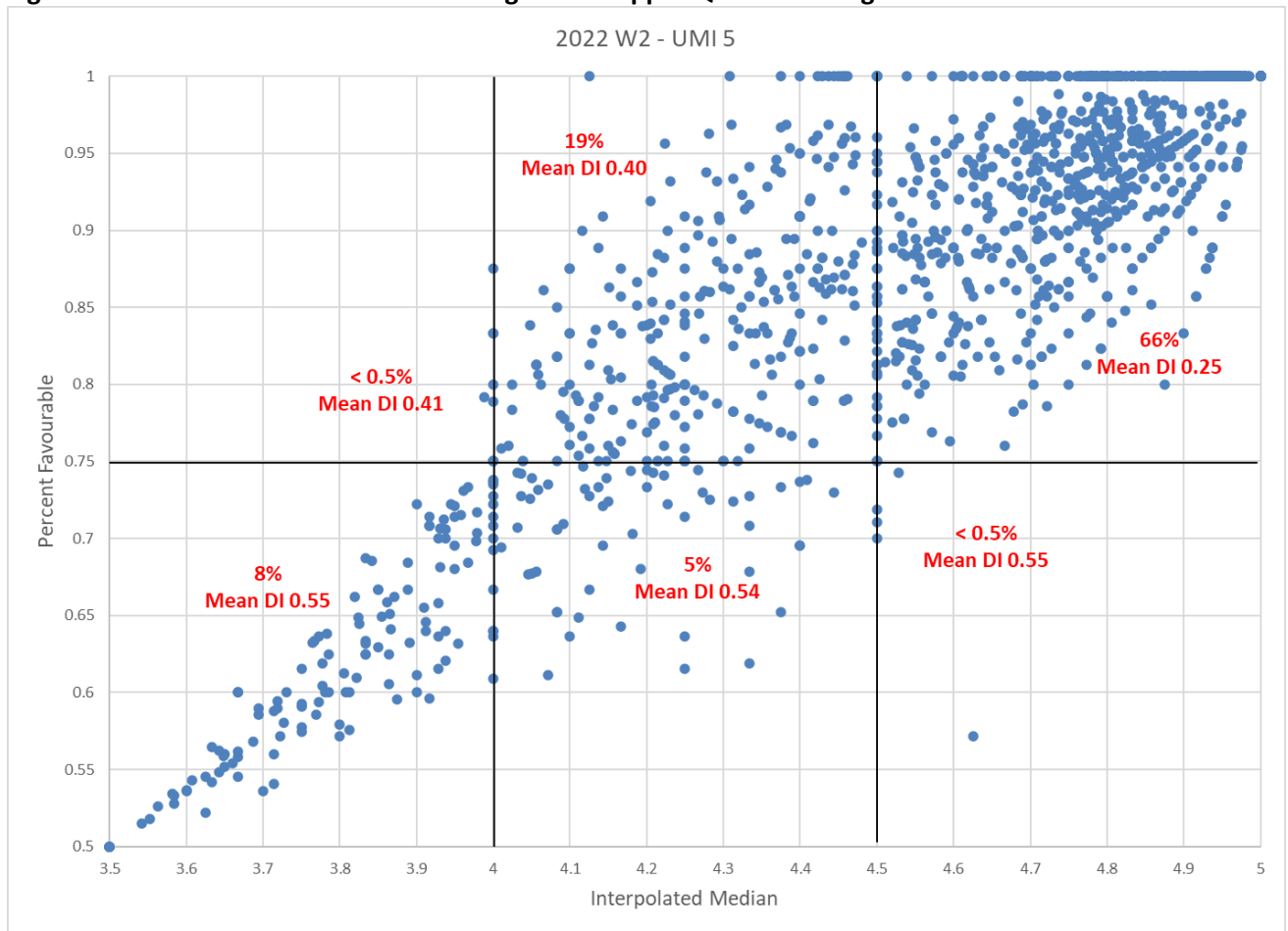


Figure B.2: 2022 Winter Term 2 - SEI Ratings in the Upper Quadrant of figure B.1



APPENDIX C

Graphical depiction of the distribution of the 2022 W (both winter terms) ratings
for UMI questions 1, 2, 3, 4, and 6.

